

service manual FIELD SERVICE

2007.12 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

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SAFETY AND IMPORTANT WARNING ITEMS

Read carefully the safety and important warning Items described below to understand them before doing service work.

IMPORTANT NOTICE

Because of possible hazards to an inexperienced person servicing this product as well as the risk of damage to the product, KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. (hereafter called the KMBT) strongly recommends that all servicing be performed only by KMBT-trained service technicians.

Changes may have been made to this product to improve its performance after this Service Manual was printed. Accordingly, KMBT does not warrant, either explicitly or implicitly, that the information contained in this service manual is complete and accurate.

The user of this service manual must assume all risks of personal injury and/or damage to the product while servicing the product for which this service manual is intended.

Therefore, this service manual must be carefully read before doing service work both in the course of technical training and even after that, for performing maintenance and control of the product properly.

Keep this service manual also for future service.

DESCRIPTION ITEMS FOR DANGER, WARNING AND CAUTION

In this service manual, each of three expressions " $\underline{\land}$ DANGER", " $\underline{\land}$ WARNING", and " $\underline{\land}$ CAUTION" is defined as follows together with a symbol mark to be used in a limited meaning.

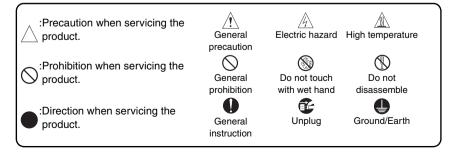
When servicing the product, the relevant works (disassembling, reassembling, adjustment, repair, maintenance, etc.) need to be conducted with utmost care.

 $_{
m b}$ DANGER: Action having a high possibility of suffering death or serious injury

WARNING: Action having a possibility of suffering death or serious injury

CAUTION: Action having a possibility of suffering a slight wound, medium trouble, and property damage

Symbols used for safety and important warning items are defined as follows:



SAFETY WARNINGS

[1] MODIFICATIONS NOT AUTHORIZED BY KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.

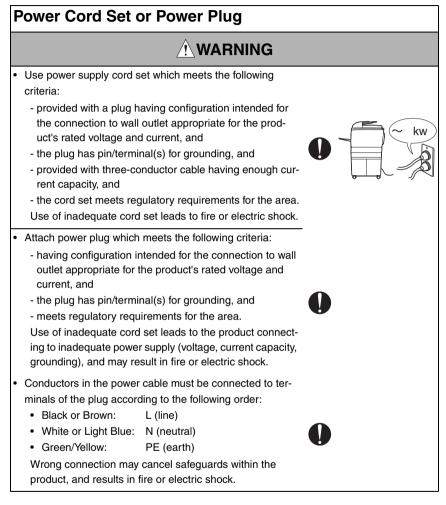
KONICA MINOLTA brand products are renowned for their high reliability. This reliability is achieved through high-quality design and a solid service network.

Product design is a highly complicated and delicate process where numerous mechanical, physical, and electrical aspects have to be taken into consideration, with the aim of arriving at proper tolerances and safety factors. For this reason, unauthorized modifications involve a high risk of degradation in performance and safety. Such modifications are therefore strictly prohibited. the points listed below are not exhaustive, but they illustrate the reasoning behind this policy.

F	Prohibited Actions		
•	Using any cables or power cord not specified by KMBT.	\bigcirc	
•	Using any fuse or thermostat not specified by KMBT. Safety will not be assured, leading to a risk of fire and injury.	\bigcirc	
•	Disabling fuse functions or bridging fuse terminals with wire, metal clips, solder or similar object.	\bigcirc	
•	Disabling relay functions (such as wedging paper between relay contacts)	\bigcirc	
•	Disabling safety functions (interlocks, safety circuits, etc.) Safety will not be assured, leading to a risk of fire and injury.	\bigcirc	(Jacob)
•	Making any modification to the product unless instructed by KMBT	\bigcirc	
•	Using parts not specified by KMBT	\bigcirc	or [®]

[2] POWER PLUG SELECTION

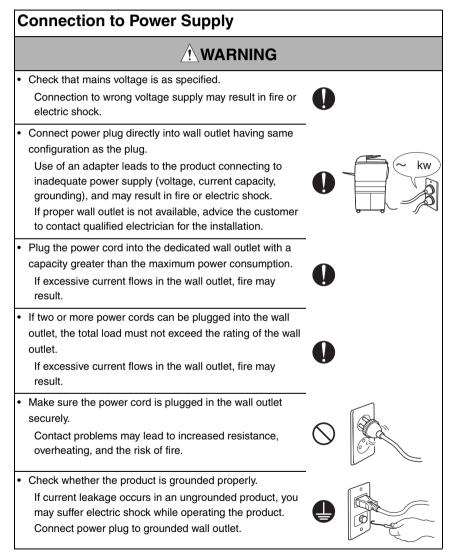
In some countries or areas, the power plug provided with the product may not fit wall outlet used in the area. In that case, it is obligation of customer engineer (hereafter called the CE) to attach appropriate power plug or power cord set in order to connect the product to the supply.



[3] CHECKPOINTS WHEN PERFORMING ON-SITE SERVICE

KONICA MINOLTA brand products are extensively tested before shipping, to ensure that all applicable safety standards are met, in order to protect the customer and customer engineer (hereafter called the CE) from the risk of injury. However, in daily use, any electrical equipment may be subject to parts wear and eventual failure. In order to maintain safety and reliability, the CE must perform regular safety checks.

1. Power Supply



Pc	ower Plug and Cord		
	WARNING		
tl ir V	Vhen using the power cord set (inlet type) that came with his product, make sure the connector is securely inserted in the inlet of the product. When securing measure is provided, secure the cord with he fixture properly. If the power cord (inlet type) is not connected to the prod- uct securely, a contact problem may lead to increased resistance, overheating, and risk of fire.	0	
	Check whether the power cord is not stepped on or inched by a table and so on. Overheating may occur there, leading to a risk of fire.	\bigcirc	
	Check whether the power cord is damaged. Check whether the sheath is damaged. If the power plug, cord, or sheath is damaged, replace with a new power cord (with plug and connector on each end) specified by KMBT. Using the damaged power cord may result in fire or electric shock.	0	0
	Do not bundle or tie the power cord. Overheating may occur there, leading to a risk of fire.	\bigcirc	
а	Check whether dust is collected around the power plug and wall outlet. Using the power plug and wall outlet without removing dust may result in fire.	0	
	Do not insert the power plug into the wall outlet with a wet and. The risk of electric shock exists.		
С	Vhen unplugging the power cord, grasp the plug, not the able. The cable may be broken, leading to a risk of fire and electric shock.	0	0

Wiring

WARNING Never use multi-plug adapters to plug multiple power cords in the same outlet. If used, the risk of fire exists. When an extension cord is required, use a specified one. Current that can flow in the extension cord is limited, so using a too long extension cord may result in fire. Do not use an extension cable reel with the cable taken up. Fire may result.

2. Installation Requirements

Prohibited Installation Places

WARNING

• Do not place the product near flammable materials or volatile materials that may catch fire.

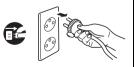
A risk of fire exists.

- Do not place the product in a place exposed to water such as rain.
 - A risk of fire and electric shock exists.

When not Using the Product for a long time

WARNING

• When the product is not used over an extended period of time (holidays, etc.), switch it off and unplug the power cord.



Dust collected around the power plug and outlet may cause fire.

Ventilation

 The product generates ozone gas during operation, but it will not be harmful to the human body.

If a bad smell of ozone is present in the following cases, ventilate the room.

- a. When the product is used in a poorly ventilated room
- b. When taking a lot of copies
- c. When using multiple products at the same time

Stability

 Be sure to lock the caster stoppers.
 In the case of an earthquake and so on, the product may slide, leading to a injury.

Inspection before Servicing

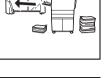
Before conducting an inspection, read all relevant documentation (service manual, technical notices, etc.) and proceed with the inspection following the prescribed procedure in safety clothes, using only the prescribed tools. Do not make any adjustment not described in the documentation.

If the prescribed procedure or tool is not used, the product may break and a risk of injury or fire exists.

• Before conducting an inspection, be sure to disconnect the power plugs from the product and options.

When the power plug is inserted in the wall outlet, some units are still powered even if the POWER switch is turned OFF. A risk of electric shock exists.

• The area around the fixing unit is hot. You may get burnt.









Work Performed with the Product Powered On

WARNING

Take every care when making adjustments or performing an operation check with the product powered. If you make adjustments or perform an operation check with the external cover detached, you may touch live or high-voltage parts or you may be caught in moving gears or the timing belt, leading to a risk of injury.
Take every care when servicing with the external cover detached. High-voltage exists around the drum unit. A risk of electric shock exists.

S	Safety Checkpoints		
	WARNING		
•	Check the exterior and frame for edges, burrs, and other damage. The user or CE may be injured.	0	
•	Do not allow any metal parts such as clips, staples, and screws to fall into the product. They can short internal circuits and cause electric shock or fire.	\bigcirc	Po
•	Check wiring for squeezing and any other damage. Current can leak, leading to a risk of electric shock or fire.	0	
•	Carefully remove all toner remnants and dust from electri- cal parts and electrode units such as a charging corona unit. Current can leak, leading to a risk of product trouble or fire.	0	
•	Check high-voltage cables and sheaths for any damage. Current can leak, leading to a risk of electric shock or fire.	0	

Safety Checkpoints **WARNING** Check electrode units such as a charging corona unit for deterioration and sign of leakage. Current can leak. leading to a risk of trouble or fire. Before disassembling or adjusting the write unit (P/H unit) incorporating a laser, make sure that the power cord has been disconnected. The laser light can enter your eye, leading to a risk of loss of eyesight. Do not remove the cover of the write unit. Do not supply power with the write unit shifted from the specified mounting position. The laser light can enter your eve. leading to a risk of loss of eyesight. When replacing a lithium battery, replace it with a new lithium battery specified in the Parts Guide Manual. Dispose of the used lithium battery using the method specified by local authority. Improper replacement can cause explosion. After replacing a part to which AC voltage is applied (e.g., optical lamp and fixing lamp), be sure to check the installation state. A risk of fire exists. Check the interlock switch and actuator for loosening and check whether the interlock functions properly. If the interlock does not function, you may receive an electric shock or be injured when you insert your hand in the product (e.g., for clearing paper jam). Make sure the wiring cannot come into contact with sharp edges, burrs, or other pointed parts. Current can leak, leading to a risk of electric shock or fire.

Safety Checkpoints

Make sure that all screws, components, wiring, connectors, etc. that were removed for safety check and maintenance have been reinstalled in the original location. (Pay special attention to forgotten connectors, pinched cables, forgotten screws, etc.)



A risk of product trouble, electric shock, and fire exists.

Handling of Consumables

 Toner and developer are not harmful substances, but care must be taken not to breathe excessive amounts or let the substances come into contact with eyes, etc. It may be stimulative.

If the substances get in the eye, rinse with plenty of water immediately. When symptoms are noticeable, consult a physician.

• Never throw the used cartridge and toner into fire. You may be burned due to dust explosion.

Handling of Service Materials

• Unplug the power cord from the wall outlet.

Drum cleaner (isopropyl alcohol) and roller cleaner (acetone-based) are highly flammable and must be handled with care. A risk of fire exists.

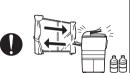
 Do not replace the cover or turn the product ON before any solvent remnants on the cleaned parts have fully evaporated.

A risk of fire exists.



Handling of Service Materials

- Use only a small amount of cleaner at a time and take care not to spill any liquid. If this happens, immediately wipe it off. A risk of fire exists.
- When using any solvent, ventilate the room well. Breathing large quantities of organic solvents can lead to discomfort.



[4] Used Batteries Precautions

ALL Areas

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Germany

VORSICHT!

Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleichwertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

France

ATTENTION

Il y a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.

Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

Denmark

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Finland, Sweden

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

VARNING

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens instruktion.

Norway

ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri.

Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

[5] Laser Safety

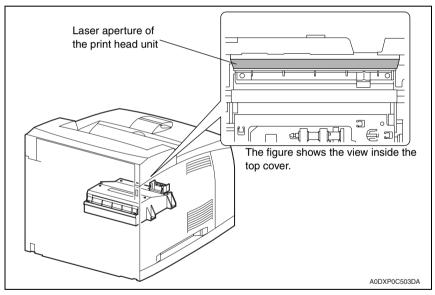
 This is a digital machine certified as a Class 1 laser product. There is no possibility of danger from a laser, provided the machine is serviced according to the instruction in this manual.

5.1 Internal Laser Radiation

semiconductor laser		
Maximum power of the laser diode	10 mW	
Maximum average radiation power (*)	220 μW	
Wavelength	775-800 nm	

*at laser aperture of the Print Head Unit

- This product employs a Class 3B laser diode that emits an invisible laser beam. The laser diode and the scanning polygon mirror are incorporated in the print head unit.
- The print head unit is NOT A FIELD SERVICEABLE ITEM. Therefore, the print head unit should not be opened under any circumstances.



U.S.A., Canada (CDRH Regulation)

- This machine is certified as a Class 1 Laser product under Radiation Performance Standard according to the Food, Drug and Cosmetic Act of 1990. Compliance is mandatory for Laser products marketed in the United States and is reported to the Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration of the U.S. Department of Health and Human Services (DHHS). This means that the device does not produce hazardous laser radiation.
- The label shown on page S-16 indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

CAUTION

• Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

semiconductor laser		
Maximum power of the laser diode	10 mW	
Wavelength	775-800 nm	

All Areas

CAUTION

• Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

semiconductor laser		
Maximum power of the laser diode	10 mW	
Wavelength	775-800 nm	

Denmark

ADVARSEL

 Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. Klasse 1 laser produkt der opfylder IEC60825-1 sikkerheds kravene.

halvlederlaser		
Laserdiodens højeste styrke	10 mW	
bølgelængden	775-800 nm	

Finland, Sweden

LUOKAN 1 LASERLAITE KLASS 1 LASER APPARAT

VAROITUS!

 Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

puolije	ohdelaser
Laserdiodin suurin teho	10 mW
aallonpituus	775-800 nm

VARNING!

 Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

halvle	edarlaser
Den maximala effekten för laserdioden	10 mW
våglängden	775-800 nm

VARO!

 Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättomälle lasersäteilylle. Älä katso säteeseen.

VARNING!

 Osynlig laserstråining när denna del är öppnad och spärren är urkopplad. Betrakta ej stråien.

Norway

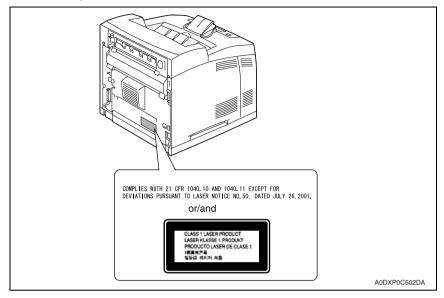
ADVERSEL

 Dersom apparatet brukes på annen måte enn spesifisert i denne bruksanvisning, kan brukeren utsettes för unsynlig laserstrålning, som overskrider grensen for laser klass 1.

halvle	eder laser
Maksimal effekt till laserdiode	10 mW
bølgelengde	775-800 nm

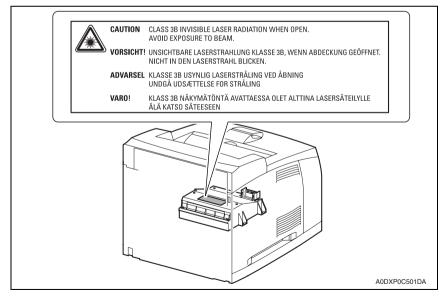
5.2 Laser Safety Label

• A laser safety label is attached to the inside of the machine as shown below.



5.3 Laser Caution Label

• A laser caution label is attached to the outside of the machine as shown below.



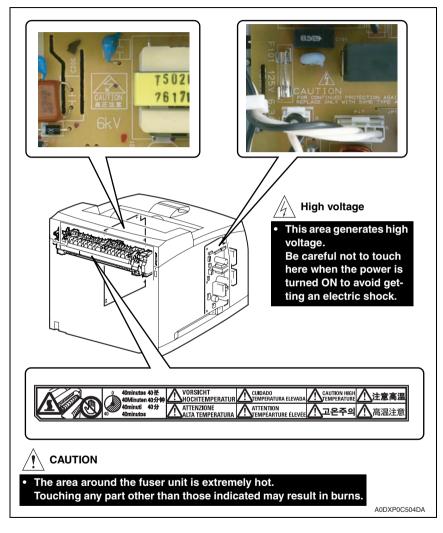
5.4 PRECAUTIONS FOR HANDLING THE LASER EQUIPMENT

- When laser protective goggles are to be used, select ones with a lens conforming to the above specifications.
- When a disassembly job needs to be performed in the laser beam path, such as when working around the printerhead and PC drum, be sure first to turn the printer OFF.
- If the job requires that the printer be left ON, take off your watch and ring and wear laser protective goggles.
- A highly reflective tool can be dangerous if it is brought into the laser beam path. Use utmost care when handling tools on the user's premises.
- The Print Head is not to be disassembled or adjusted in the field. Replace the unit or assembly including the control board. Therefore, remove the laser diode, and do not perform control board trimmer adjustment.

WARNING INDICATIONS ON THE MACHINE

Caution labels shown are attached in some areas on/in the machine.

When accessing these areas for maintenance, repair, or adjustment, special care should be taken to avoid burns and electric shock.



 You may be burned or injured if you touch any area that you are advised not to touch by any caution label. Do not remove caution labels. If any caution label has come off or soiled and therefore the caution cannot be read, contact our Service Office.

MEASURES TO TAKE IN CASE OF AN ACCIDENT

- If an accident has occurred, the distributor who has been notified first must immediately take emergency measures to provide relief to affected persons and to prevent further damage.
- 2. If a report of a serious accident has been received from a customer, an on-site evaluation must be carried out quickly and KMBT must be notified.
- 3. To determine the cause of the accident, conditions and materials must be recorded through direct on-site checks, in accordance with instructions issued by KMBT.
- 4. For reports and measures concerning serious accidents, follow the regulations specified by every distributor.

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Composition of the service manual

This service manual consists of Theory of Operation section and Field Service section to explain the main machine and its corresponding options.

Theory of Operation section gives, as information for the CE to get a full understanding of the product, a rough outline of the object and role of each function, the relationship between the electrical system and the mechanical system, and the timing of operation of each part.

Field Service section gives, as information required by the CE at the site (or at the customer's premise), a rough outline of the service schedule and its details, maintenance steps, the object and role of each adjustment, error codes and supplementary information.

The basic configuration of each section is as follows. However some options may not be applied to the following configuration.

<Theory of Operation section>

OUTLINE: COMPOSITION/OPERATION:	Explanation of system configuration, product specifications, unit configuration, and paper path Explanation of configuration of each unit, operating system, and control system
<field section="" service=""></field>	
GENERAL:	Explanation of system configuration, and product specifications
MAINTENANCE:	Explanation of service schedule, maintenance steps, ser- vice tools, removal/reinstallation methods of major parts, and firmware version up method etc.
ADJUSTMENT/SETTING:	Explanation of utility mode, service mode, and mechanical adjustment etc.
TROUBLESHOOTING:	Explanation of lists of jam codes and error codes, and their countermeasures etc.
APPENDIX:	Parts layout drawings, connector layout drawings, timing chart, overall layout drawing are attached.

Notation of the service manual

A. Product name

In this manual, each of the products is described as follows:

(1)	bizhub 40P	Main body
(2)	Microsoft Windows 95:	Windows 95
	Microsoft Windows 98:	Windows 98
	Microsoft Windows Me:	Windows Me
	Microsoft Windows NT 4.0:	Windows NT 4.0 or Windows NT
	Microsoft Windows 2000:	Windows 2000
	Microsoft Windows XP:	Windows XP
	Microsoft Windows Vista:	Windows Vista
	When the description is made in combin	nation of the OS's mentioned above:
		Windows 95/98/Me
		Windows NT 4.0/2000
		Windows NT/2000/XP/Vista
		Windows 95/98/Me/ NT/2000/XP/Vista

B. Brand name

The company names and product names mentioned in this manual are the brand name or the registered trademark of each company.

C. Feeding direction

- When the long side of the paper is parallel with the feeding direction, it is called short edge feeding. The feeding direction which is perpendicular to the short edge feeding is called the long edge feeding.
- Short edge feeding will be identified with [S (abbreviation for Short edge feeding)] on the paper size. No specific notation is added for the long edge feeding.
 When the size has only the short edge feeding with no long edge feeding, [S] will not be added to the paper size.

<Sample notation>

Paper size	Feeding direction	Notation
A4	Long edge feeding	A4
A4	Short edge feeding	A4S
A3	Short edge feeding	A3



SERVICE MANUAL FIELD SERVICE **bizhub** 40P Main body

2007.12 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

Revision history

After publication of this service manual, the parts and mechanism may be subject to change for improvement of their performance.

Therefore, the descriptions given in this service manual may not coincide with the actual machine.

When any change has been made to the descriptions in the service manual, a revised version will be issued with a revision mark added as required.

Revision mark:

- To indicate clearly a section revised, show $\underline{\land}$ to the left of the revised section. A number within $\underline{\land}$ represents the number of times the revision has been made.
- To indicate clearly a section revised, show **A** in the lower outside section of the corresponding page.

A number within **A** represents the number of times the revision has been made.

NOTE

Revision marks shown in a page are restricted only to the latest ones with the old ones deleted.

- When a page revised in Ver. 2.0 has been changed in Ver. 3.0: The revision marks for Ver. 3.0 only are shown with those for Ver. 2.0 deleted.
- When a page revised in Ver. 2.0 has not been changed in Ver. 3.0: The revision marks for Ver. 2.0 are left as they are.

2007/12	1.0	_	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

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6.4.6	Laser lens

Adjustment/Setting

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General

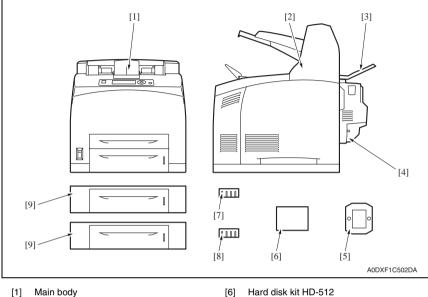
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Blank Page

General

System configuration 1.

System front view



- [2] Offset tray SF-603
- [3] Face up tray *1
- Duplex AD-508 [4]
- CF adapter MK-717 [5]

*1: Standard equipment

- Hard disk kit HD-512
- [7] DIMM (128 MB) EM-313
- [8] DIMM (256 MB) EM-313
- Lower feeder unit PF-505 [9]

2. Product specifications

A. Type

Туре	Desktop A4 laser beam printer		
Printing system	Semiconductor laser beam scanning system		
Exposure system	Laser diode and polygon mirror scanning		
PC drum type	OPC (organic photo conductor)		
Toner cartridge type	The toner cartridge contains an OPC drum, a developing roller and blade, a primary charge roller, a drum cleaner, consumable memory device and the toner.		
Print resolution	600 dpi x 600 dpi x 1 bit 1200 dpi x 1200 dpi x 1 bit		
Media feeding system	Two-way system (tray 1: 150 sheets, tray 2: 550 sheets) * Expandable up to a four-way system by adding lower feeder units (up to two)		
Developing system	Electro photographic system (roller charging, single component magnetic toner development)		
Charging system	Roller charging system		
Fusing system	Thermal fusing system by a heated roller		
Media exit system	Face down (exit tray capacity: A4S/Letter, 500 sheets)		

B. Functions

Warm-up time	Average: 20 sec. or less (Power on to ready, at ambient temperature of 22° C/71.6° F and rated source voltage)			
Process speed	269.0 mm/sec			
First print output time	Simplex	9.4 sec. (A4S/Letter S, plain paper)		
*1	Duplex	12.6 sec. (Letter S, plain paper) 12.7 sec. (A4S, plain paper)		
Print speed	Simplex 43.0 pages/min. (A4S, plain paper) 45.1 pages/min. (Letter S, plain paper)			
	Duplex	26.4 pages/min. (A4S, plain paper) 27.2 pages/min. (Letter S, plain paper)		
Media sizes *2	Letter/Legal/Statement/Executive/A4/A5/A6/B5 (JIS)/B6/Folio/SP Folio/ Foolscap/UK Quarto/Government Letter/Government Legal/16K/Kai 16/Kai 32 Japanese Postcard/Japanese Postcard-D/B5 (ISO)/Envelope #10/Envelope DL/Envelope C5/Envelope C6/Envelope Chou #3/Envelope Monarch/Envelope You #4/Envelope Chou #4/Custom size			
	Width: 76.2 to 215.9 mm (3.0 to Length: 127.0 to 900 mm (5.0 to Tray 1 Tray 1 NOTE • Image quality of media lenguaranteed.			
	Tray 2	Width: 98.4 to 215.9 mm (3.87 to 8.5 inches) Length: 148.0 to 355.6 mm (5.83 to 14.0 inches)		

Media types	 Plain paper 68 to 105 g/m²; 18.13 to 28 lb Recycled paper 68 to 105 g/m²; 18.13 to 28 lb OHP transparencies Envelopes Labels Thick 1 (106 to 159 g/m²; 28.27 to 42.4 lb) Thick 2 (160 to 216 g/m²; 42.67 to 57.6 lb) Thick 3 (106 to 216 g/m²; 28.27 to 57.6 lb) Postcards Thin paper 			
Tray capacities	Tray 1	Plain/Recycled paper: 150 sheets Transparency: 100 sheets Envelope: 15 sheets Labels: 100 sheets Thick paper: 60 sheets Postcard: 55 sheets Banner paper: 1 sheet		
	Tray 2	Plain/Recycled paper: 550 sheets Transparency: 100 sheets Envelope: 80 sheets Labels: 290 sheets Thick paper: 160 sheets Postcard: 200 sheets		
Interfaces	 Parallel (IEEE 1284) support only an ECP mode 10 Base-T/100 Base-TX/1000 Base-T Ethernet USB 2.0 (High-Speed) Host USB (USB device printing) 			
CPU	Marvell Orion II, 50	Marvell Orion II, 500 MHz		
Standard memory	DDRII-SDRAM 12	DDRII-SDRAM 128 MB		
Hard disk	Optional: 40 GB	Optional: 40 GB		

*1: First print output time is defined as the time from when the printer receives a printing start signal in the READY state until a single media is printed and delivered to the output tray.

*2: Plain paper and recycle paper are unsupported paper types with printing in A6, envelope #10, envelope C6, envelope DL, envelope monarch, envelope youkei #4, envelope choukei #3, youkei 0, envelope choukei #4, japanese postcard, or custom size of 120 mm (width) or less.

C. Maintenance

Machine durability

D. Machine specifications

Power requirements Voltage:	AC 110 to 127 V, -10 % +6 % (AC 120 V -10 % +10 %: only US/Canada) AC 220 to 240 V, -10 % +10 %
Frequency:	50 to 60 Hz \pm 3 Hz
Max power consumption	110 V: 1,015W or less 220 V: 1,015W or less
Dimensions 421.8 mm (W) x 465.4 mm (D) x 404.3 mm (H) 16.6 inch (W) x 18.3 inch (D) x 15.9 inch (H)	
Weight	29.0 kg (46.4 lb) without consumables
Operating noise	During standby :56.1 dB (A) or less During printing :28.0 dB (A) or less

E. Operating Environment

Temperature	10 to 35° C / 50 to 95° F (with a fluctuation of 10° C / 18° F or less per hour)
Humidity	15% to 85% (with a fluctuation of 20 %/h)

NOTE

• These specifications are subject to change without notice.

Maintenance

3. Periodical check

3.1 Maintenance items

3.1.1 Parts to be replaced by users (CRU)

No	Class	Part to be replaced	Number of prints *1	Clean	Replace	Description
1	Processing section	High-capacity toner cartridge	17,000		•	
2		Feed roller assy *2	200,000		•	
3	Tray 1	Pick-up roller assy *2	200,000		•	
4		Separation roller assy *2	200,000		•	
5		Feed roller assy *2	200,000		•	
6	Tray 2	Pick-up roller assy *2	200,000		•	
7	Separation roller assy *2		200,000		•	
8	Transfer section	Transfer roller *2	200,000		•	
9	Fusing section	Fuser unit *2	200,000		•	
10		Feed roller assy *2	200,000		•	
11	PF-505	Pick-up roller assy *2	200,000		•	
12		Separation roller assy *2	200,000		•	

*1: Continuous printing, B/W ratio: 5 %

*2: These parts are included in the maintenance kit, and replaced at the same time.

3.2 Maintenance parts

- To ensure that the machine produces good prints and to extend its service life, it is recommended that the maintenance jobs described in this schedule be carried out as instructed.
- The replacing time is to be determined by the total counter value.
- Maintenance conditions are based on A4S or letter S,1-side print.

3.2.1 Replacement parts

No	Maintenance parts	Quantity	Actual durable cycle *1	Parts No.	Descriptions	Ref.page
1	Maintenance kit *3	aintenance kit *3 1	200,000	A0FM012	for 110 V areas	P.8 *2
	Maintenance Kit 3	-		A0FM0Y2	for 220 V areas	F.0 Z

*1: Continuous printing, B/W ratio: 5 %

- *2: For details about maintenance procedure of lower feeder unit, see the optional lower feeder unit service manual.
- *3: The following parts are included in maintenance kit.

Item name	Quantity
Roller assy (for feed roller assy, pick-up roller assy and separation roller assy)	12
Transfer roller	1
Fuser unit	1

3.3 Concept of parts life

3.3.1 Conditions for life specifications values

• The life specification values represent the number of pages printed or figures equivalent to it when given conditions (see the table given below) are met. They can be more or less depending on the machine operating conditions of each individual user.

Item	Description
Job type	Continuous printing
Media size	A4 S or letter S
Original density	B/W ratio: 5 %

3.4 Maintenance procedure (periodical check parts)

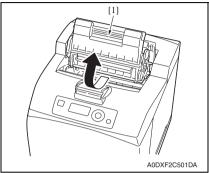
3.4.1 Replacing the toner cartridge

A. Periodically replaced parts/cycle

· High-capacity toner cartridge: Every 17,000 prints

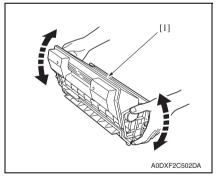
B. Removal procedure

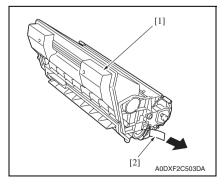
1. Open the top cover.



C. Reinstallation procedure

1. Take the new toner cartridge out of the box.





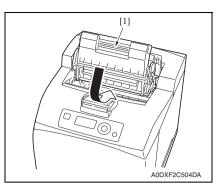
2. Hold the toner cartridge [1] by the grip, and then pull it out slowly.

Maintenance

2. Holding it firmly with both hands, rock the toner cartridge [1] left and right, forward and backward, to distribute the toner evenly.

NOTE

- Do not touch the photo conductor of the toner cartridge; otherwise image quality may decrease.
- 3. Placing the toner cartridge [1] on a flat surface, pull out the protective seal [2] horizontally.



- Field Service Ver. 1.0 Dec. 2007
- 4. Hold the toner cartridge [1] by the grip, and then insert it into the slot inside the printer.

5. Close the top cover securely.

NOTE

When removing or reinstalling the toner cartridge while it is being used or after it
has been used up, do not hold, stand or store cartridge on their ends or turn them
upside down; the toner inside the cartridge may become caked or unequally distributed.

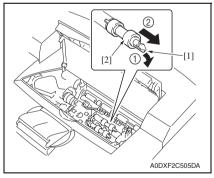
3.4.2 Replacing the tray 1 feed roller assy

A. Periodically replaced parts/cycle

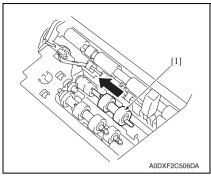
• Tray 1 feed roller assy: Every 200,000 prints

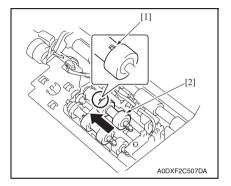
B. Removal procedure

1. Remove the toner cartridge. See P.20



 While pushing down the shaft of the feed roller assy, widen the tab [1] of the feed roller assy to loosen it and then slowly remove the feed roller assy [2] from the shaft on the tray.





 Hold the tab on the new feed roller assy [1] and slowly push it into the shaft on the tray.

2. Aligning the small tabs [1] on the feed roller assy with the slots of the shaft, push the feed roller assy [2] completely in so that the tab fits into the slot.

- *3.* Reinstall the toner cartridge.
- 4. Close the top cover securely.

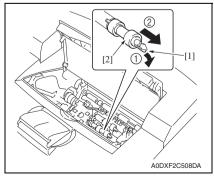
3.4.3 Replacing the tray 1 pick-up roller assy

A. Periodically replaced parts/cycle

• Tray 1 pick-up roller assy: Every 200,000 prints

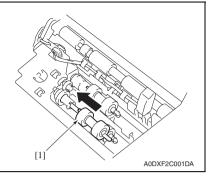
B. Removal procedure

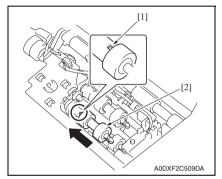
1. Remove the toner cartridge. See P.20



2. While pushing down the shaft of the pick-up roller assy, widen the tab [1] of the pick-up roller assy to loosen it and then slowly remove the pick-up roller assy [2] from the shaft on the tray.

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 Hold the tab on the new pick-up roller assy [1] and slowly push it into the shaft on the tray.

2. Aligning the small tabs [1] on the pick-up roller assy with the slots of the shaft, push the pick-up roller assy [2] completely in so that the tab fits into the slot.

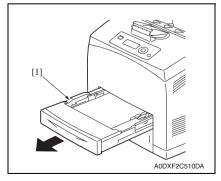
- 3. Reinstall the toner cartridge.
- 4. Close the top cover securely.

3.4.4 Replacing the tray 1 separation roller assy

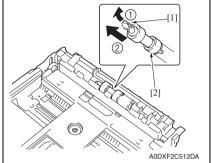
A. Periodically replaced parts/cycle

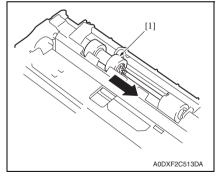
• Tray 1 separation roller assy: Every 200,000 prints

B. Removal procedure



1. Pull the tray 1 [1] out of the printer.





4. While pushing down the shaft of the separation roller assy, widen the tab

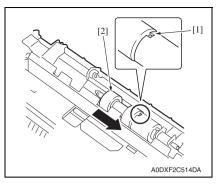
[1] of the separation roller assy to loosen it and then slowly remove the separation roller assy [2] from the

shaft on the tray.

- 2. Remove the lid [1] of the tray 1.
- 3. Remove any media [2] in the tray 1.

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 Hold the tab on the new separation roller assy [1] and slowly push it into the shaft on the tray.



- 3. Load the media face up in the tray 1.
- 4. Reattach the lid of the tray 1.
- 5. Push the tray 1 completely into the printer.

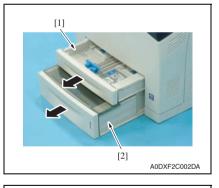
3.4.5 Replacing the tray 2 feed roller assy

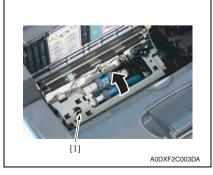
A. Periodically replaced parts/cycle

• Tray 2 feed roller assy: Every 200,000 prints

B. Removal procedure

1. Remove the toner cartridge. See P.20





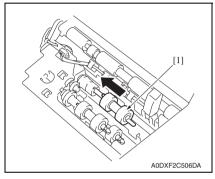
 Aligning the small tabs [1] on the separation roller assy with the slots of the shaft, push the separation roller assy [2] completely in so that the tab fits into the slot.

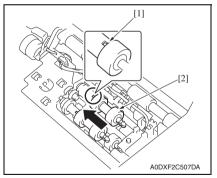
2. Pull the tray 1 [1] and tray 2 [2] out of the printer.

3. Raise the tray 1 feed unit [1] upward.

[2] A0DXF2C004DA

C. Reinstall procedure





- 3. Push the tray 1 and 2 completely into the printer.
- 4. Reinstall the toner cartridge.
- 5. Close the top cover securely.

4. While pushing down the shaft of the feed roller assy, widen the tab [1] of the feed roller assy to loosen it and then slowly remove the feed roller assy [2] from the shaft on the tray.

Maintenance

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1. Hold the tab on the new feed roller assy [1] and slowly push it into the shaft on the tray.

2. Aligning the small tabs [1] on the feed roller assy with the slots of the shaft, push the feed roller assy [2] completely in so that the tab fits into the slot.

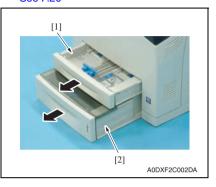
3.4.6 Replacing the tray 2 pick-up roller assy

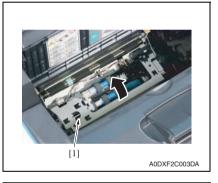
A. Periodically replaced parts/cycle

• Tray 2 pick-up roller assy: Every 200,000 prints

B. Removal procedure

1. Remove the toner cartridge. See P.20



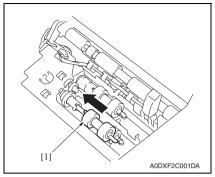


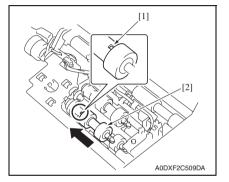
[2] A0DXF2C005DA 2. Pull the tray 1 [1] and tray 2 [2] out of the printer.

3. Raise the tray 1 feed unit [1] upward.

4. While pushing down the shaft of the pick-up roller assy, widen the tab [1] of the pick-up roller assy to loosen it and then slowly remove the pick-up roller assy [2] from the shaft on the tray.

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the tab on the new nick-up

3. Periodical check

 Hold the tab on the new pick-up roller assy [1] and slowly push it into the shaft on the tray.

2. Aligning the small tabs [1] on the pick-up roller assy with the slots of the shaft, push the pick-up roller assy [2] completely in so that the tab fits into the slot.

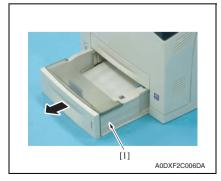
- *3.* Push the tray 1 and 2 completely into the printer.
- 4. Reinstall the toner cartridge.
- 5. Close the top cover securely.

3.4.7 Replacing the tray 2 separation roller assy

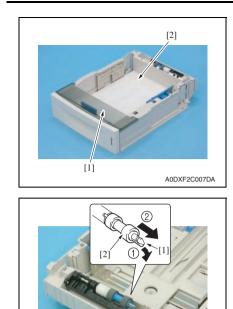
A. Periodically replaced parts/cycle

• Tray 2 separation roller assy: Every 200,000 prints

B. Removal procedure



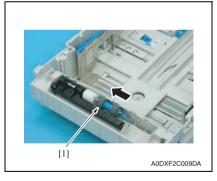
1. Pull the tray 2 [1] out of the printer.



- 2. Remove the lid [1] of the tray 2.
- 3. Remove any media [2] in the tray 2.

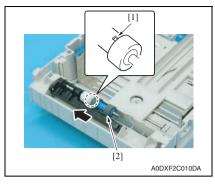
4. While pushing down the shaft of the separation roller assy, widen the tab [1] of the separation roller assy to loosen it and then slowly remove the separation roller assy [2] from the shaft on the tray.

C. Reinstall procedure



A0DXF2C008DA

 Hold the tab on the new separation roller assy [1] and slowly push it into the shaft on the tray.



- 3. Load the media face up in the tray 2.
- 4. Reattach the lid of the tray 2.
- 5. Push the tray 2 completely into the printer.

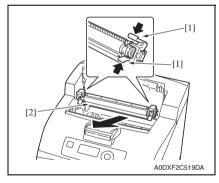
3.4.8 Replacing the transfer roller

A. Periodically replaced parts/cycle

• Transfer roller: Every 200,000 prints

B. Removal procedure

1. Remove the toner cartridge. See P.7

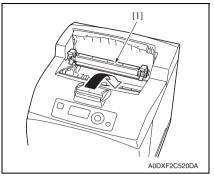


2. Pull the 2 levers [1] on the upper part of the transfer roller, then squeeze the 2 levers on the bottom of the transfer roller [2] and pull it out slowly towards you.

 Aligning the small tabs [1] on the separation roller assy with the slots of the shaft, push the separation roller assy [2] completely in so that the tab fits into the slot.

3. Periodical check

Maintenance



1. Pick up the new transfer roller [1] by the levers at both ends, and then slot it in slowly.

- 2. Reinstall the toner cartridge.
- З. Close the top cover securely.

3.4.9 Replacing the fuser unit



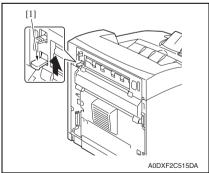
The temperature gets high in the vicinity of the fuser unit. You may get burned when you come into contact with the area. Before replacement operations, make sure that more than 20 minutes have elapsed since the main and sub power switches were turned off.

A. Periodically replaced parts/cycle

• Fuser unit: Every 200,000 prints

B. Procedure

1. Turn OFF the power switch, unplug the power cord from the power outlet, and let the machine to stand idle for about 20 min.



2. Lift the lever [1].

[1]

3. Open the rear cover [1].

- 4. Pull down the 2 levers [1] at the bottom of the fuser unit.

5. Remove the fuser unit [1] slowly.

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- 6. Install the new fuser unit.
- 7. From the Menu, select [MAINTENANCE MENU] \rightarrow [SUPPLIES] \rightarrow [REPLACE] \rightarrow [FUSER UNIT] and execute this function to reset the fuser unit counter value. See P.143
- A0DXF2C517DA [1] A0DXF2C518DA

A0DXF2C516DA

[1]

4. Service tool

4.1 Service material list

Name	Shape	Material No.	Remarks
Cleaning pad	A02EF2C526DA	000V-18-1	10pcs/1pack
Isopropyl alcohol	A00KF2C506DA	_	

4.2 Consumable parts

4.2.1 Toner cartridge

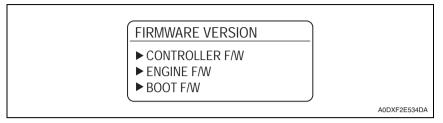
Part name	Life expectancy
High-capacity toner cartridge	17,000 prints

For the predetermined conditions, See P.6

5. Firmware upgrade

5.1 Checking the current firmware version

- 1. Display [SERVICE MENU].
- 2. Display [FIRMWARE VERSION].



3. Select the firmware to be updated and check the current version. See P.135

5.2 Firmware upgrading procedure by USB memory device

5.2.1 Preparations for firmware upgrading

A. System requirements

- PC equipped with a USB port
- USB memory device

B. Saving the firmware data into the USB memory device

- 1. Save the firmware data in appropriate space in the PC.
- 2. Connect the USB memory device to the PC.
- 3. Create a "firmware" folder immediately under the drive of the USB memory device.
- 4. Copy the firmware data (***.exe) in the firmware folder created in step 3.

NOTE

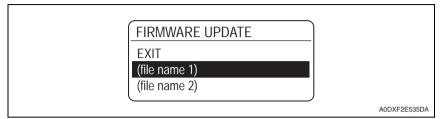
- · Be sure to save the firmware data in "drive:/firmware/***.exe."
- The printer can display up to 20 files of firmware data during upgrading.

C. How to write firmware data

- 1. Turn the power switch ON.
- 2. Connect the USB memory device to the printer.
- 3. Call the SERVICE MENU to the display.

See P.135

4. Select [FIRMWARE UPDATE] and press the Menu/Select key. A list of firmware data in the USB memory device is displayed.

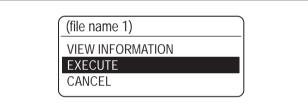


NOTE

• Before upgrading firmware, use [VIEW INFORMATION] to check that the firmware data is correct.

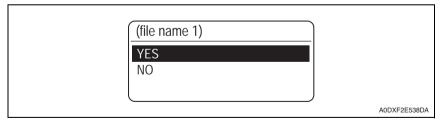
See P.145

- 5. Select the specific firmware data to be upgraded and press the Menu/Select key.
- 6. Select [EXECUTE] and press the Menu/Select key.

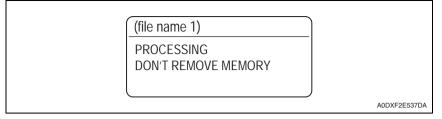


A0DXF2E536DA

7. Select [YES] and press the Menu/Select key.



8. The firmware upgrading procedure starts.



NOTE

- NEVER disconnect the USB memory device from the printer during the firmware upgrading procedure.
- 9. The printer is automatically restarted as soon as the firmware is upgraded correctly.

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5.3 Firmware upgrading procedure by updater

5.3.1 Updating method

• To update the firmware, perform "Firmware Updater."

A. System requirements

Computer	Windows	 PC with a Pentium 2,400 MHz or faster processor (A Pentium 3,500 MHz or faster processor is recommended.)
Computer	Macintosh	Apple Macintosh computer with a PowerPC G3 or later proces- sor (A PowerPC G4 or later is recommended.)
OS	Windows	Microsoft Windows XP Home Edition/Professional, Windows 2000
03	Macintosh	MacOS X 10.2 or later (We recommend installing the newest patch.)
Available	Windows	Approximately 20 to 26 MB
hard disk space	Macintosh	Approximately 30 to 42 MB
Memory		128 MB or more
Interface	Windows	 10Base-T/100Base-TX/1000Base-T Ethernet USB 2.0 (High Speed) compliant Parallel (IEEE 1284)
	Macintosh	10Base-T/100Base-TX/1000Base-T Ethernet

B. Connection for Windows

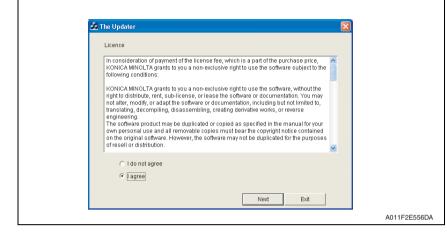
(1) Starting the firmware updater

NOTE

- Before starting the firmware updater, turn on the printer, and make sure that it is correctly connected.
- 1. Download the firmware updater.
- 2. Double-click "xxx.exe."
- 3. The printer name and firmware version are displayed. Click the [Next].

🚵 The Updater 🛛 🔀	
This tool is for updating the firmware.	
Printer name: KONICA MINOLTA	
Firmware version: Real Hot	
Next Exit	
Next	A0DXF2E539DA

4. The license agreement is displayed. Select "I agree", and then click the [Next].



5. The list of printer drivers is displayed. Select the appropriate connection for the environment where the printer is being used.

📩 The Updater 🔀	
Please select the port for updating. Printer driver list: KONICA MINOLTA	
Network port Local port Printer IP address Next Ext	
	A0DXF2E540

- For a network connection: Select "Network port."
 See P.26
- For a local connection: Select "Local port."
 See P.28
- When specifying the IP address of the printer: Select "Printer IP address." See P.30

NOTE

- If you select "Network port" or "Local port", make sure that the printer driver has been installed.
- If you select "Printer IP address", the firmware can be updated even if a printer driver is not already installed.

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(2) For a network connection

- 1. When "Network port" is selected, a list of printer drivers for the network port appears.
- 2. Select the printer driver, and then click the [Next].

🚵 The Updater				
Please select the port f	or updating.			
Printer driver list:				
KONICA MINOLTA				
KONICA MINUETA	440700			
1				
 Network port 				
 Local port 				
O Printer IP address				
		Next		

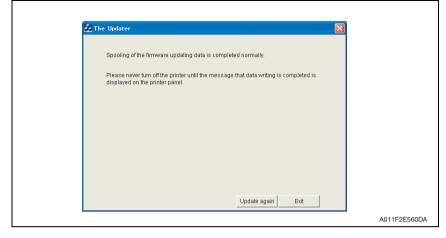
3. A message appears, requesting confirmation to update the firmware. Click the [Start] to begin transferring the firmware.

NOTE

• Do not turn off the printer while its firmware is being updated.

36 The	e Updater 🛛 🗙	
	Please do not update the firmware during printing.	
	And, please do not turn off the printer during updating.	
	If you are ready, please start now.	
	Start Exit	
		A011F2E559D

4. The result of the firmware transfer is displayed. Click the [Exit].



5. If the firmware was successfully updated, the printer will automatically restart.

<If spooling of the data fails>

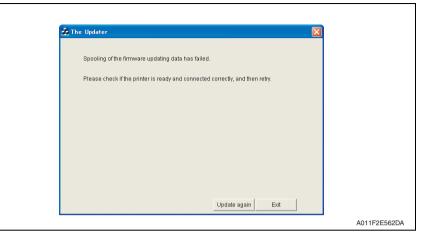
NOTE

- If spooling fails, data may remain in the printer spooler. Delete this data, and then try again.
- 1. If spooling of the data fails, the following message appears.
- 2. Click [OK].

5450G01601BPR1
Spooling of data has failed
[OK]

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3. Check that the printer is ready and that it is correctly connected, and then click the [Update again].



(3) For a local connection

- 1. When "Local port" is selected, a list of printer drivers for the local port appears.
- 2. Select the printer driver, and then click the [Next].

💑 The Updater			
Please select the port for updatin	g.		
Printer driver list:			
KONICA MINOLTA			
KONICA MINOLTA TO POLI			
C Network port			
 Local port 			
C Printer IP address		-	
C TIME I AUGESS]		
	Next	Exit	

3. A message appears, requesting confirmation to update the firmware. Click the [Start] to begin transferring the firmware.

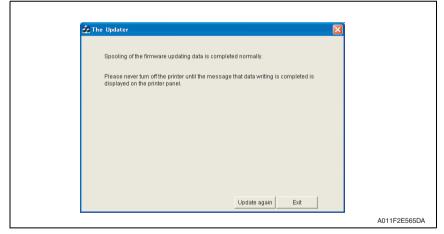
NOTE

Г

• Do not turn off the printer while its firmware is being updated.

🝰 The Updater	
Please do not update the firmware during printing.	
And, please do not turn off the printer during updating.	
lf you are ready, please start now.	
Start	
	A011F2E56

4. The result of the firmware transfer is displayed. Click the [Exit].



5. If the firmware was successfully updated, the printer will automatically restart.

<If spooling of the data fails>

For details, see "For a network connection." See P.27

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(4) When specifying the IP address of the printer

- 1. When "Printer IP address" is selected, the "Printer IP address" box becomes available.
- 2. Type in the IP address, and then click the [Next].

Updater				
Please select the port for up	dating.			
Printer driver list				
			-	
O Network port				
C Local port				
Printer IP address	192.168.1.3			
		 Exit		

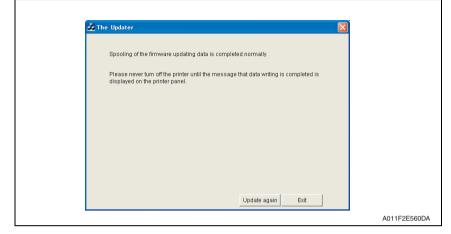
3. A message appears, requesting confirmation to update the firmware. Click the [Start] to begin transferring the firmware.

NOTE

• Do not turn off the printer while its firmware is being updated.

👪 The	Updater 🛛	
	Please do not update the firmware during printing.	
	And, please do not turn off the printer during updating.	
	If you are ready, please start now.	
	Start	
		A011F2E567D

4. The result of the firmware transfer is displayed. Click the [Exit].



5. If the firmware was successfully updated, the printer will automatically restart.

<If transferring of the data fails>

- 1. If transferring of the data fails, the following message appears.
- 2. Click [OK].

5450G01601BPR1	
Transferring of data has failed.	
	A011F2E569DA

3. Check that the printer is ready and that it is correctly connected, and then click the [Update again].

🐉 The	Updater	
	Transferring of the firmware updating data has failed.	
	Please check if the printer is ready and connected correctly, and then retry.	
	Update again Exit	

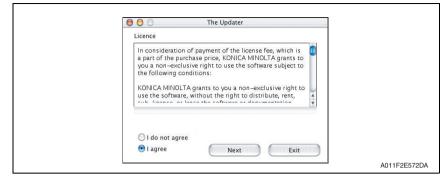
- C. Connection for Macintosh
- (1) Starting the firmware updater and the updating procedure

NOTE

- Before starting the firmware updater, turn on the printer, and make sure that it is correctly connected.
- 1. Download the firmware updater.
- 2. Double-click "***"
- 3. The printer name and firmware version are displayed. Click the [Next].

000	The Updater	
This tool is for up	dating the firmware.	
Printer name:	KONICA MINOLTA	
Firmware version:	C01801	
	Next Exit	
		A0DXF2E541DA

4. The license agreement is displayed. Select "I agree", and then click the [Next].



5. The screen for specifying the IP address of the printer appears.

O O The Updater	
Please enter the printer IP address.	
Next Exit	

6. Type in the IP address, and then click the [Next].

O O The Updater	
Please enter the printer IP address.	
Next Exit	A011F2E574DA

7. A message appears, requesting confirmation to update the firmware. Click the [Start] to begin transferring the firmware.

NOTE

• Do not turn off the printer while its firmware is being updated.



8. The result of the firmware transfer is displayed. Click the [Exit].

C C The Updater	
Transferring of the firmware updating data is completed normally.	
Please never turn off the printer until the message that data writing is completed is displayed on the printer panel.	
Update again Exit	
<u>.</u>	A011F2E576D

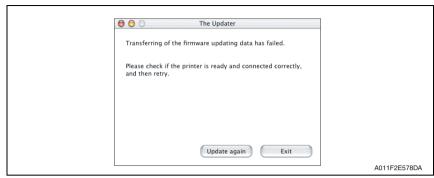
9. If the firmware was successfully updated, the printer will automatically restart.

<If transferring of the data fails>

- 1. If transferring of the data fails, the following message appears.
- 2. Click [OK].

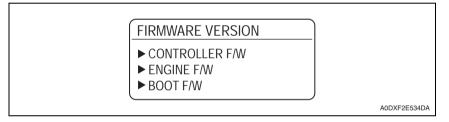
Tranferring of the firmware updating data has failed.	
	A011F2E577DA

3. Check that the printer is ready and that it is correctly connected, and then click the [Update again].



5.4 Checking the version after the firmware update

- 1. Display [SERVICE MENU].
- 2. Display [FIRMWARE VERSION].



3. Select the firmware that has been updated and check the current version.

6. Other

6.1 Disassembly/adjustment-prohibited items

- A. Screws to which blue paint or green paint is applied
- Blue paint or green paint is applied to some screws to prevent them from coming loose.
- As a general rule, screws to which blue paint or green paint is applied should not be removed or loosened.
- B. Red-painted screws
- Do not remove or loosen any of the red-painted screws in the field. It should also be noted that, when two or more screws are used for a single part, only one representative screw may be marked with the red paint.
- C. Variable resistors on board

NOTE

• Do not turn the variable resistors on boards for which no adjusting instructions are given in Adjustment/Setting.

D. Removal of PWBs

- When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.
- The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.
- Where it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.

6.2.1 Disassembly/assembly parts list

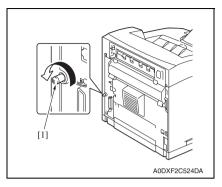
No.	Section	Part name	Ref.Page
1	Exterior part	Right cover	P.38
2		Rear top cover	P.39
3		Upper rear cover	P.39
4		Rear cover	P.40
5		Lower rear cover	P.40
6		Left cover	P.41
7		Media exit section cover	P.42
8		Front top cover	P.42
9		Front cover	P.45
10		Control panel assy	P.45
11		Media exit assy	P.46
12		Tray 1 feed unit	P.47
13		Tray 2 feed unit	P.48
14	Linit accombly ato	PH unit	P.49
15	Unit, assembly, etc	Gear assy	P.50
16		Hard disk kit (option)	P.51
17		CF adapter (option)	P.52
18		DIMM (option)	P.53
19		Backup battery	P.54
20		MFP board (MFPB)	P.55
21	Board	Print control board (PRCB)	P.56
22		DC power supply (DCPU)	P.59
23	Motor	Main motor (M1)	P.60
24		Fusing cooling fan motor (FM1)	P.62
25		Cooling fan motor (FM2)	P.62
26		Registration roller clutch (CL3)	P.64
27	Clutch	Tray1 media feed clutch (CL1)	P.64
28		Tray 2 media feed clutch (CL2)	P.65

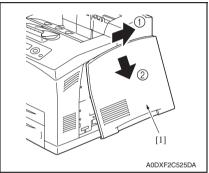
6.2.2 Cleaning parts list

No.	Section	Part name	Ref.Page
1		Feed roller	P.66
2	Tray 1	Pick-up roller	P.66
3		Separation roller	P.66
4		Feed roller	P.67
5	Tray 2	Pick-up roller	P.67
6		Separation roller	P.67
7	Processing section	Laser lens	P.68

6.3 Disassembly/assembly procedure

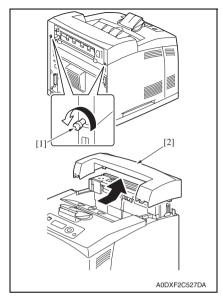
6.3.1 Right cover



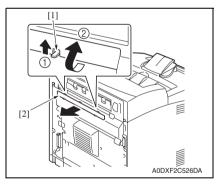


1. Loosen the screw [1].

2. Remove the right cover [1].



6.3.3 Upper rear cover



1. Loosen two screws [1], and remove the rear top cover [2].

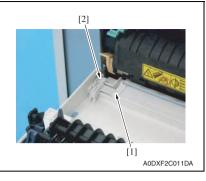
Maintenance

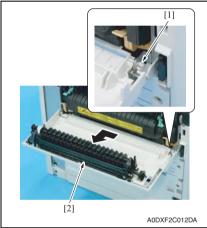
6. Other

1. Unhook two tabs [1], and remove the upper rear cover [2].

6.3.4 Rear cover

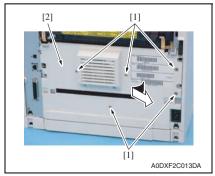
1. Open the rear cover.





6.3.5 Lower rear cover

1. Remove the rear cover. See P.40



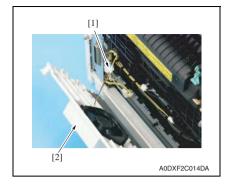
2. Unhook the tab [1], and remove the stopper [2].

3. Unhook the tab [1], and remove the rear cover [2].

2. Remove five screws [1], and take out the lower rear cover [2].

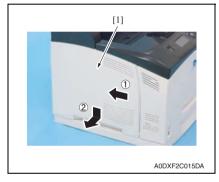
NOTE

• Do not remove it in rush as it is connected to the connector.



6.3.6 Left cover

1. Remove the lower rear cover. See P.40

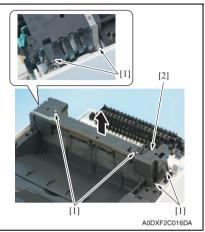


3. Disconnect the connector [1], and remove the lower rear cover [2].

2. Remove the left cover [1].

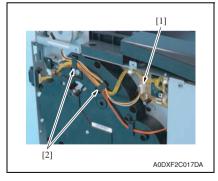
6.3.7 Media exit section cover

- 1. Open the rear cover.
- 2. Remove the rear top cover. See P.39



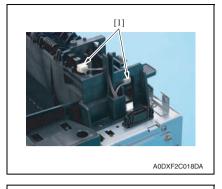
6.3.8 Front top cover

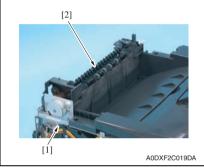
- 1. Remove the right cover. See P.38
- 2. Remove the media exit section cover. See P.42
- *3.* Remove the left cover. See P.41

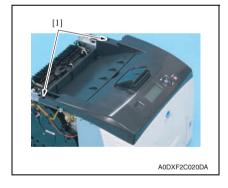


3. Remove six screws [1], and remove the media exit section cover [2].

 Disconnect the connector [1], and remove the harnesses from two harness guides [2].







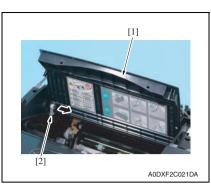
5. Disconnect two connectors [1].

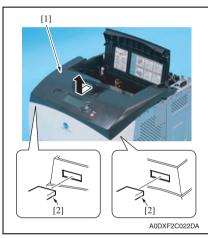
6. Remove the screw [1], and remove the media exit assy [2].

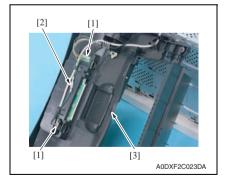
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7. Remove two screws [1].

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8. Open the top cover [1], and take out the stopper [2] from the hinge.

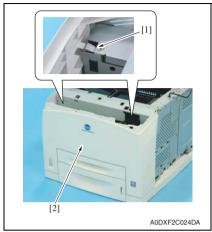
9. Following the procedure illustrated on the left, unhook two tabs [2] of the front top cover [1].

NOTE

• Do not remove it in rush as it is connected to the connector.

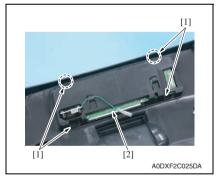
10. Remove two connectors [1] and the bullet terminal [2]. Then, remove the front top cover assy [3].

1. Remove the front top cover. See P.42



6.3.10 Control panel assy

1. Remove the front top cover. See P.42



front cover [2].

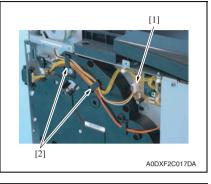
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2. Unhook two tabs [1], and remove the

2. Unhook four tabs [1], and remove the control panel assy [2].

6.3.11 Media exit assy

- 1. Remove the media exit section cover. See P.42
- 2. Remove the left cover. See P.41



- [2] [1] ADDXF2C019DA

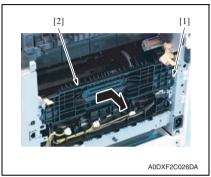
3. Disconnect the connector [1], and remove the harnesses from two harness guides [2].

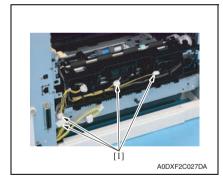
4. Disconnect two connectors [1].

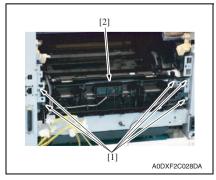
5. Remove the screw [1], and remove the media exit assy [2].

6.3.12 Tray 1 feed unit

- 1. Remove the toner cartridge. See P.7
- 2. Remove the transfer roller. See P.17
- *3.* Remove the fuser unit. See P.18
- 4. Remove the rear cover. See P.40
- 5. Remove the lower rear cover. See P.40







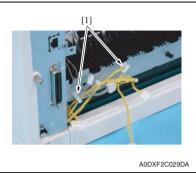
6. Unhook the tab [1], and remove the transfer roller housing [2].

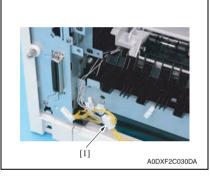
Disconnect four connectors [1], and remove the harnesses from the harness guide.

8. Remove five screws [1], and remove the tray 1 feed unit [2].

6.3.13 Tray 2 feed unit

1. Remove the tray 1 feed unit. See P.47





[2] The second s 2. Remove the harnesses from two wire saddles [1].

3. Disconnect the connector [1], and remove the harness from the harness guide.

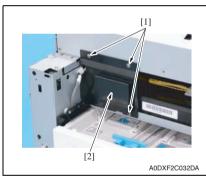
4. Remove six screws [1], and remove the tray 2 feed unit [2].

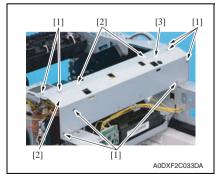
6.3.14 PH unit

 Do not replace the printer head unit while the power is ON. Laser beam generated during the above mentioned activity may cause blindness.
 Do not disassemble or adjust the printer head unit. Laser beam generated during the above mentioned activity may cause blindness.

NOTE

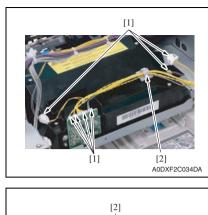
- Be sure to perform the removal and reinstallation procedures for the PH unit on a level and flat surface. Performing the procedures on a slant desk or similar place could result in the PH unit being misaligned.
- 1. Remove the front cover. See P.45
- 2. Remove the cooling fan motor assy. See P.62

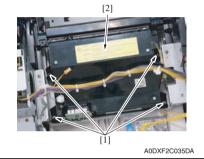




3. Remove three screws [1], and remove the cover [2].

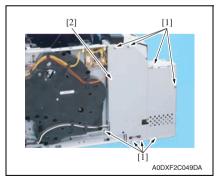
- 4. Remove the eight screws [1].
- 5. Remove three wire saddles [2], and remove the reinforcement plate [3].





6.3.15 Gear assy

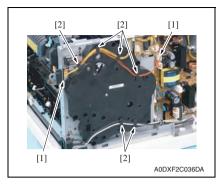
1. Remove the front cover. See P.45

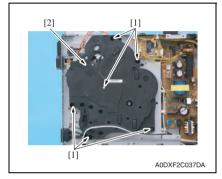


 Disconnect seven connectors [1], and remove the harnesses from the wire saddle [2].

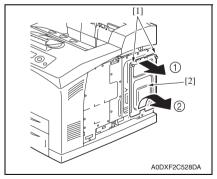
7. Remove four screws [1], and remove the PH unit [2].

2. Remove eight screws [1], and remove the DC power supply protective shield [2].





- 6.3.16 Hard disk kit (option)
- 1. Remove the right cover. See P.38



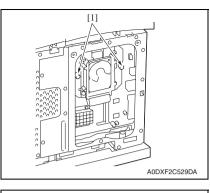
 Disconnect two connectors [1], and remove the harnesses from the harness guides [2].

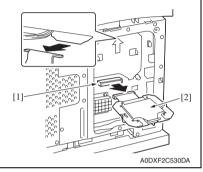
4. Remove six screws [1], and remove the gear assy [2].

NOTE

 The gear assy includes gears that are not secured in position.
 Use care to prevent these gears from dropping during the removal procedure.

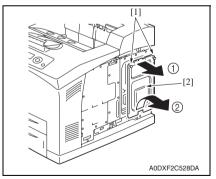
2. Loosen two screws [1], and remove the panel [2].





CF adapter (option) 6.3.17

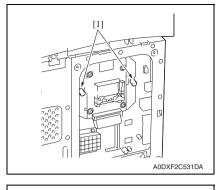
1. Remove the right cover. See P.38

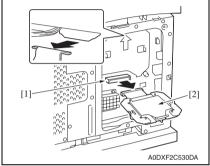


3. Loosen two screws [1].

4. Disconnect the connector [1], and remove the hard disk kit [2].

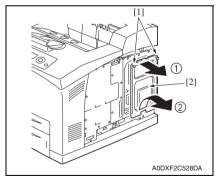
2. Loosen two screws [1], and remove the panel [2].





6.3.18 DIMM (option)

1. Remove the right cover. See P.38

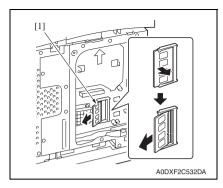


2. Loosen two screws [1], and remove the panel [2].

4. Disconnect the connector [1], and remove the CF adapter [2].

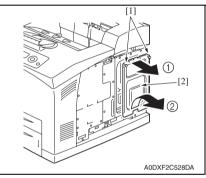
bizhub 40P

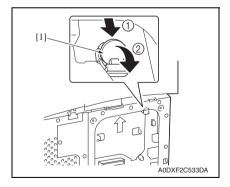
6. Other



6.3.19 Backup battery

1. Remove the right cover. See P.38





- Field Service Ver. 1.0 Dec. 2007
- 3. Remove the DIMM [1].

2. Loosen two screws [1], and remove the panel [2].

3. Remove the backup battery [1].

1. Remove the right cover.

See P.38

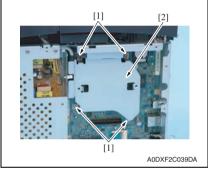
MFP board (MFPB)

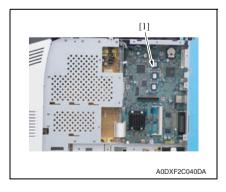
[2]

6.3.20

[1] [1] A0DXF2C038DA

[1]





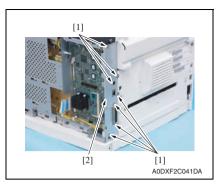
2. Remove twelve screws [1], and remove the MFP board protective shield [2].

3. Remove four screws [1], and remove the fixing plate [2].

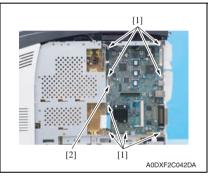
NOTE

 Remove the optional DIMM, hard disk kit, or CF adapter, if mounted on the machine, before removing the fixing plate.

4. Disconnect all connectors and flat cables from the MFP board [1].

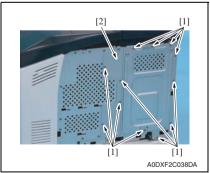


6. Remove the backup battery. See P.54



6.3.21 Print control board (PRCB)

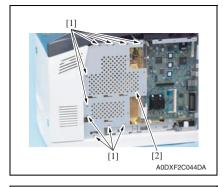
1. Remove the right cover. See P.38

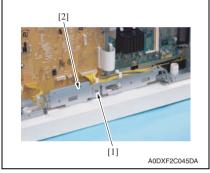


5. Remove seven screws [1], and remove the interface cover [2].

7. Remove eight screws [1], and remove the MFP board [2].

2. Remove twelve screws [1], and remove the MFP board protective shield [2].



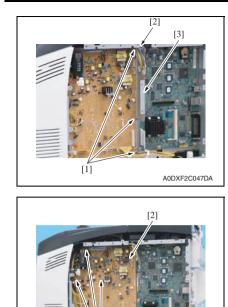




3. Remove ten screws [1], and remove the print control board protective shield [2].

4. Remove the screw [1], and remove the metal plate [2].

 Disconnect all connectors and flat cables from the print control board [1].



[1]

- 6. Remove three screws [1].
- Remove the harness from the wire saddle [2], and remove the metal plate [3].

8. Remove four screws [1], and remove the print control board [2].

- 9. Re-mount the DIMM from the old print control board.
- 10. Re-mount the backup battery from the old print control board.

A0DXF2C048DA

NOTE

• When the print control board is replaced, upgrade the firmware to the latest version.

See P.21

1. Remove the front cover.

[2]

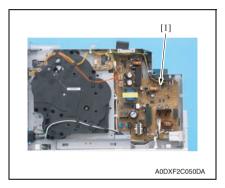
See P.45

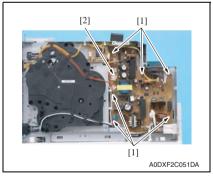
6.3.22

DC power supply (DCPU)

ADDXF2C049DA

[1]





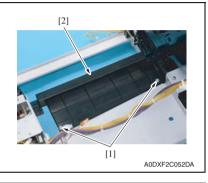
 Remove eight screws [1], and remove the DC power supply protective shield [2].

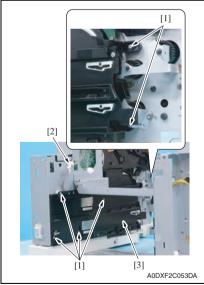
3. Disconnect all connectors from the DC power supply [1].

4. Remove six screws [1], remove and the DC power supply [2].

6.3.23 Main motor (M1)

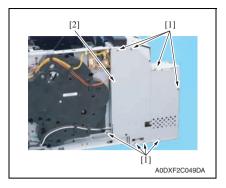
- 1. Remove the PH unit. See P.49
- 2. Remove the fuser unit. See P.18
- 3. Remove the transfer roller. See P.17
- 4. Remove the tray 1 feed unit. See P.47
- 5. Remove the tray 2 feed unit. See P.48

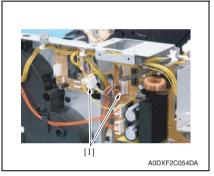


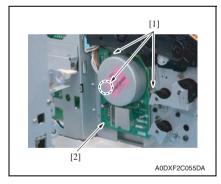


6. Remove two screws [1], and remove the plate [2].

- 7. Remove six screws [1].
- 8. Disconnect the connector [2], and remove the left guide rail assy [3].







 Remove eight screws [1], and remove the DC power supply protective shield [2].

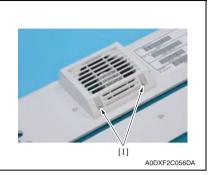
10. Disconnect two connectors [1].

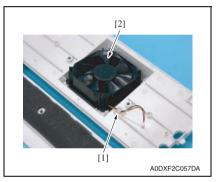
11. Remove three screw [1], and remove the main motor [2].

6. Other

6.3.24 Fusing cooling fan motor (FM1)

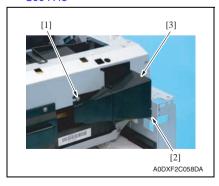
1. Remove the lower rear cover. See P.40





6.3.25 Cooling fan motor (FM2)

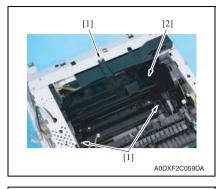
1. Remove the front cover. See P.45

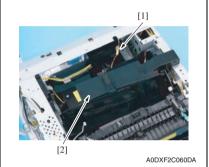


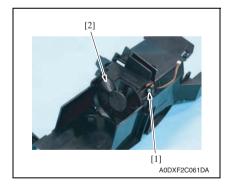
2. Remove two screws [1].

3. Remove the harness from the wire saddle [1], and remove the fusing cooling fan motor [2].

- 2. Remove the screw [1].
- 3. Unhook the tab [2], and remove the air intake duct [3].







4. Remove three screws [1] of the cooling fan motor assy [2].

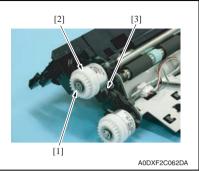
 Disconnect the connector [1], and remove the cooling fan motor assy [2].

6. Remove the screw [1], and remove the cooling fan motor [2].

6. Other

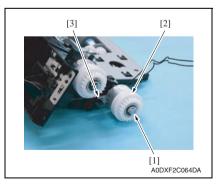
6.3.26 Registration roller clutch (CL3)

1. Remove the tray 1 feed unit. See P.47



6.3.27 Tray 1 media feed clutch (CL1)

- 1. Remove the tray 1 feed unit. See P.47
 - [1] ADXF2C063DA



2. Remove the E-ring [1], and remove the registration roller clutch [2].

NOTE

• When reinstalling the clutch, make sure that the notch [3] on the clutch comes to the position shown in the left picture.

2. Remove the harness from the harness guide [1].

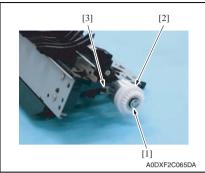
3. Remove the E-ring [1], and remove the tray 1 media feed clutch [2].

NOTE

• When reinstalling the clutch, make sure that the notch [3] on the clutch comes to the position shown in the left picture.

6.3.28 Tray 2 media feed clutch (CL2)

1. Remove the tray 2 feed unit. See P.48



2. Remove the E-ring [1], and remove the tray 2 media feed clutch [2].

NOTE

• When reinstalling the clutch, make sure that the notch [3] on the clutch comes to the position shown in the left picture.

6.4 **Cleaning procedure**

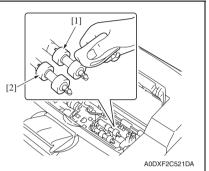
NOTE

• The alcohol described in the cleaning procedure represents the isopropyl alcohol.

6.4.1 Tray 1 feed roller/pick-up roller

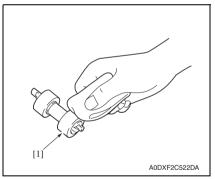
1. Remove the toner cartridge.

See P.7



6.4.2 Tray 1 separation roller

1. Remove the tray 1 separation roller assy. See P.10

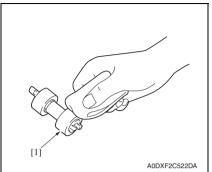


2. Using a cleaning pad dampened with alcohol, wipe the feed rollers [1] and pick-up rollers [2] clean of dirt.

2. Using a cleaning pad dampened with alcohol, wipe the separation rollers [1] clean of dirt.

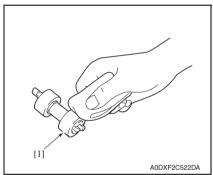
6.4.3 Tray 2 feed roller

1. Remove the tray 2 feed roller assy. See P.12



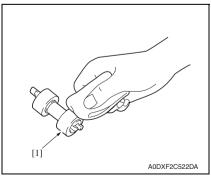
6.4.4 Tray 2 pick-up roller

1. Remove the tray 2 pick-up roller assy. See P.14



6.4.5 Tray 2 separation roller

1. Remove the tray 2 separation roller assy. See P.15



 Using a cleaning pad dampened with alcohol, wipe the feed rollers [1] clean of dirt.

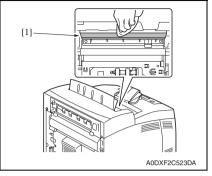
- Maintenance
- 2. Using a cleaning pad dampened with alcohol, wipe the pick-up rollers [1] clean of dirt.

 Using a cleaning pad dampened with alcohol, wipe the separation rollers
 [1] clean of dirt.

6. Other

6.4.6 Laser lens

1. Remove the toner cartridge. See P.7



2. Using a cleaning pad dampened with alcohol, wipe the laser lens [1] clean of dirt.

Adjustment/Setting

7. How to use the adjustment section

- "Adjustment/Setting" contains detailed information on the adjustment items and procedures for this machine.
- Throughout this "Adjustment/Setting," the default settings are indicated by " ".

A. Advance checks

- Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:
- 1. The power supply voltage meets the specifications.
- 2. The power supply is properly grounded.
- 3. The machine shares the power supply with any other machine that draws large current intermittently (e.g., elevator and air conditioner that generate electric noise).
- The installation site is environmentally appropriate: high temperature, high humidity, direct sunlight, ventilation, etc.; levelness of the installation site.
- 5. The original has a problem that may cause a defective image.
- 6. The density is properly selected.
- 7. Correct media is being used for printing.
- 8. The units, parts, and supplies used for printing (developer, PC drum, etc.) are properly replenished and replaced when they reach the end of their useful service life.
- 9. Toner is not running out.

B. Precautions for service jobs

- 1. To unplug the power cord of the machine before starting the service job procedures.
- 2. Special care should be used when handling the fuser unit which can be extremely hot.
- 3. The developing unit has a strong magnetic field. Keep watches and measuring instruments away from it.
- 4. Take care not to damage the PC drum with a tool or similar device.
- 5. Do not touch IC pins with bare hands.

8. Description of the control panel

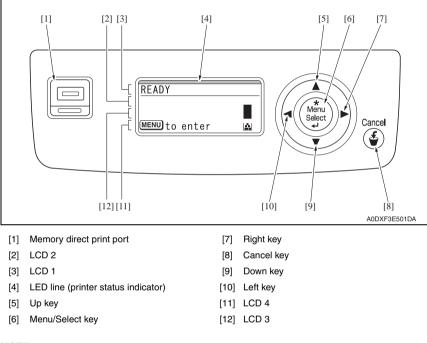
8.1 Control panel display

8.1.1 Parts of the control panel display

• The following shows the names of each part of the control panel. These names are used throughout this manual.

From the top, the panel is divided into LCD 1, LCD 2, LCD 3, and LCD 4.

• LCD 4 may display a message instructing you to press a key on the control panel. When you press that key, the displayed message changes.



NOTE

• The display screen is not designed for touch panel operation; therefore, do not touch the icons on the screen. If it is pushed too hard, the LCD (liquid crystal display) may be damaged.

8.1.2 Message structure

• There are five types of messages.

Message	Desc	cription		
Normal messages	These messages are displayed after v • Toner remaining gauge • Data-receiving message • Printing message • Firmware update messages • Warnings	warmup has been completed:		
Menu messages	These messages are displayed after t	the Menu/Select key is pressed.		
Operator call messages	These messages are displayed when users occur.	minor error(s) that can be handled by		
Service call messages	These messages are displayed when users occur.	error(s) that cannot be handled by		
Help messages	These messages are displayed when the Down key \bigtriangledown is pressed when a normal message/warning or operator call message is displayed.			
Normal message	Menu message	Operator call message		
READY	MENU ▶PROOF/PRINT MENU ▶PRINT MENU	TONER OUT REPLACE TONER		
MENU to enter	► PAPER MENU	for help		
	DDXF3E504DA A0DXF3E5	505DA A0DXF3E506DA		
Service call message	Help message			
SERVICE CALL C002 RAM ERROR	AVAILABLE ON HDD			

A0DXF3E507DA

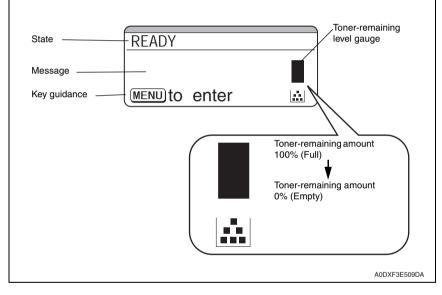
A0DXF3E508DA

Adjustment / Setting

8.1.3 Normal messages

- The basic screen is displayed after warm-up has been completed.
- The line-shaped LED on the display lights up steadily in a color corresponding to the specific message displayed on it.

Display	Description	
LCD 1	Printer mode is displayed. (Normally, "READY" is displayed.)	
LCD 2	The message is displayed. (Normally, no message is displayed.)	
LCD 3	The message is displayed. (Normally, no message is displayed.)	
LCD 4	 Key guidance is displayed. Normally "MENU to enter" is displayed. When the Menu/Select key is pressed, the panel displays the MENU screen. When a WARNING message is displayed, "∇ for help" is also displayed. When the Down key ∇ is pressed, the panel displays the HELP screen. 	



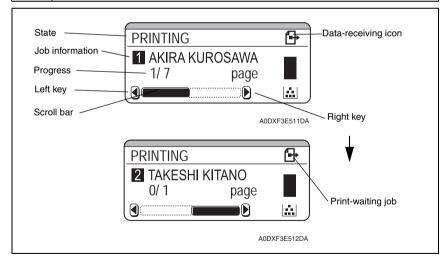
A. Toner-remaining level gauge

- The amount of toner remaining is graphed in 10% increments (11 scales.) However, it's not displayed during the following states:
 - Operator Call
 - Service Call
 - Menu
 - Help menu
 - BOOT message
 - When the toner remaining amount is not determined immediately after startup.
 - When using toner made by companies other than Konica Minolta

B. Data receiving message/print

• The control panel displays the following description at data receiving message/print.

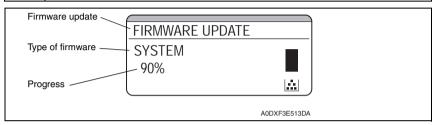
Display	Description
LCD 1	 Printer mode is displayed (for example, PRINTING). PROCESSING is displayed during data receiving or printer startup. PRINTING is displayed during printing. When printing in sets, [COPYING] is displayed after the second set starts printing.
	 The normal printing data-receiving icon "⊡" is displayed on the right during data receiving. The Memory-Direct connecting icon " ← → " is displayed on the right when the USB memory device is connected to the machine. The Memory-Direct printing data-receiving icon " ∧ " is displayed on the right during data receiving.
LCD 2	 Job information is displayed (for example, 1 AKIRA KUROSAWA). The job owner name, etc. set with PJL commands is displayed. When multiple jobs are set, the number is displayed to the left of the owner name.
LCD 3	 Job progress is displayed (for example, 1/7 page). In normal print mode, "Number of processed print / Total number of print" is displayed. When printing in sets, "Number of processed print/Total number of a set print" is displayed while the first set is copying. After the second set starts printing, the LCD 1 state is changed to COPYING and "Number of processed print /Total number of print" is displayed.
LCD 4	 Scroll bar is displayed. When multiple jobs are sent, a scroll bar is displayed. By pressing the left key⊲/right key⊳, the jobs waiting to be printed are displayed. The following example shows the scroll bar in the case of two jobs. By pressing the right key, the panel displays the job waiting to be printed. To return to the display of the job currently processing, press the left key.



C. Firmware update

• The control panel displays the following description at firmware update.

Display	Description			
LCD 1	IRMWARE UPDATE is displayed.			
LCD 2	LCD 2 displays the type of firmware (for example, SYSTEM). • SYSTEM: Controller firmware • BOOT: Boot firmware • RESOURCE: Resource file • CONFIGURATION: Equipment configuration file			
LCD 3	Progress of the update is displayed (for example, 90%).			
LCD 4	No display			



D. Warning

• This message is displayed when the print is available but some user manipulation(s) are required. The control panel displays the following description for warning.

Display	Description	
LCD 1	Print mode is displayed and warning icon is displayed on the right (for example, READY).	
LCD 2	Warning message is displayed (for example, TONER LOW).	
LCD 3	- Warning message is displayed (ioi example, TONER LOW).	
LCD 4	Key guidance is displayed. (for example, $ abla$ for help: By pressing the down key $ abla$, the screen displays the help screen)	

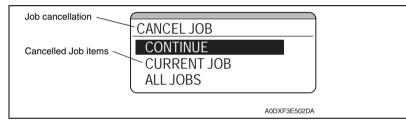
State	READY		Warning icon
Warning message	- TONER LOW		
Key guidance	▼ for help		
		A0DXF3E514DA	

E. Job cancellation

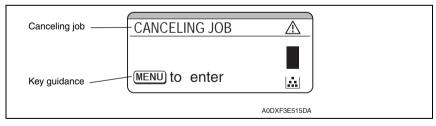
- By pressing the Cancel key after the job is sent, the control panel displays the job cancel menu.
- When no job is has been sent, pressing the Cancel key has no effect.
- The control panel displays the following description at the job cancel menu.

Display	Description		
LCD 1	CANCEL JOB is displayed.		
LCD 2	CONTINUE is displayed. Function: Continue the print of currently processing job.		
LCD 3	CURRENT JOB is displayed. Function: Stop the print of currently processing job. 		
LCD 4	 ALL JOBS is displayed Stop the printing of all jobs, including the job currently being processed and all jobs waiting to be printed. 		

- By pressing the up key \triangle /down key \bigtriangledown , the item can be selected.
- The selected item is displayed with highlighted text. The default setting is CONTINUE.
- By pressing the Menu/Select key, the selected item is entered.
- By pressing the Cancel key, the job cancel menu is closed.



 By selecting CURRENT JOB or ALL JOB and pressing the Menu/Select key, job cancellation is implemented.



F. Menu

- The menu is displayed when the Menu/Select key is pressed.
- The control panel displays the following description at the menu screen.

Display	Description			
LCD 1	The menu of a upper stratum is displayed.			
LCD 2	 Menu items are displayed (3 items/ 7 items). By pressing the up key∆/down key∇, the item is selected. The menu consists of the following 8 items: 			
LCD 3	- PROOF/ PRINT MENU - PRINT MENU - PAPER MENU - QUALITY MENU			
LCD 4	- MEMORY DIRECT - INTERFACE MENU - SYS DEFAULT MENU - MAINTENANCE MENU - SERVICE MENU			
Mer	Up key			
Menu items				
A0DXF3E505DA				

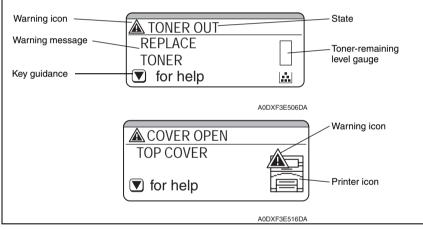
For the details of each item, see "Menu."
 See P.86

8.1.4 Operator call messages

- These messages are displayed when minor error(s) that can be handled by user occur.
- The line-shaped LED lamp on the control panel lights up red steadily during operator call.
- The control panel displays the following when an operator call message is displayed.

Display	Description		
LCD 1	warning icon " 🏝 " is displayed and the state is displayed on the right (for example, TONER DUT).		
LCD 2	Message is displayed (for example, REPLACE TONER).		
LCD 3	INESSAGE IS DISplayed (IDI example, REFLACE TONER).		
LCD 4	"▽ for help" is displayed. • By pressing the down key, the panel displays the help screen.		

- In the case of an operator call message related to a toner cartridge, the toner-remaining level gauge is displayed.



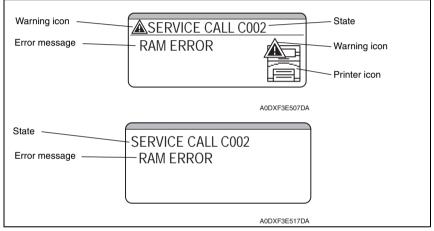
 For the details of each item, see "Operator call messages." See P.77

8.1.5 Service call messages

- These messages are displayed when error(s) that cannot be handled by the user occur.
- The line-shaped LED lamp on the control panel lights up red steadily during service call.
- The control panel displays the following description at service call.

Display	Description		
LCD 1	A "Warning icon 🏝 " is displayed and the service call message and a 4-digit-service call ID are displayed on the right (for example, SERVICE CALL C002).		
LCD 2	The error description is displayed (for example, RAM ERROR).		
LCD 3	- The error description is displayed (for example, RAM ERROR).		
LCD 4	No display		

- A printer icon is displayed with a flashing "warning icon \triangle ."
- A service call detected during startup of the printer is displayed as shown in the bottom of the following picture.



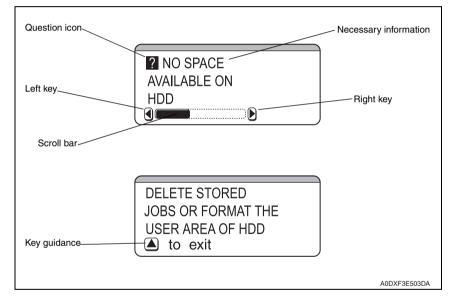
 For the details of each item, see "Service call messages." See P.78

8.1.6 Help screen

- This screen is displayed when the down key \bigtriangledown is pressed when a warning or operator call message is displayed.
- The control panel displays the following description at the help screen.

Display	Description				
LCD 1					
LCD 2	A "Question icon ?" is displayed and the necessary information is displayed on the right (for example, "NO SPACE AVAILABLE ON HDD").				
LCD 3					
LCD 4	 A scroll bar or "△ to exit" message is displayed. If there are several messages, a scroll bar is displayed. By pressing the left key⊲/right key⊳, a previous/next screen message is displayed. If all messages are displayed, "△ to exit" displays on the screen. 				

• A graphic is displayed if necessary.



8.2 List of control panel messages

NOTE

- When two or more messages are to be displayed, the message with the higher priority will be displayed.
- When a message concerning consumables/periodic replacement parts (units) is displayed, print a statistics page from the [PRINT MENU] → [STATISTICS PAGE] menu and check the status of the other consumables, too. See P.91

8.2.1 Normal messages

A. Normal messages

Message (LCD1)	Description	
INITIALIZING	The printer is being initialized	
READY	Print enabled (Data not being printed)	
OFFLINE	Off line condition (Data reception not available) TELNET allows offline setting. 	
ENERGY SAVER	Machine in energy saver mode	
PROCESSING	Print data processing (Data receiving - printer is started)	
PRINTING	Data being printed (Printer is started)	
COPYING	Data being printed in sets	
WARMING UP	During warmup	
CALIBRATING	Color shift correction in progress	
CANCELING JOB	Job canceled	
REBOOTING	The printer is restarting	
FIRMWARE UPDATE	The printer's firmware is being upgraded	

B. Warning messages

Priority	Message (LCD2/LCD3)	Description	
High 1	UNABLE TO COLLATE JOB	Print in sets disabled (full hard disk) (This warning message is displayed during printing.)	
2	HDD NEAR FULL	The hard disk space will run out soon.	
3	MEMORY CARD NEAR FULL	The compact flash space will run out soon.	
4	TONER OUT	The toner cartridge is empty.	
5	FUSER UNIT END OF LIFE	Fuser unit service life has been reached. (Printing can be continued, but print quality is out of guarantee.)	
6	TONER LOW	The toner cartridge will run out soon. (This message appears when SYS DEFAULT MENU/ENABLE WARN- ING/TONER LOW is set to ON.)	
7	PAPER EMPTY TRAY X	No media in the specified tray. The specified tray is not installed, but it is set in the printer driver. (This message appears when SYS DEFAULT MENU/ENABLE WARN- ING/PAPER EMPTY is set to ON.)	
8	PAPER LOW TRAY X	Media will soon run out. (tray 2/3/4) (This message appears when SYS DEFAULT MENU/ENABLE WARN- ING/PAPER LOW is set to ON.)	
9	NON SUPPORT CARD	A compact flash card which is inserted is not supported. The compact flash card will be invalid.	
10	INCORRECT HDD	A hard disk which was formatted by other unit is installed.	
11	INCORRECT MEMORY CARD	A compact flash card which was formatted by other unit is installed.	
12	HUBS NOT SUPPORTED	USB hub is connected to the USB host I/F.	
Low 13	DEVICE NOT SUPPORTED	An unsupported USB memory device is connected to the USB host I/F. (This warning takes precedence over others, if occurring at the same time, for the corresponding message display for about 10 sec.)	

8.2.2 Operator call messages

Priority	Message		Description
Priority	LCD1	LCD2/LCD3	Description
High 1	INCORRECT TRAY	TURN OFF	An incorrect optional lower feeder unit is mounted.In this condition, key operation on the control panel is disabled.
2	TONER MISSING	CHECK TONER	The toner cartridge is not installed.
		TOP COVER	The top cover of the machine is open.
		REAR COVER	The rear cover of the machine is open.
3	COVER OPEN	DUPLEX COVER *1	The duplex door is open.
		FINISHER COVER *2	The finisher cover is open.
		SUB EXIT *2	A media jam has occurred at the sub tray of the optional offset tray.
		FUSER/EXIT	A media jam has occurred at the fusing section.
		TRANSFER	A media jam has occurred at the image transfer section.
		DUPLEX1 *1	A media jam has occurred at the duplex media feed section of the duplex.
4	PAPER JAM	DUPLEX2 *1	A media jam has occurred at the duplex transport section of the duplex.
		TRAY1	A media jam has occurred at tray 1.
		TRAY2	A media jam has occurred at tray 2.
		TRAY3	A media jam has occurred at tray 3.
		TRAY4	A media jam has occurred at tray 4.
10	TONER OUT	REPLACE TONER	The toner cartridge has run out.
11	TRAYX SIZE ERR	ADD SSSS *3	The media size set in the printer driver does not match that of the media loaded in the specified tray.Load "SSSS" size media in the specified tray.
12	PAPER EMPTY	SSSS *3 TTTT *3	 No specified media in trays 1 to 4. Tray 3/4 is loaded with the specified media but is not set appropriately. Displays when [TRAY CHAINING] is set to [ON].
	TRAYX EMPTY	SSSS *3 TTTT *3	 No specified media in the specified tray or tray 3/4 is not set appropriately. Displays when [TRAY CHAINING] is set to [OFF].
10	PAPER ERROR	SSSS *3 TTTT *3	 The size and type of media specified in the driver is not loaded in any tray. A different size of media from the one specified in the driver is loaded in the tray at media feeding. Displays when [TRAY CHAINING] is set to [ON].
13	TRAYX PAPER ERR	SSSS *3 TTTT *3	 The size and type of media specified in the driver is not loaded in the specified tray. A different size of media from the one specified in the driver is loaded in the specified tray at media feeding. Displays when [TRAY CHAINING] is set to [OFF].

Priority	Message		Description
	LCD1	LCD2/LCD3	Description
14	OUTPUT FULL	REMOVE PAPER (MAIN TRAY)	The printed media volume has reached maximum capacity in the exit tray of the main body.
		REMOVE PAPER (SUB TRAY) *2	The printed media volume has reached maximum capacity in the sub tray of the offset tray.
15	CHECK LEVER	FACE UP TRAY IS SELECTED	The face up lever is raised when duplex printing or sub tray output is specified.
16	MEMORY FULL	PRESS CANCEL	The volume of data to be printed exceeds the permissi- ble amount of data to be processed by the machine's memory.
17	HOLD JOB ERROR	UNABLE TO STORE JOB	The specified data of the held job is being received, but an optional HDD is not installed.
Low 18		XXXX PRESS CANCEL	When printing a stored job, the printer configuration was changed since the job was stored.

*1: Only when the optional duplex is mounted.

*2: Only when the optional offset tray is mounted.

*3: SSSS represents the media size while TTTT shows the media type.

8.2.3 Service call messages

 For troubleshooting procedures, see "Troubleshooting". See P.156

Message		
LCD1 (Service Call ID)	LCD2/LCD3 (Error description)	Description
0017	MAIN MOTOR	Main motor malfunction
0046	FUSER FAN	Fusing cooling fan motor malfunction
0300	POLYGON MOTOR	Polygon motor malfunction
0500	FUSER ERROR	Heating roller warm-up failure
13E3	FLASH DEVICE	Flash ROM device fault
C002	BAM EBBOB	RAM error at startup (standard memory)
C003		RAM error at startup (expanded memory)
C013	H/W ADDRESS	MAC address error at startup (MAC address is invalid)
C015	BOOT ROM	Boot ROM error at startup
C025		Controller ROM error (Configuration information error)
C026	CONTROLLER ROM	Controller ROM error (Access error)
C027		Controller ROM error (Data error)
C050	HDD ERROR	HDD access error
C051	HDD DISK FULL	HDD full error *1
C052	CARD ERROR	Compact flash access error
C053	CARD FULL	Compact flash full error *1
C054	CARD ERROR	Compact flash disconnected
C060	UPDATE ERROR	Firmware update error
C071	H/W CONFIGURA- TION ERROR	Hardware configuration error
FFFF	I/F COMMUNICA- TION ERROR	Interface communication error

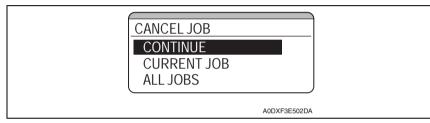
*1: If this error occurs, the device is automatically formatted when the printer is later restarted.

8.3 Cancelling a print job

- A print job being processed or printed can be cancelled by pressing the Cancel key.
- When no job has been sent, pressing the Cancel key has no effect.
- 1. If the Cancel key is pressed while a print job is being printed, a message appears on the control panel.
- 2. Select the job to be cancelled using the up key $\bigtriangleup/$ down key \bigtriangledown and press the MENU SELECT key.

By pressing the Cancel key, the job cancel menu is closed.

Panel Display (LCD2-LCD4)	Description	
CONTINUE	Continue printing the currently processing job.	
CURRENT JOB	Stop printing the currently processing job.	
ALL JOB	Stop printing all jobs, including the currently processing job and all jobs waiting to be printed.	



9. Menu

9. Menu

9.1 List of menu functions

MENU			Ref. page
PROOF/PRINT MENU *1			P.90
PRINT MENU	CONFIGURATION PG		P.90
	STATISTICS PA	GE	P.91
	FONT LIST	POSTSCRIPT	P.96
		PCL	
	MENU MAP	·	P.96
	DIRECTORY LI	ST *2	P.96
PAPER MENU	PAPER	DEFAULT TRAY	P.96
	SOURCE	TRAY 1	P.97
		TRAY 2	P.98
		TRAY 3	P.100
		TRAY 4	P.100
		TRAY CHAINING	P.101
		TRAY MAPPING	P.101
	DUPLEX *3	P.102	
	COPIES		P.102
	COLLATE *4		P.102
	FINISHING *5		P.103
	JOB SEPARATION *5		P.103
QUALITY MENU	RESOLUTION		P.103
	BRIGHTNESS		P.103
	CONTRAST		P.104
	HALFTONE	IMAGE PRINTING	P.104
		TEXT PRINTING	P.104
		GRAPHICS PRINTING	P.104
	ECONOMY PRINT		P.105
MEMORY	LIST OF FILES	*6	P.105
DIRECT *2	TYPE OF FILES		P.105

MENU			Ref. page	
INTERFACE	JOB TIMEOUT			P.106
MENU	ETHERNET	TCP/IP	ENABLE	P.106
			IP ADDRESS	P.106
			SUBNET MASK	P.107
			DEFAULT GATEWAY	P.107
			DHCP	P.107
			BOOTP	P.107
			ARP/PING	P.108
			HTTP	P.108
			FTP	P.108
			TELNET	P.108
			BONJOUR	P.108
			DYNAMIC DNS	P.109
			IPP	P.109
			RAW PORT	P.109
			SLP	P.109
			SMTP	P.109
			SNMP	P.110
			WSD PRINT	P.110
			IPSEC	P.110
			IP ADDRESS FILTER	P.110
			IPv6	P.111
		NETWARE	ENABLE	P.111
		APPLETALK	ENABLE	P.111
		SPEED/DUPLE	x	P.112
		IEEE802.1X		P.112
	MEMORY DIRE	ECT *2		P.112



		MENU			Ref. page
SYS DEFAULT	AULT LANGUAGE			P.112	
MENU	EMULATION DEF. EMULATION			P.113	
		POSTSCRIPT	WAIT TIMEOUT		P.113
			PS ERROR PAGE		P.113
			PS PROTOCOL		P.113
		PCL	CR/LF MAPPING	i	P.113
			LINES PER PAG	E	P.114
			FONT SOURCE	FONT NUMBER	P.114
				PITCH SIZE	P.114
				POINT SIZE	
				SYMBOL SET	P.115
		XPS *2	DIGITAL SIGNAT	URE	P.115
			XPS ERROR PAG	GE	P.115
	PAPER	DEFAULT	PAPER SIZE		P.115
		PAPER	CUSTOM SIZE	CUSTOM SIZE	
			PAPER TYPE	PAPER TYPE	
		PAPER SIZE ERROR		P.116	
		UNIT OF MEASURE		P.117	
	STARTUP OPTIONS	DO STARTUP PAGE			P.117
	AUTO CONTINUE				
	HOLD JOB TIMEOUT *1				
	ENERGY SAVER TIME				
	MENU TIMEOUT				
	LCD CONTRAST				
	SECURITY CHANGE PASSWORD				P.118
		LOCK PANEL			P.119
	CLOCK	DATE (xx.xx.xx)			P.119
		TIME		P.119	
		TIME ZONE			P.119
	HDD FORMAT *1			P.120	
	CARD FORMA	CARD FORMAT *7			P.120
	RESTORE	RESTORE NET	WORK		P.121
	DEFAULTS	RESTORE PRIN	RESTORE PRINTER		
		RESTORE ALL	RESTORE ALL		
	ENABLE	PAPER EMPTY	PAPER EMPTY		P.126
	WARNING	PAPER LOW			P.127
		TONER LOW			P.127

MENU				Ref. page
MAINTENANCE	PRINT MENU	EVENT LOG		P.128
MENU		HALFTONE 64	HALFTONE 64	
		HALFTONE 128		P.128
		HALFTONE 256		P.129
		GRADATION		P.129
	ALIGNMENT	TOP ADJUSTMENT		P.129
		LEFT ADJUSTMENT		P.129
		LD POWER		P.130
		VIDEO TIME LAC	3	P.130
	SUPPLIES	REPLACE	FUSER UNIT	P.130
	QUICK SETTING *6	UPDATE SETTIN	IG	P.131
		BACKUP SETTIN	١G	P.131

*1: It will be displayed only when an optional hard disk kit is installed.

*2: It will be displayed only when an optional hard disk kit or compact flash is installed.

- *3: It will be displayed only when an optional duplex is installed.
- *4: It will be displayed only when an optional hard disk kit or compact flash (1 GB or more) is installed.
- *5: It will not be displayed when an optional offset tray is installed.
- *6: It will be displayed only when a USB memory device is connected.
- *7: It will be displayed only when an optional compact flash is installed.

9.2 PROOF/PRINT MENU

Function	 Selects and prints the job held temporarily in the printer. Selects and deletes the job held temporarily in the printer.
	NOTE This menu is available only when an optional hard disk kit is installed.
Use	To proof one copy of a print job before printing the rest of the copies.
Setting /procedure	 How to print the held job 1. Select [PROOF/PRINT MENU] and press the Menu/Select key. 2. Select user name and press the Menu/Select key. 3. Select desired print job and press the Menu/Select key. 4. Select [PRINT] and press the Menu/Select key. 5. If the hold job is set as secured job, enter the password with the up key△/down key▽. 6. Set the number of copies with the up key△/down key▽ and press the Menu/Select key. NOTE If the hold job is set as secured job, the held job cannot be printed until the correct password is entered at the printer control panel. The held job is deleted automatically after the period of time specified in the "SYSTEM DEFAULT MENU/HOLD JOB TIMEOUT" menu.
	 How to delete the held job Select [PROOF/PRINT MENU] and press the Menu/Select key. Select user name and press the Menu/Select key. Select desired print job and press the Menu/Select key. Select [DELETE] and press the Menu/Select key. If the held job is set as secured job, enter the password with the up key∆/down key⊽. Select [YES] and press the Menu/Select key. NOTE If the hold job is set as secured job, the held job cannot be deleted until the correct password is entered.

9.3 PRINT MENU

9.3.1 CONFIGURATION PG

Function	Prints a configuration page.	
Use	To check the configuration and the setting values of the machine. The following items can be checked: PRINTER INFORMATION OPTIONS INTERFACE MENU PAPER MENU SYSTEM DEFAULT MENU QUALITY MENU MEMORY DIRECT	
Setting /procedure	Select [PRINT] and press the Menu/Select key.	

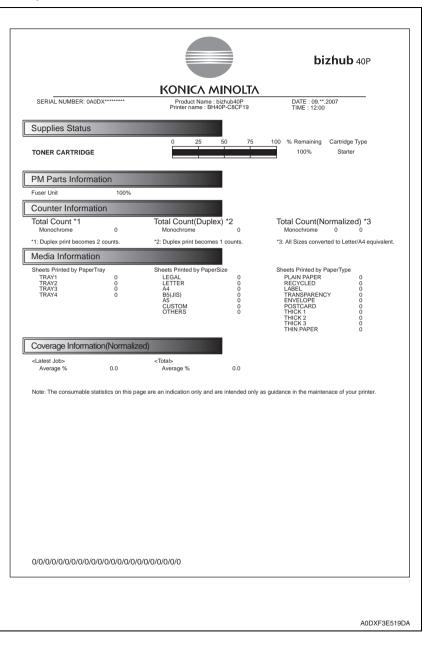
9. Menu

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9.3.2 STATISTICS PAGE

Function	Prints a statistics page.
Use	 To check consumable status and the usage of the machine. The following items can be checked:
	Supplies Status
	PM Parts Information
	Counter Information
	Media Information
	Coverage Information
	Consumable/periodic replacement parts (units) counter information*1
	*1: For details, see the following table, "How to read consumable/periodic replace- ment parts (units) counter information.
Setting /procedure	Select [PRINT] and press the Menu/Select key.

A. Sample of STATISTICS PAGE



B. Supplies Status

• Display the estimated percent of life remaining in the toner cartridge. The type of the toner cartridges that are installed in the printer is also displayed (See the table below).

Types of toner cartridges		
High	 High-capacity toner cartridge: 17.0 K 	

NOTE

 The percent of life remaining in the toner cartridge can be used as a guide, but may not exactly reflect the amount that has been used in the toner cartridge.

C. PM Parts Information

• Display the estimated percent of life remaining in periodic replacement parts (fuser unit).

D. Counter Information

• The total number of pages that have been printed is counted and displayed based on the description shown in the following table.

<Counter information list>

Types of count	Contents	Count timing
Total Count	The total number of pages ejected from the printer. Increment by one per simplex and by two per duplex	
Total Count (duplex)	 The total number of duplex sheets ejected from the printer. Increment by one per duplex (and by zero per simplex) 	When a sheet of media is ejected properly
Total Count (Normalized)	 The total number of pages on a A4 basis that have been ejected from the printer. Increment by 100 per A4 simplex and by 200 per A4 duplex *1 	

*1: A count of 100 in the counter is converted to 1 sheet of media and display the number of decimals are discarded.

NOTE

The total counters and the print counters count at a different timing, when a sheet
of media is properly ejected and when a sheet of media is fed, respectively.
Therefore, the sum of each total counter value may not be same with the sum of
each print counter value if a sheet of media cannot be ejected due to media jam
inside the machine or other possible problems.

E. Media Information

• The number of sheets printed for each paper tray, media size, and media type is counted and displayed according to the conditions shown in the following table.

<Media information list>

Types of count	Contents	Count timing
Sheets Printed by Paper Tray	 The number of sheets taken up for each paper tray 	
Sheets Printed by Paper Size	The number of sheets printed for each paper size	Upon media feed
Sheets Printed by Paper Type	The number of sheets printed for each paper type	

F. Coverage Information

• Each coverage information is calculated and displayed based on the description shown in the following table.

<Coverage information list>

Coverage information	Contents
Latest Job	 Individual average dot coverage in the last job is calculated on an A4 basis. (The average of the ratios of dot space on each page when the printable area is defined as 100% and shown in 0.1 percent increments)
Total	 Individual average dot coverage is calculated on an A4 basis for all prints performed after the printer was installed. (The average of the ratios of dot space on each page when the printable area is defined as 100% and shown in 0.1 percent incre- ments)

NOTE

• Coverage information can be used as a guide and may not completely reflect the actual amount of toner used.

G. How to read consumable/periodic replacement parts (units) counter information

 The lower left part of the statistics page shows numerical values that represent consumable/periodic replacement parts (units) counter information.
 The table below explains counter information that is provided by each numerical data.

<Display on the statistics page>

0/	7J07

<Meaning of counter value> (From the left of the numerical values)

No.	Contents		
1	Number of times a High-capacity toner cartridge has been replaced		
2	Number of times a S	Standard-capacity toner cartridge has been replaced	
3			
4			
5			
6			
7			
8			
9			
10	Not used. (The value doesn't change.)		
11			
12			
13			
14			
15			
16			
17]		
18			
19	Rate of fuser unit use (%)		
20	Number of times a fuser unit has been replaced		
1		Year (e.g. The year 2007 is displayed as 7.)	
2	Start date of use *1	Month (e.g. January is displayed as A. February is B. March is C. And December is L.)	
3		Day (e.g. The day 7 is displayed as 07.)	

*1: Start date of use begins when 100 prints are complete after the first new toner cartridge was detected following the main body installation.

9.3.3 FONT LIST

A. POSTSCRIPT

Function	Prints a postscript font list.
Use	 To determine which postscript fonts are available on the printer.
Setting /procedure	Select [PRINT] and press the Menu/Select key.

B. PCL

Function	Prints a PCL font list.
Use	 To determine which PCL fonts are available on the printer.
Setting /procedure	Select [PRINT] and press the Menu/Select key.

9.3.4 MENU MAP

Function	Prints a menu map.
Use	To see the printer's menu structure.
Setting /procedure	Select [PRINT] and press the Menu/Select key.

9.3.5 DIRECTORY LIST

Function	 Prints a directory list of the hard disk kit's contents.
Use	 To check the data saved in the optional hard disk kit.
Setting /procedure	 Select [PRINT] and press the Menu/Select key. NOTE This menu is available only when an optional hard disk kit or compact flash is installed.

9.4 PAPER MENU

9.4.1 PAPER SOURCE

A. DEFAULT TRAY

Function	Sets the priority feed tray.			
Use	To set the priority media feed tray.			
Setting /procedure	 Select [DEFAULT TRAY] and press the Menu/Select key. Select desired tray and press the Menu/Select key. The default setting is TRAY 1. 			
	"TRAY 1"	TRAY 2	TRAY 3	TRAY 4
	NOTE TRAY 3/TRAY 4 can be selected only when one or more optional lower feeder units are installed. 			

B. TRAY 1(1) PAPER SIZE

Function	Sets the size of the media in tray 1.	
Use	To specify the size of the media loaded in tray 1.	
Setting /procedure	 Select [PAPER SIZE] and press the Menu/Select key. Select desired paper size and press the Menu/Select key. For North America 	
	The default setting is LETTER.For other destinationsThe default setting is A4.	
	ANY/LETTER/LEGAL/EXECUTIVE/A4/A5/A6/B5(JIS)/B6(JIS)/GOVT LETTER/STATE- MENT/FOLIO/SP FOLIO/UK QUARTO/FOOLSCAP/GOVT LEGAL/16K/KAI 16/KAI 32/ ENV C5/ENV C6/ENV DL/ENV MONARCH/ENV CHOU#3/ENV CHOU#4/B5(ISO)/ ENV #10/ENV YOU#4/JPOST/JPOST-D/CUSTOM	
	NOTE ANY specifies any media size. CUSTOM is used to set a "custom media size." The currently detected size is displayed if "AUTO" is set for [SIZE SETTING]. 	

(2) CUSTOM SIZE

Function	Sets the custom size of media in tray 1.	
Use	To specify the custom size media loaded in tray 1.	
Setting /procedure	 Select [CUSTOM SIZE] and press the Menu/Select key. Select [WIDTH] or [LENGTH] and press Menu/Select key. Set desired number with the up key△/down key▽ and press the Menu/Select key 	
	<for america="" north=""> The default setting of WIDTH is 8.50 inches. </for>	
	WIDTH: 3.00 inches to 8.50 inches.	
	The default setting of LENGTH is 11.00 inches.	
	LENGTH: 5.00 inches to 35.43 inches.	
	<for destinations="" other=""> The default setting of WIDTH is 210 mm. </for>	
	WIDTH: 76 mm to 216 mm.	
	The default setting of LENGTH is 297 mm.	
	LENGTH: 127 mm to 900 mm.	
	NOTE By changing the [UNIT OF MEASURE] setting (INCHES/MILLIMETERS), the custom size units are changed. 	

(3) PAPER TYPE

Function	Sets the media type for tray 1.	
Use	To specify the type of media loaded in tray 1.	
Setting /procedure	 Select [PAPER TYPE] and press the Menu/Select key. Select desired paper type and press Menu/Select key. The default setting is PLAIN PAPER. 	
	ANY/PLAIN PAPER/RECYCLED/THICK 1/THICK 2/THICK 3/LABEL/TRANSPAR- ENCY/ENVELOPE/POSTCARD/THIN PAPER	
	NOTE ANY identifies any media type. 	

(4) SIZE SETTING

Function	• Selects whether the paper size of tray 1 is to be detected automatically or manually.		
Use	 To load paper of a size that cannot be detected automatically. 		
Setting • The default setting is "AUTO."			
/procedure	"AUTO"	USER SELECT	

C. TRAY 2 (1) PAPER SIZE

Function	Sets the size of the media in tray 2.
Use	To specify the size of the media loaded in tray 2.
Setting /procedure	 Select [PAPER SIZE] and press the Menu/Select key. Select desired paper size and press the Menu/Select key.
	For North America The default setting is LETTER.
	For other destinations The default setting is A4.
	LETTER/LEGAL/EXECUTIVE/A4/A5/A6/B5(JIS)/B6(JIS)/GOVT LETTER/STATE- MENT/FOLIO/SP FOLIO/UK QUARTO/FOOLSCAP/GOVT LEGAL/16K/KAI 16/KAI 32/ ENV C6/ENV DL/ENV MONARCH/ENV CHOU#3/B5(ISO)/ENV #10/ENV YOU#4/ JPOST/JPOST-D/CUSTOM
	NOTE ANY specifies any media size. CUSTOM is used to set a "custom media size." The currently detected size is displayed if "AUTO" is set for [SIZE SETTING].

(2) CUSTOM SIZE

Function	Sets the custom size of media in tray 2.	
Use	To specify the custom size media loaded in tray 2.	
Setting /procedure	 Select [CUSTOM SIZE] and press the Menu/Select key. Select [WIDTH] or [LENGTH] and press Menu/Select key. Set desired number with the up key∆/down key⊽ and press the Menu/Select key. 	
	<for america="" north=""> The default setting of WIDTH is 8.50 inches. </for>	
	WIDTH: 3.87 inches to 8.50 inches.	
	The default setting of LENGTH is 11.00 inches.	
	LENGTH: 5.83 inches to 14.00 inches.	
	<for destinations="" other=""> The default setting of WIDTH is 210 mm. </for>	
	WIDTH: 98 mm to 216 mm.	
	The default setting of LENGTH is 297 mm.	
	LENGTH: 148 mm to 356 mm.	
	NOTE By changing the [UNIT OF MEASURE] setting (INCHES/MILLIMETERS), the custom size units are changed. 	

(3) PAPER TYPE

Function	Sets the media type for tray 2.	
Use	 To specify the type of media loaded in tray 2. 	
Setting /procedure	 Select [PAPER TYPE] and press the Menu/Select key. Select desired paper type and press Menu/Select key. 	
	The default setting is PLAIN PAPER.	
	ANY/PLAIN PAPER/RECYCLED/THICK 1/THICK 2/THICK 3/LABEL/TRANSPAR- ENCY/ENVELOPE/POSTCARD/THIN PAPER	
	NOTE ANY identifies any media type. 	

(4) SIZE SETTING

Function	Selects whether the paper size of tray 2 is to be detected automatically or manually.	
Use	 To load paper of a size that cannot be detected automatically. 	
Setting /procedure	The default setting is "AUTO."	
procedure	"AUTO"	USER SELECT

D. TRAY 3/TRAY4

• It will be displayed only when the optional lower feeder unit(s) is installed.

(1) PAPER SIZE

Function	Sets the size of the media in tray 3/4.	
Use	 To specify the size of the media loaded in tray 3/4. 	
Setting /procedure	 Select [PAPER SIZE] and press the Menu/Select key. Select desired paper size and press the Menu/Select key. 	
	For North America The default setting is LETTER. 	
	For other destinations The default setting is A4. 	
	LETTER/LEGAL/EXECUTIVE/A4/A5/A6/B5(JIS)/B6(JIS)/GOVT LETTER/STATE- MENT/FOLIO/SP FOLIO/UK QUARTO/FOOLSCAP/GOVT LEGAL/16K/KAI 16/KAI 32/ ENV C6/ENV DL/ENV MONARCH/ENV CHOU#3/B5(ISO)/ENV #10/ENV YOU#4/ JPOST/JPOST-D/CUSTOM	
	NOTE ANY specifies any media size. CUSTOM is used to set a "custom media size." The currently detected size is displayed if "AUTO" is set for [SIZE SETTING]. 	

(2) CUSTOM SIZE

Function	Sets the custom size of media in tray 3/4.	
Use	 To specify the custom size media loaded in tray 3/4. 	
Setting /procedure	 Select [CUSTOM SIZE] and press the Menu/Select key. Select [WIDTH] or [LENGTH] and press Menu/Select key. Set desired number with the up key△/down key⊽ and press the Menu/Select key. 	
	<for america="" north=""> The default setting of WIDTH is 8.50 inches. </for>	
	WIDTH: 3.87 inches to 8.50 inches.	
	The default setting of LENGTH is 11.00 inches.	
	LENGTH: 5.83 inches to 14.00 inches.	
	<for destinations="" other=""> • The default setting of WIDTH is 210 mm.</for>	
	WIDTH: 98 mm to 216 mm.	
	The default setting of LENGTH is 297 mm.	
	LENGTH: 148 mm to 356 mm.	
	NOTE By changing the [UNIT OF MEASURE] setting (INCHES/MILLIMETERS), the custom size units are changed. 	

(3) PAPER TYPE

Function	 Sets the media type for tray 3/4.
Use	 To specify the type of media loaded in tray 3/4.
Setting /procedure	 Select [PAPER TYPE] and press the Menu/Select key. Select desired paper type and press Menu/Select key.
	The default setting is PLAIN PAPER.
	ANY/PLAIN PAPER/RECYCLED/THICK 1/THICK 2/THICK 3/LABEL/TRANSPAR- ENCY/ENVELOPE/POSTCARD/THIN PAPER
	NOTE ANY identifies any media type.

(4) SIZE SETTING

Function	• Selects whether the paper size of tray 3/4 is to be detected automatically or manually.	
Use	To load paper of a size that cannot be detected automatically.	
Setting	The default setting is "AUTO."	
/procedure	"AUTO"	USER SELECT

E. TRAY CHAINING

Function	Sets auto tray switching.	
Use	 To specify that the printer should pull media from another tray when the specified tray runs is empty. 	
Setting • The default setting is "ON."		
/procedure	"ON"	OFF

F. TRAY MAPPING (1) TRAY MAPPING MODE

Function	 Selects whether or not the tray mapping function is used. 		
Use	To specify whether trays are mapped.		
Setting	The default setting is OFF.		
/procedure	ON	"OFF"	

(2) LOGICAL TRAY0-9

Function	• Specifies whether jobs received from another manufacturer's printer driver are printed using tray 1 to tray 4.	
Use	• To specify the media source for print jobs using another manufacturer's printer driver.	
Setting /procedure	 Only the default for LOGICAL TRAY 2 is PHYSICAL TRAY 2. PHYSICAL TRAY 1 is the default for all trays other than LOGICAL TRAY 2. 	
	PHYSICAL TRAY 1	PHYSICAL TRAY 2
	PHYSICAL TRAY 3 PHYSICAL TRAY 4	
	NOTE Only the mounted tray can be selected. 	

9.4.2 DUPLEX

9. Menu

0
4
0
3
2
Ν
-

Function	Sets duplex printing mode.			
Use	To specify duplex printing. OFF : Duplex print is OFF LONG EDGE : Duplex print is ON, long edge SHORT EDGE : Duplex print is ON, short edge			
Setting	The default setting is "OFF."			
/procedure	"OFF"	LONG EDGE	SHORT EDGE	
	NOTE This menu is available only when a duplex is mounted. 			

9.4.3 COPIES

Function	Sets the number of prints.		
Use	 To specify the number of copies of the job to be printed. 		
Setting /procedure	 Select [COPIES] and press the Menu/Select key. Select desired print number with the up key∆/down key⊽ and press the Menu/ Select key. The default setting is "1" copy. 		
	"1" copy to 9999 copies.		

9.4.4 COLLATE

Function	Sets printing in sets.		
Use	To print several sets of multiple pages. ON : Print in sets. OFF : Print in page.		
Setting /procedure	The default setting is OFF. ON	"OFF"	
	NOTE NOTE This menu is available only when an optional hard disk kit or compact flash GB or more) is installed. The setting in the printer driver overrides the setting in this menu. 		

9.4.5 FINISHING

Function	 Selects an exit tray and finishing option at the offset tray. 		
Use	MAIN TRAY : SUB TRAY :	ay and finishing option when a op Printing to the main tray Printing to the sub tray The media is fed to the sub tray v	
Setting /procedure	OFFSET : The media is fed to the sub tray with each copy slightly shifted. • The default setting is MAIN TRAY. "MAIN TRAY" "MAIN TRAY" SUB TRAY OFFSET NOTE • This menu is available only when a offset tray is installed. • The setting in the printer driver overrides the setting in this menu. • OFFSET function is available only for the following media sizes. Paper size: 89 to 216 mm in width and 140 to 356 mm in length		s installed. etting in this menu. ving media sizes.

9.4.6 JOB SEPARATION

Function	Solacts whether or not to use a shift function for each job that prints to the offect trait			
Use	 Selects whether or not to use a shift function for each job that prints to the offset tra- 			
Setting	The default setting is OFF.			
/procedure	ON "OFF"			
	 NOTE This menu is available only when a offset tray is installed. This setting is disabled when "SUB TRAY" or "OFFSET" is selected for [FIN-ISHING]. This function is available only for the following media sizes. Paper size: 89 to 216 mm in width and 140 to 356 mm in length 			

9.5 QUALITY MENU

9.5.1 RESOLUTION

Function	Sets the print resolution.		
Use	Sets the print resolution.		
Cotting	The default setting is 600.		
/procedure	"600"	1200	

9.5.2 BRIGHTNESS

Function	 Sets the 	Sets the brightness of the printed image.						
Use	 To adjus 	To adjust the brightness of the printed image.						
Setting	6							
/procedure	-15 %	-10 %	-5 %	"0 %"	+5 %	+10 %	+15 %	

9.5.3 CONTRAST

Function	Sets the contrast of the printed image.							
Use	To adjust the contrast of the printed image.							
Setting • The default setting is 0 %.								
/procedure	-15 %	-10 %	-5 %	"0 %"	+5 %	+10 %	+15 %	

9.5.4 HALFTONE

A. IMAGE PRINTING

Function	 Sets the halftone characteristic of image to be printed. 				
Use	 To set the halftone characteristic that is used for the printed image (picture.) LINE ART : HALFTONE characteristic that emphasizes the resolution of the print image. DETAIL : HALFTONE characteristic that emphasizes the balance between the resolution and the tone reproducibility of the print image. SMOOTH : HALFTONE characteristic that emphasizes the tone reproducibility of the print image. 				
Setting /procedure	The default setting is DETAIL. LINE ART "DETAIL" SMOOTH				

B. TEXT PRINTING

Function	Sets the halftone characteristic of the text to be printed.			
Use	 To set the halftone characteristic that is used for printing text (letter). LINE ART : HALFTONE characteristic that emphasizes the resolution of the print image. DETAIL : HALFTONE characteristic that emphasizes the balance between the resolution and the tone reproducibility of the print image. SMOOTH : HALFTONE characteristic that emphasizes the tone reproducibility of the print image. 			
Setting	The default setting is LINE ART.			
/procedure	"LINE ART" DETAIL SMOOTH			

C. GRAPHICS PRINTING

Function	 Sets the halftone characteristic for graphics printing. 		
Use	 To set the halftone characteristic that is used for printing graphics (figures). LINE ART : HALFTONE characteristic that emphasizes the resolution of the print image. DETAIL : HALFTONE characteristic that emphasizes the balance between the resolution and the tone reproducibility of the print image. SMOOTH : HALFTONE characteristic that emphasizes the tone reproducibility of the print image. 		
Setting /procedure	The default setting is LINE ART. LINE ART "DETAIL" SMOOTH		

9.5.5 ECONOMY PRINT

Function	 Selects whether or not to use the economy print mode where job prints with lower print density and less toner consumption. 		
Use	 To reduce toner consumption In the economy print mode, toner consumption will be reduced by approx. 30 % compared to the normal mode. 		
Setting	The default setting is OFF.		
/procedure	ON	"OFF"	

9.6 MEMORY DIRECT

- This menu appears only when the optional hard disk kit or the compact flash is installed.
- This menu does not appear when "DISABLE" is selected in the [INTERFACE MENU] → [MEMORY DIRECT] setting.

9.6.1 LIST OF FILES

Function	 Displays folders and files stored in a USB memory connected to the USB port and sends print jobs.
Use	 To select files to be printed with the USB memory direct print function. The maximum of 99 files and folders in total can be displayed. The maximum of 7 folder hierarchies can be displayed.
Setting /procedure	 Insert a USB memory into the USB port. Select [MEMORY DIRECT] → [LIST OF FILES] and select files to be printed then press the Menu/Select key. (When a desired file is in a folder, select the folder that includes the file and press the Menu/Select key.) Specify a media type, duplex printing ON/OFF, the number of copies, and other necessary settings. Select [PRINT] and press the Menu/Select key. NOTE Do not remove the USB memory from the main body during memory direct printing.

9.6.2 TYPE OF FILES

Function	 Specifies the types of files to be displayed on [LIST OF FILES]. 	
Use	 To limit the types of files that can be listed. 	
Setting /procedure	The default setting is PDF,XPS.	
procedure	PDF,XPS,JPEG,TIFF	"PDF,XPS"

9.7 INTERFACE MENU

9.7.1 JOB TIMEOUT

Function	Sets the time to activate JOB TIMEOUT.			
Use	To specify the amount of time before a print job times out.			
Setting /procedure	The default setting is 15 seconds.			
, procedure	5 seconds to 300 seconds			

9.7.2 ETHERNET

NOTE

• When the ETHERNET setting is changed, the printer restarts automatically.

A. TCP/IP

(1) ENABLE

Function	Enables TCP/IP.		
Use	To specify that the printer is connected to a TCP/IP network. YES : Enable TCP/IP. Print can be made at TCP/IP environment. NO : Disable TCP/IP. Print cannot be made at TCP/IP environment.		
Setting /procedure	The default setting is YES. "YES"	NO	
	NOTE • The folowing screen displays only w IP ADDRESS/SUBNET MASK/DEFAU HTTP/FTPTELNET/BONJOUR/DYNAI SNMP/WSD PRINT/IPSEC/IP ADDRES	LT GATEWAY/DHCP/BOOTP/ARP/PING/ MIC DNS/IPP/RAW PORT/SLP/SMTP/	

(2) IP ADDRESS

Function	Sets the IP address of the printer used for the network.	
Use	To set the printer's IP address.	
Setting /procedure	 Select [IP ADDRESS] and press the Menu/Select key. Set desired IP address (first bite) with the up key△/down key▽ and press the right key▷. Repeat the above procedures and set the IP address up to fourth bite. Press the Menu/Select key. 	
	 NOTE When setting the IP address manually, [DHCP], [BOOTP] and [ARP/PING] settings are set to [OFF] automatically. When IP address is not allocated from the server, the IP address is set automatically within the range "169.254.0.0. to 169.254.255.255." 	

(3) SUBNET MASK

Function	 Sets the subnet mask of the printer used in the network. 	
Use	 To set the printer's subnet mask. 	
Setting /procedure	 Select [SUBNET MASK] and press the Menu/Select key. Set desired subnet mask (first bite) with the up key△/down key▽ and press the right key ▷. Repeat the above procedures and set the subnet mask up to fourth bite. Press the Menu/Select key. The default setting is "000.000.000.000." 000.000.000 to 255.255.255.255 	

(4) DEFAULT GATEWAY

Function	Sets the gateway address of the printer used in the network.	
Use	To set the printer's gateway address.	
Setting /procedure	 Select [DEFAULT GATEWAY] and press the Menu/Select key. Set desired default gateway address (first bite) with the up key△/down key▽ and press the right key▷. Repeat the above procedures and set the default gateway address up to fourth bite. Press the Menu/Select key. The default setting is "000.000.000.000." 000.000.000 to 255.255.255.255 	

(5) DHCP

Function	Automatically acquires an IP address from the DHCP server, if there is one in the network, and specifies whether to load other network information.		
Use	 To automatically acquire an IP address and load other network information. ON : Enable IP auto acquisition setting. OFF : Disable IP auto acquisition setting. 		
Setting	The default setting is ON.		
/procedure	"ON" OFF		
	NOTE • When setting the IP address manually, the [DHCP] setting is changed to [OFF].		

(6) BOOTP

Function	 Automatically acquires an IP address from BOOTP and specifies whether to load other network information. 		
Use	 To automatically acquire an IP address and load other network information. ON : Enable IP auto acquisition setting. OFF : Disable IP auto acquisition setting. 		
Setting	The default setting is OFF.		
/procedure	ON	"OFF"	
	NOTE When setting the IP address manually, the [BOOTP] setting is changed to [OFF]. 		

(7) ARP/PING

Function	 Select whether or not the IP address is automatically acquired. 	
Use	 To automatically acquire an IP address and load other network information. ON : Enable IP auto acquisition setting. OFF : Disable IP auto acquisition setting. 	
Setting /procedure	The default setting is OFF.	
	ON	"OFF"
	NOTE When setting the IP address manually, the [ARP/PING] setting is changed to [OFF]. 	

(8) HTTP

Function	Enables HTTP.	
Use	To enable HTTP. YES : HTTP is enabled. NO : HTTP is disabled.	
Setting /procedure	The default setting is YES.	
	"YES"	NO
	NOTE Setting this function to "NO" will 	automatically set [IPP] to "NO."

(9) FTP

Function	Enables FTP.		
Use	 To enable FTP. YES : FTP is enabled. NO : FTP is disabled. 		
Setting /procedure	 The default setting is YES. "YES" 	NO	

(10) TELNET

Function	Select whether to enable or disable TELNET transmissions.	
Use	To specify that the printer is connected by TELNET transmissions.	
Setting /procedure	 The default setting is ENABLE. 	
/procedure	"ENABLE"	DISABLE

(11) BONJOUR

Function	 Select whether or not to use the bonjour setting. 		
Use	 To use when operating under the bonjour service environment. YES : Bonjour is enabled. NO : Bonjour is disabled. 		
Setting	The default setting is YES.		
/procedure	"YES"	NO	

(12) DYNAMIC DNS

Function	 Select whether or not to use the dynamic DNS setting. 	
Use	 To use when operating under the d YES : Dynamic DNS is enabled. NO : Dynamic DNS is disabled. 	
Setting /procedure	 The default setting is NO. YES 	"NO"

(13) IPP

Function	To set whether to enable or disable IPP setting	ng.
Use	YES : IPP is enabled. NO : IPP is disabled.	
Setting	 The default setting is YES. 	
/procedure	"YES"	NO

(14) RAW PORT

<ENABLE>

Function	• To set whether to enable or disable raw port setting.	
Use	YES : Raw port is enabled. NO : Raw port is disabled.	
Setting	The default setting is YES.	
/procedure	"YES" NO	

<BIDIRECTIONAL>

Function	 Enables or disables bi-directional comr 	•	
Use	ON : Raw port is enabled for bi-directional communication. OFF : Raw port is disabled for bi-directional communication.		
Setting	 The default setting is OFF. 		
/procedure	ON	"OFF"	

(15) SLP

Function	To set whether to enable or disable SLP setting.	
Use	YES : SLP is enabled. NO : SLP is disabled.	
Setting	The default setting is YES.	
/procedure	"YES"	NO

(16) SMTP

Function	To set whether to enable or disable SM	TP setting.	
Use	YES : SMTP is enabled. NO : SMTP is disabled.		
Setting	The default setting is YES.		
/procedure	"YES"	NO	

(17) SNMP

9. Menu

Function	 To set whether to enable or disable SNMP setting. 		
Use	YES : SNMP is enabled. NO : SNMP is disabled.		
Setting	 The default setting is YES. 		
/procedure	"YES"	NO	

(18) WSD PRINT

Function	To set whether to use this printer as a WSD printer.
Use	YES : WSD print is enabled. NO : WSD print is disabled.
Setting	The default setting is YES.
/procedure	"YES" NO

(19) IPSEC

Function	To set whether to use IPsec protocol for IP network communication.	
Use	 When IPsec protocol is used to perform encrypted communication. YES : IPsec is enabled. NO : IPsec print is disabled. 	
Setting	 The default setting is NO. 	
/procedure	YES	"NO"

(20) IP ADDRESS FILTER

<ACCESS PERMISSION>

Function	To set the IP filtering (access permission). ENABLE : Access permission is enabled. DISABLE : Access permission is disabled.	
Use	NOTE The range for the IP addresses, to which access is enabled, is set using the PageScope Web Connection. 	
Setting	The default setting is DISABLE.	
/procedure	ENABLE	"DISABLE"

<ACCESS REFUSE>

Function	To set the IP filtering (access refuse). ENABLE : Access refuse is enabled. DISABLE : Access refuse is disabled.	
Use	NOTE The range for the IP addresses, to which access is disabled, is set using the PageScope Web Connection. 	
Setting	The default setting is DISABLE.	
/procedure	ENABLE	"DISABLE"

(21) IPV6 <ENABLE>

Function	To set whether to use IPv6 in IP network communication.	
Use	YES : IPv6 is enabled. NO : IPv6 is disabled.	
Setting	The default setting is YES.	
/procedure	"YES" NO	

<AUTO SETTING>

Function	To set whether to use the IPv6 address automatic acquisition setting.
Use	YES : IPv6 address is automatically obtained. NO : IPv6 auto configuration is disabled.
Setting	The default setting is YES.
/procedure	"YES" NO

<LINK LOCAL>

Function	Displays the link-local address of IPv6.
Use	

<GLOBAL ADDRESS>

Function	 Displays the global address of IPv6. 	1
Use	- Displays the global address of it vo.	

<GATEWAY ADDRESS>

Function	 Displays the gateway address of IPv6.
Use	· Displays the galeway address of it vo.

B. NETWARE

Function	Enables NetWare.		
Use	 To specify that the printer is connected to a NetWare network. YES : Enable NetWare. Printing can be done via NetWare. NO : Disable NetWare. Printing cannot be done via NetWare. 		
Setting	The default setting is NO.		
/procedure	YES	"NO"	

C. APPLETALK

Function	Enables AppleTalk.		
Use	 To specify that the printer is connected to an AppleTalk network. YES : Enable AppleTalk. Printing can be done via AppleTalk. NO : Disable Apple Talk. Printing cannot be done via AppleTalk. 		
Setting /procedure	The default setting is YES. "YES"	NO	
	YES	NO	

D. SPEED/DUPLEX

Function	Sets the communication speed and method of network.		
Use	To set the network communication speed and method.		
Setting /procedure	Setting items Network speed (SPEED): AL Duplex mode (DUP): AUTO, The default setting is AUTO	full-duplex mode, half-dup	

E. IEEE802.1X

Function	Enables IEEE802.1X.	
Use	 To carry out wireless LAN communication. YES : IEEE802.1X is enabled. NO : IEEE802.1X is disabled. 	
Setting /procedure	The default setting is NO. YES	"NO"

9.7.3 MEMORY DIRECT

Function	Select whether to enable or disable me	, , , ,
Use	ENABLE : MEMORY DIRECT menu is appeared, and memory direct printin enabled. DISABLE : MEMORY DIRECT menu is disappeared, and memory direct printing disabled.	
Setting	 The default setting is ENABLE. 	
/procedure	"ENABLE"	DISABLE

9.8 SYS DEFAULT MENU

9.8.1 LANGUAGE

Function	Sets the language of the control panel display.
Use	 To change the language of the control panel display at user's option.
Setting /procedure	 The default setting is "ENGLISH." "ENGLISH" / FRENCH / GERMAN / SPANISH / ITALIAN / PORTUGUESE / CZECH / JAPANEASE / KOREAN / SIMPLIFIED CHINESE / TRADITIONAL CHINESE/ DUTCH / RUSSIAN / POLISH

9.8.2 EMULATION

A. DEF. EMULATION

Function	 To set the PDL (Page I 	Description Language).		
Use	 To fix the PDL as nece 	ssary. It usually switches automa	atically.	
Setting	 The default setting is A 	IUTO.		
/procedure	"AUTO"	POSTSCRIPT	PCL	

B. POSTSCRIPT(1) WAIT TIMEOUT

Function	Sets the amount of time to wait for a postscript file.
Use	• To set the amount of time to wait for a postscript file before the print job times out.
Setting /procedure	 Select [WAIT TIMEOUT] and press the Menu/Select key. Select desired time with the up key△/down key▽ and press the Menu/Select key. The default setting is 0 second.
	"0" second to 300 seconds.

(2) PS ERROR PAGE

Function	Specifies whether error pages are printed at the time of a postscript error.	
Use	 To specify whether error pages are printed after a postscript error occurs. ON : Error pages are printed at the time of postscript error. OFF : Error pages are not printed at the time of postscript error. 	
Setting	The default setting is OFF.	
/procedure	ON "OFF"	

(3) PS PROTOCOL

Function	 Sets the protocol to be u 	sed for postscript printing.	
Use	To use the protocol when AUTO : Automatic NORMAL : ASCII lette BINARY : Binary data	r code data	g.
Setting /procedure	The default setting is AUTO. "AUTO" NORMAL BINARY		

C. PCL (1) CR/LF MAPPING

Function	Sets the linefeed code for PCL printing.	
Use	 To specify the type of linefeed to be used for PCL printing. 	
Setting	 The default setting is "CR=CR LF=LF." 	
/procedure	"CR=CR LF=LF" CR=CRLF LF=LF CR=CR LF=LFCR CR=CRLF LF=LFCR	

(2) LINES PER PAGE

9. Menu

Function	 Sets the lines per page for PCL printing. 	
Use	 To set the number of lines to be printed per page for PCL jobs. 	
Setting /procedure	 Select [LINES PER PAGE] and press the Menu/Select key. Select desired line number with the up key△/down key▽ and press the Menu/Select key. The default setting is 60 lines. 	
	5 lines to 128 lines	

(3) FONT SOURCE

Function	Sets the PCL font to be used for PCL printing.
Use	To set the font to be used for printing PCL jobs.
Setting /procedure	 Select [FONT NUMBER] and press the Menu/Select key. Select desired font with the up key∆/down key⊽ and press the Menu/Select key.
	The default setting is 0.
	"0" to 102
	 NOTE According to the selected [FONT NUMBER], [PITCH SIZE] or [POINT SIZE] setting is available. Details on the font which corresponds to the font No. can be checked by the PCL font list. See P.96

<PITCH SIZE/POINT SIZE>

Function	 Sets the pitch size of the PCL font for PCL printing. 	
Use	To set the pitch size of the font to be used for printing PCL jobs.	
Setting /procedure	 Select [PITCH SIZE] and press the Menu/Select key. Select desired pitch size with the up key△/down key▽ and press the Menu/Select key. The default setting is 10.00 pt. 	
	0.44 pt to 99.99 pt	
	NOTE • When one of the following "FONT NUMBERs" is selected, "PITCH SIZE" set- ting is available. FONT NUMBER: 0 to 5, 21 to 23, 54 to 57, 81, 82.	

<SYMBOL SET>

Function	Sets the symbol set for PCL printing.
Use	 To set the symbol set to be used for printing PCL jobs.
Setting /procedure	The default setting is PC8. "PC8" / DESKTOP / ISO4 / ISO6 / ISO11 / ISO15 / ISO17 / ISO21 / ISO60 / ISO69 / ISOL1 / ISOL2 / ISOL5 / ISOL6 / ISOL9 / LEGAL / MATH8 / MCTEXT / MSPUBL / PC775 / PC850 / PC852 / PC858 / PC8DN / PC8TK / PC1004 / PIFONT / PSMATH / PSTEXT / ROMAN8 / WIN30 / WINBALT / WINL1 / WINL2 / WINL5 / ARABIC8 / HPWARA / PC864ARA / HEBREW7 / HEBREW8 / ISOHEB / PC851GRK / PC8GRK / ISOGRK

D. XPS

(1) DEGITAL SIGNATURE

Function	Selects whether to verify digital signatures attached to XPS (XML Pape	r Specifica-
Use	 tion) files when printing the files. When ON is selected, files with invalid digital signatures are not printed 	
Setting	The default setting is DISABLE.	
/procedure	ENABLE "DISABLE"	

(2) XPS ERROR PAGE

Function	To set whether to print error information when an error occurs while printing a XPS
Use	Use file. ON : XPS error page is printed when an XPS error occurs. OFF : No XPS error page is printed when an XPS error occurs.
Setting	The default setting is ON.
/procedure	"ON" OFF

9.8.3 PAPER

A. DEFAULT PAPER

(1) PAPER SIZE

Function	Sets the default media size.
Use	To set the default media size.
Setting /procedure	<for america="" north=""> The default setting is LETTER. <for destinations="" other=""></for> The default setting is A4. LETTER/LEGAL/EXECUTIVE/A4/A5/A6/B5(JIS)/B6(JIS)/GOVT LETTER/STATE-MENT/FOLIO/SP FOLIO/UK QUARTO/FOOLSCAP/GOVT LEGAL/16K/KAI 16/KAI 32/ENV C5/ENV C6/ENV DL/ENV MONARCH/ENV CHOU#3/ENV CHOU#4/B5(ISO)/ENV #10/ENV YOU#4/JPOST/JPOST-D/CUSTOM</for>

(2) CUSTOM SIZE

Function	Sets the custom media width and length.	
Use	 To set the width and length of the custom media size. 	
Setting /procedure	 Select [CUSTOM SIZE] and press the Menu/Select key. Select [WIDTH] or [LENGTH] and press Menu/Select key. Set desired number with the up key△/down key♡ and press the Menu/Select key. <for america="" north=""></for> 	
	 The default setting of WIDTH is 8.50 inches. WIDTH: 3.00 inches to 8.50 inches. 	
	The default setting of LENGTH is 11.00 inches.	
	LENGTH: 5.00 inches to 14.00 inches.	
	<for destinations="" other=""> The default setting of WIDTH is 210 mm. </for>	
	WIDTH: 76 mm to 216 mm.	
	The default setting of LENGTH is 297 mm.	
	LENGTH: 127 mm to 356 mm.	
	NOTE By changing the [UNIT OF MEASURE] setting (INCHES/MILLIMETERS), the custom size units are changed. 	

(3) PAPER TYPE

Function	Sets the default media type.
Use	To set the default media type.
Setting /procedure	The default setting is PLAIN PAPER. "PLAIN PAPER"/RECYCLED/THICK 1/THICK 2/THICK 3/LABEL/TRANSPARENCY/ ENVELOPE/POSTCARD/THIN PAPER

B. PAPER SIZE ERROR

Function	To select whether to detect a paper size e		
Use	ENABLE : Paper size error is detected DISABLE : No paper size error is detected		
Setting • The default setting is ENABLE.			
/procedure	"ENABLE"	DISABLE	

C. UNIT OF MEASURE

To change media measurement units.	
<for america="" north=""> The default setting is INCHES. <!--</td--></for>	
The default setting is MILLIMETERS. INCHES MILLIMETERS	
<	

9.8.4 STARTUP OPTIONS

A. DO STARTUP PAGE

Function	Sets whether a startup page is printed at startup of the printer.		
Use	To specify whether a startup page is ON : Start up page is printed at st OFF : Start up page is not printed	artup the printer.	
Setting	 The default setting is OFF. 		
/procedure	ON	"OFF"	

9.8.5 AUTO CONTINUE

Function	Select whether or not printing continues if the si tray is different from the size or type of media fo	51
Use	 If AUTO CONTINUE is set to ON, printing autom onds under the following conditions. At this time, media size is different. No media: PAPER EMPTY/TRAY EMPTY Different media size/type: PAPER ERROR/TRA' ON : Auto continuous printing is ON. OFF : Auto continuous printing is OFF. 	printing will be performed even if the
Setting /procedure	The default setting is OFF. ON	"OFF"

9.8.6 HOLD JOB TIMEOUT

Function	• Sets the amount of time before a job saved temporarily in the printer is automatically deleted.	
Use	To change the amount of time a job is held before being deleted.	
Setting /procedure	The default setting is DISABLE (No auto delete.). "DISABLE" 1 hour 4 hours 1 day 1 week	
	NOTE This menu is available only when an optional hard disk kit is installed. 	

9.8.7 ENERGY SAVER TIME

Function	 Sets the amount of time before the machine enters energy saver mode after the last print is received or the last key operated.
Use	To change the amount of time before the machine enters energy saver mode.
Setting /procedure	 The default setting is 5 minutes. 5 minutes/6 minutes/7 minutes/8 minutes/9 minutes/10 minutes/11 minutes/12 minutes/ 13 minutes/14 minutes/15 minutes/30 minutes/1 hour

9.8.8 MENU TIMEOUT

Function	Sets the amount of time before the control panel returns to the status screen from menu mode and the help display.				
Use	 To set the amount of the time before the control panel returns to the status screen from the menu and the help display. 				
Setting	 The default setting is 2 n 	ninutes.			
/procedure	OFF 1 minute "2 minutes"				

9.8.9 LCD CONTRAST

Function	 Sets the 	Sets the brightness of the control panel LCD display.							
Use	 To set the 	To set the brightness of the control panel LCD display.							
U	The default	setting is 0.							
/procedure	-3	-2	-1	"0"	+1	+2	+3		

9.8.10 SECURITY

A. CHANGE PASSWORD

Function	 Sets the password used for the lock panel function. 			
Use	To change the password used for the lock panel function. 0000 : Panel lock function is OFF. 0001 to FFFF : Valid password for panel lock function.			
Setting /procedure	 Select [CHANGE PASSWORD] and press the Menu/Select key. Set desired password (first digit) with the up key△/down key▽ and press the right key▷. Repeat the above procedures to set up to fourth digit password. The default setting is 0000. 			
	"0000" to FFFF			
	 NOTE Make sure to set the password to something other than "0000" when the [LOCK PANEL] function is set to [ON]. If you forget the password, it can be initiated (0000) with [SERVICE MENU/ RESTORE PASSWORD]. See P.143 			

B. LOCK PANEL

Function	 Protects the menu (except the service menu) with a password. 					
Use	 To make the menu (except the service menu) impossible to change unless the correct password is entered. OFF : Panel lock function is OFF. MINIMUM : Panel lock function is ON. Protect the operation of [INTERFACE MENU], [SYS DEFAULT MENU]. ON : Panel lock function is ON. Protect the operation of [PROF/PRINT MENU], [PRINT MENU], [PAPER MENU], [QUALITY MENU], [INTERFACE MENU], [SYS DEFAULT MENU], [INTERFACE MENU], [SYS DEFAULT MENU] and [MEMORY DIRECT]. 					
Setting /procedure	The default setting is "OFF." "OFF." MINIMUM ON					

9.8.11 CLOCK

A. DATE

Function	Sets the date of the printer's built-in clock.
Use	To change the date of the printer's built-in clock.
Setting /procedure	DATE (DD.MM.YY): For Europe DATE (MM.DD.YY): For North America DATE(YY.MM.DD): For Japan, Asia, China The following shows how to set DATE (DD.MM.YY). 1. Select [CLOCK] and press the Menu/Select key. 2. Select [DATE (DD.MM.YY)] and press the Menu/Select key. 3. Set date with the up key△/down key⊽ and press the right key▷. 4. Repeat the above procedures to set month and year. 5. Press the Menu/Select key. DD : 01 to 31 MM : 01 to 12 YY : 2007 to 2032

B. TIME

Function	Sets the time of the printer's built-in clock.
Use	To change the time of the printer's built-in clock.
Setting /procedure	 Select [CLOCK] and press the Menu/Select key. Select [TIME] and press the Menu/Select key. Set hour with the up key∆/down key⊽ and press the right key⊳. Repeat the above procedures to set minute. Press the Menu/Select key.

C. TIME ZONE

Function	Sets the time zone.
Use	
Setting /procedure	 Select [CLOCK] and press the Menu/Select key. Select [TIME ZONE] and press the Menu/Select key. Set time zone with the up key∆/down key⊽. Press the Menu/Select key.

9. Menu

9.8.12 HDD FORMAT

9. Menu

Function	Initializes the format of the optional hard disk kit.					
Use	To initialize the format of the optional hard disk kit. USER AREA ONLY : Initialize only user area ALL : Initialize all area					
Setting /procedure	 Select [HDD FORMAT] and press the Menu/Select key. Select desired initialization method and press the Menu/Select key. 					
	 [ARE YOU SURE?] is displayed. By pressing the Menu/Select key, initialization starts. By pressing the Cancel key with respect to the Menu/Select key with the start of initialization starts. 					
	without pressing the Menu/Select key, the start of initialization can be cancelled.5. The printer restarts and the hard disk is initialized. Once the initialization starts, it cannot be cancelled.					
	The default setting is USER AREA ONLY.					
	USER AREA ONLY ALL					
	NOTE This menu is available only when an optional hard disk kit is installed. 					

9.8.13 CARD FORMAT

Function	 Initializes the format of the optional compact flash card. 					
Use	 To initialize the format of the optional compact flash card. USER AREA ONLY : Initialize only user area ALL : Initialize all area 					
Setting /procedure	 Select [CARD FORMAT] and press the Menu/Select key. Select desired initialization method and press the Menu/Select key. [ARE YOU SURE?] is displayed. By pressing the Menu/Select key, initialization starts. By pressing the Cancel key without pressing the Menu/Select key, the start of initialization can be cancelled. The printer restarts and the hard disk is initialized. Once the initialization starts, it cannot be cancelled. 					
	The default setting is USER AREA ONLY. USER AREA ONLY ALL					
	NOTE This menu is available only when an optional compact flash card is installed. 					

9.8.14 RESTORE DEFAULTS

Function	Restores the factory default of each setting.				
To restore the defaults of all settings. RESTORE NETWORK : Restore the default for [INTERFACE MENU setting. Use RESTORE PRINTER : Restore the default for [PAPER MENU], [Q MENU], [SYS DEFAULT MENU] and [MEN DIRECT] setting.					
	RESTORE ALL : Restore defaults for all settings.				
Setting /procedure	 Select [RESTORE DEFFAULTS] and press the Menu/Select key. Select desired mode and press the Menu/Select key. [ARE YOU SURE?] is displayed. By pressing the Menu/Select key, initialization starts. By pressing the Cancel key without pressing the Menu/Select key, the start of initialization can be cancelled. The printer restarts and the hard disk is initialized. Once the initialization starts, it cannot be cancelled. 				
	The default setting is RESTORE NETWORK.				
	RESTORE NETWORK RESTORE PRINTER RESTORE ALL				

List of reset items 1

					Reset Item			Ref.	
Item			RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page		
		DEFAULT TRAY		_	Reset	Reset	TRAY1	P.96	
			PAPER SIZE	—	Reset	Reset	LETTER/A4	P.97	
			CUSTOM SIZE	_	Reset	Reset	WIDTH: 8.5inches LENGTH: 11inches	P.97	
	PAPER SOURCE	TRAY 1 to 4		_	Reset	Reset	WIDTH:210mm LENGTH:297mm	1.31	
			PAPER TYPE	_	Reset	Reset	PLAIN PAPER	P.98	
PAPER			SIZE SETTING		Reset	Reset	AUTO	P.98	
MENU		TRAY C	HAINING	_	Reset	Reset	ON	P.102	
		DU	/APPING ODE	_	Reset	Reset	OFF	P.101	
			PLEX	_	Reset	Reset	OFF	P.102	
			PIES	_	Reset	Reset	1	P.102	
		COI	LATE		Reset	Reset	OFF	P.102	
		FINI	SHING	_	Reset	Reset	MAIN TRAY	P.103	
			JOB SE	PARATION		Reset	Reset	OFF	P.103

List of reset items 2

ltem			Reset Item				Ref.
			RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page
	RE	SOLUTION	—	Reset	Reset	600	P.103
	BR	IGHTNESS	—	Reset	Reset	0 %	P.103
QUALITY	HALFTONE	IMAGE PRINTING	—	Reset	Reset	DETAIL	P.104
MENU		TEXT PRINTING	—	Reset	Reset	LINE ART	P.104
		GRAPHICS PRINTING	_	Reset	Reset	DETAIL	P.104
	ECO	NOMY PRINT	_	Reset	Reset	OFF	P.105

List of reset items 3

		Reset Item				Bef.
		RESTORE NETWORK		RESTORE ALL	Initial Value	Page
MEMORY DIRECT	TYPE OF FILES	_	Reset	Reset	PDF,XPS	P.105

List of reset items 4

				Reset Item			Ref.		
		RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page			
	JO	B TIMEOU	Т		Reset	Reset	15 seconds	P.106	
		ENA	BLE	Reset	_	Reset	YES	P.106	
		IP ADI	DRESS	Reset	_	Reset	000.000. 000.000	P.106	
		SUBNE	T MASK	Reset	_	Reset	000.000. 000.000	P.107	
		DEFAULT	GATEWAY	Reset	_	Reset	000.000. 000.000	P.107	
		DH	ICP	Reset	_	Reset	ON	P.107	
	ETHER- NET- TCP/IP	BO	OTP	Reset	_	Reset	OFF	P.107	
INTER-			ARP/	PING	Reset	_	Reset	OFF	P.108
FACE		НТ	TP	Reset	_	Reset	YES	P.108	
MENU		F	TP	Reset	_	Reset	YES	P.108	
		TEL	NET	Reset	—	Reset	ENABLE	P.108	
		BON	JOUR	Reset	—	Reset	YES	P.108	
		DYNAN	IIC DNS	Reset	—	Reset	NO	P.109	
		IF	P	Reset		Reset	YES	P.109	
		BAW	ENABLE	Reset		Reset	YES		
		PORT	BIDIREC- TIONAL		Reset	Reset	OFF	P.109	
		SI	LP	Reset	_	Reset	YES	P.109	
		SM	1TP	Reset	_	Reset	YES	P.109	
		SN	MP	Reset		Reset	YES	P.110	

					Reset Item			Ref.
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page
		WSD	PRINT	Reset	_	Reset	YES	P.110
		IP S	SEC	Reset	—	Reset	NO	P.110
	ETHER-	IP ADDRESS	ACCESS PERMIS- SION	Reset	_	Reset	DISABLE	P.110
	NET- TCP/IP	FILTER	ACCESS REFUSE	Reset	_	Reset	DISABLE	
INTER- FACE		IPv6	ENABLE	Reset	—	Reset	YES	
MENU			AUTO SETTING	Reset	_	Reset	YES	P.111
	NETWARE		Reset	_	Reset	YES	P.111	
	APPLE TALK		Reset	—	Reset	YES	P.111	
	SPEED/DUPLEX		Reset	—	Reset	AUTO	P.112	
	IEEE802.1X		Reset	_	Reset	NO	P.112	
	MEN	IORY DIRE	СТ	_	Reset	Reset	ENABLE	P.112

List of reset items 5

					Reset Item			Ref.
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page
	L	ANGUAGE		—	Reset	Reset	ENGLISH	P.112
		DEF. EM	ULATION	—	Reset	Reset	AUTO	P.113
			WAIT TIM- EOUT	_	Reset	Reset	0	
		POST- SCRIPT	PS ERROR PAGE	_	Reset	Reset	OFF	P.113
			PS PRO- TOCOL		Reset	Reset	AUTO	
			CR/LF MAPPING	_	Reset	Reset	CR=CR LF=LF	
	MENU TION		LINES PER PAGE	—	Reset	Reset	60	
DEFAULT		-	FONT SOURCE/ FONT NUMBER	_	Reset	Reset	0	P.113
			FONT SOURCE/ PITCH SIZE	_	Reset	Reset	10.00	
		XPS	FONT SOURCE/ SYMBOL SET	_	Reset	Reset	PC8	
			DEGITAL SIGNA- TURE		Reset	Reset	DISABLE	P.115
		A O	XPS ERROR PAGE	_	Reset	Reset	ON	

					Reset Item			Ref.	
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL	Initial Value	Page	
			PAPER SIZE	—	Reset	Reset	LETTER/A4		
		DEFAULT	CUSTOM SIZE/ WIDTH	—	Reset	Reset	8.5 inches/ 210 mm	Ditte	
	PAPER	PAPER	CUSTOM SIZE/ LENGTH	_	Reset	Reset	11.00 inches/ 297 mm	P.115	
			PAPER TYPE	_	Reset	Reset	PLAIN PAPER		
			R SIZE ROR	—	Reset	Reset	ENABLE	P.116	
		10	UNIT OF N	MEASURE	_	Reset	Reset	INCHES/ MILLI- METERS	P.117
	STARTUP OPTIONS	DO START	TUP PAGE	_	Reset	Reset	OFF	P.117	
SYS	AUT	O CONTIN	UE	—	Reset	Reset	OFF	P.117	
DEFAULT MENU	HOLD	JOB TIME	OUT	—	Reset	Reset	DISABLE	P.117	
MENO	ENERG	GY SAVER	TIME	—	Reset	Reset	5 minutes	P.118	
	MEN	NU TIMEOU	JT	—	Reset	Reset	2 minutes	P.118	
	LCD	CONTRA	ST	—	Reset	Reset	0	P.118	
	SECURITY	CHANGE P	ASSWORD	—	Reset	Reset	0000	P.118	
	SECONIT	LOCK	PANEL	—	Reset	Reset	OFF	F.110	
			TRAY 1	—	Reset	Reset	ON		
		PAPER	TRAY 2	—	Reset	Reset	ON	P.126	
	ENABLE WARNING PAP	EMPTY	TRAY 3	—	Reset	Reset	ON	r. 120	
			TRAY 4	—	Reset	Reset	ON		
		D1 D5 D	TRAY 2	—	Reset	Reset	ON		
		PAPER LOW	TRAY 3	_	Reset	Reset	ON	P.127	
		2011	TRAY 4	—	Reset	Reset	ON		
		TONE	RLOW	_	Reset	Reset	OFF	P.127	

List of reset items 6

			Reset Item			
	Item		RESTORE PRINTER	RESTORE ALL	Initial Value	Ref. Page
	Admin Password	_	Reset	Reset	administrator	_
E.	Contact Name	_	Reset	Reset	KONICA MINOLTA Customer Support	_
ectic	Contact Information	_	Reset	Reset	Blank	—
Conn	Contact Utility Link		Reset	Reset	http://page scope.com/	_
PageScope Web Connection	Corporate URL	_	Reset	Reset	http://koni- caminolta. com/	_
Sco	Supplies and Accessories		Reset	Reset	Blank	_
Page	Product Help URL		Reset	Reset	http://page scope.com/	_
	Auto IP	Reset		Reset	DHCP	_
	IPP Config Printer Name	Reset		Reset	bizhub 40P	_
	IPP Config Printer Location	Reset	_	Reset	Blank	_

*: Destination items. For details, see the page referenced.

9.8.15 ENABLE WARNING

A. PAPER EMPTY

(1) TRAY1

Function	 Specifies whether a [TRAY 1 Paper Empty] is displayed as a normal message when it is empty. 			
Use	 To specify whether to display a [TRAY 1 Paper Empty] message as a normal message. ON : Paper empty message is displayed on normal message when tray is empt OFF : Paper empty message is not displayed on normal message when tray is empty. 			
Setting /procedure	The default setting is ON. OFF	"ON"		

(2) TRAY2

Function	 Specifies whether a [TRAY 2 Paper is empty. 	Empty] is displayed as a normal message when it
Use	 To specify whether to display a [PAPER EMPTY] message as a normal message. ON : Paper empty message is displayed on normal message when tray is empty. OFF : Paper empty message is not displayed on normal message when tray is empty. 	
Setting /procedure	The default setting is ON.	
	OFF	"ON"

(3) TRAY3

Function	 Specifies whether a [TRAY 3 Paper Empty] is displayed as a normal message when it is empty. 			
Use	 To specify whether to display a [PAPER EMPTY] message as a normal message. ON : Paper empty message is displayed on normal message when tray is empty. OFF : Paper empty message is not displayed on normal message when tray is empty. 			
Setting	5			
/procedure OFF "ON"		"ON"		

(4) TRAY4

Function	 Specifies whether a [TRAY 4 Paper Empty] is displayed as a normal message when it is empty. 			
Use	 To specify whether to display a [PAPER EMPTY] message as a normal message. ON : Paper empty message is displayed on normal message when tray is empty. OFF : Paper empty message is not displayed on normal message when tray is empty. 			
Setting	The default setting is ON.			
/procedure	OFF	"ON"		

B. PAPER LOW(1) TRAY2

Function	Select whether or not to display a warn	ng when tray 2 is about to run out of media.
Use	ON : Paper low message is displaye empty.	LOW] message as a warning message. Id on warning message when tray is near- layed on warning message when tray is near-
Setting /procedure	The default setting is ON. OFF	"ON"

(2) TRAY3

Function	• Select whether or not to display a warning when tray 3 is about to run out of media.			
Use	ON : Paper low message is disp empty.	ER LOW] message as a warning message. ayed on warning message when tray is near- lisplayed on warning message when tray is near-		
Setting /procedure	The default setting is ON. OFF	"ON"		

(3) TRAY4

Function	Select whether or not to display a way	ning when tray 4 is about to run out of media.
Use	 To specify whether to display a [PAPER LOW] message as a warning message. ON : Paper low message is displayed on warning message when tray is near- empty. OFF : Paper low message is not displayed on warning message when tray is near- empty. 	
Setting /procedure	 The default setting is ON. OFF 	"ON"

C. TONER LOW

Function	Specifies whether or not a warning appears when the toner is about to run out.	
Use		opears when the toner is about to full out.
Setting	 The default setting is OFF. 	
/procedure	ON	"OFF"

9.9 MAINTENANCE MENU

9.9.1 How to enter the MAINTENANCE MENU

A. Procedure

9. Menu

- 1. Display [MAINTENANCE MENU] on the menu screen and press the Menu/Select key.
- 2. [ENTER PASSWORD] message is displayed.
- Set the first digit of user password with the up key∆/down key
 down key
 and press the right key
 .
- 4. Repeat the above procedures to set up to fourth digit of password. (The initial setting for user password is [0000].)
- 5. Press the Menu/Select key.

B. Exiting

· Press the Cancel key.

9.9.2 PRINT MENU

A. EVENT LOG

Function	Prints the event log.	
Use	To check the jams/troubles that occurred, and history of replacing the consumables, etc. The items that can be checked are as follows. Paper Jam Error : The number of jams occurred and its history Engine Fatal Error : The history of troubles which caused service call Fuser Unit : The history of replacing the fuser unit Toner Cartridge : The history of replacing the toner cartridge Trouble Counter : Troubles counted at each section	
Setting /procedure	 Select [EVENT LOG] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

B. HALFTONE 64

Function	Prints the halftone pattern with 25 % level.
Use	 To check the unevenness of the density and the pitch.
Setting /procedure	 Set the A4S or letter S media on the tray. Select [HALFTONE 64] and press the Menu/Select key. Select desired color with the up key△/down key▽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key.

C. HALFTONE 128

Function	Prints the halftone pattern with 50 % level.
Use	 To check the unevenness of the density and the pitch.
	 Set the A4S or letter S media on the tray. Select [HALFTONE 128] and press the Menu/Select key. Select desired color with the up key△/down key▽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key.

D. HALFTONE 256

Function	Prints the halftone pattern with 100 % level.
Use	 To check the unevenness of the density and the pitch.
Setting /procedure	 Set the A4S or letter S media on the tray. Select [HALFTONE 256] and press the Menu/Select key. Select desired color with the up key∆/down key⊽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key.

E. GRADATION

Function	Prints the gradation pattern.
Use	 To check the gradation reproductively.
	 Set the A4S or letter S media on the tray. Select [GRADATION] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key.

9.9.3 ALIGNMENT

A. TOP ADJUSTMENT

Function	Adjusts the top margin of media for single-sided printing.	
Use	To correct a misaligned print image. TRAY 1 to TRAY 4 : Adjust the head margin of plain paper fed from the tray1 to 4. THICK : Adjust the head margin of thick paper. DUPLEX : Adjust the head margin of duplex print media.	
Setting /procedure	 Select [TOP ADJUSTMENT] and press the Menu/Select key. Select desired tray or media type and press the Menu/Select key. Select desired adjustment amount with the up key△/down key▽ and press the Menu/Select key. 	
	-8 (-4.1 mm) to +7 (+3.6 mm) (1 step: 0.5 mm)	

B. LEFT ADJUSTMENT

Function	Adjusts the left margin of media for single-sided printing.	
Use	 To correct a misaligned print image. LEFT ADJ TRAY 1 : Adjust the left margin of media fed from tray 1 (manual tray.) LEFT ADJ TRAY 2 : Adjust the left margin of media fed from tray 2. LEFT ADJ TRAY 3 : Adjust the left margin of media fed from tray 3. LEFT ADJ TRAY 4 : Adjust the left margin of media fed from tray 4. LEFT ADJ DUPLEX : Adjust the left margin of duplex print media. 	
Setting /procedure	 Select [LEFT ADJUSTMENT] and press the Menu/Select key. Select desired item and press the Menu/Select key. Select desired adjustment amount with the up key∆/down key⊽ and press the Menu/Select key. -8 (-4.1 mm) to +7 (+3.6 mm) (1 step: 0.5 mm) 	

C. LD POWER

Function	Adjust the intensity of laser output.
Use	 The greater the value, the higher the laser output intensity.
Setting /procedure	0 to 7

D. VIDEO TIME LAG

Function	Adjust the video output start point.	
Use	 To fine-adjust the print start position of even-numbered lines in the horizontal direction in increments of one dot. The greater the value, the more the position is on the right side (up to 15 dots rightward). 	
Setting /procedure	0 to 15	

9.9.4 SUPPLIES

A. REPLACE

(1) FUSER UNIT

Function	Resets the fuser unit counter.
Use	 To use when the fuser unit has been replaced.
Setting /procedure	 Select [MAINTENANCE MENU] → [SUPPLIES] → [REPLACE] → [FUSER UNIT] and select YES. Press the Menu/Select key and reset the counter.

9.9.5 QUICK SETTING

A. UPDATE SETTING

Function	• To update printer settings according to the printer setting definition file stored in the USB memory device.
Use	Printer definition files are saved according to various setting patterns and a pattern the most appropriate for a specific need can be selected promptly.
Setting /procedure	 Set the USB memory device. Call the MAINTENANCE MENU screen to the display. Select [QUICK SETTING] → [UPDATE SETTING]. The "/setup/*.ini" files in the USB memory device appear on the display. NOTE The directory name (setup) and file extension (*.ini) are fixed. The definition file with any other name or file extension is not recognized. Up to 20 files can be displayed.
	 5. Using the up key △ or down key ▽, select the definition file to be updated and press the Menu/Select key. 6. Select [EXECUTE] and press the Menu/Select key. 7. The selected definition file is loaded and the settings are updated. The message "PROCESSING" appears during the updating procedure. 8. When the updating procedure is completed, the printer gives a message notifying that the procedure is completed.
	NOTE The printer is automatically restarted, if an item that calls for a restart of the printer is included in the updated items.

B. BACKUP SETTING

Function	• To store, as a definition file, the current printer setting information in the USB memory device.
Use	 Printer definition files are saved according to various setting patterns and a pattern the most appropriate for a specific need can be selected promptly.
Setting /procedure	 Set the USB memory device. Call the MAINTENANCE MENU screen to the display. Select [QUICK SETTING] → [BACKUP SETTING]. Select [EXECUTE] and press the Menu/Select key. The definition file with a file name of "SETUP**.in" is saved in the "/setup" folder of the USB memory device. The message "PROCESSING" appears while the definition file is being saved.
	 NOTE Any number from 01 to 20 takes the place of "**" in the file name. Up to 20 definition files can be saved. If the USB memory device already contains 20 files, the maximum number of files saved is exceeded and any new file cannot be saved. 6. When the saving procedure is completed, the printer gives a message notifying that the procedure is completed.

10. Adjustment item list

Replacement part/Service job											
Adjustment/setting Items			No	Install lower feeder unit	Install duplex	Replace fuser unit	Replace PH unit	Replace MFP board	RESTORE DEFAULTS	Execute F/W update	
		-	CONTROLLER F/W	1					(2)		0
			ENGINE F/W	2							
			TOP ADJUSTMENT	3	0	0					
R	SERVICE		LEFT ADJUSTMENT	4	0	0					
MENU	MENU		DENSITY ADJ	5							
			LD POWER	6				(1)			
			VIDEO TIME LAG	7				(2)			
		SUPPLIES	FUSER UNIT	8			0				
Re-entry			9						0		
F/W update			10					(1)			
Enter the serial number			11					(3)			

* This table shows the adjustment items that are required when a part of the machine has been replaced. Priority order, if applicable, during the adjustment procedures is indicated by the corresponding number.

11. SERVICE MENU

11.1 How to enter the service menu

NOTE

 Make sure not to reveal the password of the service menu to any unauthorized person.

A. Procedure 1

- 1. Display [SERVICE MENU] on the menu screen and press the Menu/Select key.
- 2. [ENTER PASSWORD] message is displayed.
- 3. Set first digit of password with the up key \triangle /down key \bigtriangledown and press the right key \triangleright .
- Repeat the above procedures to set up to seventh digit of password. Enter "KMBH40P" for service password.

NOTE

- The service password needs to correspond to the product name.
- 5. Press the Menu/Select key.

B. Procedure 2

1. Turn the power switch ON while pressing the up key \bigtriangleup and the Menu/Select key at the power switch OFF.

NOTE

- Continue to press the up key∆ and the Menu/Select key until "INITIALIZING" message appears on the control panel.
- 2. When initializing is complete, the service menu appears.

NOTE

 Password authentication is not required before starting to operate the service menu, however, once the service menu is closed, you need to enter the password to display the service menu again.

C. Procedure 3

- If a service call message is on the display, perform the following steps, since the ordinary procedure may not be good for entering the service menu.
- With the service call message on the display, hold down the Menu/Select key for 5 sec. or more.
- 2. Set first digit of password with the up key \triangle /down key \bigtriangledown and press the right key \triangleright .
- 3. Repeat the above procedures to set up to seventh digit of password. Enter "KMBH40P" for service password.

Only the following menu items are, however, available if the service menu is accessed through the above steps.

- SERIAL NUMBER
- FIRMWARE VERSION
- DIAG MODE
- RESTORE PASSWORD
- SOFT SWITCH

D. Exiting

Press the Cancel key.

11.2 Service menu function tree

	S	ERVICE MENU	Ref. Page
SERIAL NUMBER			P.135
FIRMWARE	CONTROLLEF	R F/W	P.135
VERSION	ENGINE F/W		
	BOOT F/W		
ALIGNMENT	TOP ADJUSTMENT		P.135
	LEFT ADJUST	MENT	P.136
	DENSITY ADJ		P.136
	LD POWER	P.136	
	VIDEO TIME L	P.136	
PRINT MENU	MAINTENANC	P.137	
	EVENT LOG		P.137
	CONFIGURAT	P.137	
	HALFTONE 64		P.138
	HALFTONE 12	8	P.138
	HALFTONE 256		P.138
	GRADATION	P.138	
DIAG MODE	DIAG EXEC		P.139
SUPLLIES	REPLACE	FUSER UNIT	P.143
RESTORE PASSWOR	RD		P.143
QUICK SETTING *1	UPDATE SETT	P.144	
	BACKUP SET	P.144	
FIRMWARE UPDATE *1			P.145
SOFT SWITCH	SWITCH 1	P.145	
	SWITCH 2		
	SWITCH 3		
	SWITCH 4		

*1: It will be displayed only when a USB memory device is connected.

11.3 SERVICE MENU

11.3.1 SERIAL NUMBER

Function	Displays the serial number of the printer.
Use	To confirm the printer's serial number.
	 Select [SERVICE MENU] and press the Menu/Select key. Select [SERIAL NUMBER] and press the Menu/Select key. The serial number of the printer is displayed.

11.3.2 FIRMWARE VERSION

Function	Displays the version number of the printer firmware.
Use	 To use when the firmware is updated. To confirm the version number of the printer firmware. CONTROLLER F/W: Firmware of controller ENGINE F/W : Firmware of engine BOOT F/W : Boot firmware
Setting /procedure	 Select [FIRMWARE VERSION] and press the Menu/Select key. Select desired firmware and press the Menu/Select key. Version number of firmware is displayed.

11.3.3 ALIGNMENT

A. TOP ADJUSTMENT

ct a misaligned print image. 1 to TRAY 4 : Adjust the head margin of plain paper fed from the tray1 to 4. C : Adjust the head margin of thick paper.
EX : Adjust the head margin of duplex print media.
TOP ADJUSTMENT] and press the Menu/Select key. lesired tray or media type and press the Menu/Select key. lesired adjustment amount with the up key \triangle /down key \bigtriangledown and press the elect key.
5

B. LEFT ADJUSTMENT

Function	Adjusts the left margin of media for single-sided printing.
Use	To correct a misaligned print image. LEFT ADJ TRAY 1 : Adjust the left margin of media fed from tray 1 (manual tray.) LEFT ADJ TRAY 2 : Adjust the left margin of media fed from tray 2. LEFT ADJ TRAY 3 : Adjust the left margin of media fed from tray 3. LEFT ADJ TRAY 4 : Adjust the left margin of media fed from tray 4. LEFT ADJ DUPLEX : Adjust the left margin of duplex print media.
Setting /procedure	 Select [LEFT ADJUSTMENT] and press the Menu/Select key. Select desired item and press the Menu/Select key. Select desired adjustment amount with the up key△/down key▽ and press the Menu/Select key.
	-8 (-4.1 mm) to +7 (+3.6 mm) (1 step: 0.5 mm)

C. DENSITY ADJ

Functions	 To adjust image density to target reproduction levels.
Use	An image quality problem is not corrected even after gradation adjust has been run.
Setting/ Procedure	0 to 15

D. LD POWER

Function	Adjust the intensity of laser output.
Use	 The greater the value, the higher the laser output intensity.
Setting /procedure	0 to 7

E. VIDEO TIME LAG

Function	Adjust the video output start point.
Use	 To fine-adjust the print start position of even-numbered lines in the horizontal direction in increments of one dot. The greater the value, the more the position is on the right side (up to 15 dots rightward).
Setting /procedure	0 to 15

11.3.4 PRINT MENU

A. MAINTENANCE INFO

Functions	• To produce an output of a list of setting values, adjustment values, total counter values, and others.
Use	To check the maintenance information. The items which can be checked are as follows. Device Caution Information Count (total) : Total counter value Coverage (total) : Coverage rate Replace count (total) : Number of times TC and fuser unit have been replaced.
Setting/ Procedure	 Select [MAINTENANCE INFO] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key.

B. EVENT LOG

Functions	To print the EVENT LOG.	
Use	To check the jams/troubles which occurred, and the history of replacing the consum- ables. The items which can be checked are as follows. Paper Jam Error : The number of times jam have occurred and its history Engine Fatal Error : The history of the troubles which required service call Fuser Unit : The history of replacing the fuser unit Toner Cartridge : The history of replacing the toner cartridge Trouble Counter : Trouble counting for each section	
Setting/ Procedure	 Select [EVENT LOG] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

C. CONFIGURATION PG

Functions	 Prints the information concerning the configuration. 	
Use	To check the adjustment values set by the Maintenance Menu and Service Menu. The items which can be checked are as follows. TOP ADJUSTMENT LEFT ADJUSTMENT DENSITY ADJ LD POWER VIDEO TIME LAG	
Setting/ Procedure	 Select [CONFIGURATION PG] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

D. HALF TONE 64

Functions	Prints the halftone pattern with 25 % level.	
Use	To check the unevenness of the density and the pitch.	
Setting/ Procedure	 Set the A4S or letter S media on the tray. Select [HALF TONE 64] and press the Menu/Select key. Select desired color with the up key∆/down key⊽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

E. HALF TONE 128

Functions	 Prints the halftone pattern with 50 % level. 	
Use	To check the unevenness of the density and the pitch.	
Setting/ Procedure	 Set the A4S or letter S media on the tray. Select [HALF TONE 128] and press the Menu/Select key. Select desired color with the up key△/down key▽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

F. HALF TONE 256

Functions	Prints the halftone pattern with 100 % level.	
Use	 To check the unevenness of the density and the pitch. 	
Setting/ Procedure	 Set the A4S or letter S media on the tray. Select [HALF TONE 256] and press the Menu/Select key. Select desired color with the up key∆/down key⊽ and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

G. GRADATION

Functions	Prints the gradation pattern.	
Use	To check the gradation reproductively.	
	 Set the A4S or letter S media on the tray. Select [GRADATION] and press the Menu/Select key. Select [PRINT] and press the Menu/Select key. 	

11.4 DIAG MODE

11.4.1 DIAG EXEC

A. Setting procedure

- 1. Call the service menu to the display. See P.135
- 2. Select [DIAG MODE]→[DIAG EXEC].
- 3. Select the specific DIAG CODE corresponding to the function to be executed from the DIAG function list shown below. Then, press the Menu/Select key.
- 4. The selected DIAG function is executed.
- 5. To terminate the DIAG operation, select DIAG CODE "00" and press the Menu/Select key.

NOTE

• Energizing a motor or a clutch when there is a media misfeed in the machine will apply load on the drive system, resulting in a failure.

- When an output test under high voltage is to be performed, never touch live parts.
 - Never touch the drive unit, if it is to be operated.
 - While performing testing on the PH unit, use utmost care to prevent your eyes from being directly exposed to the laser beam.

B. DIAG function list

DIAG CODE	Title	Description	
00	Stop all tests	Brings all DIAG operations under the DIAG MODE to a stop.	
01	Sensor/switch check	 can be displa When a char the DIAG ST to 0 and ther A sensor/swithing 	s of the sensors/switches fitted in the main body or options ayed. nge in a sensor/switch is detected, the numerical value of ATUS counts up. If counting up to 15, the value goes back in the value again counts up. itch is faulty if the DIAG STATUS is not count up.
		Main body	Tray1 media empty sensor
			Tray2 media empty sensor (PS3)
			Tray2 near empty sensor (PS4)
			Registration sensor (PS1)
			Exit sensor
			Media full sensor (PS7)
			Face up sensor (PS6)
			Upper cover switch (SW3)
			Rear cover switch (SW2)
			No toner cartridge
			No toner
		Lower feeder	Media empty sensor (PS1)
		unit	Media near empty sensor
		Duplex	Transport sensor (PS1)
			Duplex cover switch
		Offset tray	Offset tray exit sensor (PS1)
			Media full sensor on the offset tray control board (OTCB)
			Offset tray rear cover switch (SW1)
02	Fusing	Not used.	
03	temperature check		
04			
05	Firmware	Not used.	
06	version		
07			
08			
09	ROM check sum	Not used.	
0A			
0B			
0C			
10	Main motor test	Energizes the	main motor.
11	Exit motor, clockwise test	Energizes the	exit motor for forward rotation.

DIAG CODE	Title	Description	
12	Exit motor, counterclockwise, high speed test	Energizes the exit motor for backward rotation at high speed.	
13	Exit motor, coun- terclockwise, low speed test	Energizes the exit motor for backward rotation at low speed.	
14	Duplex transport motor, clockwise, high speed test	Energizes the transport motor of the duplex for forward rotation at high speed.	
15	Duplex transport motor, clockwise, normal speed test	Energizes the transport motor of the duplex for forward rotation at ordi- nary speed.	
16	Tray 1 media feed clutch test	Energizes the tray 1 media feed clutch for 1 sec.	
17	Tray 2 media feed clutch test	Energizes the tray 2 media feed clutch for 1 sec.	
18	Tray 3 media feed clutch test	Energizes the tray 3 media feed clutch for 1 sec.	
19	Tray 4 media feed clutch test	Energizes the tray 4 media feed clutch for 1 sec.	
1A	Fan motor stop	Energizes and deenergizes the fan motor.	
1B	Pressure roller bias (-) test	Applies a negative voltage to the fusing pressure roller.	
1C	Registration roller clutch test	Energizes the registration roller clutch.	
1D	Charge roller AC test	Applies an AC voltage to the charge roller.	
1E	Charge roller DC test	Applies a DC voltage to the charge roller.	
1F	Developer bias, AC test	Applies an AC voltage as a developing bias to the magnetic roller.	
20	Developer bias, DC test	Applies a DC voltage as a developing bias to the magnetic roller.	
21	Transfer roller - test	Applies a negative voltage to the transfer roller.	
22	Transfer roller + test	Applies a positive voltage to the transfer roller.	
23	Charge neutraliz- ing plate test	Applies a voltage to the charge neutralizing plate.	
24	Fan motor, high speed test	Rotates the fan motor at high speed.	
25	Polygon motor test	 Energizes the polygon motor. NOTE Do not energize the polygon motor for a long time, because energizing the polygon motor affects the cumulative time. 	
26	Laser diode test	Turns on the laser diode of the PH unit.	
27	Offset tray trans- port motor test	Operates the transport motor of the offset tray.	

11. SERVICE MENU

DIAG	Title	Description
CODE		
28	Offset tray offset test	 Operates the offset mechanism of the offset tray. The offset mechanism is operated in the following order: exit centrally → exit offset (to the right) → exit normally (to the left) → exit centrally (repeated)
29	Exit tray route change solenoid test	Energizes the exit tray route change solenoid of the offset tray.
2A	Pressure roller bias (+) test	Applies a positive voltage to the fusing pressure roller.
2B	Tray 3 media feed motor test	Energizes the tray 3 media feed motor.
2C	Tray 4 media feed motor test	Energizes the tray 4 media feed motor.
2D	Tray 3 transport clutch test	Energizes the tray 3 transport clutch.
2E	Tray 4 transport clutch test	Energizes the tray 4 transport clutch.
2F	Main motor, high speed test (Half speed mode)	Energizes the main motor for rotation at high speed (during half-speed control).
30	Exit motor, clock- wise, normal speed test (Half speed mode)	Energizes the exit motor for forward rotation at ordinary speed (during half-speed control).
31	Exit motor, coun- terclockwise, high speed test (Half speed mode)	Energizes the exit motor for backward rotation at high speed (during half-speed control).
32	Exit motor, coun- terclockwise, nor- mal speed test (Half speed mode)	Energizes the exit motor for backward rotation at ordinary speed (during half-speed control).
33	Duplex transport motor, clockwise, high speed test (Half speed mode)	Energizes the transport motor of the duplex for forward rotation at high speed (during half-speed control).
34	Duplex transport motor, clockwise, normal speed test (Half speed mode)	Energizes the transport motor of the duplex for forward rotation at ordi- nary speed (during half-speed control).
35	Tray 3 media feed motor test (Half speed mode)	Energizes the tray 3 media feed motor (during half-speed control).
36	Tray 4 media feed motor test (Half speed mode)	Energizes the tray 4 media feed motor (during half-speed control).
37	Offset tray trans- port motor test (Half speed mode)	Energizes the transport motor of the offset tray (during half-speed control).

11.5 SUPPLIES

11.5.1 REPLACE

A. FUSER UNIT

Function	Resets the fuser unit counter.	
Use	 To use when the fuser unit has been replaced. 	
Setting /procedure	 Call the service menu to the screen. Select [SERVICE MENU] → [SUPPLIES] → [REPLACE] → [FUSER UNIT], and select "YES." Press the Menu/Select key and reset the counter. 	

11.6 RESTORE PASSWARD

Function	 Reinitializes the user password used for the "INTERFACE MENU / SYSTEM DEFAULT MENU / MAINTENANCE MENU" set by user. 	
Use	 To reinitialize the user password when the menu cannot be opened even when enter ing the correct password. To reinitialize the user password when the user forgets the password. YES : Initialize password NO : Not initialize password 	
Setting /procedure	 Select "RESTORE PASSWORD" and press the Menu/Select key. Select "YES" and press the Menu/Select key. Return the password set at "INTERFACE MENU / SYSTEM DEFAULT MENU / MAINTENANCE MENU" to "0000." The default setting is NO. 	
	YES	"NO"

11.7 QUICK SETTING

11.7.1 UPDATE SETTING

Function	 To update printer settings according to the printer setting definition file stored in the USB memory device. 	
Use	 Printer definition files are saved according to various setting patterns and a pattern the most appropriate for a specific need can be selected promptly. 	
Setting /procedure	 Set the USB memory device. Call the SERVICE MENU screen to the display. Select [QUICK SETTING] → [UPDATE SETTING]. The "/setup/*.ini" files in the USB memory device appear on the display. 	
	 NOTE The directory name (setup) and file extension (*.ini) are fixed. The definition file with any other name or file extension is not recognized. Up to 20 files can be displayed. 	
	 Using the up key △ or down key ▽, select the definition file to be updated and press the Menu/Select key. Select [EXECUTE] and press the Menu/Select key. The selected definition file is loaded and the settings are updated. The message "PROCESSING" appears during the updating procedure. When the updating procedure is completed, the printer gives a message notifying that the procedure is completed. 	
	 NOTE The printer is automatically restarted, if an item that calls for a restart of the printer is included in the updated items. 	

11.7.2 BACKUP SETTING

Function	 To store, as a definition file, the current printer setting information in the USB memory device. 			
Use	 Printer definition files are saved according to various setting patterns and a pattern the most appropriate for a specific need can be selected promptly. 			
Setting /procedure	 Set the USB memory device. Call the SERVICE MENU screen to the display. Select [QUICK SETTING] → [BACKUP SETTING]. Select [EXECUTE] and press the Menu/Select key. The definition file with a file name of "SETUP**.in" is saved in the "/setup" folder of the USB memory device. The message "PROCESSING" appears while the definition file is being saved. 			
	 NOTE Any number from 01 to 20 takes the place of "**" in the file name. Up to 20 definition files can be saved. If the USB memory device already contains 20 files, the maximum number of files saved is exceeded and any new file cannot be saved. 			
	6. When the saving procedure is completed, the printer gives a message notifying that the procedure is completed.			

11.8 FIRMWARE UPDATE

A. VIEW INFORMATION

Function Use	 To display firmware information stored in the USB memory device. The following information is displayed: Model name (bizhub 40P) of firmware data Version information of firmware data
Setting /procedure	 Set the USB memory device. Call the SERVICE MENU screen to the display. Select [FIRMWARE UPDATE] and press the Menu/Select key. Select the specific type of firmware data to be upgraded and press the menu key. Select [VIEW INFORMATON] and press the Menu/Select key.
	NOTE An error message appears if the selected data is not of the appropriate data format.

B. EXECUTE

Function	To upgrade firmware by using the USB memory device.		
Use	Use for upgrading firmware.		
Setting /procedure	See P.21		

11.9 SOFT SWITCH

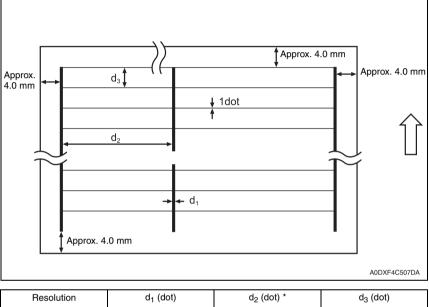
Function			
Use	 Not used. 		
Setting /procedure			

12. Other functions

12.1 Test pattern print

12.1.1 Outline

- The test pattern print prints the test pattern built into the machine for operation check.
- This test pattern can be produced only through the operation on the engine side. It can be useful for identifying the faulty section when an image problem or other malfunction occurs.



Resolution	d ₁ (dot)	d ₂ (dot) *	d ₃ (dot)
600 dpi	Approx. 24	Approx. 2454	127
1,200 dpi	Approx. 48	Approx. 4908	63

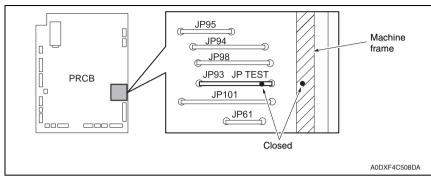
*: The d₂ values are for Letter.

NOTE

• The longitudinal lines in the test pattern may be rugged for want of jitter control.

12.1.2 Printing procedure

• The test pattern is printed when a circuit is closed across the test print pin (JP TEST) on the printer control board and the frame.



Blank Page

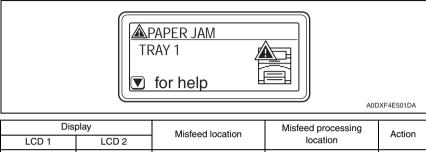
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Troubleshooting

13. Jam display

13.1 Misfeed display

• When a media misfeed occurs, a message is displayed on the control panel.

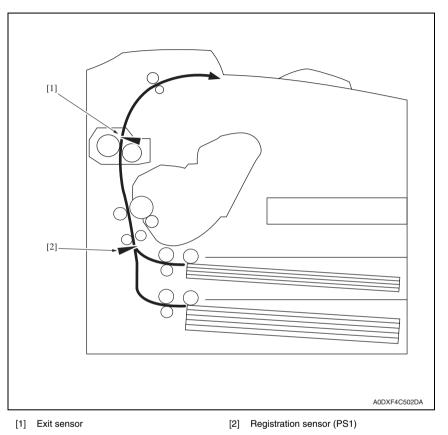


LCD 1	LCD 2	Misieed location	location	Action
	TRAY1	 Tray 1 media feed 	 Tray 1/top cover 	P.152
	TRAY2	 Tray 2 media feed 	 Tray 2/top cover 	P.153
	TRAY3	See P.15 of the PF-505 service manual.		
	TRAY4			
PAPER JAM	TRANSFER	 Transfer section 	Top cover	P.154
	FUSER/EXIT	 Fusing/exit section 	 Rear cover/fuser unit 	P.155
DUPLEX1 See P.13 of the AD-508 service manual.		nvico monual		
	DUPLEX2	- See F. 15 OF the AD-500 Service Inditudi.		
	SUB EXIT	See P.13 of the SF-603 service manual.		

13.2 Misfeed display resetting procedure

• Open the relevant cover, clear the sheet of misfed media, and close the cover.

13.3 Sensor layout



13.4 Solution

13.4.1 Initial check items

• When a media misfeed occurs, first make checks of the following initial check items.

Check item	Action
Does media meet product specifications?	Change media.
Is media curled, wavy, or damp.	Change media.Instruct user in correct media storage.
Is a foreign matter present along the media path, or is the media path deformed or worn?	Clean or change the media path.
Are the media separator fingers dirty, deformed, or worn?	Clean or change the defective media sepa- rator finger.
Are rolls/rollers dirty, deformed, or worn?	Clean or change the defective roll/roller.
Are the edge guide and trailing edge stop at correct position to accommodate the media?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

13.4.2 Misfeed at tray1 media feed section

A. Detection timing

Туре	Description
Detection of tray 1 media feed section	 The media blocks the registration sensor at a timing earlier than the predetermined time after it has been taken up from tray 1. The distance between sheets of media is shorter than the specified value during media feed from tray 1. Media longer than Legal is used (one of media size errors).

B. Action

Relevant electrical parts		
Main motor (M1)	Print control board (PRCB)	
Tray 1 media feed clutch (CL1)		
Registration roller clutch (CL3)		
Registration sensor (PS1)		

Step		WIRING DIAGRAM	
	Action	Control signal	Location (electri- cal component)
1	Initial check items	—	—
2	PS1 sensor check	PRCB P/J24-11 (ON)	P.187
3	CL1 operation check	PRCB P/J24-13 (ON)	P.187
4	CL3 operation check	PRCB P/J24-15 (ON)	P.187
5	M1 operation check	DCPU P/J43-5 (ON)	P.183
6	Change PRCB		_

13.4.3 Misfeed at tray 2 media feed section

A. Detection timing

Туре	Description
Detection of misfeed at tray 2 media feed section	 The media does not reach the registration sensor within the predetermined period of time after it has been taken up from tray 2.

B. Action

Relevant electrical parts		
Main motor (M1)	Print control board (PRCB)	
Tray 2 media feed clutch (CL2) Registration roller clutch (CL3) Registration sensor (PS1)		

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Initial check items	—	—
2	PS1 sensor check	PRCB P/J24-11 (ON)	P.187
3	CL2 operation check	PRCB P/J24-5 (ON)	P.187
4	CL3 operation check	PRCB P/J24-15 (ON)	P.187
5	M1 operation check	DCPU P/J43-5 (ON)	P.183
6	Change PRCB	—	—

13.4.4 Misfeed at transfer section

A. Detection timing

Туре	Description
Detection of misfeed at transfer section	 The media does not reach the exit sensor even after the lapse of the predeter- mined period of time after it has blocked the registration sensor.
Detection of media left in transfer section	The registration sensor is blocked during a warm-up cycle.

B. Action

Relevant electrical parts		
Main motor (M1) Fuser unit		
Registration roller clutch (CL3) Registration sensor (PS1)	Print control board (PRCB)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Initial check items	—	—
2	PS1 sensor check	PRCB P/J24-11 (ON)	P.187
3	CL3 operation check	PRCB P/J24-15 (ON)	P.187
4	M1 operation check	DCPU P/J43-5 (ON)	P.183
5	Change fuser unit	—	—
6	Change PRCB	—	—

13.4.5 Misfeed at fusing/exit section

A. Detection timing

Туре	Description
Detection of misfeed at fusing/ exit section	 The media does not block the exit sensor even after the lapse of the predetermined period of time after it has been taken up. The media does not block the exit sensor even after the lapse of the predetermined period of time after it has unblocked the registration sensor. The media unblocks the exit sensor at a timing earlier than the predetermined time.
Detection of media left in fusing/exit section	The exit sensor is blocked during a warm-up cycle.

B. Action

Relevant electrical parts		
Main motor (M1) Fuser unit		
Exit motor	Exit motor drive board	
Registration roller clutch (CL3)	Print control board (PRCB)	
Registration sensor (PS1)		

	Action	WIRING DIAGRAM		
Step		Control signal	Location (electri- cal component)	
1	Initial check items	—	—	
2	PS1 sensor check	PRCB P/J24-11 (ON)	P.187	
3	CL3 operation check	PRCB P/J24-15 (ON)	P.187	
4	M1 operation check	DCPU P/J43-5 (ON)	P.183	
5	Exit motor operation check	Exit motor drive board P/J103-2 to 5	P.183	
6	Check the exit motor drive board connector for proper connection and correct as nec- essary.	—	_	
7	Change fuser unit.	—	—	
8	Change PRCB	_	—	

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14. Malfunction code

14.1 Trouble codes (service call)

• The printer's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding trouble code on the control panel.



14.1.1 Trouble code list

• For the details of the malfunction codes of the options, see the service manual for the corresponding option.

LCD1 (service call ID)	LCD2/LCD3 (error description)	ltem	Detection timing
0017	MAIN MOTOR	Main motor malfunction	The speed of the main motor (M1) does not reach the predetermined value.
0046	FUSER FAN	Fusing cooling fan motor malfunction	 The fusing cooling fan motor (FM1) develops a rotation failure or other malfunction.
0300	Polygon Motor	Polygon motor malfunction	 The interval of the /BD signal is retarded relative to the predetermined value after the polygon motor has started rotating. The interval of the /BD signal is retarded relative to the predetermined value after it has reached the predetermined value. The laser beam output does not reach the predetermined value.
0500	FUSER ERROR	Heating roller warm-up failure	 The fusing temperature does not reach the predetermined value after the lapse of the predetermined period of time. The heater lamp remains ON for 10 sec. or more in the standby state. The fusing temperature is 125 °C or less during a print cycle. The fusing temperature is 220 °C or more. An open-circuited thermistor is detected.
13E3	FLASH DEVICE	Flash ROM device fault	An erase error occurs during erasing of data in flash ROM.
C002	RAM ERROR	RAM error at startup (standard memory)	 RAM error at standard memory is detected dur- ing printer start-up.
C003	RAM ERROR	RAM error at startup (expanded memory)	 RAM error at expanded memory is detected dur- ing printer start-up.
C013	H/W ADDRESS	MAC address error at startup	Invalid MAC address is detected during printer start-up.

LCD1 (service call ID)	LCD2/LCD3 (error description)	Item	Detection timing
C015	BOOT ROM	Boot ROM error at startup	Boot ROM error is detected during printer start- up.
C025		Controller ROM error (Configuration informa- tion error)	 Lead error of destination setting file is detected during the printer starting.
C026	LER ROM	Controller ROM error (Access error)	 Flash ROM access error is detected during the printer starting.
C027		Controller ROM error (Data error)	Final check sum error is detected during the printer starting.
C050	HDD ERROR	HDD access error	 When correct access to the hard disk kit is failed during access.
C051	HDD DISK FULL	HDD full error	Range for user space is full during access to the hard disk kit.
C052	CARD ERROR	Compact flash access error	• When correct access to the compact flash card is failed during access.
C053	CARD FULL	Compact flash full error	 Range for user space is full during access to the compact flash card.
C054	CARD ERROR	Compact flash disconnected	Compact flash is disconnected
C060	UPDATE ERROR	Firmware update error	• Firmware update fails to complete correctly dur- ing update.
C071	H/W CON- FIG ERROR	Hardware configuration error	An error occurs with hardware configuration (video clock etc.).
FFFF	I/F COMM ERROR	Interface Communication error	 Correct communication is failed when receiving/ sending the command between MFPB and PRCB.

14.2 Resetting a malfunction

• To reset a malfunction, turn the power switch OFF and then ON again.

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14.3 Solution

14.3.1 0017: Main motor malfunction

Relevant electrical parts			
Main motor Print control board (PRCB)			
WIRING DIAGRAM			

	Action			
Step		Control signal	Location (electri- cal component)	
1	Check the M1 connector for proper connec- tion and correct as necessary.	_	—	
2	Check M1 for proper drive coupling and correct as necessary.	—	_	
3	Check the PRCB connector for proper con- nection and correct as necessary.	—	_	
4	M1 operation check	DCPU P/J43-5 (ON)	P.183	
5	Change M1	—	—	
6	Change PRCB			

14.3.2 0046: Fusing cooling fan motor malfunction

correct as necessary.

FM1 operation check

Change FM1

Change PRCB

3

4

5

	Relevant electrical parts			
Fusing	g cooling fan motor (FM1)	Print control board (PRCB)		
	WIRING DIAGRAM			
Step	Action	Control signal	Location (electri- cal component)	
1	Check the FM1 connector for proper con- nection and correct as necessary.	_	—	
2	Check the fan for possible overload and	_	_	

PRCB P/J24-16 (ALARM)

P.187

_

Change PH unit

Change PRCB

2

3

14.3.3 0300: Polygon motor malfunction

	Relevant electrical parts				
PH unit Print control board (PRCB)					
WIRING DIAGRAM					
Step	Action	Control signal	Location (electri- cal component)		
1	Check the cable and connector for proper connection and correct as necessary.				

14.3.4 0500: Heating roller warm-up failure

Relevant electrical parts	
Fuser unit DC power supply (DCPU)	Print control board (PRCB)

_

	Action	WIRING DIAGRAM	
Step		Control signal	Location (electri- cal component)
1	Check the fuser unit for correct installation (whether it is secured in position).	_	—
2	Check the fuser unit, DCPU, and PRCB for proper connection and correct as neces- sary.		—
3	Change fuser unit	_	_
4	Change PRCB		_
5	Change DCPU	_	_

14.3.5 13E3: Flash ROM device fault

	Relevant electrical parts				
Print c	ontrol board (PRCB)	MFP board (MFPB)			
	WIRING DIAGRAM				
Step	Action	Control signal	Location (electri- cal component)		
1	Check the MFPB for proper connection and correct as necessary.	—	_		
2	Change PRCB	—	—		
3	Change MFPB	—	—		

14.3.6 C002: RAM error at startup (standard memory)

14.3.7 C003: RAM error at startup (expanded memory)

	Relevant electrical parts			
MFP b	ooard (MFPB)	DIMM (standard/option)		
		WIRING DIAGRAM		
Step	Action	Control signal	Location (electri- cal component)	
1	Reboot the main body.	_	—	
2	Check connection state of the standard/ expanded memory and correct as neces- sary.	_	_	
3	Check the MFPB connector for proper con- nection and correct as necessary.			
4	Change the standard/expanded DIMM.	_		
5	Change MFPB	_	—	

14.3.8 C013: MAC address error at startup

14.3.9 C015: BOOT ROM error at startup

Relevant electrical parts

MFP board (MFPB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Reboot the main body.	_	—
2	Check the MFPB connector for proper con- nection and correct as necessary.	_	—
3	Change MFPB	_	

14.3.10 C025: Controller ROM error (Configuration information error)

14.3.11 C026: Controller ROM error (Access error)

14.3.12 C027: Controller ROM error (Data error)

Relevant	electrical	parts
----------	------------	-------

MFP board (MFPB)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Reboot the main body.	_	_
2	Check the MFPB connector for proper con- nection and correct as necessary.	_	_
3	If this error message is displayed after update of firmware, conduct the firmware update procedures again.	_	
4	Change MFPB	_	—

14.3.13 C050: HDD access error

Relevant electrical parts		
MFP board (MFPB)	Hard disk kit (HDD)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Reboot the main body.	_	—
2	Check the HDD connector for proper con- nection and correct as necessary.	_	—
3	Check the MFPB connector for proper con- nection and correct as necessary.	_	—
4	Change HDD	—	—
5	Change MFPB	_	—

14.3.14 C051: HDD full error

Relevant electrical parts					
MFP b	MFP board (MFPB) Hard disk kit (HDD)				
WIRING DIAC			M		
Step	Action	Control signal	Location (electri- cal component)		
1	Reboot the main body.	—	—		
2	Delete the job hold in "PROOF/PRINT MENU" to increase the available range for user space.	_	_		
3	Check the HDD connector for proper con- nection and correct as necessary.	_	_		
4	Change HDD	_	_		

14.3.15 C052: Compact flash access error

Relevant electrical parts		
MFP board (MFPB) Compact flash card		

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Reboot the main body.	—	—
2	Check the compact flash for proper con- nection and correct as necessary.		—
3	Check the MFPB connector for proper con- nection and correct as necessary.	_	—
4	Change compact flash	_	—
5	Change MFPB		

14.3.16 C053: Compact flash full error

Relevant electrical parts			
MFP board (MFPB) Compact flash card			
WIRING DIAGRAM			

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electri- cal component)
1	Reboot the main body.	_	_
2	Delete the job hold in "PROOF/PRINT MENU" to increase the available range for user space.	—	_
3	Check the compact flash for proper con- nection and correct as necessary.	_	_
4	Change compact flash		

14.3.17 C054: Compact flash disconnected

	Relevant electrical parts			
MFP board (MFPB)		Compact flash card		
		WIRING DIAGRA	M	
Step	Action	Control signal	Location (electri- cal component)	
1	Reboot the main body.	—	—	
2	Check the compact flash for proper con- nection and correct as necessary.	_	—	
3	Change compact flash	—	_	

14.3.18 C060: Firmware update error

Relevant electrical parts

MFP board (MFPB)

	Action	WIRING DIAGRAM			
Step		Control signal	Location (electri- cal component)		
1	Reboot the main body.		—		
2	Check the cable that has been used for update of the firmware for proper connec- tion and correct as necessary.	-	_		
3	Check the firmware update file and if the file is not the correct one, update the firmware again.	_	_		
4	Check the firmware update procedure and if the procedure is not correct, update the firmware again.	_	_		
5	Update the firmware again.	_	—		
6	Check the MFPB connector for proper con- nection and correct as necessary.	_	—		
7	Change MFPB				

14.3.19 C071: Hardware configuration error

Relevant electrical parts
MFP board (MFPB)
WIRING DIAGRAM

		WIRING DIAGRAM			
Step	Action	Control signal	Location (electri- cal component)		
1	Reboot the main body.	_	—		
2	Check the MFPB connector for proper con- nection and correct as necessary.	_	_		
3	Change MFPB	—	—		

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14.3.20 FFFF: Interface Communication error

Relevant electrical parts						
Print c	ontrol board (PRCB)	MFP board (MFPB)				
		WIRING DIAGRA	M			
Step	Action	Control signal	Location (electri- cal component)			
1	Reboot the main body.	—	—			
2	Check the PRCB connector for proper con- nection and correct as necessary	—	—			
3	Check the MFPB connector for proper con- nection and correct as necessary.		—			
4	Change MFPB	—	—			
5	Change PRCB	—	—			

15. Image quality problems

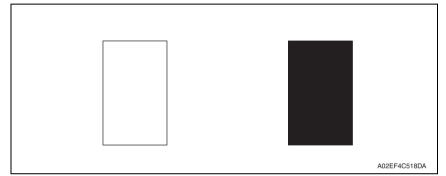
15.1 How to identify problematic part

Let the machine produce a test print and determine whether the image problem is attributale to the engine or controller system.
 See P.146

15.2 Solution

15.2.1 Blank or black prints

A. Typical faulty images



Step	Section	Check item	Result	Action
1	Print unit	Is a printed page blank?	YES	Check the PH Unit connectors for proper connection.
2	- Toner cartridge	Is the coupling of the drive mech- anism of the toner cartridge prop- erly connected?	NO	Check the coupling of the drive mechanism for connection and correct it as necessary, or replace the toner cartridge.
3		Is the drum charge voltage con- tact point or PC drum ground con- tact point of the toner cartridge properly connected?	NO	Check, clean, or correct the contact point.
4	Print control board	Is the print control board (PRCB) connector connected properly?	NO	Connect it properly.
5	_	Was the problem eliminated when	NO	Replace the print control board (PRCB).
				Replace the MFP board (MFPB).
				Replace the PH unit.

15.2.2 Blank spots

A. Typical faulty images

/
ABCDE
ABODE
ABCDE
A3CDE

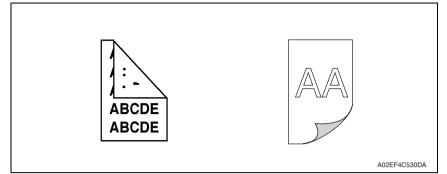


A02EF4C523DA

Step	Section	Check item	Result	Action
1	Media	Is the media damp?	YES	Replace the media with media that was just unwrapped.
2	Toner cartridge	Is the PC drum scratched?	YES	Replace the toner cartridge.
3	Media path	Is there foreign matter in the media path?	YES	Remove the foreign matter.
4	Transfer roller	Is the transfer roller dirty or scratched?	YES	Clean or replace the transfer roller.
5	_	Was the problem eliminated when step 4 was checked?	YES	Replace the print control board (PRCB).
				Replace the MFP board (MFPB).

15.2.3 Back marking

A. Typical faulty images



Step	Section	Check item	Result	Action
1	Media path	Is there foreign matter in the media path?	YES	Remove the foreign matter.
2	Fuser unit	Is the fusing roller dirty or scratched?	YES	Clean or replace the fuser unit.
3	Transfer roller	Is the transfer roller dirty or scratched?	YES	Clean or replace the transfer roller.

15.2.4 Low image density

A. Typical faulty images

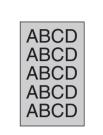


A02EF4C516DA

Step	Section	Check item	Result	Action
1	Media	Is the media damp?	YES	Replace the media with media that was just unwrapped.
2	Toner cartridge	Is there toner left in the toner cartridge?	NO	Replace the toner cartridge.
3		Is the PC drum faulty?	YES	
4	Print control board	Is the developing bias faulty?	YES	Replace the print control board (PRCB).
5	Transfer roller	Is the transfer roller faulty?	YES	Replace the transfer roller.
6	_	Was the problem eliminated when step 6 was checked?	YES	Replace the print control board (PRCB).
				Replace the MFP board (MFPB).

15.2.5 Foggy background

A. Typical faulty images

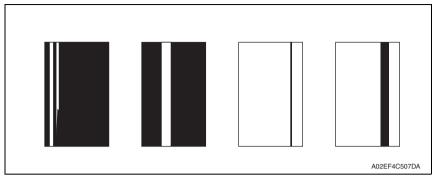


A02EF4C510DA

Step	Section	Check item	Result	Action
1		Is the PC drum scratched?	YES	Replace the toner cartridge.
2	Toner cartridge	Is the developing bias contact ter- minal in good contact with its mat- ing part?	NO	Clean the contact terminal or check the terminal position.
3	PH unit	Is the PH window dirty?	YES	Clean the PH window.
4	_	Is the problem eliminated after checks have been made through	YES	Replace the print control board (PRCB).
		step 3?		Replace the MFP board (MFPB).

15.2.6 White line/bands in sub scan direction Black line/bands in sub scan direction

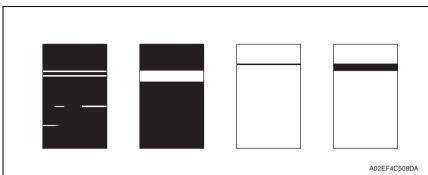
A. Typical faulty images



Step	Section	Check item	Result	Action
1	Media path	Is the media path dirty with toner?	YES	Clean it.
2	Transfer roller	Is the transfer roller dented, scratched, or dirty?	YES	Replace the transfer roller.
3	Toner cartridge	Is PC drum scratched or dirty?	YES	Replace the toner cartridge.
4	Fuser unit	Is the fusing roller scratched or dirty?	YES	Replace the fuser unit.
5	PH unit	Is the PH window dirty?	YES	Clean the PH window.
		Is the problem eliminated after checks have been made through	YES	Replace the print control board (PRCB).
	step 5?		Replace the MFP board (MFPB).	

15.2.7 White line/bands in main scan direction Black line/bands in main scan direction

A. Typical faulty Images



Step	Section	Check item	Result	Action
1		Is the media path dirty with toner?	YES	Clean it.
2	Media path	Is there foreign matter in the media path?	YES	Remove the foreign matter.
3	Transfer roller	Is the transfer roller dented, scratched, or dirty?	YES	Replace the transfer roller.
4	Toner cartridge	Is PC drum scratched or dirty?	YES	Replace the toner cartridge.
5	Fuser unit	Is the fusing roller scratched or dirty?	YES	Replace the fuser unit.
6	PH unit	Is the PH window dirty?	YES	Clean the PH window.
7		- Is the problem eliminated after checks have been made through YES step 6?	YES	Replace the print control board (PRCB).
				Replace the MFP board (MFPB).

15.2.8 Offset image

A. Typical faulty images



A0DXF4C509DA

Step	Section	Check item	Result	Action	
1	Fuser unit	Is the fusing roller faulty?	YES	Replace the fuser unit.	
2	Transfer roller	Is the transfer roller faulty?	YES	Replace the transfer roller.	
3	_	Is the problem eliminated after checks have been made through step 2?	YES	Replace the print control board (PRCB).	
				Replace the MFP board (MFPB).	

15.2.9 Blurred image

A. Typical faulty images



A02EF4C511DA

B. Troubleshooting Procedure

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15.2.10 Uneven pitch

A. Typical faulty images



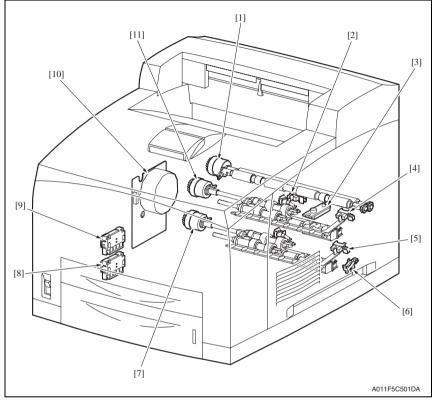
A02EF4C525DA

Step	Section	Check item	Result	Action	
1	Toner cartridge	Is the toner cartridge installed in position?	NO	Reinstall.	
2	PH unit	Is the PH unit secured in position with the fixing screw?	NO	Secure it in position.	
3	Toner cartridge	Is the drive mechanism of the print unit dirty or damaged?	YES	Clean or change the toner cartridge	
4		Is the photo conductor dirty, scratched, or worn?	YES	Change the toner cartridge.	
5	Transfer roller	Are the transfer roller and drive mechanism dirty, scratched, deformed, or worn?	YES	Change the transfer roller.	
6	Fuser unit	Are the rollers and drive mecha- nism of the fuser unit dirty, scratched, deformed, or worn?	YES	Change the fuser unit.	

Appendix

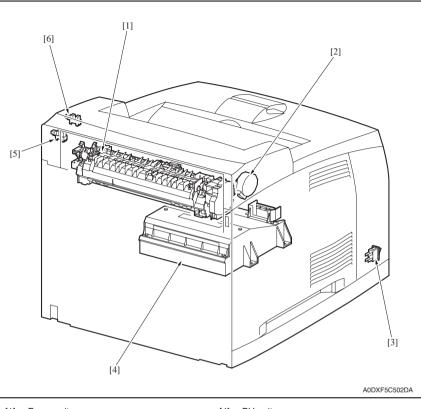
16. Parts layout drawing

16.1 Main body



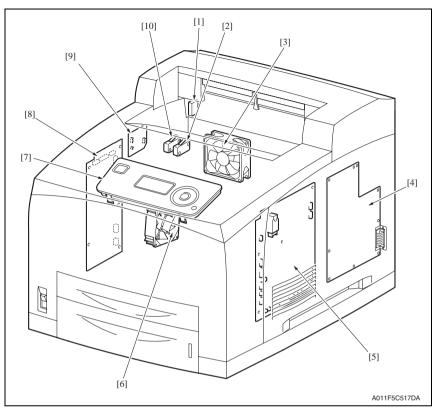
- [1] Registration roller clutch (CL3)
- [2] Registration sensor (PS1)
- [3] Toner near empty sensor
- [4] Tray1 media empty sensor
- [5] Tray2 media empty sensor (PS3)
- [6] Tray2 near empty sensor (PS4)

- [7] Tray2 media feed clutch (CL2)
- [8] Tray2 media size switch
- [9] Tray1 media size switch
- [10] Main motor (M1)
- [11] Tray1 media feed clutch (CL1)



- [1] Fuser unit
- [2] Exit motor
- [3] Main power switch (SW1)

- [4] PH unit
- [5] Face up sensor (PS6)
- [6] Media full sensor (PS7)



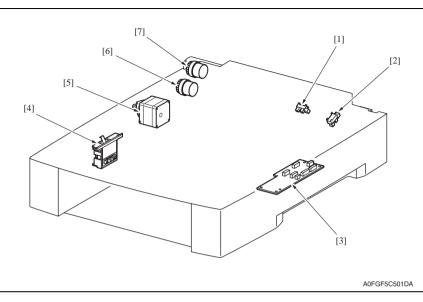
- [1] Rear cover switch (SW2)
- [2] Interlock switch/24V
- [3] Fusing cooling fan motor (FM1)
- [4] MFP board (MFPB)
- [5] Print control board (PRCB)

- [6] Cooling fan motor (FM2)
- [7] Operation board
- [8] DC power supply (DCPU)
- [9] Exit motor drive board
- [10] Interlock switch/5V

Appendix

16.2 PF-505 (option)

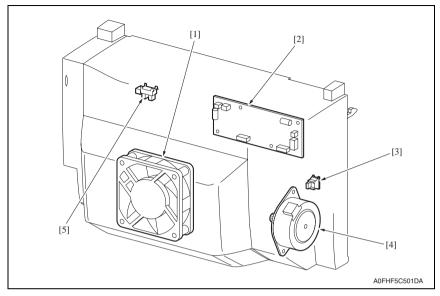




- [1] Media empty sensor (PS1)
- [2] Media near empty sensor
- [3] PC control board (PCCB)
- [4] Media size switch (SW1)

- [5] Media feed motor (M1)
- [6] Media feed clutch (CL1)
- [7] Transport clutch (CL2)

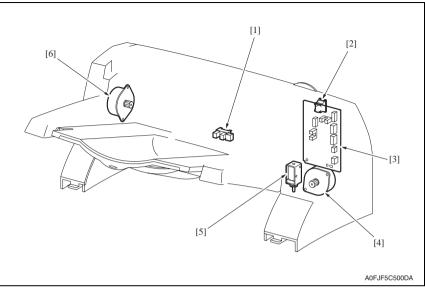
16.3 AD-508 (option)



- [1] Cooling fan motor (FM1)
- [2] AD control board (ADCB)
- [3] Duplex cover switch

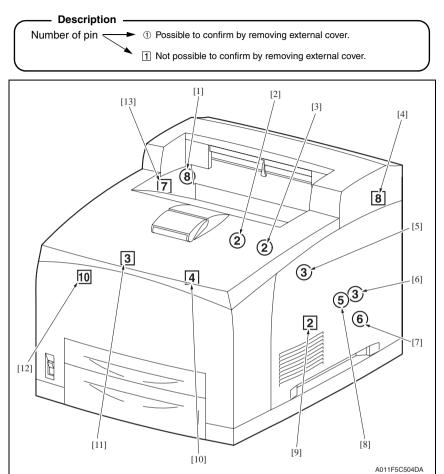
- [4] Transport motor (M1)
- [5] Transport sensor (PS1)

16.4 SF-603 (option)



- [1] Offset tray exit sensor (PS1)
- [2] Offset tray rear cover switch (SW1)
- [3] OCT control board (OCTCB)
- [4] Shift motor (M2)
- [5] Exit tray route change solenoid (SD1)
- [6] Transport motor (M1)

17. Connector layout drawing

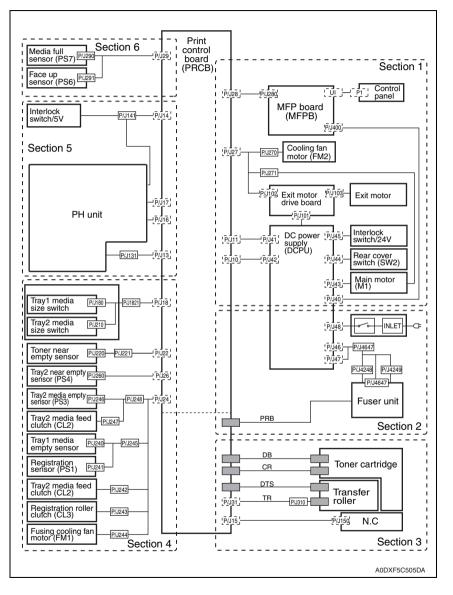


No.	CN No.	Location	No.	CN No.	Location
[1]	P/J2750	P.192	[8]	P/J248	P.187
[2]	P/J242	P.187	[9]	P/J247	P.187
[3]	P/J243	P.187	[10]	P/J131	P.189
[4]	P/J3070	P.193	[11]	P/J270	P.183
[5]	P/J244	P.187	[12]	P/J1821	P.187
[6]	P/J221	P.187	[13]	P/J4647	P.185
[7]	P/J245	P.187			

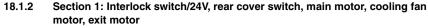
18. Wiring diagram

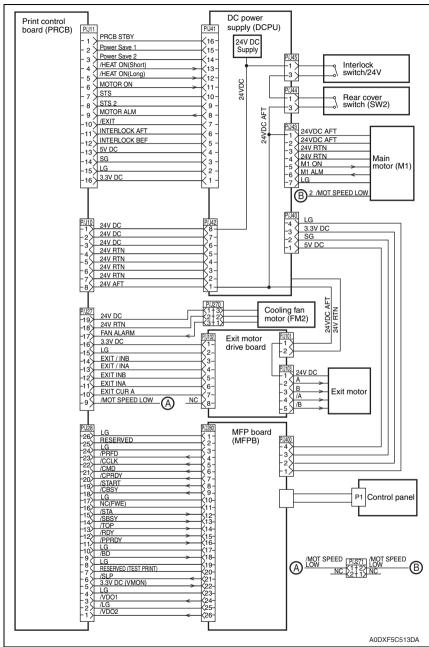
18.1 Main body

18.1.1 Overall wiring diagram



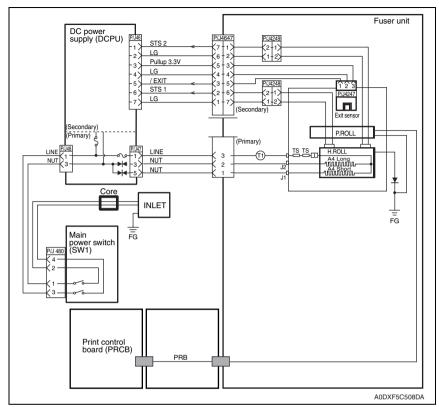
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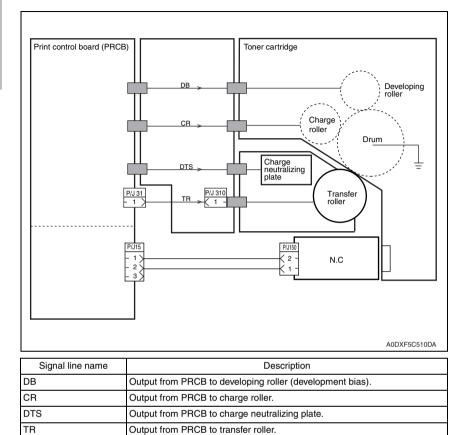
Signal line name	Description
/HEAT ON	AC power-supply control signal for heater rod. Low: ON/High: OFF
M1 ON	Control signal for main motor (M1).
M1 ALM	Monitor signal for main motor (M1).
INTERLOCK AFT	Signal indicating that the rear cover is open. This signal goes High when the front or rear cover is open.
INTERLOCK BEF	Signal indicating that the front cover is open. This signal goes High when the front cover is open.
FAN ALARM	Cooling fan motor (FM2) monitor signal. If a trouble occurs, this signal goes High.
EXIT /INB	Excitation signal for exit motor. Phase /B.
EXIT /INA	Excitation signal for exit motor. Phase /A.
EXIT INB	Excitation signal for exit motor. Phase B.
EXIT INA	Excitation signal for exit motor. Phase A.
EXIT CUR A	Current-switching signal for exit motor.
EXIT CUR B	Current-switching signal for exit motor.
A and B	Current output to each winding of exit motor. Phases A and B.
/A and /B	Current output to each winding of exit motor. Phases \overline{A} and \overline{B} .
/PRFD	Prefeed signal. This is effective only when /RDY is Low.
/CCLK	Clock signal. This is sent out simultaneously with /STA or /CMD.
/CMD	Command signal. When /CBSY is Low, it is sent out from the controller in synchronism with /CCLK.
/CPRDY	Ready signal for the controller power supply. This signal goes Low when the controller power supply is ON and, at the same time, initial- ization of the CPU is completed. When a trouble occurs with the CPU, the signal goes High.
/START	Print start signal. This is effective only when /RDY is Low.
/CBSY	Command busy signal. This goes Low when /CMD is sent out (except when /SBSY is Low or /PPRDY is High).
/STA	Status signal. Status is sent in synchronism with /CCLK when /SBSY is Low.
/SBSY	Status busy signal. This signal is Low when the printer is sending /STA (except when /CBSY is Low or /CPRDY is High).
/ТОР	Vertical sync signal for image data. This is periodically sent out when polygon motor is in operation.
/RDY	Ready signal. This signal is Low in a standby state where reception of /START is awaited.
/PPRDY	Ready signal for the printer power supply. This goes Low when the printer power supply is turned on and initialization of the CPU is com- pleted. This signal goes High when the MCP detects an error.
/BD	Horizontal sync signal for image data. This is periodically sent out when polygon motor is in operation.
/SLP	Control signal for LVPS. This goes Low in power saving mode.
/VDO1	Image data signal. This is sent out in synchronism with /TOP and /BD.
/VDO2	This signal goes High (White) for other than effective data.

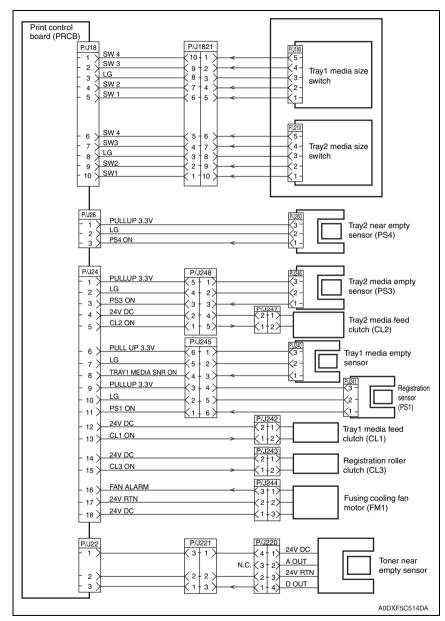
18.1.3 Section 2: Fuser unit, main power switch



Signal line name	Description
/EXIT	Signal from exit sensor. This signal goes Low when light is received.
STS	Temperature monitor signal (analog signal) from temperature sensor (thermistor). It detects the temperature on the surface of heat roller.
PRB	Output from PRCB which applies a high voltage to pressure roller.

18.1.4 Section 3: Toner cartridge, transfer roller



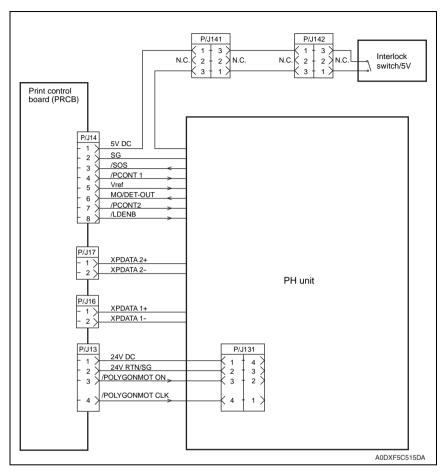


18.1.5 Section 4: Media feed section, fusing cooling fan motor

0	
4	
ρ	
4	
N	

Signal line name	Description
PS4 ON	Signal from tray2 near empty sensor (PS4). This signal goes Low when light is received.
PS3 ON	Signal from tray2 media empty sensor (PS3). This signal goes Low when light is received.
CL2 ON	Control signal for tray2 media feed clutch (CL2). Low: ON / High: OFF
TRAY1 MEDIA SNR ON	Signal from tray1 media empty sensor. This signal goes Low when light is received.
PS1 ON	Signal from registration sensor (PS1). This signal goes Low when light is received.
CL1 ON	Control signal for tray1 media feed clutch (CL1). Low: ON / High: OFF
CL3 ON	Control signal for registration roller clutch (CL3). Low: ON / High: OFF
FAN ALARM	Fan monitor signal. This signal goes High if there is a trouble with fus- ing cooling fan motor (FM1).
D OUT	Signal indicating detection of toner in the toner cartridge, from toner near empty sensor.

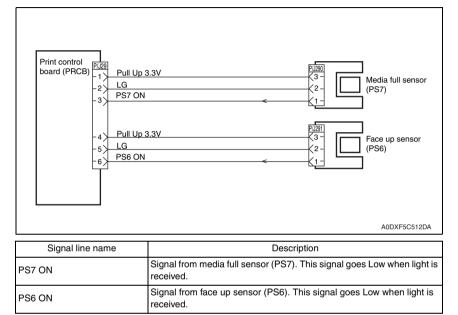
18.1.6 Section 5: PH unit, upper cover switch, interlock switch/5V



Signal line name	Description	
/SOS	SYNC signal generated by SOS sensor. This signal commands start of each scan.	
/PCONT	Sample / Hold circuit Low: Sampled (LD is forcibly lit up); High: Held	
Vref	Laser output control signal for determining or adjusting the current flowing through laser diode.	
MO/DET-OUT	Laser output monitor signal for providing feedback of laser output beam from laser diode (analog signal).	
/LDENB	Control signal permitting emission of laser diode. High: laser diode OFF.	
XP DATA+	Print image data. DATA+ > DATA-: lit up	
XP DATA-	DATA+ < DATA-: put out	

Signal line name	Description
/POLYGONMOT ON	Sensor motor control signal for turning ON/OFF polygon motor. Low: ON / High: OFF
/POLYGONMOT CLK	Clock signal to polygon motor.

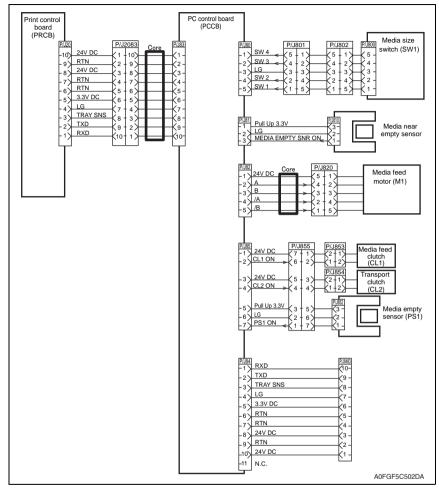
18.1.7 Section 6: Media full sensor, face up sensor



bizhub 40P

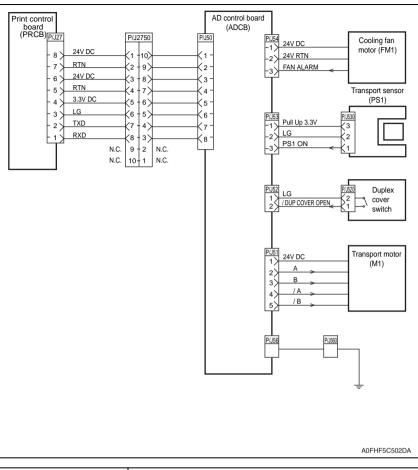
18.2 Options





Signal line name	Description
TRAY SNS	Signal detecting an lower feeder unit. ID is recognized by the number of falling edges.
MEDIA EMPTY SNR ON	Signal from offset media near empty sensor. This signal goes Low when light is received.
A and B	Excitation signal for media feed motor (M1). Phases A and B.
/A and /B	Excitation signal for media feed motor (M1). Phases /A and /B.
CLUTCH-TURN ON	Control signal for media feed clutch. Low: ON / High: OFF
CLUTCH-FEED ON	Control signal for transport clutch. Low: ON / High: OFF
PS1 ON	Signal from media empty sensor. This signal goes Low when light is received.

18.2.2 AD-508



Signal line name	Description
FAN ALARM	Fan monitor signal. This signal goes high if there is a trouble with cool- ing fan motor (FM1).
PS1 ON	Signal from transport sensor (PS1). This signal goes Low when light is received.
/DUP COVER OPEN	Signal from duplex cover switch. This signal goes Low when the duplex cover is closed.
A and B	Excitation signal for transport motor (M1). Phases A and B.
/A and /B	Excitation signal for transport motor (M1). Phases /A and /B.

bizhub 40P

18.2.3 SF-603

A and B

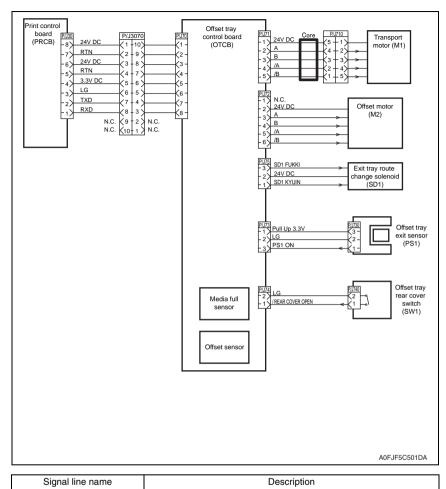
/A and /B

SD1 FUKKI

SD1 KYUIN

/REAR COVER OPEN

PS1 ON



Phases A and B.

Phases /A and /B.

light is received.

Excitation signal for transport motor (M1) and offset motor (M2).

Excitation signal for transport motor (M1) and offset motor (M2).

Signal from offset tray exit sensor (PS1). This signal goes Low when

Signal from offset tray rear cover switch (SW1). This signal goes Low

Control signal for offset tray exit sensor (SD1).

when the rear cover of offset tray is closed.

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SERVICE MANUAL

FIELD SERVICE

PF-505

2007.12 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

Revision history

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2007/12	1.0	_	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

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General

1. Product specifications

A. Type

Name	Add-on 550-sheet media feed cassette	
Туре	Front-loading type	
Installation	Desk type	
Document Alignment	Center	

B. Media

Media size *1	Letter/Legal/Statement/Executive/A4/A5/A6/B5 (JIS)/B6/Folio/SP Folio/ Foolscap/UK Quarto/Government Letter/Government Legal/16K/Kai 16/Kai 32/ Japanese Postcard/Japanese Postcard-D/B5 (ISO)/Envelope #10/Envelope DL/Envelope C6/Envelope Chou #3/Envelope Monarch/Envelope You #4/Cus- tom size
	Width: 98.4 - 215.9 (3.0 - 8.5 inch) Length: 148.0 - 355.6 (5.0 - 14.0 inch)
Media type	Plain paper 68 to 105 g/m²; 18.13 to 28 lb.
	Recycled paper
	68 to 105 g/m ² ; 18.13 to 28 lb.
	OHP transparencies
	Envelopes
	Labels
	Thick 1 (106 to 159 g/m ² ; 28.27 to 42.4 lb.)
	Thick 2 (160 to 216 g/m ² ; 42.67 to 57.6 lb.)
	Thick 3 (106 to 216 g/m ² ; 28.27 to 57.6 lb.) Postcards
	Thin paper
	Plain/Recycled paper: 550 sheets
	Transparency: 100 sheets
	Envelope: 80 sheets
Capacity	Labels: 290 sheets
	Thick paper: 160 sheets Postcard: 200 sheets
	Thin paper: 550 sheets

*1: Plain paper and recycle paper are unsupported paper types with printing in A6, envelope #10, envelope C6, envelope DL, envelope monarch, envelope youkei #4, envelope choukei #3, youkei 0, envelope choukei #4, japanese postcard, or custom size of 120 mm (width) or less.

C. Machine specifications

	421.8 mm (W) × 451.6 mm (D) × 143.0 mm (H) 16.5 inch (W) × 17.75 inch (D) × 5.75 inch (H)
Weight	Approx. 8.42 kg (18.5 lb)

NOTE

• These specifications are subject to change without notice.

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2

Periodic check

Maintenance procedure (periodic parts check)

Replacing the feed roller assy and pick-up roller assy

Maintenance

2.

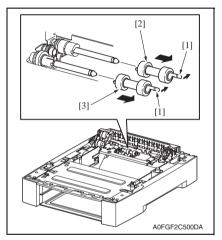
2.1 2.1.1

PF-505

A. Periodically replaced parts/cycle Feed roller assy: Every 200,000 prints Pick-up roller assy: Every 200,000 prints

B. Replacing procedure

1. Remove the lower feeder unit. See P.7



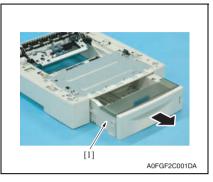
 Unlock the hook [1], and remove the feed roller assy [2] and pick-up roller assy [3] from the shaft.

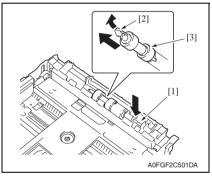
2.1.2 Replacing the separation roller assy

A. Periodically replaced parts/cycle

Separation roller assy: Every 200,000 prints

B. Replacing procedure





1. Slide out the tray from the lower feeder unit.

2. While pressing down the holder [1], unlock the hook [2] and remove the separation roller assy [3].

3. Other

3.1 Disassembly/adjustment prohibited items

A. Paint-locked screws

NOTE

- To prevent loose screws, a screw lock in blue or green series color is applied to the screws.
- The screw lock is applied to the screws that may get loose due to the vibrations and loads created by the use of machine or due to the vibrations created during transportation.
- If the screw lock coated screws are loosened or removed, be sure to apply a screw lock after the screws are tightened.

B. Red-painted screws

NOTE

- The screws which are difficult to be adjusted in the field are painted in red in order to prevent them from being removed by mistake.
- Do not remove or loosen any of the red-painted screws in the field. It should also be noted that, when two or more screws are used for a single part, only one representative screw may be marked with the red paint.

C. Variable resistors on board

NOTE

- Do not turn the variable resistors on boards for which no adjusting instructions are given in Adjustment/Setting.
- D. Removal of PWBs

- When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.
- The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.
- Where it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.

3.2 Disassembly/assembly list (other parts)

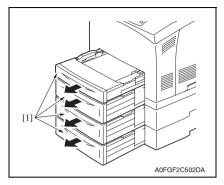
A. Disassembly/assembly parts list

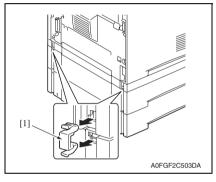
No	Section	Part name	Ref. page
1	Unit	Lower Feeder Unit	P.7
2	Exterior parts	Rear cover	P.8
3	Boards	PC control board (PCCB)	P.9
4	Boards	Media size switch (SW1)	P.9
5	Motor	Media feed motor (M1)	P.10
6	Clutches	Media feed clutch (CL1)	P.12
7	Citiciles	Transport clutch (CL2)	P.13

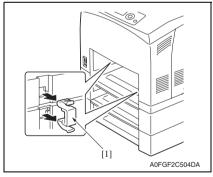
B. Cleaning parts list

No	Section	Part name	Ref. page
1		Feed roller	P.14
2	Media feed section	Pick-up roller	P.14
3		Separation roller	P.14

3.3.1 Lower Feeder Unit







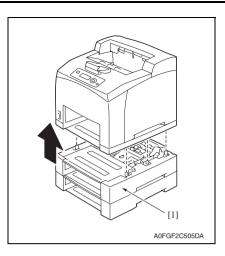
1. Remove all trays [1].

- Remove two fixing pieces [1] from the back of the main body.
- Maintenance

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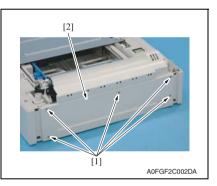
3. Remove two fixing pieces [1] from where the trays are slid into.

7



3.3.2 Rear cover

1. Remove the Lower Feeder Unit. See P.7



4. Raise the main body and remove the lower feeder unit [1].

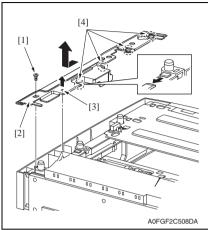
Field Service Ver. 1.0 Dec. 2007

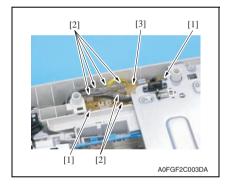
2. Remove five screws [1], and remove the rear cover [2].

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3.3.3 PC control board (PCCB)

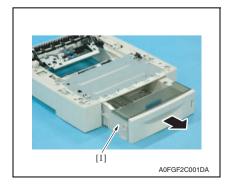
1. Remove the Lower Feeder Unit. See P.7





3.3.4 Media size switch (SW1)

1. Remove the Lower Feeder Unit. See P.7

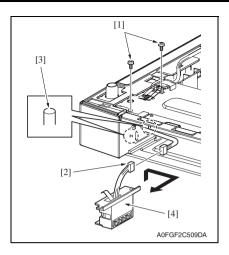


- 2. Remove the screw [1].
- 3. Raise the part [3] on the right plate cover [2] a little in the direction of the arrow to detach the part from the boss.
- Slide the right plate cover [2] in the direction of the arrow to unlock four claws [4] and remove the right plate cover.

5. Remove two screws [1] and disconnect six connectors [2], and remove the PC control board [3].

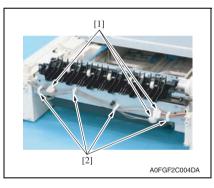
2. Slide out the tray from the lower feeder unit.

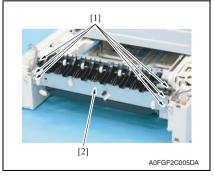
Maintenance



3.3.5 Media feed motor (M1)

- 1. Remove the Lower Feeder Unit. See P.7
- 2. Remove the rear cover. See P.8





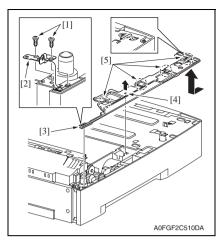
 Remove two screws [1], disconnect the connector [2], and detach the media size switch [4] from two bosses [3].

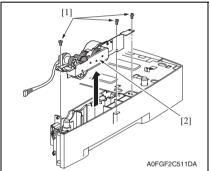
Field Service Ver. 1.0 Dec. 2007

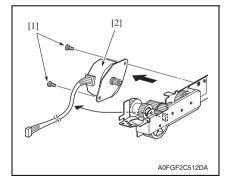
3. Disconnect three connectors [1] and remove the harness from four wire saddles [2].

4. Remove six screws [1], and remove the media feed unit [2].

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- 5. Remove two screws [1], and remove the earth plate [2].
- 6. Raise the part [4] on the left plate cover [3] a little in the direction of the arrow to detach the part from the boss.
- 7. Slide the left plate cover [3] in the direction of the arrow to unlock four claws [5] and remove the left plate cover.

8. Remove three screws [1], and remove the drive unit [2].

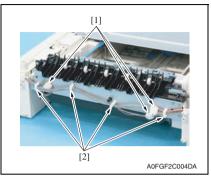
9. Remove two screws [1], and remove the media feed motor [2].

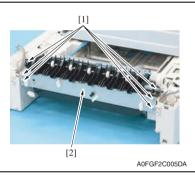
3. Other

3. Other

3.3.6 Media feed clutch (CL1)

- 1. Remove the Lower Feeder Unit. See P.7
- 2. Remove the rear cover. See P.8





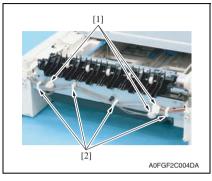
3. Disconnect three connectors [1] and remove the harness from four wire saddles [2].

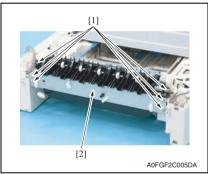
4. Remove six screws [1], and remove the media feed unit [2].

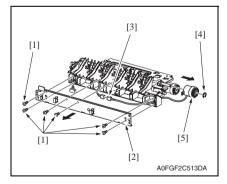
- 5. Remove six screws [1], and remove the sheet metal [2].
- Disconnect the connector [3] and remove the E-ring [4], and remove the media feed clutch [5].

3.3.7 Transport clutch (CL2)

- 1. Remove the Lower Feeder Unit. See P.7
- 2. Remove the rear cover. See P.8







3. Disconnect three connectors [1] and remove the harness from four wire saddles [2].

4. Remove six screws [1], and remove the media feed unit [2].

- 5. Remove six screws [1], and remove the sheet metal [2].
- Disconnect the connector [3] and remove the E-ring [4], and remove the transport clutch [5].

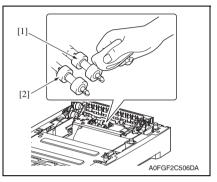
3.4 Cleaning procedure

NOTE

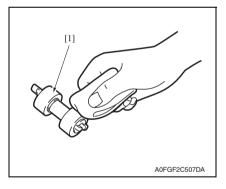
• The alcohol used in this cleaning procedure is isopropyl alcohol.

3.4.1 Feed roller and pick-up roller

1. Remove the lower feeder unit. See P.7



- 3.4.2 Separation roller
- 1. Remove the separation roller assy. See P.4



2. Using a cleaning pad dampened with alcohol, wipe the feed roller [1] and pick-up roller [2].

 Using a cleaning pad dampened with alcohol, wipe the separation roller [1].

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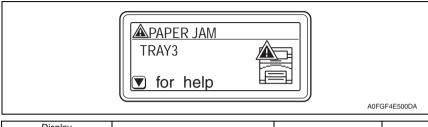
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Troubleshooting

4. Jam display

4.1 Misfeed display

• When a media misfeed occurs, a message is displayed on the control panel.



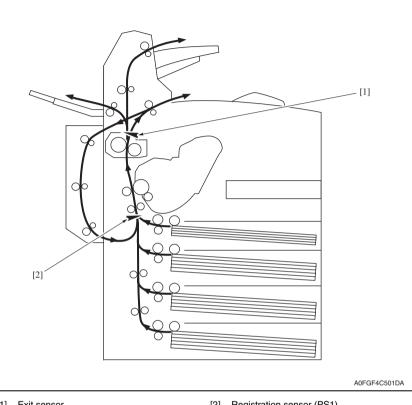
Display		Misfeed location	Misfeed clearing location	Ref. page
LCD1	LCD2	Wisieed location	Misleed cleaning location	riei. page
PAPER JA	TRAY3	Tray 3 media feed section	Tray3/top cover	P.18
FAFENJA	TRAY4	Tray 4 media feed section	Tray4/top cover	P.19

4.2 Misfeed display resetting procedure

Open the relevant cover, clear the sheet of misfed media, and close the cover.

4.3 Sensor layout

• For a system equipped with a lower feeder unit.



[1] Exit sensor

[2] Registration sensor (PS1)

4.4 Solution

4.4.1 Initial check items

• When a media misfeed occurs, first check the following initial check items.

Check Item	Action
Does the media meet product specifications?	Change the media.
Is the media curled, wavy, or damp.	Change the media. Instruct the user in correct media storage requirements.
Is a foreign object present along the media path, or is the media path deformed or worn?	Clean or change the media path.
Are the rolls/rollers dirty, deformed, or worn?	Clean or change the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the cor- rect position to accommodate media?	Set as necessary.
Are the actuators found operational as checked for cor- rect operation?	Correct or change the defective actuator.

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4.4.2 Misfeed at the tray3 media feed section

A. Detection timing

Туре	Description
	The leading edge of media does not block the registration sensor (PS1) after the lapse of a predetermined period of time after the media is fed from the tray 3.

B. Action

Relevant electrical parts	
Media feed motor (M1)	PC control board (PCCB)
Media feed clutch (CL1)	MFP board (MFPB)
Transport clutch (CL2)	
Registration sensor (PS1)	

	Action	WIRING DIAGRAM		
Step		Control Signal	Location (Electrical Com- ponent)	
1	Initial check items	—	—	
2	PS1 sensor check	PRCB P/J24-11 (ON)	See P.187 of the main unit service manual.	
3	CL1 operation check	PCCB P/J85-2 (ON)		
4	CL2 operation check	PCCB P/J85-4 (ON)	See P.191 of the	
5	M1 operation check	PCCB P/J82-2 to 5	main unit service	
6	Change PCCB.	_	manual.	
7	Change MFPB.	—]	

4.4.3 Misfeed at the tray 4 media feed section

A. Detection timing

Туре	Description
Detection of mis- feed at tray 4 media feed section	The leading edge of media does not block the registration sensor (PS1) after the lapse of a predetermined period of time after the media is fed from the tray 4.

B. Action

Relevant electrical parts	
Media feed motor (M1)	PC control board (PCCB)
Media feed clutch (CL1)	MFP board (MFPB)
Transport clutch (CL2)	
Registration sensor (PS1)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Com- ponent)
1	Initial check items	—	—
2	PS1 sensor check	PRCB P/J24-11 (ON)	See P.187 of the main unit service manual.
3	CL1 operation check	PCCB P/J85-2 (ON)	See P.191 of the main unit service manual.
4	CL2 operation check	PCCB P/J85-4 (ON)	
5	M1 operation check	PCCB P/J82-2 to 5	
6	Change PCCB.		
7	Change MFPB.	_	

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SERVICE MANUAL

FIELD SERVICE

AD-508

2007.12 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

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4.4	1.3	Misfeed at duplex option media transport section17

1

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General

1. Product specifications

А. Туре

Name	Duplex
Installation	Mounted on the right side
Reversing system	Exit roller switchback
Document alignment	Center

B. Media

	Letter/Legal/Executive/A4/A5/A6/B5 (JIS)/B6/Folio/SP Folio/Foolscap/UK
Media size	Quarto/Government Letter/Government Legal/16K/Kai 16/Kai 32/Japanese
	Postcard/Japanese Postcard-D/B5 (ISO)/Custom size

C. Machine specifications

	351.7 mm (W) \times 146.2 mm (D) \times 256.6 mm (H) 13.75 inch (W) \times 5.75 inch (D) \times 10 inch (H)
Weight	Approx. 2.1 kg (4.75 lb)

NOTE

• These specifications are subject to change without notice.

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Maintenance

2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

• Periodically replaced parts are not employed.

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3. Other

3.1 Disassembly/adjustment prohibited items

A. Paint-locked screws

NOTE

- To prevent loose screws, a screw lock in blue or green series color is applied to the screws.
- The screw lock is applied to the screws that may get loose due to the vibrations and loads created by the use of machine or due to the vibrations created during transportation.
- If the screw lock coated screws are loosened or removed, be sure to apply a screw lock after the screws are tightened.

B. Red-painted screws

NOTE

- The screws which are difficult to be adjusted in the field are painted in red in order to prevent them from being removed by mistake.
- Do not remove or loosen any of the red-painted screws in the field. It should also be noted that, when two or more screws are used for a single part, only one representative screw may be marked with the red paint.

C. Variable resistors on board

NOTE

• Do not turn the variable resistors on boards for which no adjusting instructions are given in Adjustment/Setting.

D. Removal of PWBs

- When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.
- The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.
- Where it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.

3.2 Disassembly/assembly list (other parts)

3.2.1 Disassembly/assembly parts list

No	Section	Part name	Ref. page
1	Unit	Duplex unit	P.6
2		Right cover	P.7
3	Exterior parts	Left cover	P.7
4		Top cover	P.8
5	Board and etc.	AD control board (ADCB)	P.8
6	Others	Transport motor (M1)	P.9
7		Cooling fan motor (FM1)	P.10

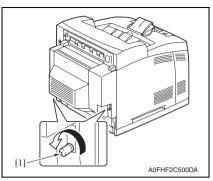
3.2.2 Cleaning parts list

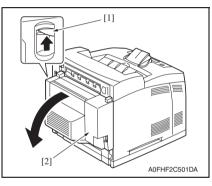
No	Section	Part name	Ref. page
1	Transport section	Transport rollers	P.12

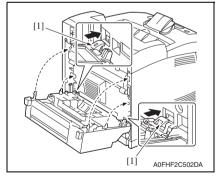
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3.3 Disassembly/assembly procedure

3.3.1 Duplex unit







1. Loosen two screws [1].

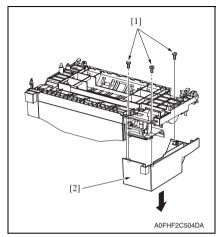
2. Raise the lever [1] and remove the duplex unit [2].

NOTE

• Fit the left and right bottom claws [1] into the holes to reinstall the duplex unit.

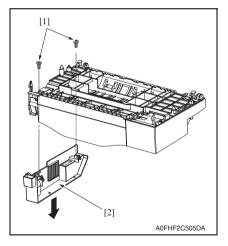
3.3.2 Right cover

1. Remove the duplex unit. See P.6



3.3.3 Left cover

1. Remove the duplex unit. See P.6



2. Remove three screws [1], and the right cover [2].

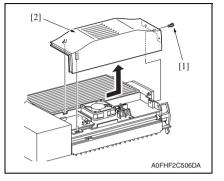
the left cover [2].

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2. Remove two screws [1], and remove

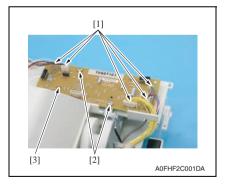
3.3.4 Top cover

- 1. Remove the duplex unit. See P.6
- 2. Remove the left cover. See P.7



3.3.5 AD control board (ADCB)

- 1. Remove the duplex unit. See P.6
- 2. Remove the left cover. See P.7
- *3.* Remove the top cover. See P.8
- 4. Remove the right cover. See P.7

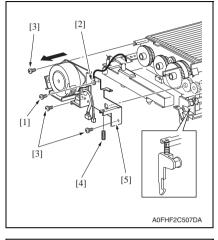


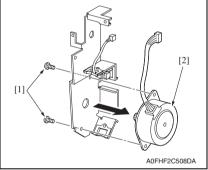
3. Remove the screw [1], and remove the top cover [2].

5. Disconnect five connectors [1] and remove two screws [2], and remove the AD control board [3].

3.3.6 Transport motor (M1)

- 1. Remove the duplex unit. See P.6
- 2. Remove the AD control board. See P.8





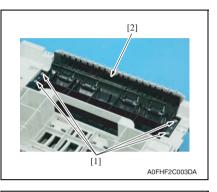
- 3. Remove the screw [1], and remove the ground wire [2].
- Remove three screws [3] and the spring [4], and remove the transport motor assy [5].

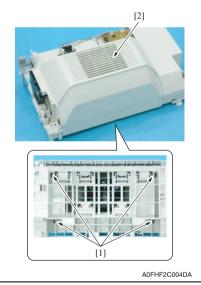
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5. Remove two screws [1], and remove the transport motor [2].

3.3.7 Cooling fan motor (FM1)

- 1. Remove the duplex unit. See P.6
- 2. Remove the left cover. See P.7
- 3. Remove the top cover. See P.8

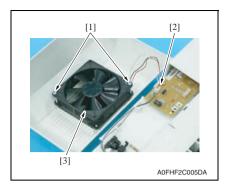




4. Remove four screws [1], and remove the transport roll assy [2].

4. Remove four screws [1], and remove the cooling fan motor cover [2].

5. Remove two screws [1] and disconnect the connector [2], and remove the cooling fan motor [3].



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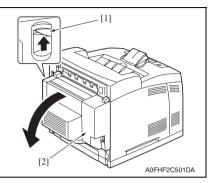
3. Other

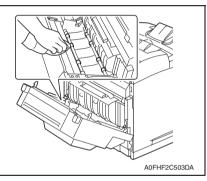
3.4 Cleaning procedure

NOTE

• The alcohol used in this cleaning procedure is isopropyl alcohol.

3.4.1 Transport rollers





1. Raise the lever [1] and open the duplex cover [2].

2. Using a cleaning pad dampened with alcohol, wipe the transport rollers.

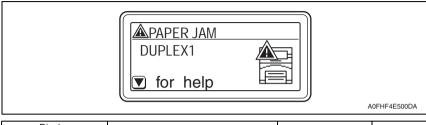
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Troubleshooting

4. Jam display

4.1 Misfeed display

• When a media misfeed occurs, a message is displayed on the control panel.

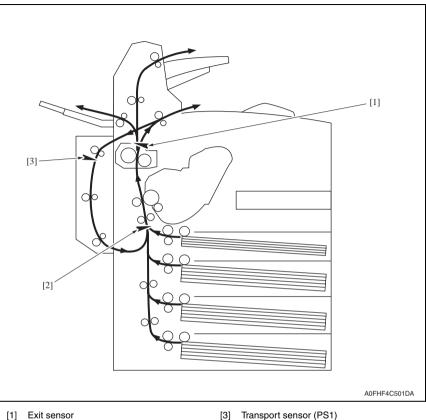


Display		Misfeed location	Misfeed clearing	Ref. page
LCD1	LCD2	Misieed location	location	nei. page
PAPER JAM	DUPLEX 1	Duplex option media feed section	F Duplex cover	P.16
PAPER JAM	DUPLEX 2	Duplex option media transport section		P.17

4.2 Misfeed display resetting procedure

Open the relevant cover, clear the sheet of misfed media, and close the cover.

4.3 Sensor layout



- [1]
- [2] Registration sensor (PS1)

Transport sensor (PS1) [3]

4.4 Solution

4.4.1 Initial check items

• When a media misfeed occurs, first make checks of the following initial check items.

Check Item	Action
Does media meet product specifications?	Change media.
Is media curled, wavy, or damp.	Change media. Instruct user in correct media storage.
Is a foreign object present along the media path, or is the media path deformed or worn?	Clean or change the media path.
Are rolls/rollers dirty, deformed, or worn?	Clean or change the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at correct position to accommodate media?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

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4.4.2 Misfeed at duplex option media feed section

A. Detection timing

Туре	Description
feed at duplex	 Media does not turn ON the transport sensor (PS1) after the lapse of a predetermined period of time after the media is fed. The transport sensor (PS1) is not turned OFF after the lapse of a predetermined period of time after media turns ON the transport sensor.

B. Action

Relevant Electrical Parts		
Transport sensor (PS1)	AD control board (ADCB)	
Transport motor (M1)	Printer control board (PRCB)	

		WIRING DIAGRAM		
Step	Action	Control Signal	Location (Electrical Com- ponent)	
1	Initial check items	—	—	
2	PS1 sensor check	ADCB P/J53-3 (ON)		
3	M1 operation check	ADCB P/J51-2 to 5	See P.192 of the main unit service	
4	Change ADCB.	—	manual.	
5	Change PRCB.	_		

4.4.3 Misfeed at duplex option media transport section

A. Detection timing

Туре	Description
Detection of mis- feed at duplex	Media turns ON the registration sensor (PS1) before the lapse of a predetermined period of time after the media turns ON the transport sensor (PS1).
option media trans- port section	Media does not turn ON the registration sensor (PS1) after the lapse of a prede- termined period of time after the media turns ON the transport sensor (PS1).
Detection of media left at duplex option media transport section	Transport sensor (PS1) is turned ON when the power switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts		
5	AD control board (ADCB) Printer control board (PRCB)	
(OEO)		

		WIRING DIAGRAM		
Step	Action	Control Signal	Location (Electrical Com- ponent)	
1	Initial check items	—	—	
2	Registration sensor check	PRCB P/J24-11 (ON)	See P.187 of the main unit service manual.	
3	Transport sensor check	ADCB P/J53-3 (ON)		
4	M1 operation check	ADCB P/J51-2 to 5	See P.192 of the main unit service	
5	Change ADCB.	—	manual.	
6	Change PRCB. —			

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SERVICE MANUAL

FIELD SERVICE

SF-603

2007.12 KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

Revision history

After publication of this service manual, the parts and mechanism may be subject to change for improvement of their performance.

Therefore, the descriptions given in this service manual may not coincide with the actual machine.

When any change has been made to the descriptions in the service manual, a revised version will be issued with a revision mark added as required.

Revision mark:

- To indicate clearly a section revised, show $\underline{\land}$ to the left of the revised section. A number within $\underline{\land}$ represents the number of times the revision has been made.
- To indicate clearly a section revised, show **A** in the lower outside section of the corresponding page.

A number within **A** represents the number of times the revision has been made.

NOTE

Revision marks shown in a page are restricted only to the latest ones with the old ones deleted.

- When a page revised in Ver. 2.0 has been changed in Ver. 3.0: The revision marks for Ver. 3.0 only are shown with those for Ver. 2.0 deleted.
- When a page revised in Ver. 2.0 has not been changed in Ver. 3.0: The revision marks for Ver. 2.0 are left as they are.

2007/12	1.0	_	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

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General

1. Product specifications

А. Туре

Name	Offset tray
Installation	Install at the top section of the printer
Document alignment	Center
Media ejection system	Face down

B. Functions

Modes Offset, Job separation

C. Media type

	Width: 89 to 216 mm (3.5 - 8.5 inch) Length: 140 to 356 mm (5.5 - 14.0 inch)
Capacity	Plain/Recycled paper: 500 sheets

D. Machine specifications

	417.8 mm (W) × 312.5 mm (D) × 226.4 mm (H) 16.5 inch (W) × 12.25 inch (D) × 9 inch (H)
Weight	Approx. 2.6 kg (5.75 lb)

NOTE

• These specifications are subject to change without notice.

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Maintenance

2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

• Periodically replaced parts are not employed.

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3. Other

3.1 Disassembly/adjustment prohibited items

A. Paint-locked screws

NOTE

- To prevent loose screws, a screw lock in blue or green series color is applied to the screws.
- The screw lock is applied to the screws that may get loose due to the vibrations and loads created by the use of machine or due to the vibrations created during transportation.
- If the screw lock coated screws are loosened or removed, be sure to apply a screw lock after the screws are tightened.

B. Red-painted screws

NOTE

- The screws which are difficult to be adjusted in the field are painted in red in order to prevent them from being removed by mistake.
- Do not remove or loosen any of the red-painted screws in the field. It should also be noted that, when two or more screws are used for a single part, only one representative screw may be marked with the red paint.

C. Variable resistors on board

NOTE

• Do not turn the variable resistors on boards for which no adjusting instructions are given in Adjustment/Setting.

D. Removal of PWBs

- When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.
- The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.
- Where it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.

3.2 Disassembly/assembly list (other parts)

3.2.1 Disassembly/assembly parts list

No	Section	Part name	Ref. page
1	Unit	Offset tray	P.6
2		Offset tray cover	P.7
3	Exterior parts	Top cover	P.7
4		Front cover	P.8
5	Board and etc.	Offset tray control board (OTCB)	P.8
6		Transport motor (M1)	P.9
7	Others	Offset motor (M2)	P.9
8		Exit tray route change solenoid (SD1)	P.10

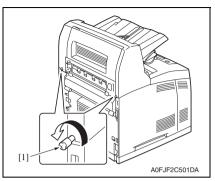
3.2.2 Cleaning parts list

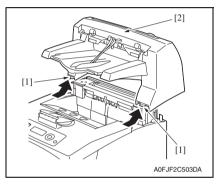
No	Section	Part name	Ref. page
1	Feed section	Media feed rollers	P.11

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3.3 Disassembly/assembly procedure

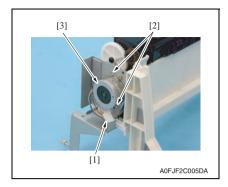
3.3.1 Offset tray



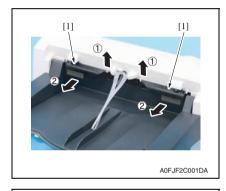


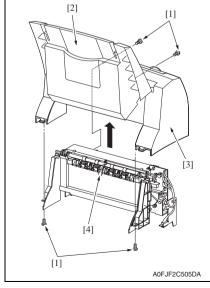
1. Loosen two screws [1].

2. Unlock two claws [1] and remove the offset tray [2].



3.3.3 Top cover





 Unlock the boss [1] and remove the offset tray cover [2] by moving it in the direction of the arrow.

1. Remove two flappers [1].

2. Remove four screws [1], and raise the tray [2] close to a vertical position to remove the top cover [3].

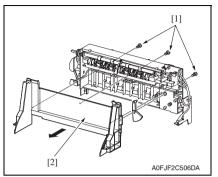
NOTE

• When removing the top cover, take care so that the actuator [4] is not damaged.

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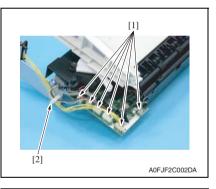
3.3.4 Front cover

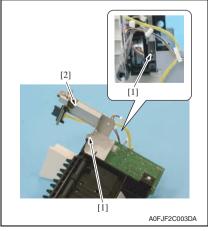
1. Remove the top cover. See P.7



3.3.5 Offset tray control board (OTCB)

1. Remove the top cover. See P.7

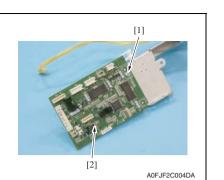




2. Remove three screws [1], and remove the front cover [2].

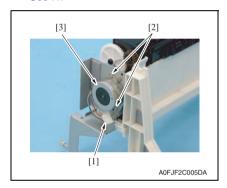
2. Disconnect six connectors [1] and remove the harness from the wire saddle [2].

3. Remove two screws [1], and remove the offset tray control board assy [2].



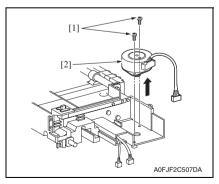
3.3.6 Transport motor (M1)

1. Remove the top cover. See P.7



3.3.7 Offset motor (M2)

1. Remove the offset tray control board assy. See P.8



4. Remove the screw [1], and remove the offset tray control board [2].

- Maintenance

2. Disconnect the connector [1] and

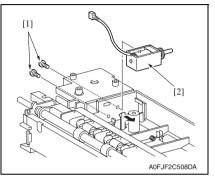
the transport motor [3].

remove two screws [2], and remove

2. Remove two screws [1], and remove the offset motor [2].

3.3.8 Exit tray route change solenoid (SD1)

- 1. Remove the top cover. See P.7
- 2. Remove the front cover. See P.8
- 3. Remove the offset tray control board. See P.8
- 4. Remove the offset motor. See P.9



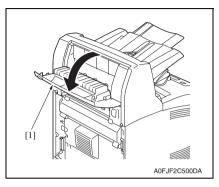
 Remove two screws [1], and remove the exit tray route change solenoid [2].

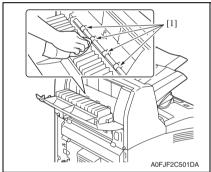
3.4 Cleaning procedure

NOTE

• The alcohol used in this cleaning procedure is isopropyl alcohol.

3.4.1 Media feed rollers





1. Open the offset tray cover [1].

2. Using a cleaning pad dampened with alcohol, wipe the media feed rollers.

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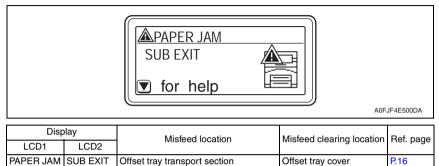
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Troubleshooting

4. Jam display

4.1 **Misfeed display**

• When a media misfeed occurs, a message is displayed on the control panel.



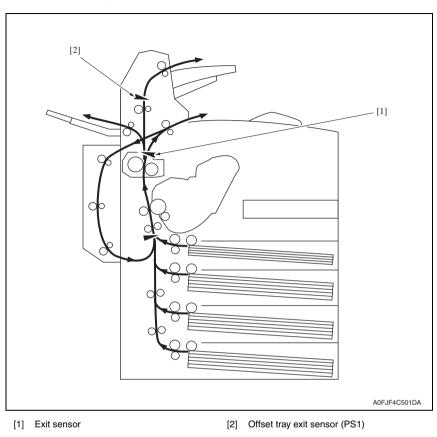
Offset tray cover

4.2 Misfeed display resetting procedure

• Open the relevant cover, clear the sheet of misfed media, and close the cover.

4.3 Sensor layout





4.4 Solution

4.4.1 Initial check items

• When a media misfeed occurs, first make checks of the following initial check items.

Check Item	Action
Does media meet product specifications?	Change media.
Is media curled, wavy, or damp.	Change media. Instruct user in correct media storage.
Is a foreign object present along the media path, or is the media path deformed or worn?	Clean or change the media path.
Are rolls/rollers dirty, deformed, or worn?	Clean or change the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at correct position to accommodate media?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

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4.4.2 Misfeed at offset tray media transport section

A. Detection timing

Туре	Description
Transport section	Media does not turn ON the offset tray exit sensor (PS1) after the lapse of a pre- determined period of time after the media turns ON the exit sensor located in the main body.
	The offset tray exit sensor (PS1) is not turned OFF after the lapse of a predeter- mined period of time after media turns ON the offset tray exit sensor.
Detection of paper remaining in the transport section	Offset tray exit sensor (PS1) is turned ON when the power switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts			
Exit sensor Offset tray exit sensor (PS1) Transport motor (M1)	Offset tray control board (OTCB) Printer control board (PRCB)		

		WIRING DIAGRA	M	
Step	Action	Control Signal	Location (Electrical Com- ponent)	
1	Initial check items	_	—	
2	PS1 sensor check	OTCB P/J73-3 (ON)		
3	M1 operation check	OTCB P/J71 2 to 5	See P.193 of the main unit service	
4	Change OTCB	—	manual.	
5	Change PRCB			



PARTS GUIDE MANUAL

JANUARY 2008

bizhub 40P A0DX013

KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.

INFORMATION FOR PARTS GUIDE MANUAL

To find correct Parts No., refer to the "HOW TO MAKE THE BEST USE OF THIS MANUAL" in the following page.

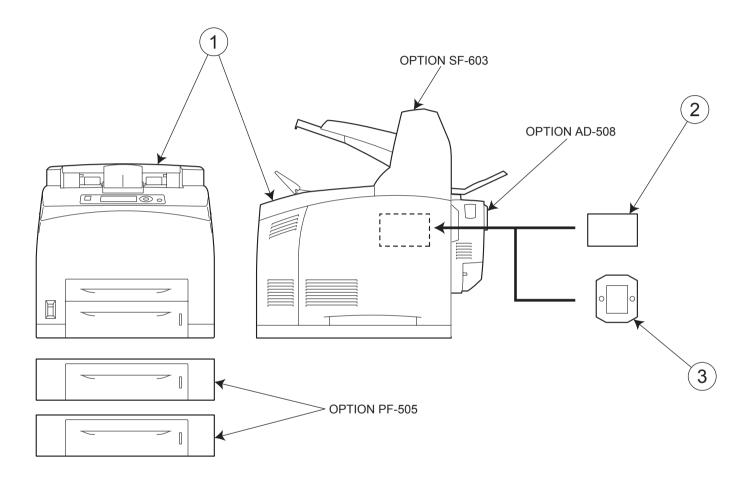
HOW TO MAKE THE BEST USE OF THIS MANUAL

- 1 When you order, please check the proper figures beforehand that are on Our Parts Guide Manual, and order with the appropriate figures.
- 2 For screws, Nuts, Washers, retaining rings and Pins which are used in this model, one letter is shown on the Standard parts column of Parts list and exploded diagrams.
- 3 In order to maintain safety of the product, some specific parts composed of this product are set up as "essential safety parts".
- 4 The assigned parts number for the "essential safety parts" is indicated as "SP00-****". When replacing these parts, follow precautions for disassembling and installing which are listed in the Service Manual. Do not use any parts that are not set up as
- 5 she means that there are exclusive parts for each destination. Please check the appropriate destination when you order.
- 6 Revision Mark

Marked as \blacktriangle on the illustration shows that the revision has been made.

7 All rights reserved. (any reprints or quotations are prohibited.) Use of this parts guide manual should be strictly supervised to avoid disclosure of confidential information.

SYSTEM OUTLINE



Parts Guide Manual "bizhub 40P" includes PF-505, AD-508 and SF-603.

GENERAL CONTENTS

No.	Description	Model
1	PRINTER B/W	bizhub 40P
2	OTHER OPTION	HD-512
3	OTHER OPTION	MK-717

DIAGRAM OF MAIN PARTS SECTION

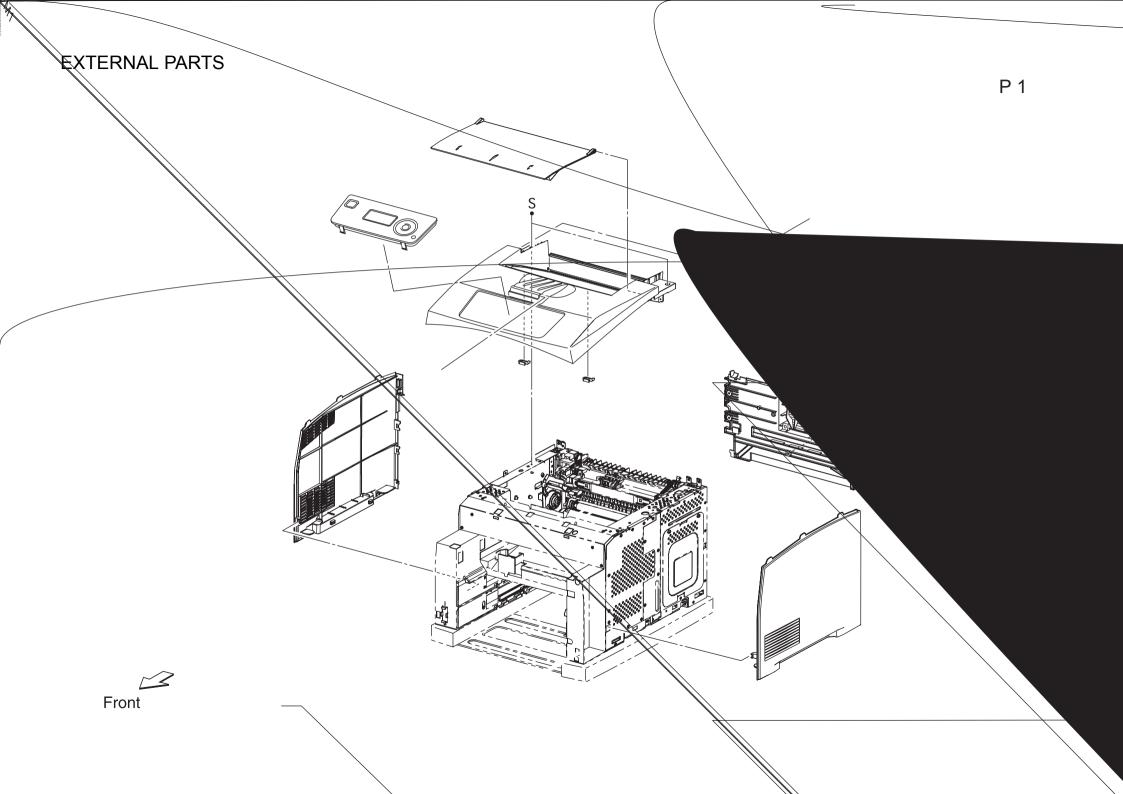
CONTENTS

No.	DESCRIPTION	PAGE No.
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3	550 PAPER CASSETTE	P3
4	PAPER FEED SECTION	P4 P5
5	P/H FUSING SECTION	P6
6	PAPER EXIT SECTION	P7 P8
7	DRIVE SECTION	P9
8	ELECTRICAL COMPONENTS	P10
9	PF-505	P11 P12 P13
10	AD-508	P14
11	SF-603	P15

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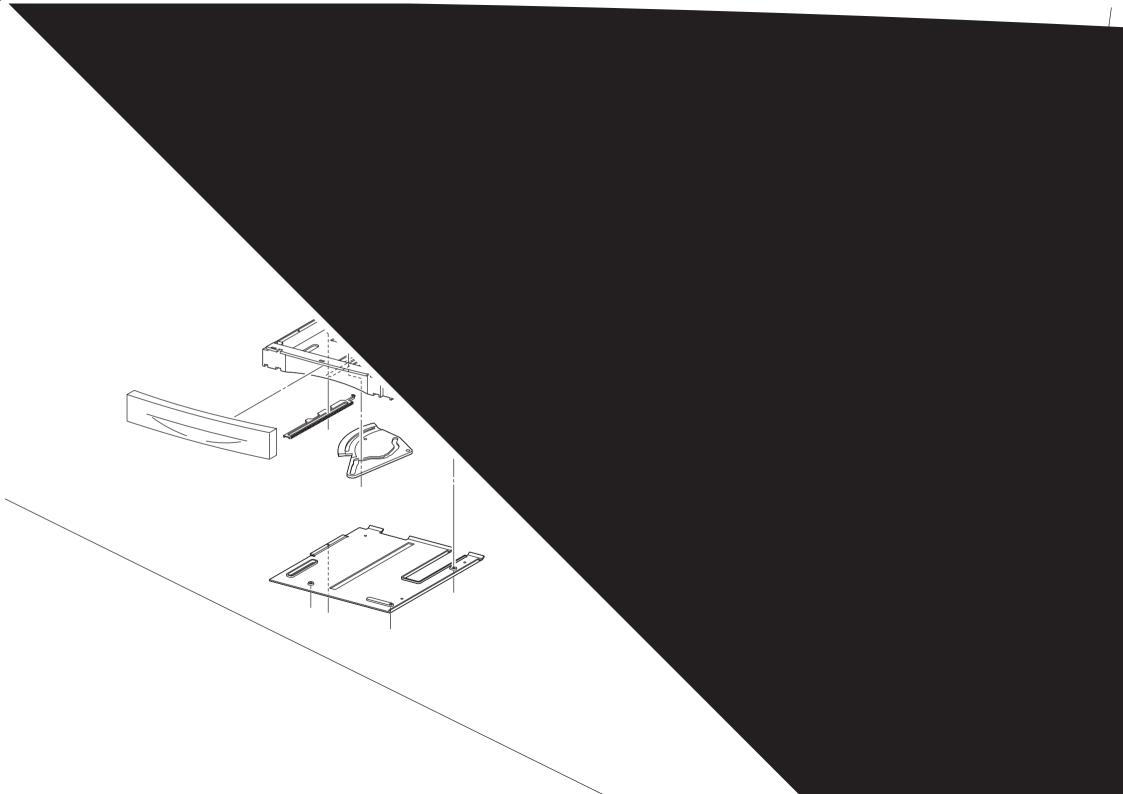
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Key	Part No.	Description	Destinations	Class	QTY	Standard parts
1	A0DX M71A 01	OPERATION PANEL 34PPM		I	1	
2 3	A0DX PP2X 01	KIT TOP COVER		С	1	
3	A0DX PP16 00 A0DX PP1U 00	FAN MAIN 80 COVER REAR		C C	1	
4 5	A0DX PP10 00 A0DX PP24 00	COVER REAR COVER RIGHT		c	1	
6	A0DX PP2P 00	COVER FRONT		C	1	
7	A0DX PP23 00	COVER LEFT		C C	1	
8	A0DX PP2R 00	COVER STOPPER		С	1	
9	A0DX PP21 00	COVER OPEN		С	1	
10	A0DX PP30 00	COVER EXIT J2 500		С	1	
11	A00F 9420 00	Label Logo Mark		С	1	
12	A0DX 9421 00	Label bizhub40P		С	1	

bizhub 40P

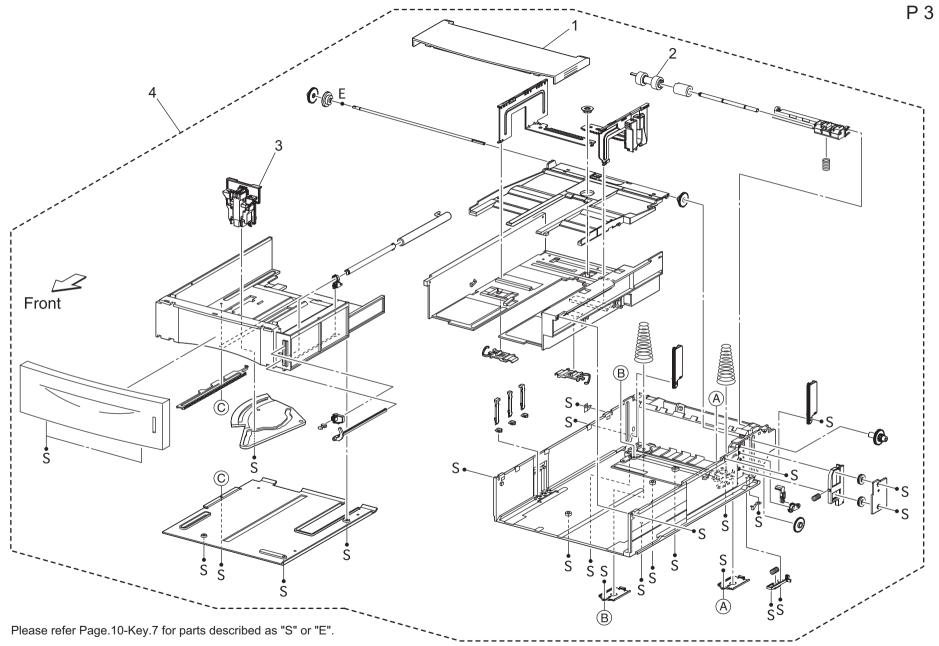
Daga 1



150 PAPER CASSETTE

Key	PAPER CA Part No.	Description	Destinations	Class	QTY	Page. Z
1 2 3 4 5 6	A0DX PP20 00 A0DX PP1R 00 A0DX PP2D 00 A0DX PP0A 00 A0DX PP01 01 A0DX PP0C 01	COVER CST ROLL ASSY RETARD SPRING RETARD GUIDE END 150 HOLDER ASSY RETARD 150 PAPER CASSETTE			1 1 1 1 1 1 1	

550 PAPER CASSETTE



550 PAPER CASSETTE

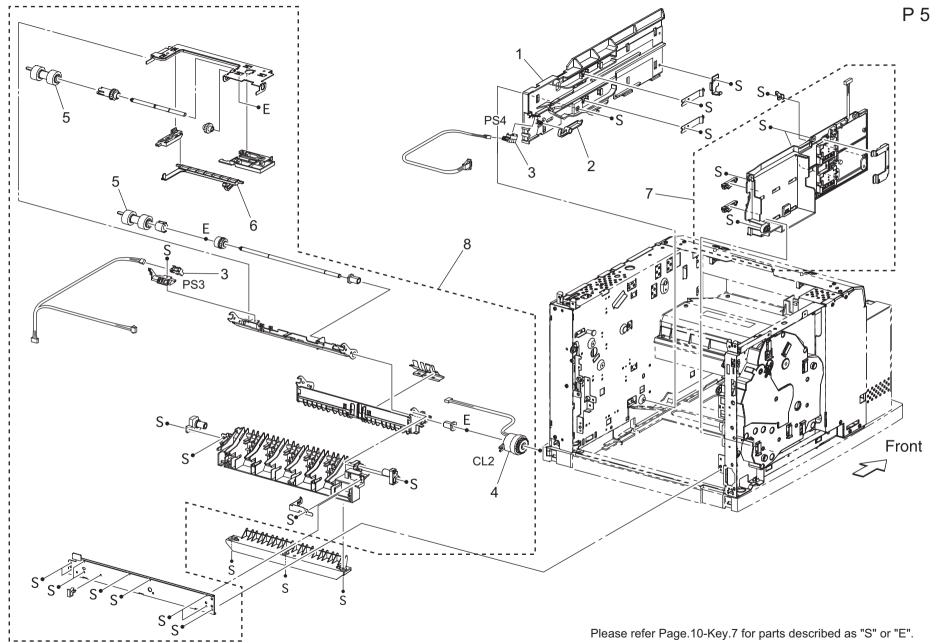
Key	Part No.	Description	Destinations	Class	QTY	Standard parts
1 2 3 4	A0DX PP20 00 A0DX PP1R 00 A0DX PP09 00 A0DX PP0D 01	COVER CST ROLL ASSY RETARD GUIDE END 550 550 PAPER CASSETTE		С С С С	1 1 1 1	



PAPER FEED SECTION

Key	Part No.	Description	Destinations	Class	QTY	Standard parts
1 2 3 4 5	A0DX PP11 00 A0DX PP10 00 A0DX PP2H 00 A0DX PP1R 00 A0DX PP1G 00	CLUTCH ASSY PH ACTUATOR NO PAPER SENSOR OCT ROLL ASSY RETARD SENSOR TONER ASSEMBLY KIT CHUTE REGI		С С С С С	2 1 1 2 1	
6 7	A0DX PP2V 00 A0DX PP1V 00	KIT CHUTE REGI 150-45 FEEDER ASSY		C C	1 1	

PAPER FEED SECTION



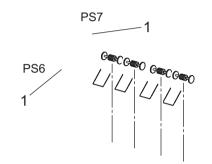
PAPER FEED SECTION

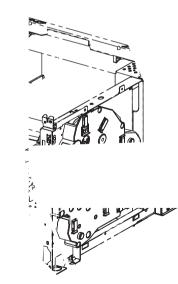
Key	Part No.	Description	Destinations	Class	QTY	Page. 5 Standard parts
1 2 3 4 5 6 7 8	A0DX PP06 00 A0DX PP0Y 00 A0DX PP2H 00 A0DX PP1H 00 A0DX PP1R 00 A0DX PP10 00 A0DX PP07 00 A0DX PP04 00	GUIDE TRAY RIGHT ACTUATOR SENSOR OCT CLUTCH ASSY PH ROLL ASSY RETARD ACTUATOR NO PAPER GUIDE TRAY LEFT FEEDER2 ASSY 250		D C C C C C C C	1 1 2 1 2 1 1 1 1	



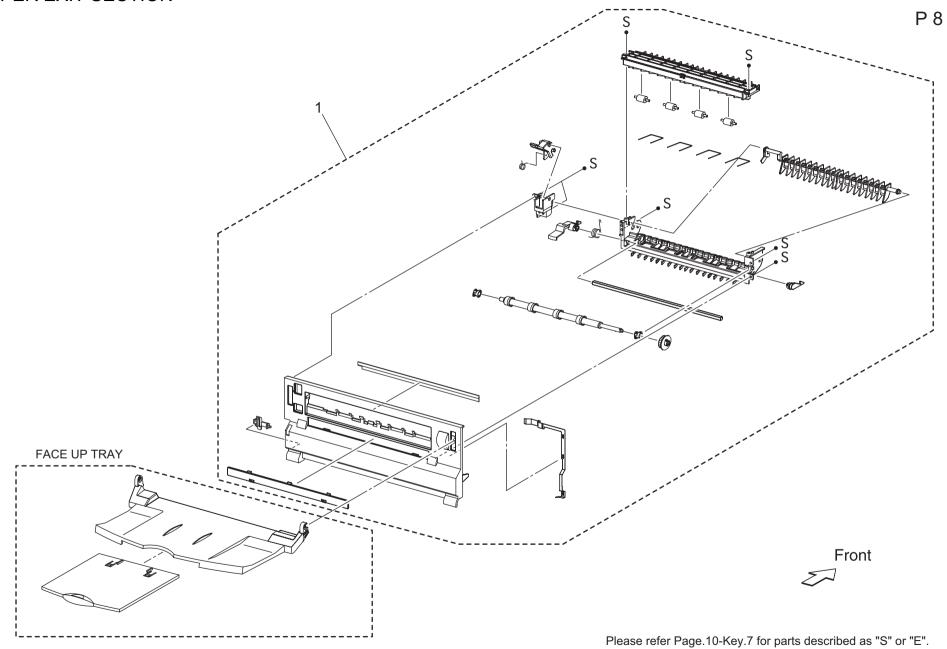
P/H FUSING SECTION

Key	Part No.	Description	Destinations	Class	QTY	Paye. 0 Standard parts
1 2 3 4 4 5	A0DX PP2N 00 A0DX PP0G 00 A0DX PP2B 00 A0DX PP1W 00 A0DX PP1X 00 A0DX PP1C 00	HARNESS ASSY ROS 34PPM ROS ASSY 45PPM HOUSING ASSY BTR FUSER ASSY 45PPM 110V FUSER ASSY 45PPM 220V FAN SUB	B C	D I C C B	1 1 1 1 1 1	



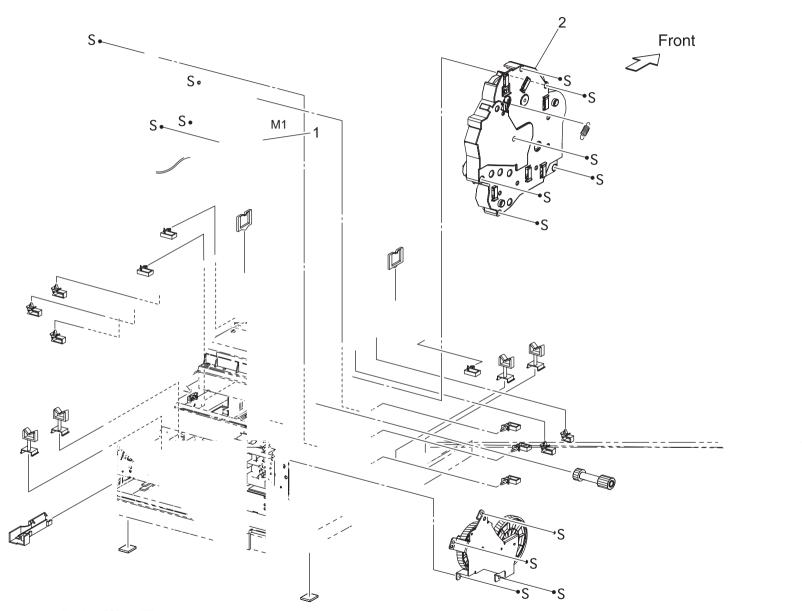


Part No.	Description	Destinations	Class	QTY	Standard parts
A0DX PP2H 00	SENSOR OCT		I	2	



PAPER EXIT SECTION

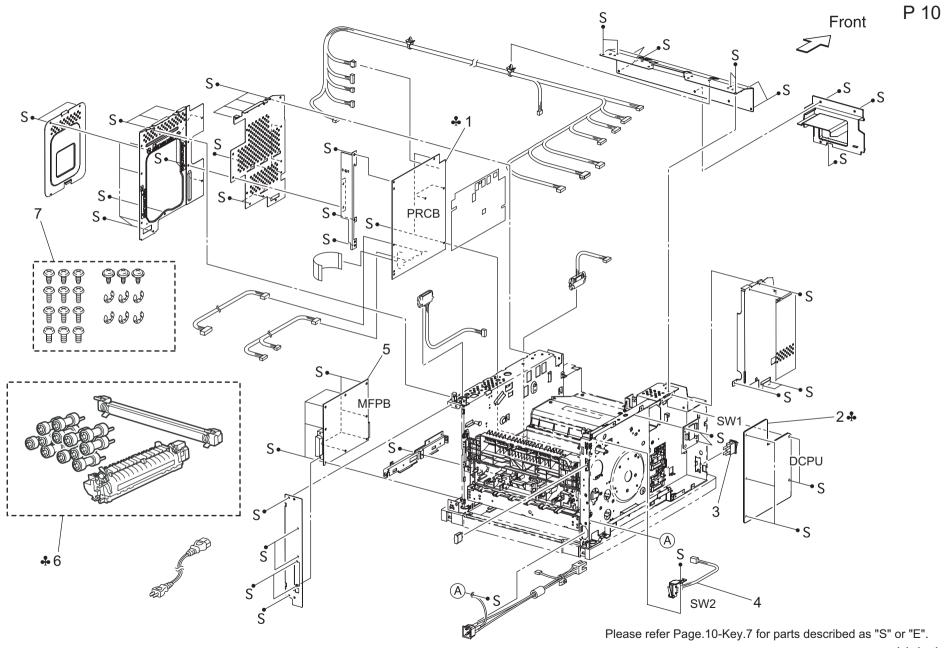
Key	Part No.	Description	Destinations	Class	QTY	Page. o Standard parts
1	A0DX PP0J 00	COVER REAR 500 34PPM		С	1	



Please refer Page.10-Key.7for parts described as "S" or "E".

DR	RIVE SECTION Page. 9							
Key	Part No.	Description	Destinations	Class	QTY	Standard parts		
1 2	A0DX PP1D 00 A0DX PP1Y 00	MAIN MOTOR GEAR ASSY HOUSING		C C	1 1			

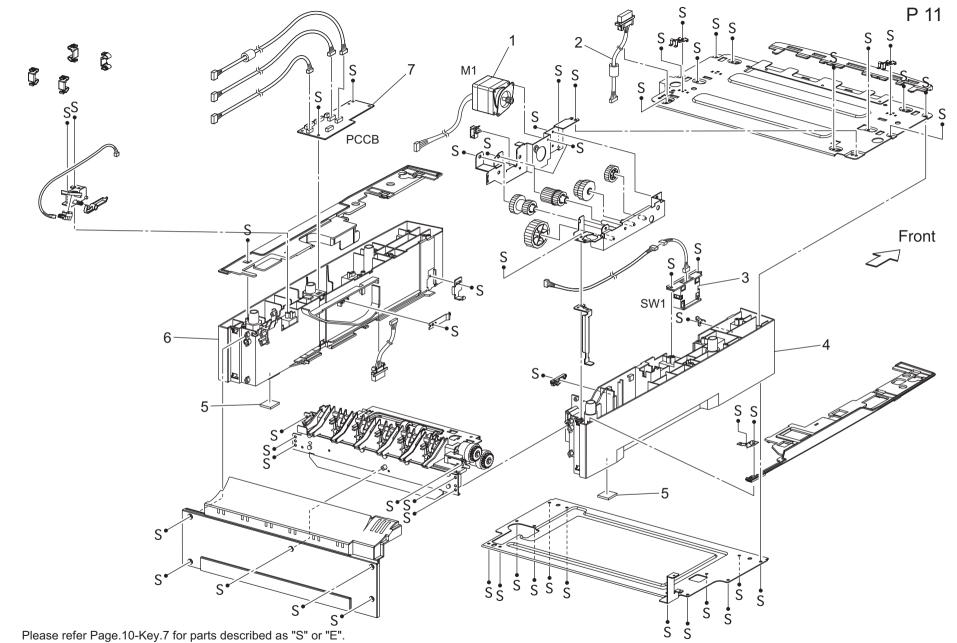
ELECTRICAL COMPONENTS



ELECTRICAL COMPONENTS

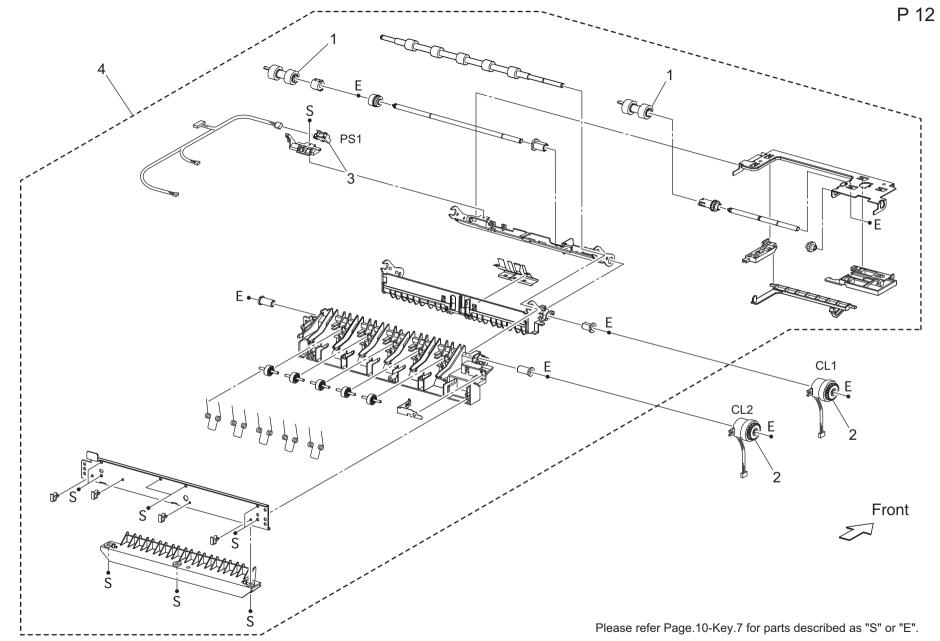
Key		Description	Destinations	Class	QTY	Standard parts
1 1 2 2 3	A0DX PP39 01 A0DX PP2T 01 A0DX PP0Q 00 A0DX PP0R 00 A0DX PP0T 00	PWB ESS 45PPM HVPS/MCU 45PPM 1200DPI 110V LVPS 110V LVPS 220V POWER SWITCH	C B B C C	 C	1 1 1 1 1	
4 5 6 7	A0DX PP0X 00 A0DX M712 02 A0FM 012 A0FM 0Y2 A0DX PP33 00	INTERLOCK S/W REAR Controller PWB assembly Maintenance Kit 110V Maintenance Kit 220V KIT SCREW	B C	C I B C	1 1 1 1	

PF-505

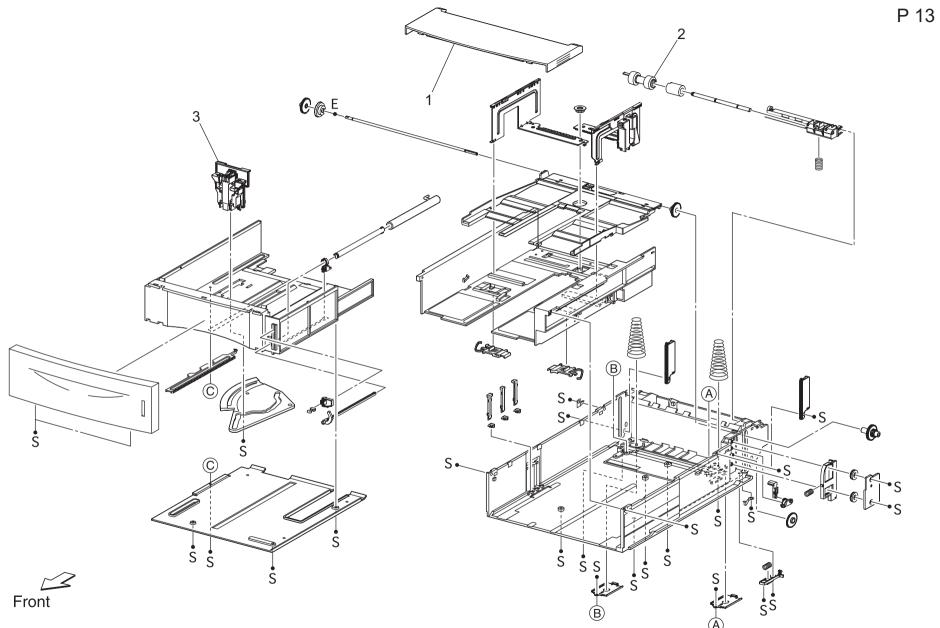


Page Standard par	QTY	Class	Destinations	Description	Part No.	Key
	1	C	Destinations	MOTOR ASSY OPT FDR	A0DX PP1E 00	1
		D		HARNESS ASSY FDR2	A0DX PP1E 00 A0DX PP2M 00	2
	1	D				2
	1	С		OPT ASSY SIZE	A0DX PP0V 00	3
	1	С		FRAME CVR L550	A0DX PP2G 00	4
	2	С		FOOT	A0DX PP00 00	5
	1	С		FRAME CVR R550	A0DX PP25 00	6
	1	I		PWBA FEEDER 550	A0DX PP2J 00	7

PF-505



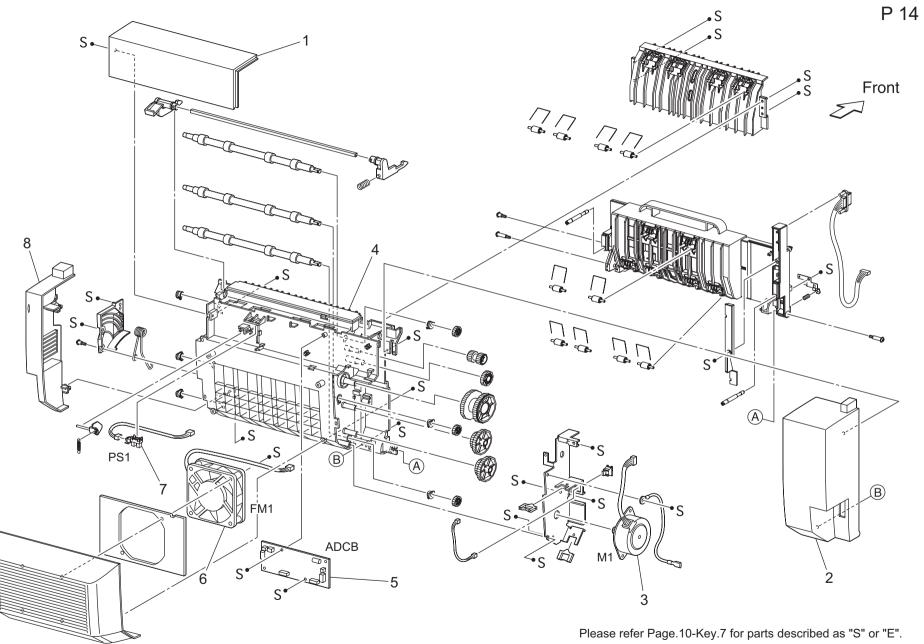
PF-	505					Page. 12
Key	Part No.	Description	Destinations	Class	QTY	Standard parts
1	A0DX PP1R 00 A0DX PP11 00	ROLL ASSY RETARD CLUTCH ASSY PH		C C	2 2	
2 3	A0DX PP11 00 A0DX PP2H 00	SENSOR OCT		I	1	
4	A0DX PP2H 00 A0DX PP05 00	SENSOR OCT 550 FEEDER OPTION		Ċ	1	
	1					
						bizbub 4



Please refer Page.10-Key.7 for parts described as "S" or "E".

(ey	Part No.	Description	Destinations	Class	QTY	Page. 1 Standard parts
1 2 3	A0DX PP20 00 A0DX PP1R 00 A0DX PP09 00	COVER CST ROLL ASSY RETARD GUIDE END 550		C C C	1 1 1	

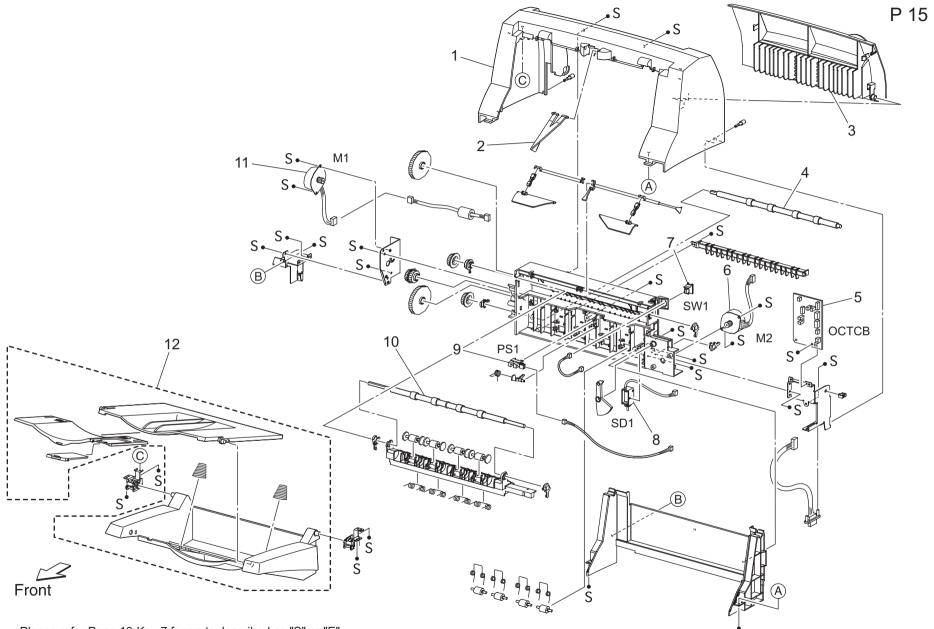
AD-508



bizhub 40P

D-508 Page. 14							
эy	Part No.	Description	Destinations	Class	QTY	Standard parts	
	A0DX PP2F 01	COVER TOP		С	1		
2	A0DX PP28 01	COVER LEFT		С	1		
;	A0DX PP13 00	MOTOR DUPLEX		С	1		
	A0DX PP2E 01 A0DX PP2K 00	COVER HSG DUP PWBA DUPLEX		С	1		
;	A0DX PP2K 00 A0DX PP17 00	FAN DUP		C I	1		
,	A0DX PP1F 00	SENSOR DUP		I	1		
;	A0DX PP29 01	COVER RIGHT		C	1		
·	100/11/20 01			Ũ	•		

SF-603



Please refer Page.10-Key.7 for parts described as "S" or "E".

S

	-603 Page. 15							
Key	Part No.	Description	Destinations	Class	QTY	Standard parts		
1	A0DX PP1M 01	COVER OCT		С	1			
2	A0DX PP08 00	WEIGHT		D	1			
3	A0DX PP22 01	COVER REAR		С	1			
4	A0DX PP0F 00	ROLL OCT LOWER		С	1			
5	A0DX PP1J 00 A0DX PP1A 00	PWBA OCT MOTOR ASSY OFFSET		1	1			
6 7	A0DX PP1A 00 A0DX PP0S 00	S/W REAR COVER		C C	1 1			
8	A0DX PP03 00	SOLENOID ASSY GATE		c	1			
9	A0DX PP2H 00	SENSOR OCT			1			
10	A0DX PP0E 00	ROLL OCT UPPER		ċ	1			
11	A0DX PP1B 00	ROLL OCT UPPER MOTOR ASSY OCT		C	1			
	A0DX PP0B 01	TRAY ASST OCT		C	1			
				-				
					┨─────┤			

MAINTENANCE LIST

• The items with no Page/Key numbers are not handled as spare parts.

No.	Section	PM Parts Description	Maintenance Cycle (K=1,000)		Parts No.	Destinations	Page/Key	Note
			QTY	Replace				
1	-	Maintenance Kit 110V *3	1	200K *1	A0FM012	110 V areas	P10-6	*2
2		Maintenance Kit 220V *3	1	200K *1	A0FM0Y2	220 V areas	P10-6	*2

*1: Continuous printing, B/W ratio: 5 %

*2: For details about maintenace procedure of lower feeder unit, see the optional lower feeder unit service manual.

*3: The Maintenance kit includes Rollers(for feed roller, pick-up roller and separation roller), Transfer roller and Fuser unit.

DESTINATION

Destination No.		Destinations		V	Hz	Model No.
A	A1	JAPAN		100	50/60	
	A2	JAPAN		200	50/60	
В		USA, CANADA		120	60	A0DX-013
С		EUROPEAN TYPE		220-240	50/60	A0DX-023
D	D1	S.E ASIA TYPE	THAILAND, SRI LANKA, SINGAPORE, MALAYSIA, HONG KONG, PAKISTAN, INDIA, BANGLADESH, INDONESIA	220-240	50/60	
	D3	OCEANIA TYPE	AUSTRALIA, NEW ZEALAND	220-240	50/60	
E		PHILIPPINES		220-240	50/60	
F	F1	SAUDI ARABIA		127	60	
	F2	SAUDI ARABIA		220-240	50/60	
G	G1	C.S AMERICA		220-240	50/60	
	G2	C.S AMERICA		120	60	
Н		TAIWAN		110	60	
I		JORDAN, LEBANON, SYRIA, SOUTH AFRICA, IRAQ, IRAN, N.YEMEN, CAME- ROON, UAE, BAHRAIN, OMAN, QATAR, KUWAIT, KENYA, TUNISIA, IVORY COAST, MOROCCO		220-240	50/60	
J		CHINA		220-240	50/60	
К		KOREA		220-240	50/60	