KONICA MINOLTA

SERVICE MANUAL

bizhub
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KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

FIELD SERVICE TOTAL CONTENTS

PC-108/PC-206

PC-407

JS-502

FS-530/PU-501/OT-602

MT-502

SD-507

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 "⚠ **DANGER**", "⚠ **WARNING**", and "⚠ **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.

⚠ **DANGER: Action having a high possibility of suffering death or serious injury**

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

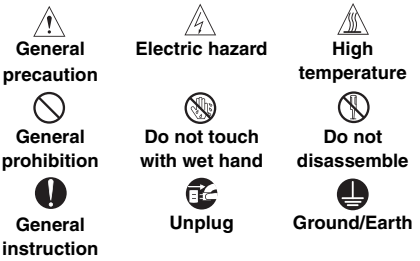
⚠ **CAUTION: Action having a possibility of suffering a slight wound, medium trouble, and property damage**

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

△ **:Precaution when servicing the product.**

⃠ **:Prohibition when servicing the product.**

● **:Direction when servicing the product.**



SAFETY WARNINGS

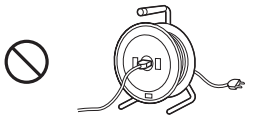
[1] MODIFICATIONS NOT AUTHORIZED BY KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.

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.

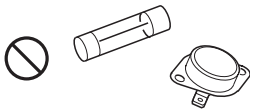
Prohibited Actions

⚠ DANGER

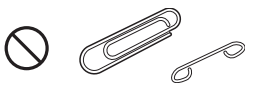
- Using any cables or power cord not specified by KMBT.



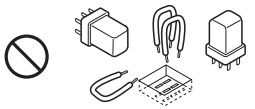
- Using any fuse or thermostat not specified by KMBT. Safety will not be assured, leading to a risk of fire and injury.



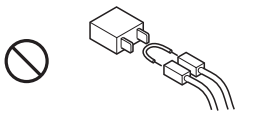
- Disabling fuse functions or bridging fuse terminals with wire, metal clips, solder or similar object.



- Disabling relay functions (such as wedging paper between relay contacts)

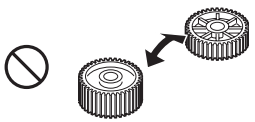


- Disabling safety functions (interlocks, safety circuits, etc.) Safety will not be assured, leading to a risk of fire and injury.



- Making any modification to the product unless instructed by KMBT

- Using parts not specified by KMBT



[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.

Power Cord Set or Power Plug

⚠ WARNING

- Use power supply cord set which meets the following criteria:
  - provided with a plug having configuration intended for the connection to wall outlet appropriate for the product's rated voltage and current, and
  - the plug has pin/terminal(s) for grounding, and
  - provided with three-conductor cable having enough current capacity, and
  - the cord set meets regulatory requirements for the area.

  Use of inadequate cord set leads to fire or electric shock.

- Attach power plug which meets the following criteria:
  - having configuration intended for the connection to wall outlet appropriate for the product's rated voltage and current, and
  - the plug has pin/terminal(s) for grounding, and
  - meets regulatory requirements for the area.

  Use of inadequate cord set leads to the product connecting to inadequate power supply (voltage, current capacity, grounding), and may result in fire or electric shock.

- Conductors in the power cable must be connected to terminals of the plug according to the following order:
  - Black or Brown: L (line)
  - White or Light Blue: N (neutral)
  - Green/Yellow: PE (earth)

  Wrong connection may cancel safeguards within the product, and results in fire or electric shock.

[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

Connection to Power Supply

⚠ WARNING

- Check that mains voltage is as specified.

  Connection to wrong voltage supply may result in fire or electric shock.

- Connect power plug directly into wall outlet having same configuration as the plug.

  Use of an adapter leads to the product connecting to inadequate power supply (voltage, current capacity, grounding), and may result in fire or electric shock.

  If proper wall outlet is not available, advice the customer to contact qualified electrician for the installation.

- Plug the power cord into the dedicated wall outlet with a capacity greater than the maximum power consumption.

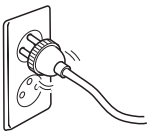
  If excessive current flows in the wall outlet, fire may result.

- If two or more power cords can be plugged into the wall outlet, the total load must not exceed the rating of the wall outlet.

  If excessive current flows in the wall outlet, fire may result.

- Make sure the power cord is plugged in the wall outlet securely.

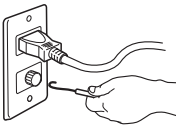
  Contact problems may lead to increased resistance, overheating, and the risk of fire.



- Check whether the product is grounded properly.

  If current leakage occurs in an ungrounded product, you may suffer electric shock while operating the product.

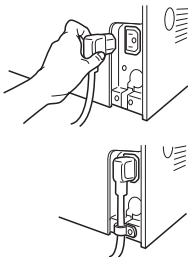
  Connect power plug to grounded wall outlet.



Power Plug and Cord

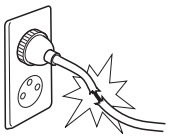
⚠ WARNING

- When using the power cord set (inlet type) that came with this product, make sure the connector is securely inserted in the inlet of the product.
  When securing measure is provided, secure the cord with the fixture properly.
  If the power cord (inlet type) is not connected to the product securely, a contact problem may lead to increased resistance, overheating, and risk of fire.

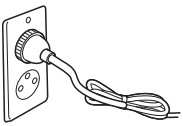


- Check whether the power cord is not stepped on or pinched by a table and so on.
  Overheating may occur there, leading to a risk of fire.

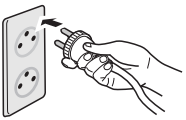
- Check whether the power cord is damaged. Check whether the sheath is damaged.
  If the power plug, cord, or sheath is damaged, replace with a new power cord (with plug and connector on each end) specified by KMBT. Using the damaged power cord may result in fire or electric shock.



- Do not bundle or tie the power cord.
  Overheating may occur there, leading to a risk of fire.

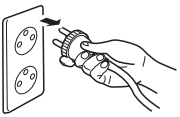


- Check whether dust is collected around the power plug and wall outlet.
  Using the power plug and wall outlet without removing dust may result in fire.



- Do not insert the power plug into the wall outlet with a wet hand.
  The risk of electric shock exists.

- When unplugging the power cord, grasp the plug, not the cable.
  The cable may be broken, leading to a risk of fire and electric shock.

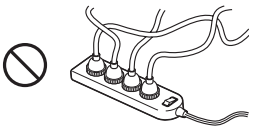


Wiring

⚠ WARNING

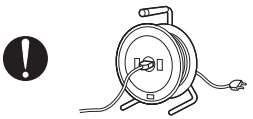
- Never use multi-plug adapters to plug multiple power cords in the same outlet.

  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

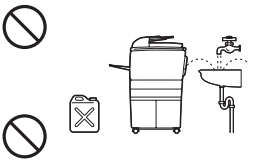
⚠ WARNING

- 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.

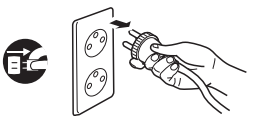


When not Using the Product for a long time

⚠ 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

⚠ CAUTION

- 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

⚠ CAUTION

- 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

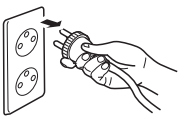
⚠ CAUTION

- Before conducting an inspection, read all relevant documentation (service manual, technical notices, etc.) and proceed with the inspection following the prescribed procedure, 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.

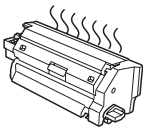
- Before conducting an inspection, be sure to disconnect the power plugs from the product and options.

  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.

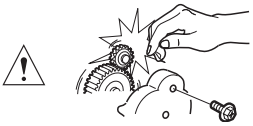


Work Performed with the Product Powered On

⚠ 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.

Safety Checkpoints

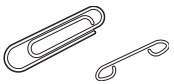
⚠ WARNING

- Check the exterior and frame for edges, burrs, and other damage.

  The user or CE may be injured.

- 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.



- Check wiring for squeezing and any other damage.

  Current can leak, leading to a risk of electric shock or fire.

- Carefully remove all toner remnants and dust from electrical parts and electrode units such as a charging corona unit.

  Current can leak, leading to a risk of product trouble or fire.

- Check high-voltage cables and sheaths for any damage.

  Current can leak, leading to a risk of electric shock or fire.

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.

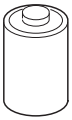
  The laser light can enter your eye, leading to a risk of loss of eyesight.

- 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 eye, leading to a risk of loss of eyesight.

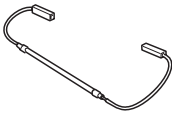
- When replacing a lithium battery, replace it with a new lithium battery specified in the Parts Guide Manual. Dispose of the used lithium battery using the method specified by local authority.

  Improper replacement can cause explosion.



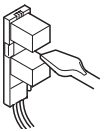
- After replacing a part to which AC voltage is applied (e.g., optical lamp and fixing lamp), be sure to check the installation state.

  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

⚠ WARNING

- 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

⚠ WARNING

- 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.

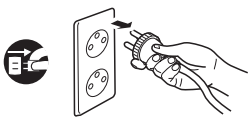
  You may be burned due to dust explosion.

Handling of Service Materials

⚠ CAUTION

- 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.

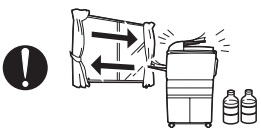
  A risk of fire exists.

Handling of Service Materials

⚠ CAUTION

- 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

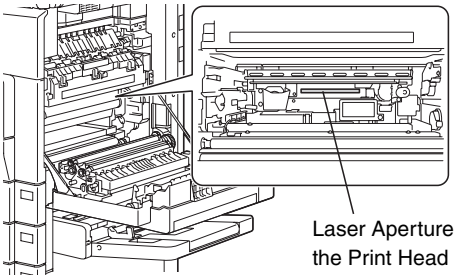
- This is a digital machine certified as a class 1 laser product. There is no possibility of danger from a laser, provided the machine is serviced according to the instruction in this manual.

5.1 Internal Laser Radiation

Semiconductor laser	
Maximum average radiation power(*)	28.9 µW
Wavelength	770-795 nm

*: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 SERVICE ITEM. Therefore, the print head unit should not be opened under any circumstances.



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

- This machine is certified as a Class I 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 to 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	5 mW
Wavelength	770-795 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	5 mW
Wavelength	770-795 nm

Denmark

⚠ ADVARSEL

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

Halvlederlaser	
Laserdiodens højeste styrke	5 mW
Bølgelængden	770-795 nm

Finland, Sweden

⚠ VARO!

- **Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.**

LOUKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

⚠ VAROITUS!

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

Puolijohdelaser	
Laserdiodin suurin teho	5 mW
Aallonpituus	770-795 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.**

Halvledarlaser	
Den maximala effekten för laserdioden	5 mW
Våglängden	770-795 nm

⚠ VARNING!

- **Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.**

Norway

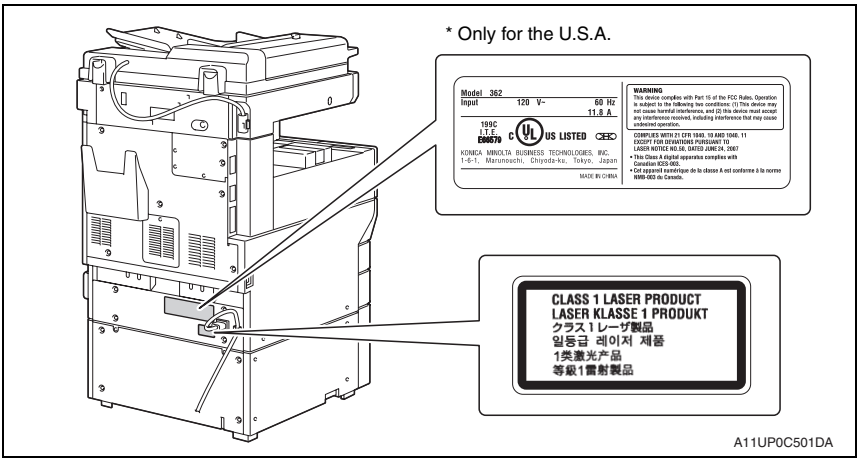
⚠ ADVERSEL

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

Halvleder laser	
Maksimal effekt till laserdiode	5 mW
Bølgelengde	770-795 nm

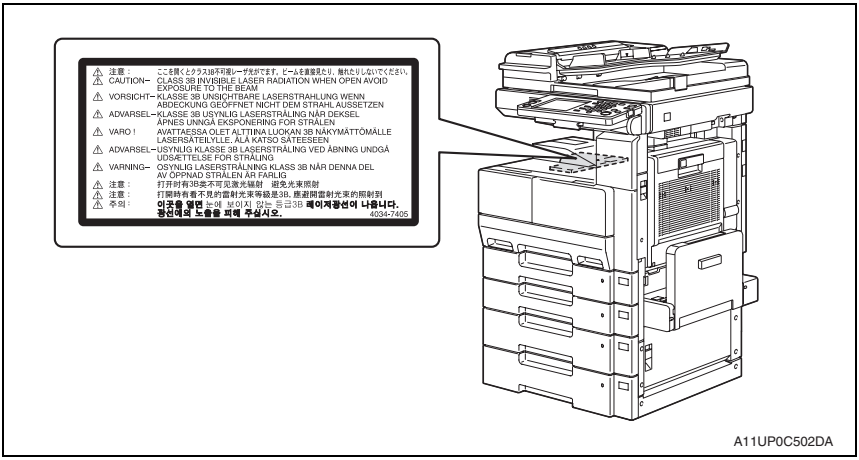
5.2 Laser Safety Label

- A laser safety labels is attached to the outside of the machine as shown below.



5.3 Laser Caution Label

- A laser caution label is attached to the inside of the machine as shown below.

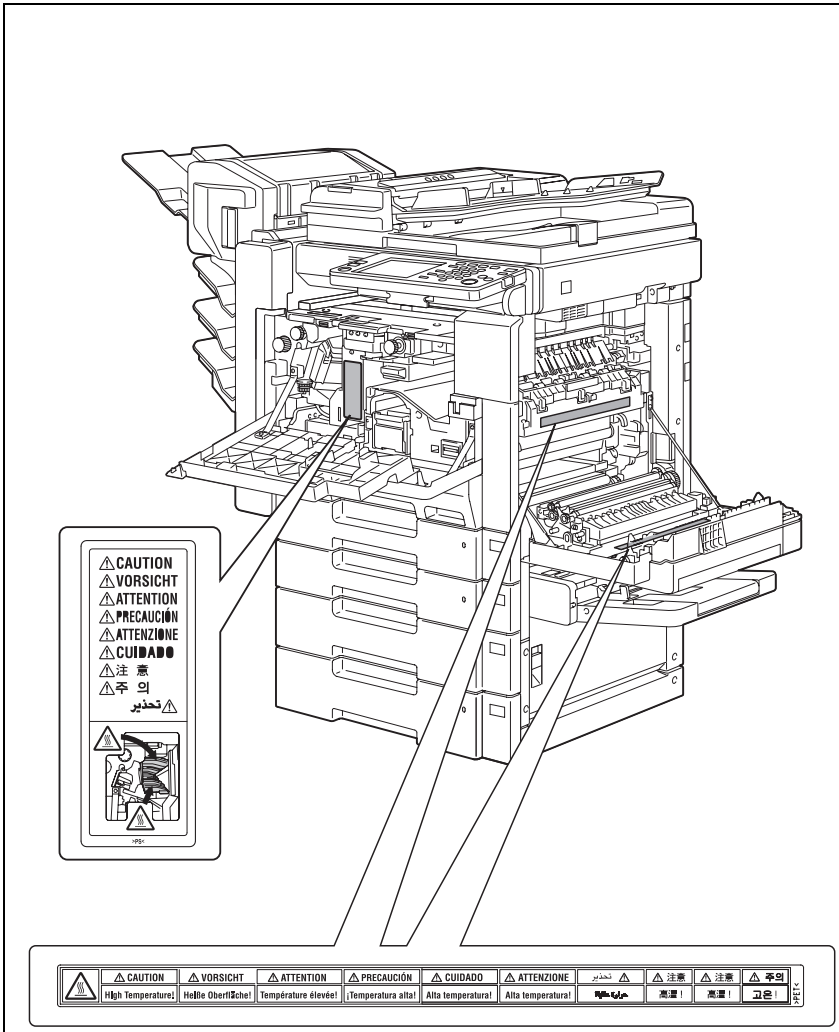


5.4 Precautions For Handling The Laser Equipment

- 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 copier OFF.
- If the job requires that the copier 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.

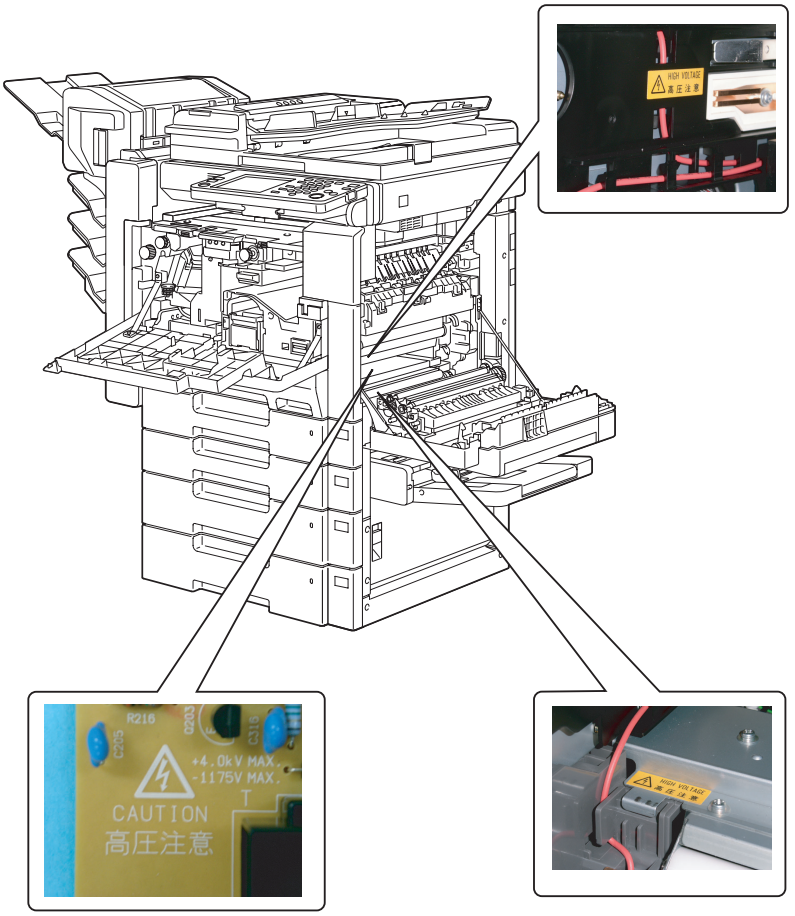
WARNING INDICATIONS ON THE MACHINE

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.



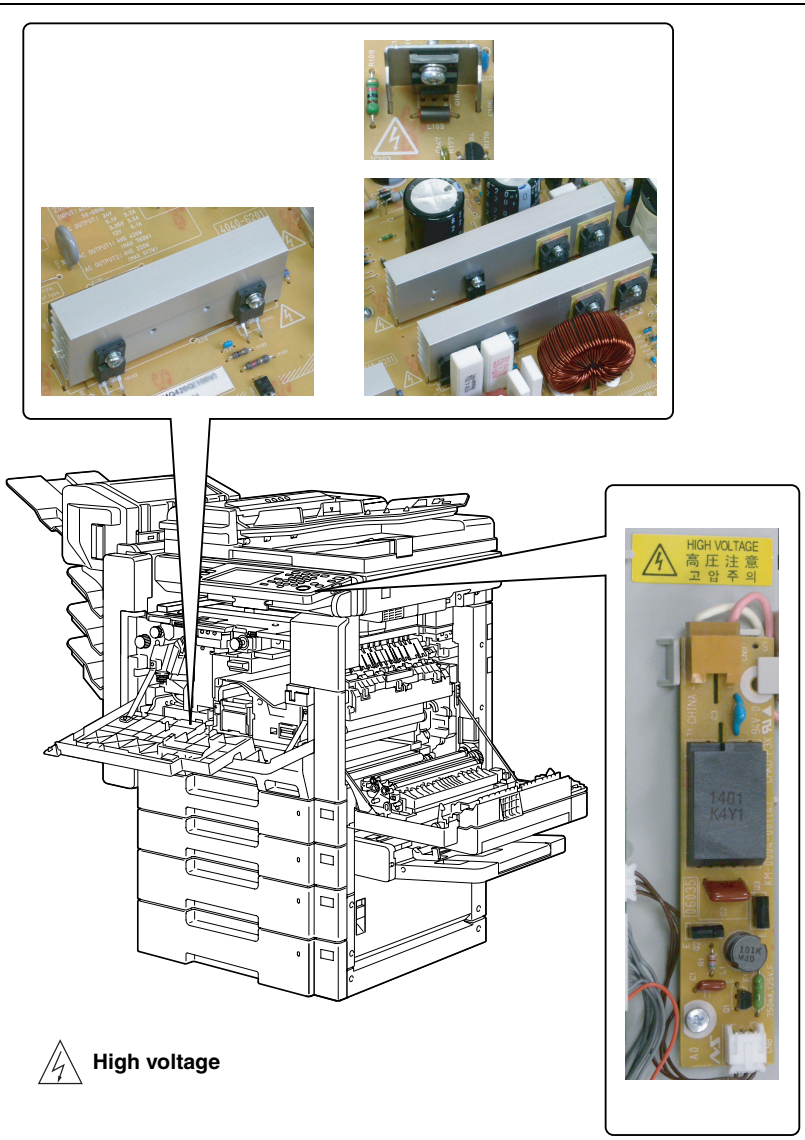
CAUTION

A11UP0C503DA



High voltage

A11UP0C504DA



A11UP0C505DA

⚠ CAUTION:

- **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

1. 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.

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:	Explanation of system configuration, product specifications, unit configuration, and paper path
COMPOSITION/OPERATION:	Explanation of configuration of each unit, operating system, and control system

<Field service section>

OUTLINE:	Explanation of system configuration, and product specifications
MAINTENANCE:	Explanation of service schedule, maintenance steps, service 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)	IC board:	Standard printer
(2)	bizhub 362/282/222:	Main body
(3)	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 combination of the OS's mentioned above:	
		Windows 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
	Short edge feeding	A4S
A3	Short edge feeding	A3

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

bizhub Main body 362/282/222

2008.12
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  to the left of the revised section.
  A number within represents the number of times the revision has been made.

- To indicate clearly a section revised, show  in the lower outside section of the corresponding page.
  A number within 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.

Date	Service manual Ver.	Revision mark	Descriptions of revision
2009/03	1.01	▲	Description addition of phase 2.0 / Error corrections
2008/12	1.0	—	Issue of the first edition

CONTENTS

bizhub 362/282/222 Main body

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

APPENDIX

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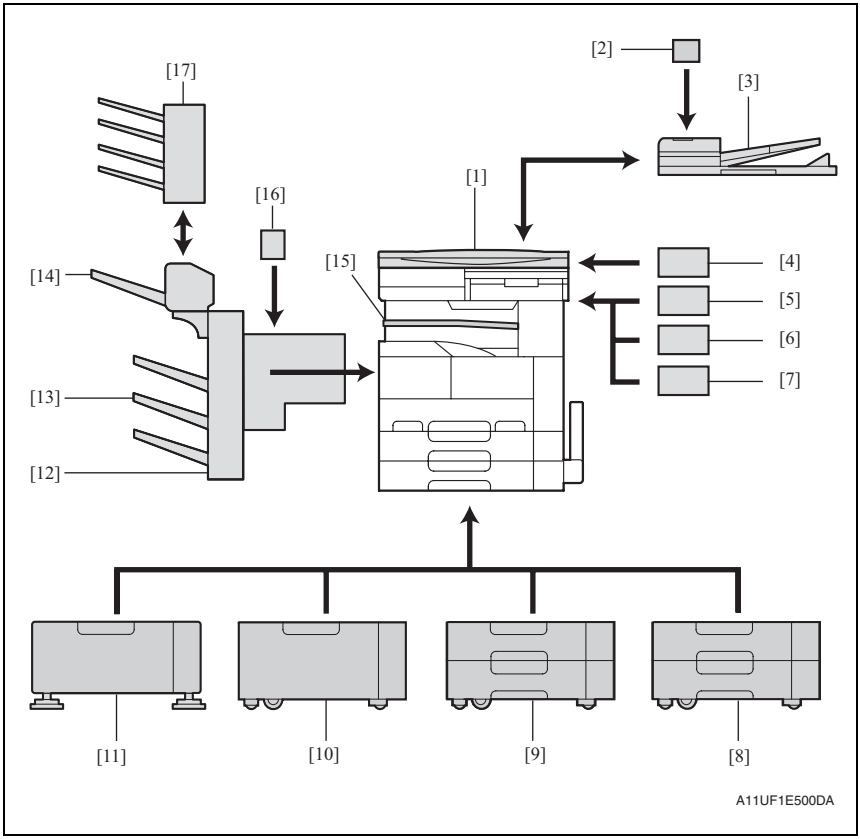
OUTLINE

1. System configuration

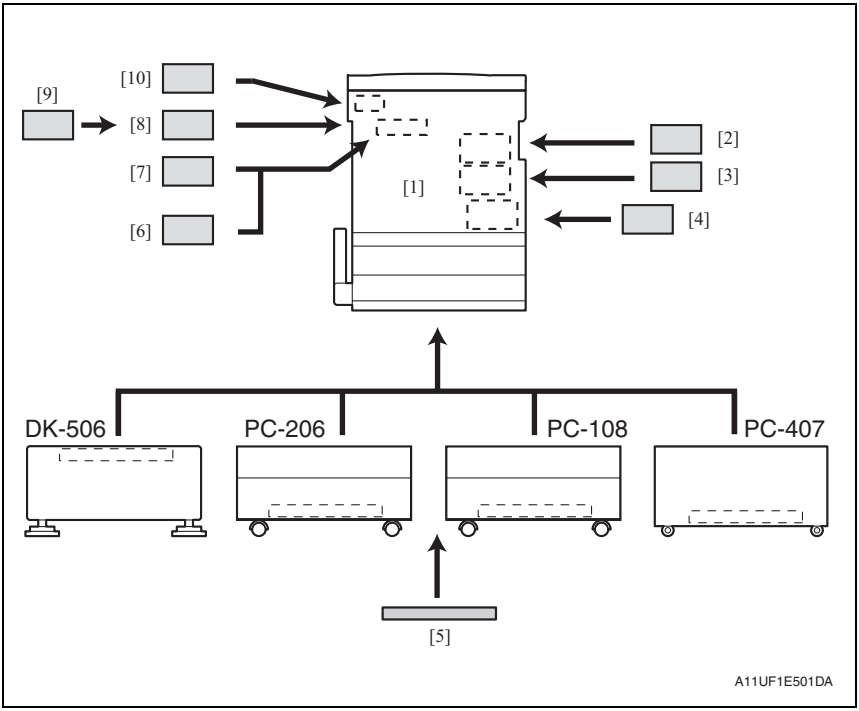
1/2 System Front View



[1] Original Cover (OC-510)
[2] Stamp Unit (SP-501)
[3] Reverse Automatic Document Feeder (DF-620)
[4] Data Controller (D-103)
[5] Key Counter Kit 4
[6] Key Counter *1
[7] Key Counter Mount Kit *2
[8] Paper Feed Cabinet (PC-407)
[9] Paper Feed Cabinet (PC-206)
[10] Paper Feed Cabinet (PC-108)
[11] Desk (DK-506)
[12] Finisher (FS-530)
[13] Output Tray (OT-602)
[14] Saddle Sticher (SD-507)
[15] Job Separator (JS-502)
[16] Punch Unit (PU-501)
[17] Mailbin Kit (MT-502)

*1: Key Counter Only
*2: Mount Pleate Only

2/2 System Rear View



[1]	Machine	[6]	Scanner Unit (SU-501) *1
[2]	Fax Kit (FK-503)	[7]	Expanded Memory Unit (EM-303/EM-304/EM-305) *1
[3]	Fax Multi Line (ML-502)	[8]	Hard Disk (HD-504) *2
[4]	Local Interface kit (EK-502)	[9]	Security Kit (SC-504)
[5]	Dehumidifier Heater 1C	[10]	Mount Kit (MK-709) *3

*1:The Expanded Memory Unit and Scanner Unit cannot be mounted at the same time.
*2: When mounting the hard disk, the Expanded Memory unit is necessary. However, if the Fax Kit or the Scanner Unit is mounted, the Expanded Memory unit is not necessary.
*3: Ones for Europe will be with the standard equipment.

2. Product specifications

A. Type

Type	Desktop/Console (dedicated cabinet or dedicated table)
Copying System	Electrostatic dry powdered image transfer to plain paper
PC Drum Type	OPC (organic photo conductor)
Scanning Density	Equivalent to 600 dpi
Exposure Lamp	cold-cathode tube
Print Density	Main scan: 600 dpi; sub-scan: 600 dpi
Platen	Stationary (mirror scan)
Original Scanning	Scanning in main scanning direction with a CCD
Registration	Rear left edge
Paper Feeding System (Standard) Three-way system	Multiple Bypass: 150 sheets Tray1: 500 sheets Tray2: 500 sheets
Exposure System	Electrostatic dry powdered image transfer to plain paper with a laser
Developing System	HMT developing system
Charging System	Comb electrode with scorotron system
Image Transfer System	Image transfer roller system
Paper Separating System	Separator fingers
Fusing System	Heat roller

B. Functions

Types of Original	Sheets, books, and three-dimensional objects	
Max. Original Size	A3 or 11 × 17	
Multiple Copies	1 to 999	
Warming-up Time	14 sec. or less (when the Auxiliary Power Switch is turned ON from a stabilized state, in which the Main Power Switch is ON and Auxiliary Power Switch is OFF, with the rated power source voltage and at a room temperature of 23°C)	
Image Loss	Leading edge: 4 mm (1/4 inch), Trailing edge: 4 mm (1/4 inch), Rear edge: 4 mm (1/4 inch), Front edge: 4 mm (1/4 inch)	
First Copy Time (Tray1, A4, full size)	4.8 sec. or less (bizhub 362)	
	5.3 sec. or less (bizhub 282)	
	5.3 sec. or less (bizhub 222)	
System Speed	160 m/s (bizhub 362)	
	140 m/s (bizhub 282, bizhub 222)	
Copying Speed for Multi-copy Cycle (A4, 8-1/2 × 11)	36 copies/min (bizhub 362)	
	28 copies/min (bizhub 282)	
	22 copies/min (bizhub 222)	
Fixed Zoom Ratios	Full size	x1.000
	Reduction	Metric Area: x0.500, x0.707, x0.816, x0.930 Inch Area: x0.500, x0.647, x0.733, x0.785, x0.930
	Enlargement	Metric Area: x1.154, x1.414, x2.000 Inch Area: x1.214, x1.294, x1.545, x2.000
Variable Zoom Ratios	×0.250 to ×4.000	in 0.001 increments

C. Types of Paper

Paper Source		Paper Source		
		Tray1	Tray2	Multiple Bypass
Copy paper type	Plain paper (56 to 90 g/m² / 15 to 24 lb)	❍	❍	❍
	Translucent paper	-	-	-
	OHP transparencies	-	-	❍
	Thick paper (91 to 210 g/m² / 24-1/4 to 55-3/4 lb)	-	-	❍
	Postcards	-	-	❍
	Envelopes	-	-	❍
	Labels	-	-	❍
	Thin Paper (50 to 55 g/m² / 13-1/4 to 14-3/4 lb)	-	-	❍
Copy paper dimensions	Max. (width × length)	297 to 420 mm 11.5 x 16.5 inches		297 to 432 mm 11 × 17 inches
	Min. (width × length)	148 to 210 mm 5.75 x 8.25 inches		90 to 140 mm 3.5 x 5.5 inches

❍: Reliably fed - : Feeding prohibited

D. Machine Specifications

Power Requirements	Voltage	AC 120 V, 220 - 240 V
	Frequency	50/60 Hz
Max Power Consumption	120 V: 1380 W ± 10 % 200 V: 1300 - 1470 W ± 10 %	
Dimensions	677 (W) x 710 (D) x 718 (H) mm	
Space Requirements	1,531 (W) x 1,138 (D) mm *1	
Mass	74 kg (including the Duplex Unit, Switchback Unit, and Imaging Unit)	

*1: Space requirements is the necessary area when DF-620, PC-206, FS-530 and SD-507 are mounted and bypass tray is fully opened.

E. Operating Environmen

Temperature	10 to 32 °C / 50 to 89.6 °F (with a fluctuation of 10 °C / 18 °F or less per hour)
Humidity	15 to 85 % (with a fluctuation of 20 %/h)

F. Built-in Controllers

Type	Built-in type controller	
CPU	RM5231	
Printer Driver	PCL5e Emulation PCL6 (XL Ver. 2.1)Emulation PostScript3 Emulation (3011.xx.xx)	
Scan Driver	TWAIN driver	
OS Compatibility	Server	Windows NT 4.0, Windows 2000 (Service Pack 4 or later), Windows Server 2003, or Windows Server 2008
	Client	Windows 2000, Windows XP, Windows Vista, or Windows NT 4.0 Mac OS 9.2 or later, Mac OS X 10.2, Mac OS X 10.3, Mac OS X 10.4, Mac OS X 10.5
Interface	Ethernet (10 Base-T/100 Base-TX), USB 2.0/1.1	

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

3. Periodical check

3.1 Maintenance items

3.1.1 bizhub 362

A. Periodical parts replacement 1 (per 50,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2		●			
4		Feed Roller	1		●			
5		Separation Roller	1		●			
6		Rollers and rolls			●			
7		Scanning Guide	1		●			
8		Reflective Sensor section	1		●			

B. Periodical parts replacement 2 (per 100,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Photo Conductor Unit	1			●		
4		Developer	1			●		
5		Toner Filter (Developing Unit)	1			●		

C. Periodical parts replacement 3 (per 150,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Transport section	Paper Dust Remover	1			●		
4	Image Transfer Section	Transfer Roller Unit	1			●		

D. Periodical parts replacement 4 (per 200,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2			●		
4		Feed Roller	1			●		
5		Separation Roller	1			●		

E. Periodical parts replacement 5 (per 300,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Bypass	Feed Roller	1			●		
4		Separation Roller Assy	1			●		
5	Tray 1	Feed Roller	1			●		
6		Pick-up Roller	1			●		
7		Separation Roller Assy	1			●		
8	Tray 2	Feed Roller	1			●		
9		Pick-up Roller	1			●		
10		Separation Roller Assy	1			●		
11	PC-108	Pick-up Roller	1			●		
12	PC-206	Feed Roller	1			●		
13	PC-407	Separation Roller Assy	1			●		
14	FS-530	Rollers and rolls			●			
15	MT-502	Rollers and rolls			●			
16	SD-507	Rollers and rolls			●			

F. Periodical parts replacement 6 (per 400,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Developing Unit	1			●		
4		Toner Filter (Main body)	1			●		

G. Periodical parts replacement 7 (per 450,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Fusing section	Fusing Unit	1			●		

H. Periodical parts replacement 8 (per 900,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Transport section	Registration Roller Bearing				●		
4		Registration Roller Gear				●		

3.1.2 bizhub 282

A. Periodical parts replacement 1 (per 50,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2		●			
4		Feed Roller	1		●			
5		Separation Roller	1		●			
6		Rollers and rolls			●			
7		Scanning Guide	1		●			
8		Reflective Sensor section	1		●			

B. Periodical parts replacement 2 (per 80,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Photo Conductor Unit	1			●		
4		Developer	1			●		
5		Toner Filter (Developing Unit)	1			●		

C. Periodical parts replacement 3 (per 150,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Transport section	Paper Dust Remover	1			●		
4	Image Transfer Section	Transfer Roller Unit	1			●		

D. Periodical parts replacement 4 (per 200,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2			●		
4		Feed Roller	1			●		
5		Separation Roller	1			●		

E. Periodical parts replacement 5 (per 300,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Bypass	Feed Roller	1			●		
4		Separation Roller Assy	1			●		
5	Tray 1	Feed Roller	1			●		
6		Pick-up Roller	1			●		
7		Separation Roller Assy	1			●		
8	Tray 2	Feed Roller	1			●		
9		Pick-up Roller	1			●		
10		Separation Roller Assy	1			●		
11	PC-108 PC-206 PC-407	Pick-up Roller	1			●		
12		Feed Roller	1			●		
13		Separation Roller Assy	1			●		
14	FS-530	Rollers and rolls			●			
15	MT-502	Rollers and rolls			●			
16	SD-507	Rollers and rolls			●			

F. Periodical parts replacement 6 (per 320,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Developing Unit	1			●		
4		Toner Filter (Main body)	1			●		

G. Periodical parts replacement 7 (per 450,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Fusing section	Fusing Unit	1			●		

3.1.3 bizhub 222

A. Periodical parts replacement 1 (per 50,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubrication	Descriptions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2		●			
4		Feed Roller	1		●			
5		Separation Roller	1		●			
6		Rollers and rolls			●			
7		Scanning Guide	1		●			
8		Reflective Sensor section	1		●			

B. Periodical parts replacement 2 (per 65,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubrication	Descriptions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Photo Conductor Unit	1			●		
4		Developer	1			●		
5		Toner Filter (Developing Unit)	1			●		

C. Periodical parts replacement 3 (per 150,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubrication	Descriptions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Transport section	Paper Dust Remover	1			●		
4	Image Transfer Section	Transfer Roller Unit	1			●		

D. Periodical parts replacement 4 (per 200,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubrication	Descriptions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	DF-620	Pick-up Roller	2			●		
4		Feed Roller	1			●		
5		Separation Roller	1			●		

E. Periodical parts replacement 5 (per 260,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Processing section	Developing Unit	1			●		
4		Toner Filter (Main body)	1			●		

F. Periodical parts replacement 6 (per 300,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Bypass	Feed Roller	1			●		
4		Separation Roller Assy	1			●		
5	Tray 1	Feed Roller	1			●		
6		Pick-up Roller	1			●		
7		Separation Roller Assy	1			●		
8	Tray 2	Feed Roller	1			●		
9		Pick-up Roller	1			●		
10		Separation Roller Assy	1			●		
11	PC-108 PC-206 PC-407	Pick-up Roller	1			●		
12		Feed Roller	1			●		
13		Separation Roller Assy	1			●		
14	FS-530	Rollers and rolls			●			
15	MT-502	Rollers and rolls			●			
16	SD-507	Rollers and rolls			●			

G. Periodical parts replacement 7 (per 450,000-print)

No	Class	Parts to be replaced	Number of personnel	Check	Clean	Replace	Lubri-cation	Descrip-tions
1	Overall	Paper take-up and image conditions		●				
2		Appearance		●	●			
3	Fusing section	Fusing Unit	1			●		

3.2 Maintenance parts

- To ensure that the machine produces good copies and to extend its service life, it is recommended that the maintenance jobs described in this schedule be carried out as instructed.
- Replace with reference to the numeric values displayed on the Life counter.
- The conditions are: A4 or 8-1/2x11, standard mode, and no Sleep.

3.2.1 Replacement parts

A. Main body

No	Classification	Parts name		Quantity	Actual durable cycle *1	Parts No.	Descriptions	Ref.Page in this manual
1	Bypass	Feed Roller		1	300 K	4131-3001-##		P.18
2		Separation Roller Assy		1	300 K	4034-0151-##		P.19
3	Tray 1	Feed Roller		1	300 K	4030-3005-##	Replace those three parts at the same time.	P.20
4		Pick-up Roller		1	300 K	4030-3005-##		P.21
5		Separation Roller Assy		1	300 K	4030-0151-##		P.23
6	Tray 2	Feed Roller		1	300 K	4030-3005-##	Replace those three parts at the same time.	P.25
7		Pick-up Roller		1	300 K	4030-3005-##		P.26
8		Separation Roller Assy		1	300 K	4030-0151-##		P.28
9	Transport section	Registration Roller Bearing		4	900 K	1164-3549-##		P.30
10		Registration Roller Gear 1		1	900 K	1164-3508-##		P.30
11		Registration Roller Gear 2		1	900 K	1164-3515-##		P.30
12		Paper Dust Remover		1	150 K	4040-0778-##		P.31
13	Fusing section	Fusing Unit		1	450 K	4040-R710-##	120 V/127 V areas only.	P.37
						4040-R711-##	220 - 240 V areas only.	
						4040-R712-##	110 V areas only.	
14	Transfer section	Transfer Roller Unit		1	150 K	4040-R725-##		P.38
15	Processing section	Photo Conductor Unit	bizhub 362	1	100 K	-	*2	P.34
16			bizhub 282	1	80 K			
17			bizhub 222	1	65 K			
18		Developer	bizhub 362	1	100 K	-		P.34
19			bizhub 282	1	80 K			
20			bizhub 222	1	65 K			
21		Developing Unit	bizhub 362	1	400 K	4040-0752-##	*3	P.39
22			bizhub 282	1	320 K	4040-0752-##		
23			bizhub 222	1	260 K	4040-0752-##		
24		Toner Filter (Developing Unit)	bizhub 362	1	100 K	4040-5217-##	*2	P.32
25			bizhub 282	1	80 K	4040-5217-##		
26			bizhub 222	1	65 K	4040-5217-##		

No	Classification	Parts name		Quantity	Actual durable cycle *1	Parts No.	Descriptions	Ref.Page in this manual
27	Processing section	Toner Filter (Main body)	bizhub 362	1	400 K	4040-2093-##	*3	P.33
28			bizhub 282	1	320 K	4040-2093-##		
29			bizhub 222	1	260 K	4040-2093-##		
30		Ozone Filter		1	300 K	4011-2031-##		P.33

*1: Actual durable cycle is the Special Parts Counter value.
*2: The Photo Conductor Unit and Toner Filter (Developing Unit) should be replaced with new ones at the same time.
*3: The Developing Unit and Toner Filter (Main body) should be replaced with new ones at the same time.

B. Option

No	Classification	Parts name	Quantity	Actual durable cycle *1	Parts No.	Descriptions	Ref.Page in this manual
1	PC-108 PC-407	Pick-up Roller	1	300 K	4030-3005-##	Replace those three parts at the same time.	*2
2		Feed Roller	1	300 K	4030-3005-##		
3		Separation Roller Assy	1	300 K	4030-0151-##		
4	PC-206	Pick-up Roller	2	300 K	4030-3005-##	Replace those three parts at the same time.	
5		Feed Roller	2	300 K	4030-3005-##		
6		Separation Roller Assy	2	300 K	4030-0151-##		
7	DF-620	Pick-up Roller	1	200 K	4344-5003-##	Replace those three parts at the same time.	
8		Feed Roller	1	200 K	4582-3014-##		
9		Separation Roller	1	200 K	4582-3047-##		
10	SP-501	Spare TX Marker Stamp 2	1	As required	-	Ink running out	

*1: Actual durable cycle is the Special Parts Counter value.
*2: See each Option Service Manual.

3.2.2 Cleaning parts

No	Classification	Parts name	Actual durable cycle *1	Descriptions	Ref.Page in this manual
1	DF-620	Pick-up Roller	50 K		*2
2		Feed Roller	50 K		
3		Separation Roller	50 K		
4		Misc. rollers and rolls	50 K		
5		Scanning Guide	50 K		
6		Reflective Sensor section	50 K		
7	FS-530	Rollers and rolls	300 K		*3
8	MT-502	Rollers and rolls	300 K		*4
9	SD-507	Rollers and rolls	300 K		*5

*1: Actual durable cycle is the Special Parts Counter value.
*2: See DF-620 Service manual.
*3: See FS-530 Service manual.
*4: See MT-502 Service manual.
*5: See SD-507 Service manual.

3.3 Concept of parts life

	Description	Life value (Specification value)	Lift stop
Photo Conductor Unit	The distance through which the Photo Conductor has been rotated is converted to a corresponding number of printed pages produced on A4 paper at 4P/J and the life condition is detected when a predetermined value is reached.	100 K *1 *3	Not stopped *2
Developer			
Developing Unit	Photo Conductor Unit × 4 times	400 K *1	Not stopped *2
Fusing Unit	Count the number of times paper is fed out.	450 K *1	Not stopped

*1: On the bizhub 362
*2: The setting can be changed to “stopped” by using the soft switch of the Tech. Rep. mode.
*3: The Photo Conductor Unit and Developer have to be replaced together.

A. Conditions for Life Specifications Values

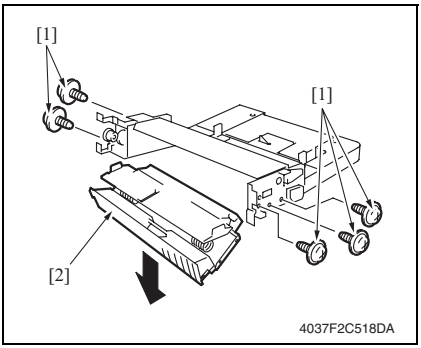
- The life specification values represent the number of copies made or figures equivalent to it when given conditions (see the Table given below) are met. They can be more or less depending on the machine operating conditions of each individual user.

Item	Description		
	bizhub 362	bizhub 282	bizhub 222
Job Type	4 page/Job	3 page/Job	2 page/Job
Paper Size	A4		
Original Density	B/W ratio: 6 %		
Average Copy Volume (copies/month)	7,000	4,000	2,500

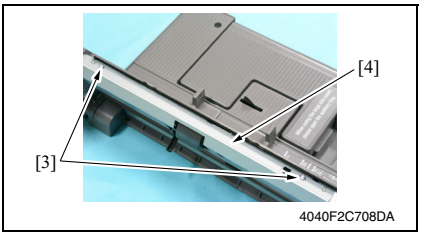
3.4 Maintenance procedure (Periodical check parts)

3.4.1 Replacing the Bypass Tray Feed Roller

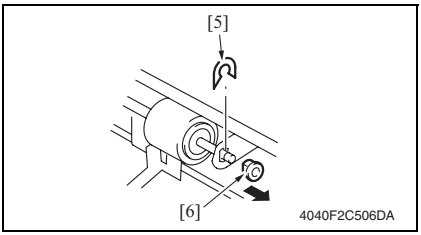
1. Remove the Multi Bypass Unit.
See P.72



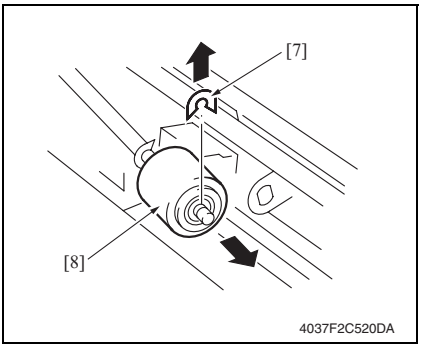
2. Remove five screws [1] and the Manual Bypass Unit Lower Frame [2].



3. Remove two screws [3] and the Feed Roller Cover [4].



4. Snap off the C-clip [5] for the Feed Roller, and remove the bearing. [6].



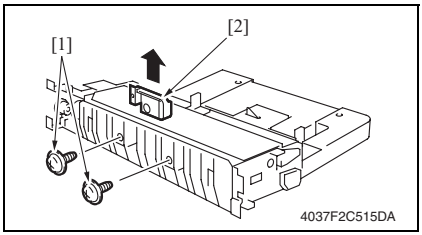
5. Snap off the C-clip [7], and remove the Bypass Feed Roller [8].
6. To reinstall, reverse the order of removal.
7. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Bypass] and clear the counter.

NOTE

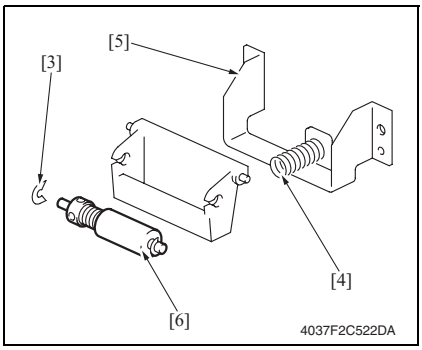
- **Replace the Bypass Feed Roller and the Bypass Separation Roller Assy at the same time.**

3.4.2 Replacing the Bypass Tray Separation Roller Assy

1. Remove the Multi Bypass Unit.
See P.72



2. Remove two screws [1], and remove Bypass Paper Separation Roller fixing bracket Assy [2].

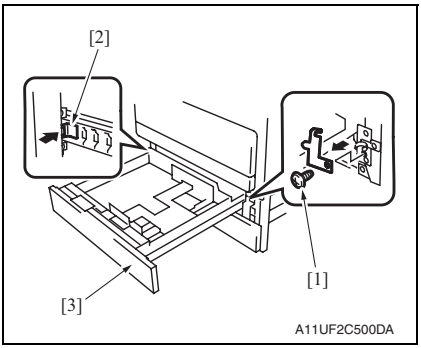


3. Snap off the C-clip [3], and remove the spring [4] and the guide plate [5]. Remove the Bypass Paper Separation Roller Assy [6].
4. To reinstall, reverse the order of removal.
5. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Bypass] and clear the counter.

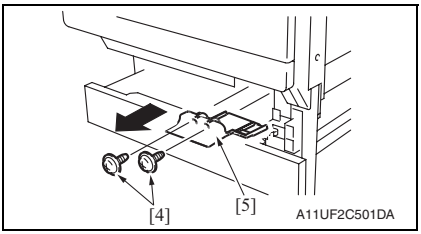
NOTE

- **Replace the Bypass Feed Roller and the Bypass Separation Roller Assy at the same time.**

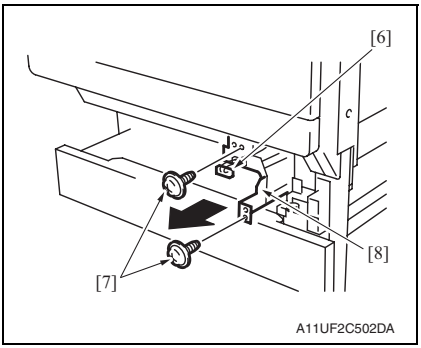
3.4.3 Replacing the Tray 1 Feed Roller



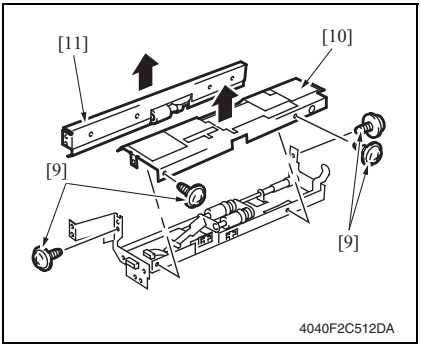
1. Remove the screw [1] and, holding the stopper [2], remove Tray 1 [3].



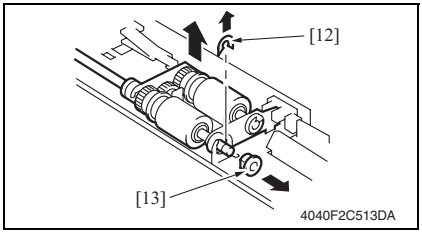
2. Remove two screws [4] and the Connector Cover [5].



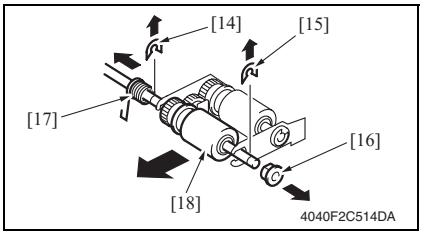
3. Remove the Connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].



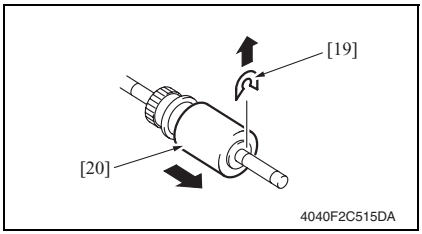
5. Remove four screws [9] and the Tray 1 Feed Roller Assy Cover [10] and the Tray 1 Separator Roll Assy [11].



6. Remove the C-clip [12] and the bearing [13].

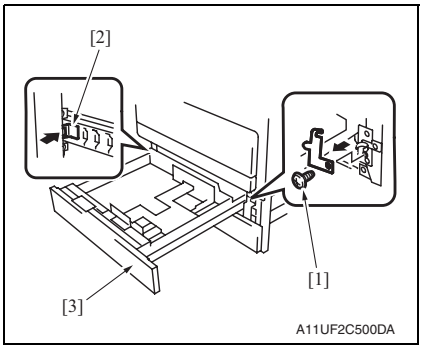


7. Remove the C-clip [14], E-ring [15], bearing [16] and spring [17] to remove the Tray 1 Feed Roller Assy [18].

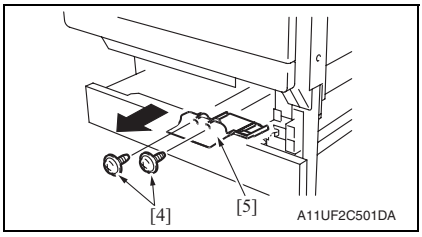


8. Remove the C-clip [19] and the Tray 1 Feed Roller [20].
9. To reinstall, reverse the order of removal.
10. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 1] and clear the counter.

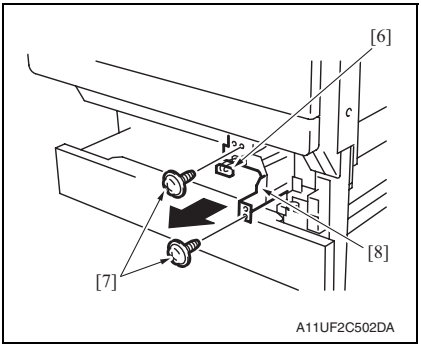
3.4.4 Replacing the Tray 1 Pick-up Roller



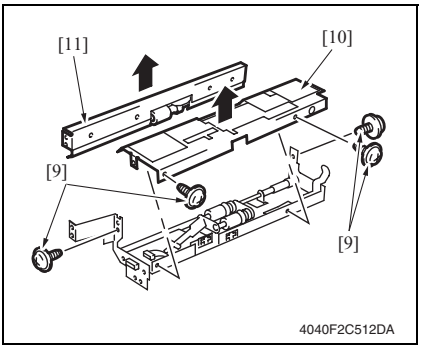
1. Remove the screw [1] and, holding the stopper [2], remove Tray 1 [3].



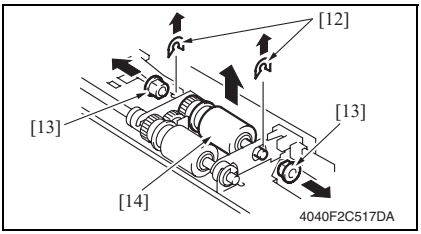
2. Remove two screws [4] and the Connector Cover [5].



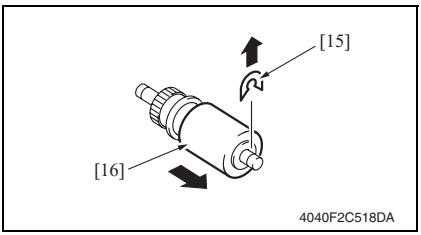
3. Remove the Connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].



5. Remove four screws [9] and the Tray 1 Feed Roller Assy Cover [10] and the Tray 1 Separator Roll Assy [11].

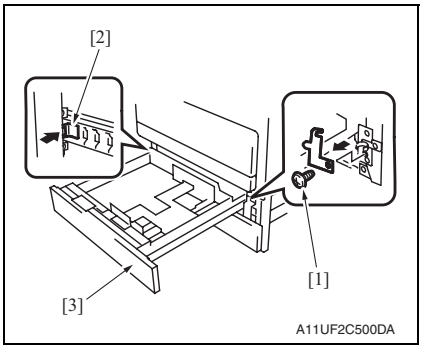


6. Remove two C-clips [12] and two bearings [13]. Then, remove the Pick-up Roller Assy [14].

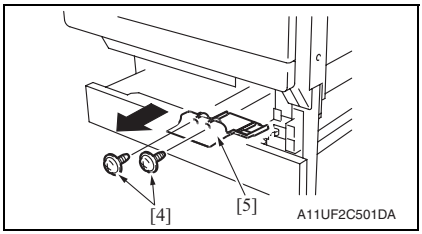


7. Remove one C-clip [15] and the Tray 1 Pick-up Roller [16].
8. To reinstall, reverse the order of removal.
9. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 1] and clear the counter.

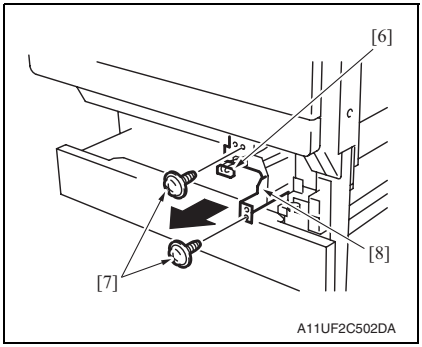
3.4.5 Replacing the Tray 1 Separation Roller Assy



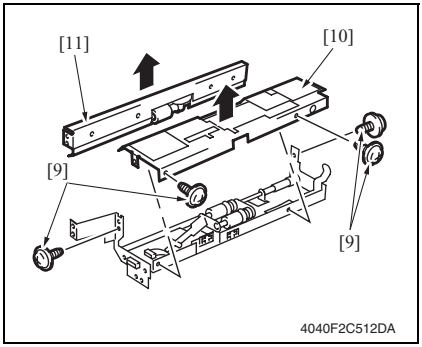
1. Remove the screw [1] and, holding the stopper [2], remove Tray 1 [3].



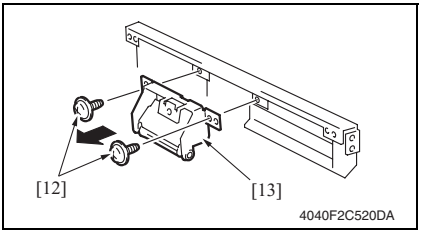
2. Remove two screws [4] and the Connector Cover [5].



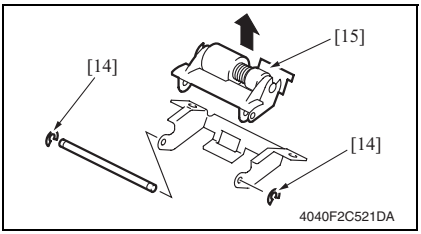
3. Remove the Connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].



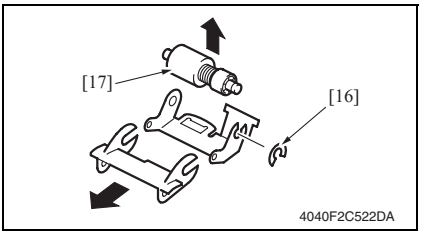
5. Remove four screws [9] and the Tray 1 Feed Roller Assy Cover [10] and the Tray 1 Separator Roll Assy [11].



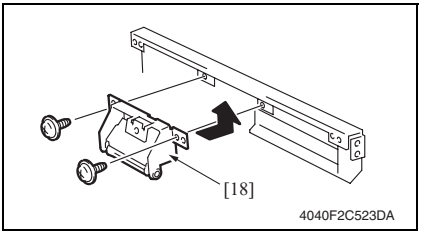
6. Remove two Screws [12] and the Tray 1 Separation Roller installation plate Assy [13].



7. Remove two C-clips [14] and the Tray 1 Separation Roller installation plate [15].



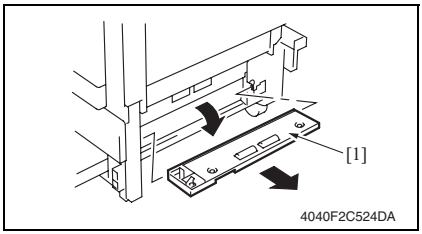
8. Remove the C-clip [16] and the Tray 1 Separation Roller Assy [17].
9. To reinstall, reverse the order of removal.
10. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 1] and clear the counter.



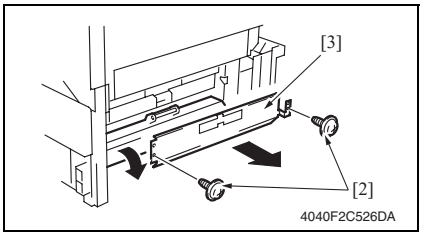
NOTE

- **Install the Tray 1 Separation Roller Mounting Bracket Assy [18] while pressing the holder up so that it coheres to the metal bracket of the copier.**

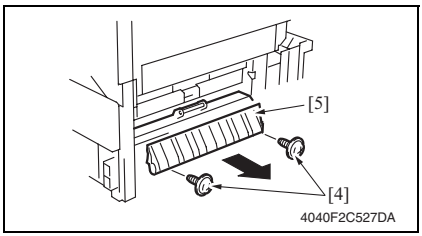
3.4.6 Replacing the Tray 2 Feed Roller



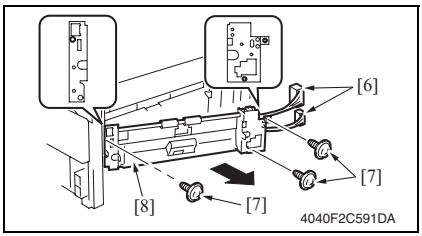
1. Slide out the Tray 2.
2. Remove the Multi Bypass Unit. See P.72
3. Remove the Lower Right Cover [1].



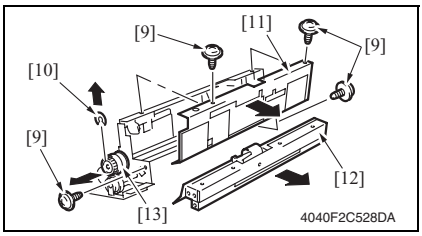
4. Remove two screws [2] and the Transport Roller Cover [3].



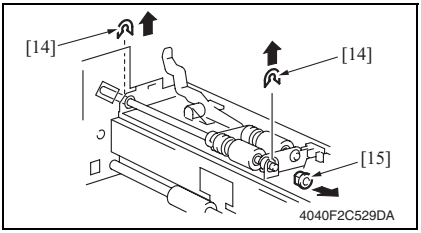
5. Remove two screws [4] and the Misfeed Clearing Cover [5].



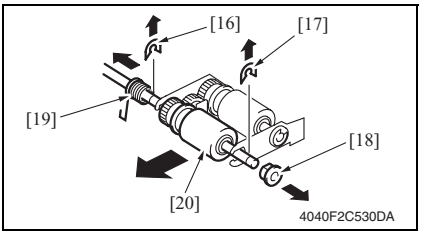
6. Unplug two connectors [6].
7. Remove three screws [7] and the Tray 2 Feed Roller Assy [8].



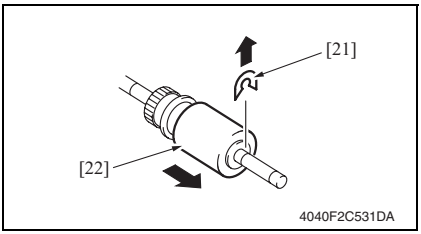
8. Remove four screws [9] and the C-clip [10]. Then, remove the Tray 2 Feed Roller Cover [11], the Tray 2 Separation Roller Assy [12], and the Tray 2 Feed Roller Clutch [13].



9. Remove two C-clips [14] and the bearing [15].

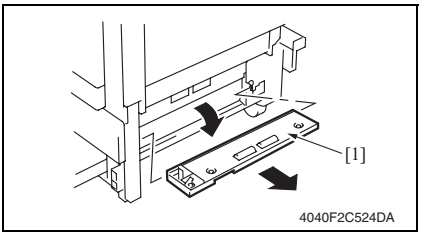


10. Remove the C-clip [16], E-ring [17], bearing [18] and spring [19] to remove the Tray 2 Feed Roller Assy [20].

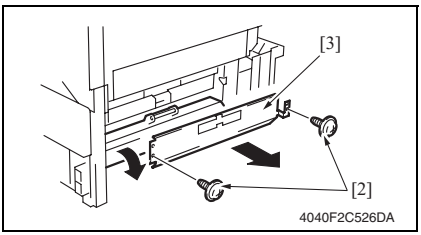


11. Remove the C-clip [21] and the Tray 2 Feed Roller [22].
12. To reinstall, reverse the order of removal.
13. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 2] and clear the counter.

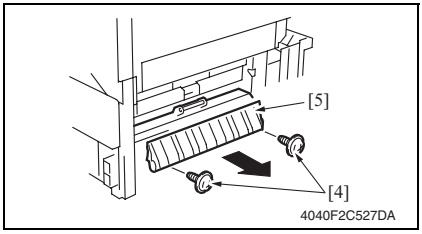
3.4.7 Replacing the Tray 2 Pick-up Roller



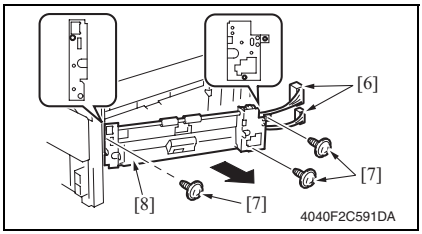
1. Slide out the Tray 2.
2. Remove the Multi Bypass Unit. See P.72
3. Remove the Lower Right Cover [1].



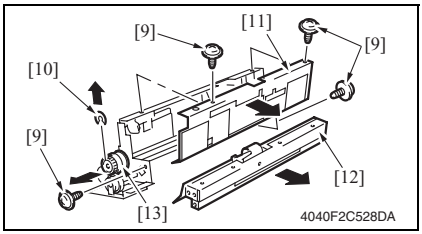
4. Remove two screws [2] and the Transport Roller Cover [3].



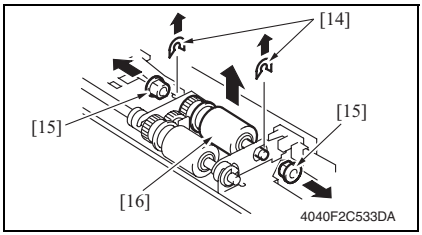
5. Remove two screws [4] and the Misfeed Clearing Cover [5].



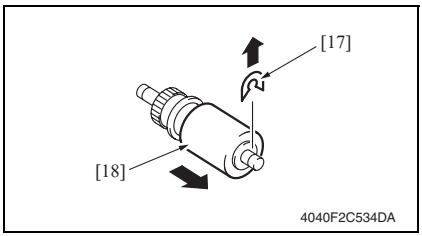
6. Unplug two connectors [6].
7. Remove three screws [7] and the Tray 2 Feed Roller Assy [8].



8. Remove four screws [9] and the C-clip [10]. Then, remove the Tray 2 Feed Roller Cover [11], the Tray 2 Separation Roller Assy [12], and the Tray 2 Feed Roller Clutch [13].

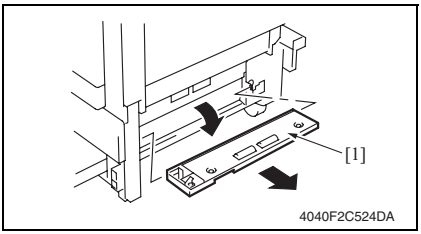


9. Remove two C-clips [14] and two bearings [15]. Then, remove the Tray 2 Pick-up Roller Assy [16].

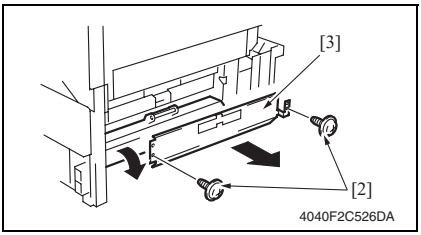


10. Remove the C-clip [17] and the Tray 2 Pick-up Roller [18].
11. To reinstall, reverse the order of removal.
12. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 2] and clear the counter.

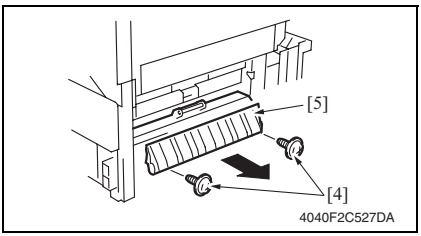
3.4.8 Replacing the Tray 2 Separation Roller



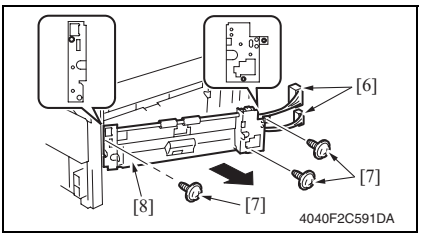
1. Slide out the Tray 2.
2. Remove the Multi Bypass Unit. See P.72
3. Remove the Lower Right Cover [1].



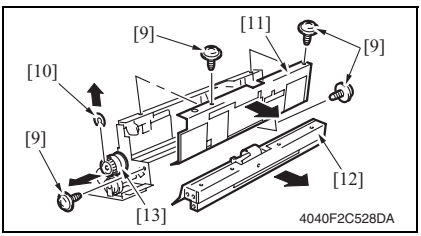
4. Remove two screws [2] and the Transport Roller Cover [3].



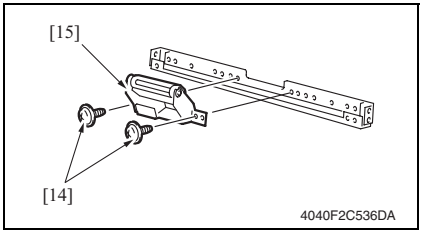
5. Remove two screws [4] and the Misfeed Clearing Cover [5].



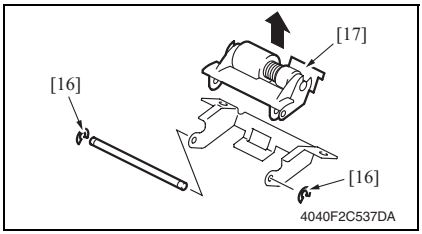
6. Unplug two connectors [6].
7. Remove three screws [7] and the Tray 2 Feed Roller Assy [8].



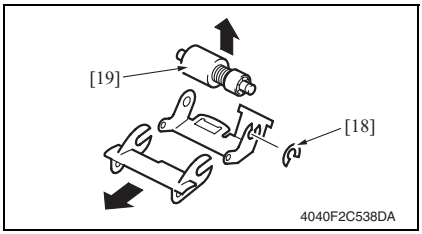
8. Remove four screws [9] and the C-clip [10]. Then, remove the Tray 2 Feed Roller Cover [11], the Tray 2 Separation Roller Assy [12], and the Tray 2 Feed Roller Clutch [13].



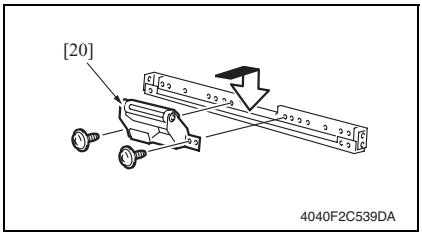
9. Remove two Screws [14] and the Tray 2 Separation Roller installation plate Assy [15].



10. Remove two C-clips [16] and the Tray 2 Separation Roller installation plate [17].



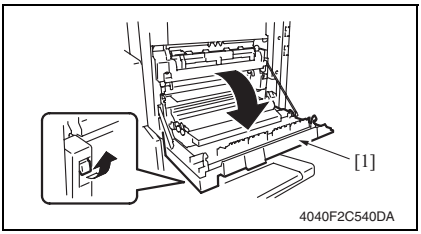
11. Remove the C-clip [18] and the Tray 2 Separation Roller Assy [19].
12. To reinstall, reverse the order of removal.
13. Select [Tech. Rep. Mode] → [Counter] → [Special Parts Counter] → [Tray 2] and clear the counter.



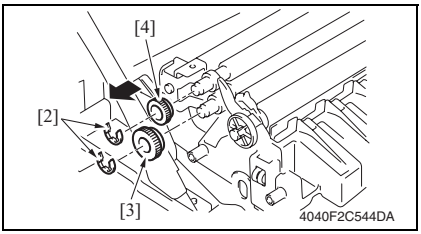
NOTE

- **Install the Tray 2 Separation Roller Mounting Bracket Assy [20] while pressing the holder up so that it coheres to the metal bracket of the copier.**

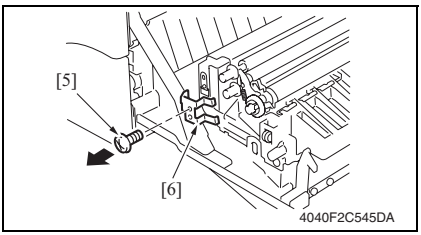
3.4.9 Replacing of the Registration Roller Bearings and Registration Roller Gears 1, 2



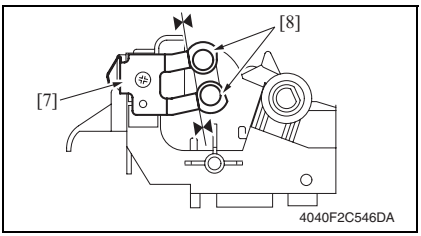
1. Open the Right Door [1].



2. Remove two E-rings [2], Registration Roller Gears 1 [3] and Registration Roller Gears 2 [4].

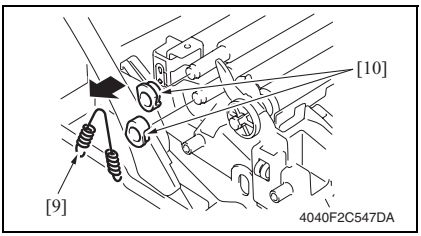


3. Remove the screw [5] and the ground plate [6].



⚠ CAUTION

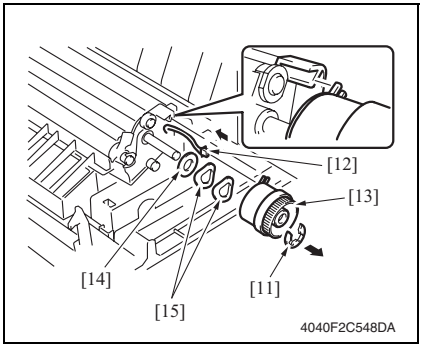
- **When reinstalling the ground plate, make sure that the ground plate [7] is in contact with the side faces of the bushings [8].**



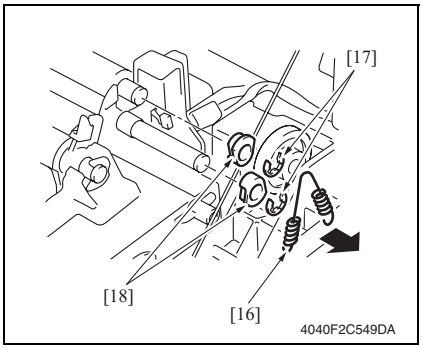
4. Remove the spring [9] and two Registration Roller Bearings [10].

NOTE

- **When reinstalling the bearings, make sure that the flanges of the bearings are on the outside.**



5. Remove the E-ring [11] and unplug the connector [12]. Then, remove the Registration Roller Clutch [13].
6. Remove the washer [14] and two wave washers [15].

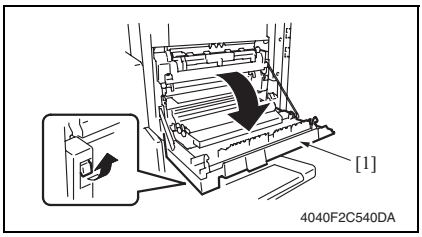


7. Remove the spring [16], two E-rings [17], and two Registration Roller Bearings [18].

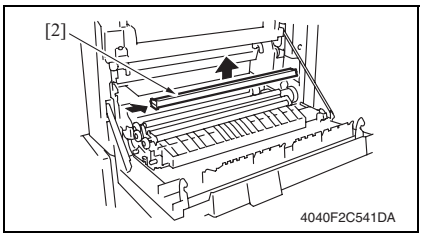
NOTE

- **When reinstalling the bearings, make sure that the flanges of the bearings are on the outside.**

3.4.10 Cleaning of the Paper Dust Remover

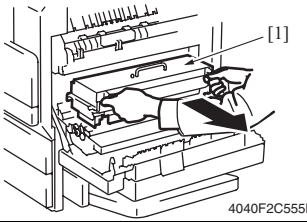


1. Open the Right Door [1].

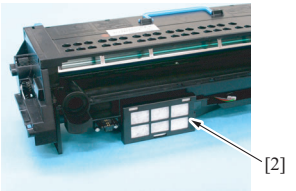


2. Remove the Paper Dust Removal [2].

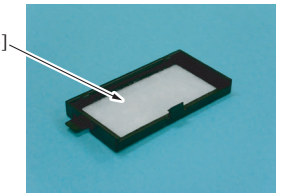
3.4.11 Replacing of the Toner Filter (Developing Unit)



1. Open the Right Door.
2. Remove the IU [1].



3. Remove the Toner Filter Cover [2].

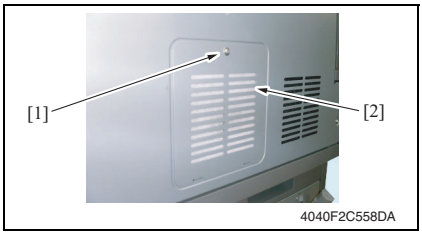


4. Remove the Toner Filter (Developing Unit) [3].

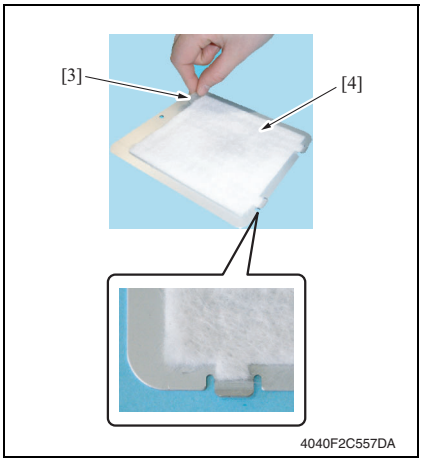
NOTE

- **Replace the Photo Conductor Unit with a new one at the same time.**

3.4.12 Replacing of the Toner Filter (Main body)



1. Remove the screw [1] and the Toner Filter Rear Cover [2].

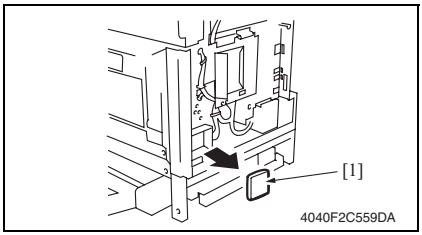


2. Pull on the tape portion [3] and peel off the Toner Filter (Main body) [4].

NOTE

- **When mounting the filter, not the correct mounting position that is shown on the left.**
- **Replace the Developing Unit with a new one at the same time.**

3.4.13 Replacement of the Ozone Filter



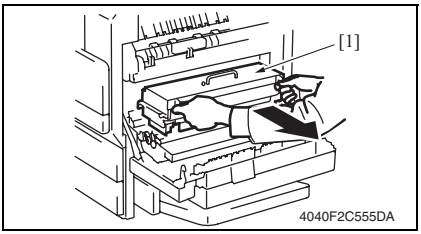
1. Remove the Upper Rear Cover. See P.51
2. Remove the Rear Cover. See P.52
3. Remove the Ozone Filter [1].

3.4.14 Replacement of the Photo Conductor Unit and Developer

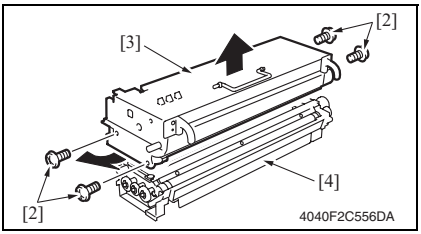
1. Select Tech. Rep. Mode → [Counter] → [Special Parts Counter] → [PC Life].
2. Press the Clear key to clear the counter value.
3. Turn OFF the main power switch.

NOTE

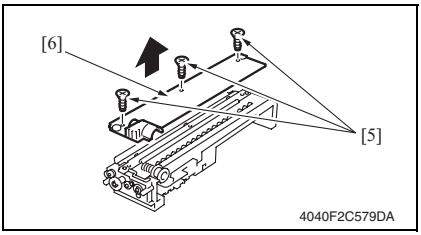
- **Clear the PC Life counter before removing the IU.**
- **After clearing the PC Life counter, be sure to turn OFF the main power switch.**
- **The Developer has to be replaced together with the Photo Conductor Unit**



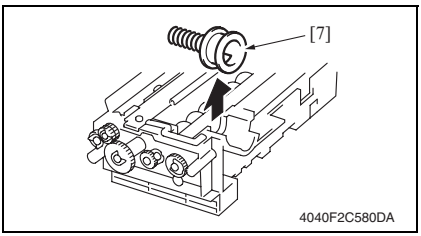
4. Open the Right Door.
5. Remove the IU [1].



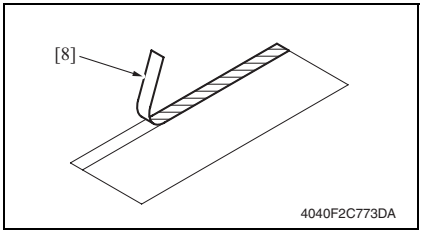
6. Remove four screws (silver) [2] and disassemble the Photo Conductor Unit [3] and the Developing Unit [4].



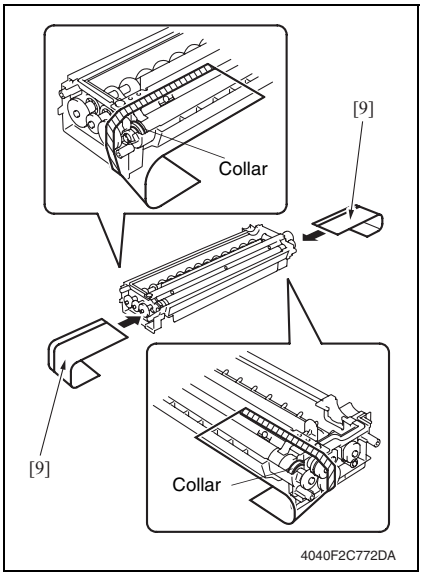
7. Remove three screws [5] and the Developer Scattering Prevention Plate [6].



8. Remove the Toner Supply Port [7].



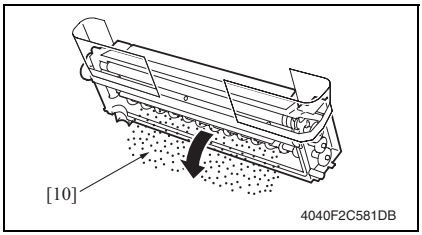
9. Remove the liner from the mylar sheet [8] furnished with the drum.



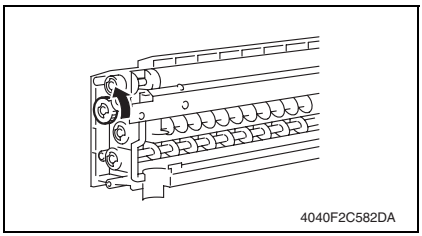
10. Attach two mylar sheets [9].

NOTE

- **Make sure that the collar is completely covered with the mylar sheet [9].**

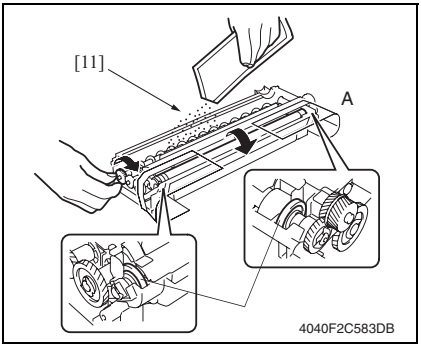


11. Remove the developer [10].



Removal of the Developer

- **Dump the developer on the Sleeve Roller by rotating the gear in the direction of the arrow.**
- **If you rotate the gear in reverse, mylar for cleaning the ATDC Sensor.**
- **Dump developer until almost no developer sticks to the Sleeve Roller.**

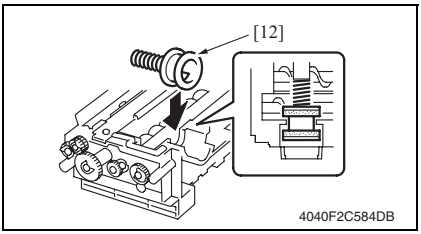


12. Set the developer [11] while rotating the gear in the direction of the arrow.

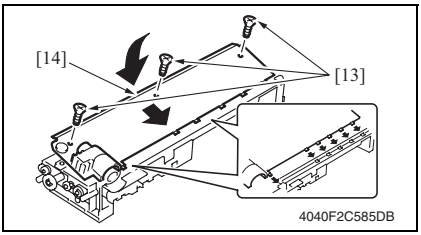
NOTE

- **Not touching the gear of A side.**
- **Be sure not to let starter get inside the collar.**

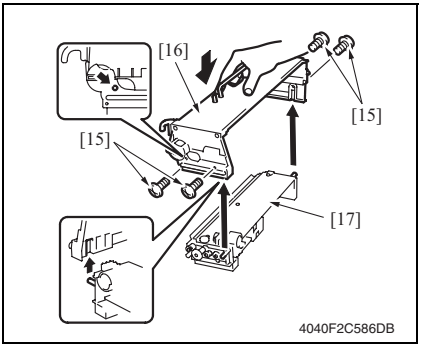
13. Remove the mylar sheets that were attached in step 10.



14. Reinstall the Toner Supply Port [12].



15. Using three screws [13], secure the Developer Scattering Prevention Plate [14].



16. Install the four screws [15] to secure the New Photo Conductor Unit [16] and Developing Unit [17].

17. Install the IU in the copier.

18. Turn ON the main power switch.

19. Select Tech. Rep. Mode → [Function] → [F8] and press the Start key.

NOTE

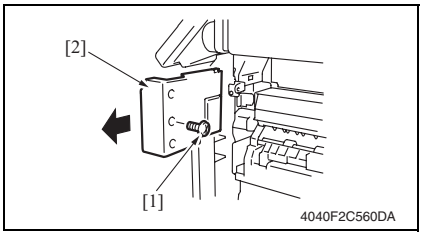
- **After replacing the developer, be sure to execute F8 under Function of Tech. Rep. Mode.**
- **When the main power switch is turned ON, execute F8 quickly.**

3.5 Replacing the unit

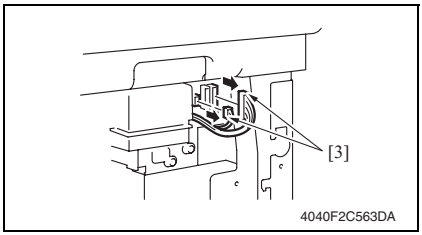
3.5.1 Replacement of the Fusing Unit

⚠ CAUTION

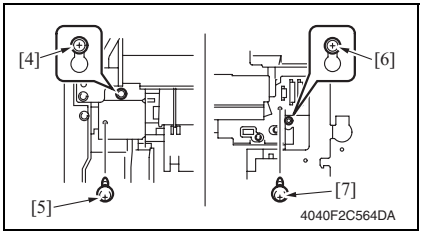
- **From the safety viewpoint, the Fusing Unit is replaced as a unit. No parts intended for other models should be used for the Fusing Unit of this machine. Note, however, that the thermistor and several other parts mentioned in this machine may be replaced as an individual part with a new one.**



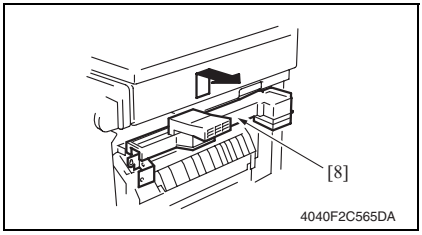
1. Open the Right Door.
2. Remove the Rear Right Cover. See P.51
3. Remove the screw [1] and the Front Right Cover [2].



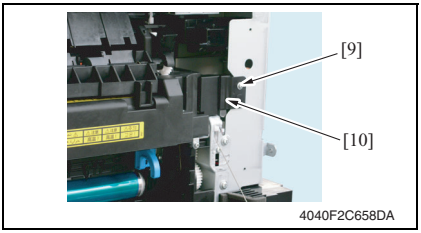
4. Unplug two connectors [3] of the Switch Back Unit.



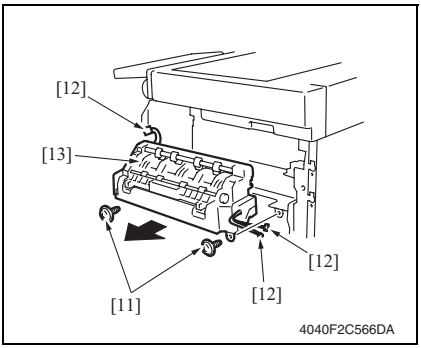
5. Loosen the screw [4] in front.
6. Remove the screw [5] in front.
7. Loosen the screw [6] in the back.
8. Remove the screw [7] in the back.



9. Remove the Switch Back Unit [8].

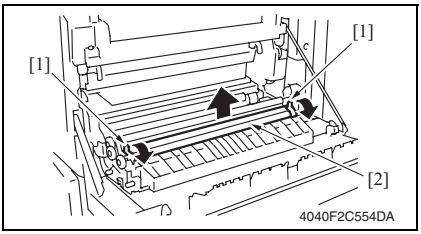


10. Remove the screw [9] and the Connector Cover [10].



11. Remove two screws [11] and unplug three connectors [12]. Then, remove the Fusing Unit [13].

3.5.2 Replacement of the Transfer Roller Unit



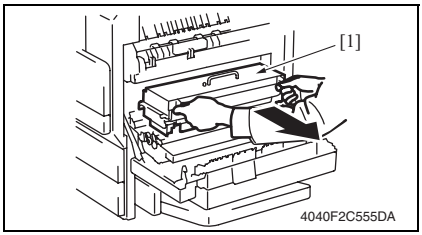
1. Open the Right Door.
2. Pull down the knobs [1] forward and remove the Transfer Roller [2].

3.5.3 Replacement of the Developing Unit

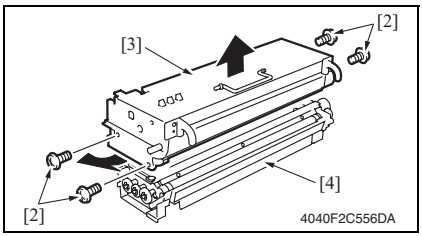
1. Select Tech. Rep. Mode → [Counter] → [Special Parts Counter] → [Developer].
2. Press the Clear key to clear the counter value.
3. Turn OFF the main power switch.

NOTE

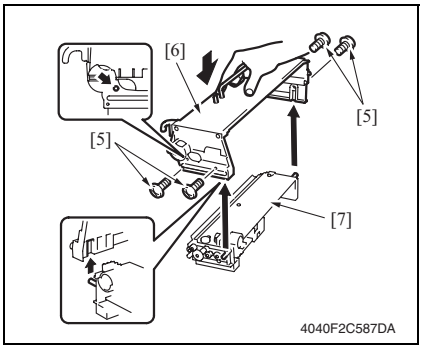
- **Clear the Developer counter before removing the IU.**
- **After clearing the Developer counter, be sure to turn OFF the main power switch.**
- **The Photo Conductor Unit and Developer have to be replaced together with the Developing Unit.**



4. Open the Right Door.
5. Remove the IU [1].



6. Remove four screws (silver) [2] and disassemble the Photo Conductor Unit [3] and the Developing Unit [4].
7. Replace the Developing Unit [4].
8. Supply new developer to the new Developing Unit.
See P.34



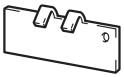
9. Install the four screws [5] to secure the Photo Conductor Unit [6] and Developing Unit [7].
10. Install the IU in the copier.
11. Turn ON the main power switch.
12. Select Tech. Rep. Mode → [Function] → [F8] and press the Start key.

NOTE

- **After replacing the developer, be sure to execute F8 under Function of Tech. Rep. Mode.**
- **When the main power switch is turned ON, execute F8 quickly.**

4. Service tool

4.1 CE Tool list

Tool name	Shape	Personnel	Parts No.	Remarks
Thermistor Holding/Check Jig	 4040F2C728DA	1	4040-7901-01	

5. Firmware upgrade

5.1 Preparations for Firmware rewriting

5.1.1 Service environment

- Drive which enables writing/reading of Compact flash
- Compact flash (with 32 MB or more)

NOTE

- **Make sure that the file system on the compact flash is "FAT".**

5.1.2 Writing into the Compact flash

- Copy the firmware files using the computer.

NOTE

- **The copying operation should be performed on the files contained in the folder, instead of the folder.**
- **Copy only those files to be upgraded to the compact flash.**
- **If wrong firmware is copied, no control panel display is given and thus no firmware can be downloaded.**

5.1.3 Checking ROM version

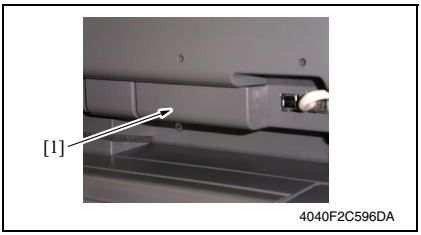
- Before attempting to upgrade the firmware, check the current ROM version.
See P.210

5.2 Firmware rewriting by the compact flash

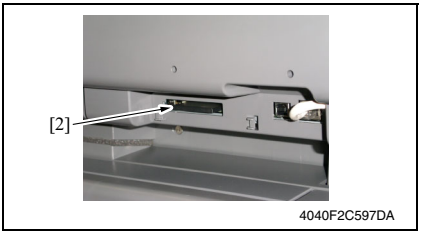
NOTE

- **NEVER attempt to remove or insert the compact flash with the machine power turned ON.**

5.2.1 MSC



1. Turn OFF the main power switch.
2. Remove the Compact flash Cover [1].



3. Insert the compact flash card [2], in which only the MSC upgrading files have been written, into the slot.

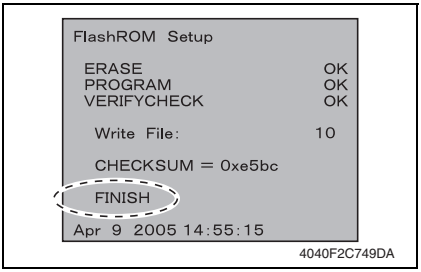
NOTE

- **Make sure that this compact flash card contains only the upgrading firmware of the MSC, and not that of the engine or Finisher.**

NOTE

- **Be sure to turn ON the sub power switch first before turning ON the main power switch.**

4. Turn ON the main power switch.

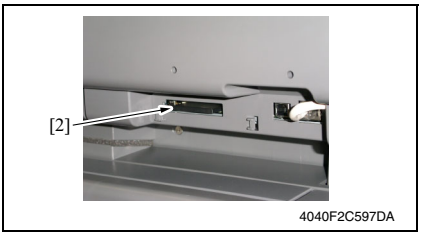


5. The firmware upgrading sequence will start.

6. When the upgrading sequence is completed, which is notified by the message “FINISH” appearing on the screen, turn OFF the main power switch.

NOTE

- **NEVER turn OFF the main power switch until the message “FINISH” appears on the screen.**



7. Remove the Compact flash card [2] from the slot.

8. Turn ON the main power switch.

9. Call the Tech. Rep. Mode to the screen.
See P.154

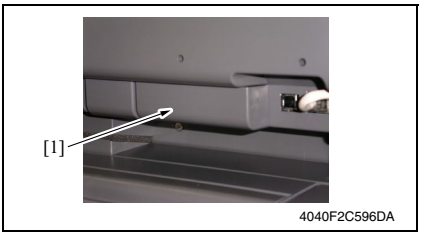
10. Select [ROM Version].

11. Make sure if the version of Firmware is updated.

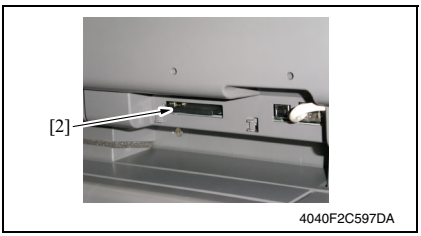
5.2.2 Engine

NOTE

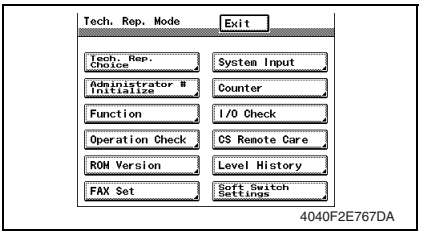
- **Make sure that the MSC firmware has not been copied to the compact flash card.**
- **To upgrade both the engine firmware and Finisher firmware at the same time, they must first be copied onto a single compact flash.**
  See P.7 of the FS-530/PU-501/OT-602 service manual.
- **If the files copied to the compact flash card are those of either the engine or Finisher, or wrong, no screen display is given and thus no firmware can be downloaded.**



1. Turn OFF the main power switch.
2. Remove the Compact flash Cover [1].



3. Insert the compact flash card [2], to which the engine upgrading files have been copied, into the slot.

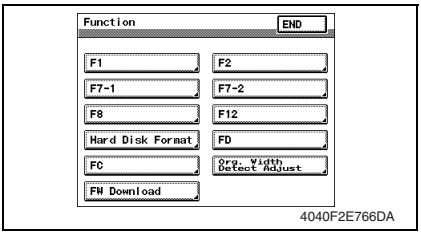


4. Open the Right Door.

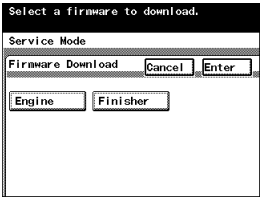
NOTE

- **Be sure to open the Right Door before turning ON the main power switch.**

5. Turn ON the main power switch.
6. Call the Tech. Rep. Mode to the screen.
   See P.154
7. Touch [Function].



8. Touch [FW Download].



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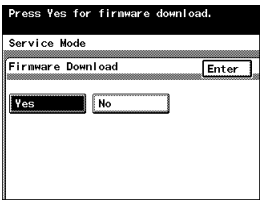
9. Select [Engine] and touch [Enter].

NOTE

- **Touch [Finisher] also if the Finisher firmware is to be upgraded at the same time.**



4040F2E769DA

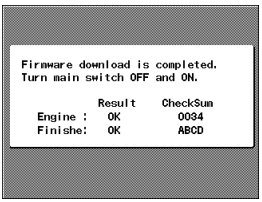
10. Select [Yes] and touch [Enter].

4040F2E770DA

11. The firmware upgrading sequence will start.

NOTE

- **The firmware upgrading sequence will last for 5 to 6 min. During this period, NEVER turn off the machine power.**
- **If the Finisher firmware is also upgraded, the entire sequence will take about 10 to 11 min.**



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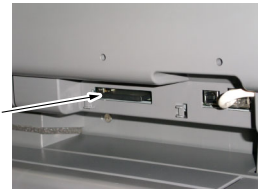
12. When the upgrading sequence is completed, turn OFF the main power switch.



4040F2C597DA

13. Remove the compact flash card [2] from the slot. After some while thereafter, turn ON the main power switch.

14. Call the Tech. Rep. Mode to the screen.
See P.154

15. Select [ROM Version].

16. Make sure if the version of Firmware is updated.

5.3 Firmware rewriting by the Internet ISW

5.3.1 Outline

- [Internet ISW] is the system which gives the instruction for updating the firmware with the CS Remote Care, so the main body will automatically receive the firmware from the program server over a network for updating.

5.3.2 Service environment

The following conditions are necessary for using the Internet ISW function.

- The main body is connected to such a network environment that the firmware can be downloaded on the internet using the ftp protocol.

The “Internet ISW” will not operate under the following conditions.

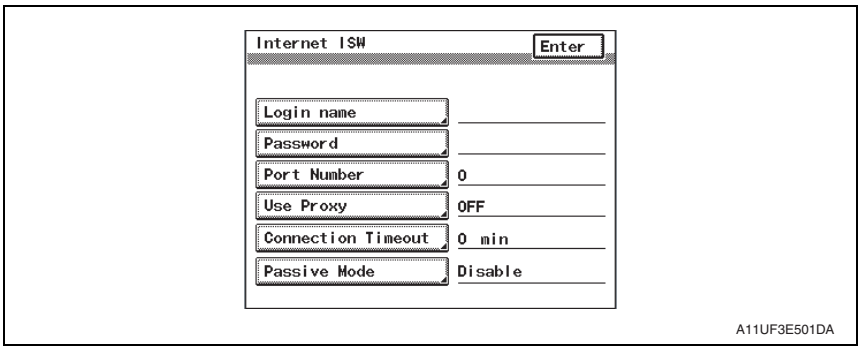
- Main power switch is set to OFF.
- Sub power switch is set to OFF.
- The main body has the job currently performing.
- Modes other than normal mode are used.
- Machine has a paper jam.
- The version of firmware provided from the program server and MFBS board/MFBS2 Board on the machine are not compatible with each other.

5.3.3 Preparations

- For details of each setting item, refer to ADJUSTMENT/SETTING “Internet ISW”.
See P.164

A. Internet ISW

1. Call the Tech. Rep. Mode to the screen.
2. Touch [Tech. Rep. Choice]
3. Touch [Internet ISW]



4. Touch [Login name], and enter the login name which is necessary for connecting to the program server on the on-screen keyboard, and touch [Enter].
5. Touch [Password], and enter the password which is necessary for connecting to the program server on the on-screen keyboard, and touch [Enter].
6. Touch [Port Number], and set the port number for the proxy server from 1 through 65535.
7. Touch [Use Proxy], for connecting via proxy server, select [Enter].
8. Touch [Connection Timeout], set the time for the connection time out between 1 min and 60 min.
9. Touch [Passive Mode] and, if connection through PASV (passive mode) is to be enabled, select [Enable].

5.3.4 Firmware rewriting procedure

- For the firmware update procedure using CS Remote Care, refer to CS Remote Care Center Manual.
- For detailed error information relating to CS Remote Care, refer to “ADJUSTMENT/SETTING: CS Remote Care.”
See P.205

NOTE

- **Before updating firmware using Internet ISW, contact the dministrator to get agreement.**
Do not update firmware via Internet ISW when a job is processed. Internet ISW does not function when a job is processed.

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

⚠ CAUTION

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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 Disassembly/Assembly/Cleaning list (Other parts)

6.2.1 Disassembly/Assembly parts list

No	Section	Part name	Ref.Page
1	Exterior parts	Original Scanning Glass	P.50
2		Original Glass	P.50
3		Front Holding Bracket	P.50
4		Control Panel	P.57
5		Upper Front Cover	P.54
6		Middle Front Cover	P.54
7		Front Cover	P.54
8		Front Door	P.52
9		Lower Front Cover	P.53
10		Paper Output Cover	P.53
11		Left Cover	P.55
12		Rear Left Cover	P.55
13		Front Right Cover	P.51
14		Rear Right Cover	P.51
15		Lower Right Rear Cover	P.50
16		Lower Right Cover	P.56
17		Rear Cover	P.52
18		Upper Rear Cover	P.51
19		Lower Rear Cover	P.50
20		Tray 1	P.57
21		Tray 2	P.58
22		Tray Rear Cover	P.50
23		Front Manual Bypass Cover	P.56
24		Rear Manual Bypass Cover	P.56
25		IR Right Cover	P.52
26		IR Left Cover	P.55
27		IR Upper Left Cover	P.50
28	Board and etc.	Mechanical Control Board Cover	P.58
29		MFBS Board/MFBS2 Board	P.63
30		Inverter Board	P.64
31		BCRS Board	P.65
32		CCD Unit	P.66
33		FD Paper Size Board 1	P.59
34		FD Paper Size Board 2	P.60
35		High Voltage Unit	P.62
36		Power Supply Unit	P.61
37		Operation Board	P.70

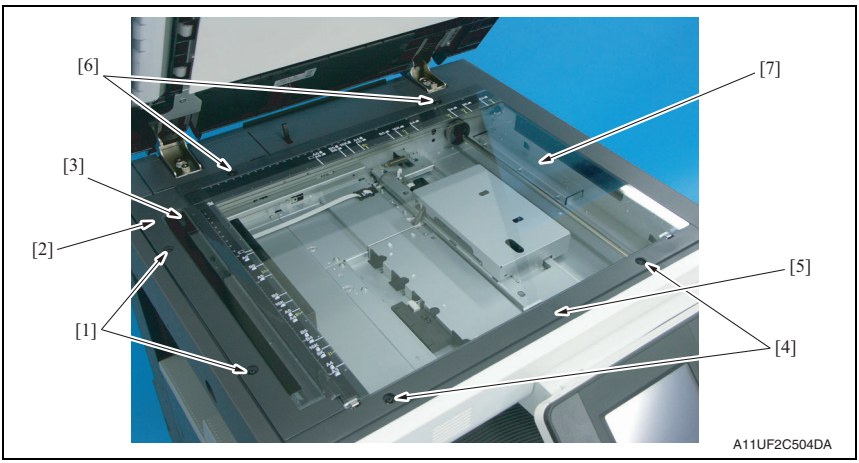
No	Section	Part name	Ref.Page
38	Unit	Manual Bypass Unit	P.72
39		PH Unit	P.72
40		Toner Hopper Unit	P.75
41		Toner Replenishing Drive Unit	P.75
42		Duplex Unit	P.77
43		Switch Back Unit	P.77
44	IR	Scanner Motor	P.78
45		Exposure Lamp	P.80
46		Exposure Unit	P.79
47		Scanner Drive Cables	P.81
48	Others	Main Motor	P.86
49		IU Motor	P.86
50		Power Supply Cooling Fan Motor	P.87
51		Toner Suction Fan Motor	P.87
52		Temperature/humidity Sensor	P.88
53		ATDC Sensor	P.88
54	Fusing Unit	Thermistor	P.90
55		Paper Exit Roll 1	P.92
56		Paper Exit Roll 2	P.92
57		Separation Claw	P.93

6.2.2 Cleaning parts list

No	Section	Part name	Ref.Page
1	Bypass	Feed Roller	P.95
2		Separation Roller	P.95
3	Tray1	Feed Roller	P.96
4		Pick-up Roller	P.97
5		Separation Roller	P.98
6	Tray 2	Feed Roller	P.99
7		Pick-up Roller	P.99
8		Separation Roller	P.100
9	Transport	Registration Roller	P.101
10		Paper Dust Remover	P.101
11		Transport Roller	P.101
12	IR	Scanner rails	P.102
13		Bushings	P.102
14		Mirrors	P.102
15		Lens	P.103
16		Original Scanning Glass	P.103
17		Original Glass	P.103
18	Others	Charge Neutralizing Plate	P.104
19		Ds Collar	P.104

6.3 Disassembly/Assembly procedure

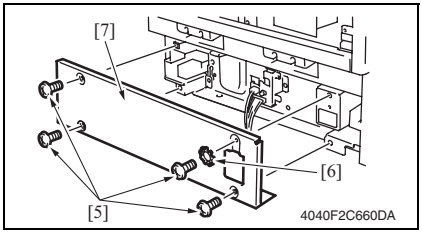
6.3.1 IR Upper Left Cover/Original Scanning Glass/Front Holding Bracket/Original Glass



1. Remove two Screws [1], and remove the IR Upper Left Cover [2].
2. Remove the Original Scanning Glass [3].
3. Remove two Screws [4], and remove the Front Holding Bracket [5].
4. Remove two Screws [6], and remove the Original Glass [7].

6.3.2 Lower Rear Cover/Lower Right Rear Cover/Tray Rear Cover

1. Remove four Screws [1], and remove the Lower Rear Cover [2].
2. Remove two Screws [3], and remove the Lower Right Rear Cover [4].

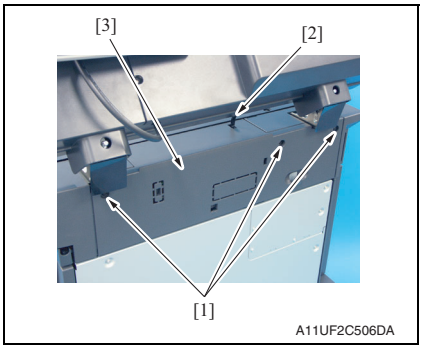


3. Remove the four screws [5], one wave washer [6], and the Tray Rear Cover [7].

⚠ CAUTION

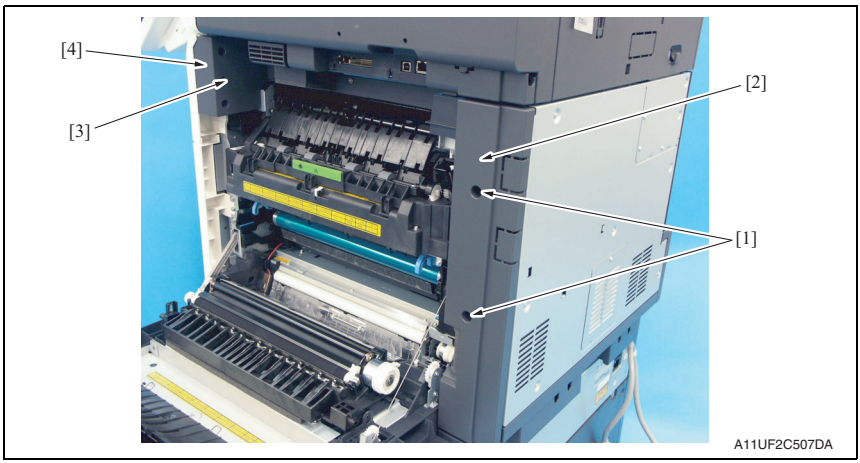
- **Make sure that the wave washer is installed at the correct position.**

6.3.3 Upper Rear Cover



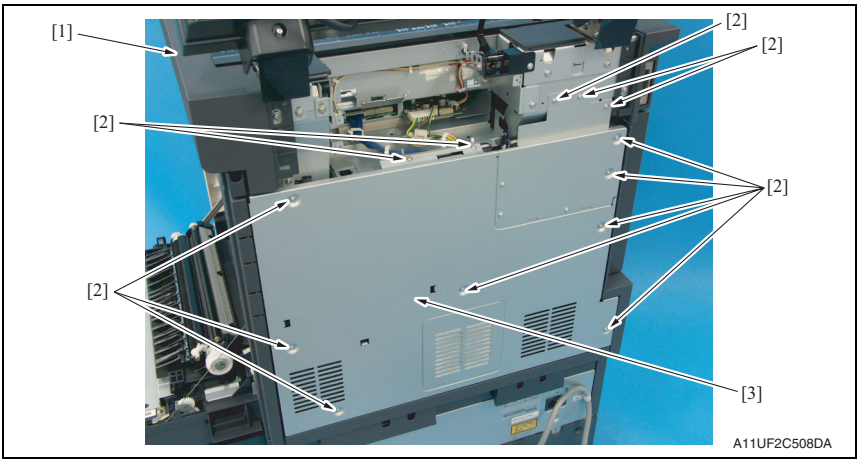
1. Remove three screws [1] and, pushing down the actuator [2], remove the Upper Rear Cover [3].

6.3.4 Rear Right Cover/Front Right Cover



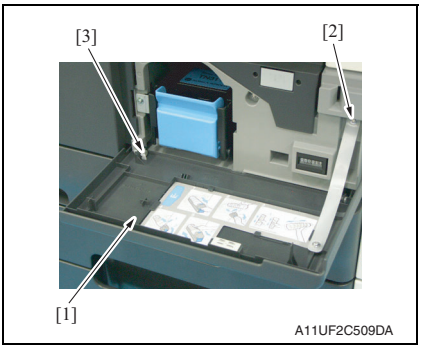
1. Open the Right Door.
2. Remove two Screws [1], and remove the Rear Right Cover [2].
3. Remove the Screws [3], and remove the Front Right Cover [4].

6.3.5 IR Right Cover/Rear Cover



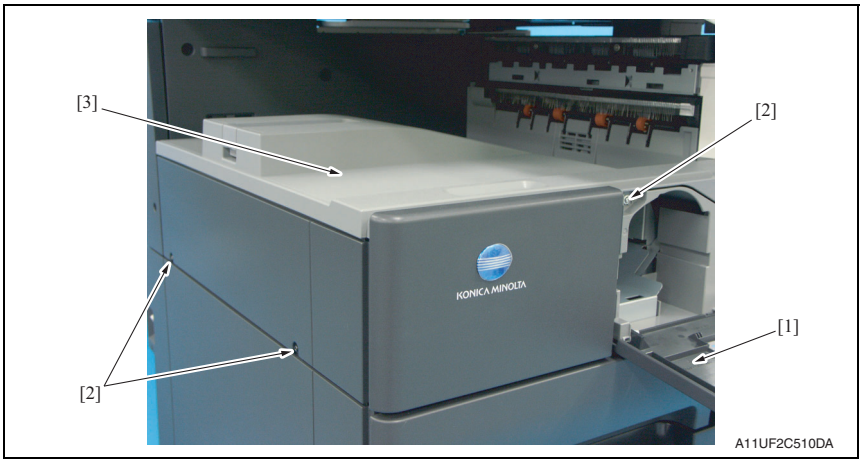
1. Open the Right Door.
2. Remove the Upper Rear Cover.
See P.51
3. Remove the IR Right Cover [1].
4. Remove thirteen Screws [2], and remove the Rear Cover [3].

6.3.6 Front Door

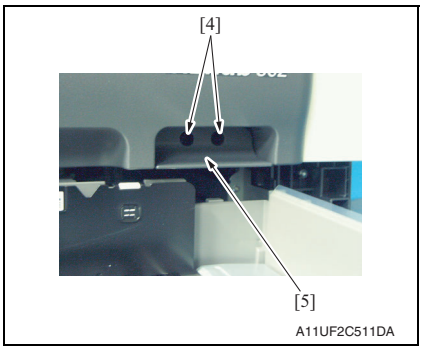


1. Open the Front Door [1].
2. Remove the screw [2], C-clip [3], and the Front Door [1].

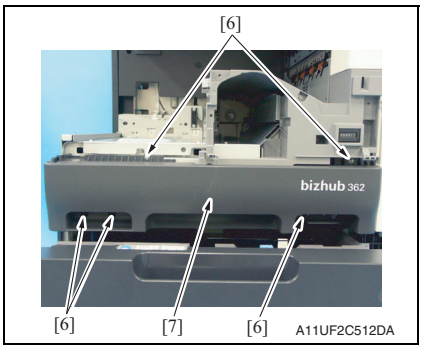
6.3.7 Paper Output Cover/Lower Front Cover



1. Open the Front Door [1].
2. Remove three screws [2] and the Paper Output Cover [3].

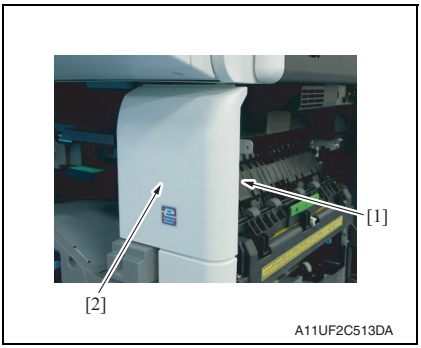


3. Slide out the Tray 1.
4. Remove two screws [4] and the Connector Cover [5].

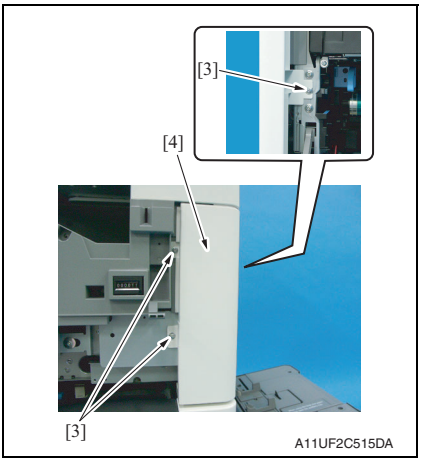


5. Remove the Front Door.
See P.52
6. Remove five screws [6] and the Lower Front Cover [7].

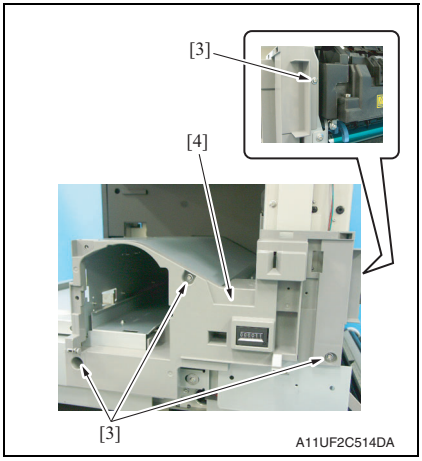
6.3.8 Upper Front Cover/Middle Front Cover/Front Cover



1. Open the Right Door.
2. Remove the Front Right Cover.
See P.51
3. Remove the screw [1] and the Upper Front Cover [2].

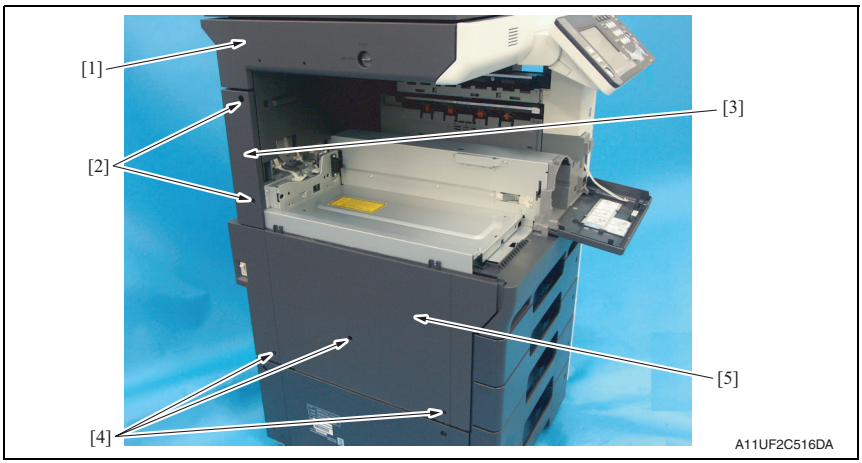


4. Remove three screws [3] and the Middle Front Cover [4].
5. Remove the Toner Hopper Unit.
See P.75
6. Remove the Paper Output Cover.
See P.53
7. Remove the Front Door.
See P.52
8. Remove the Lower Front Cover.
See P.53



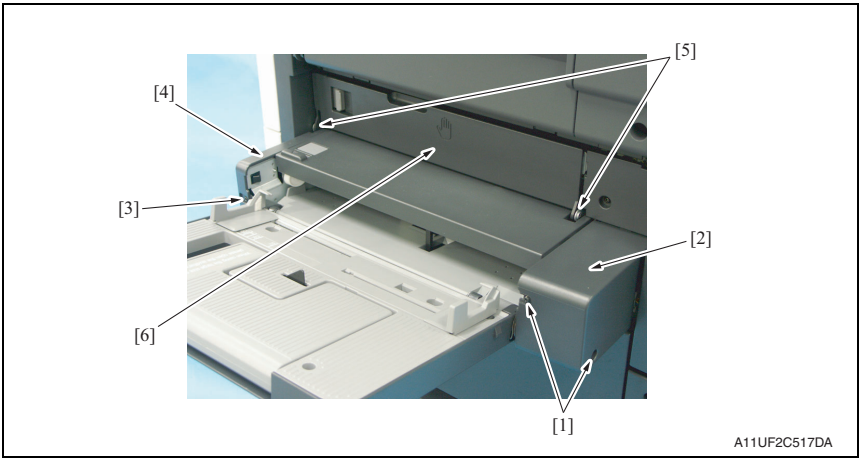
9. Remove four screws [3] and the Front Cover [4].

6.3.9 IR Left Cover/Rear Left Cover/Left Cover



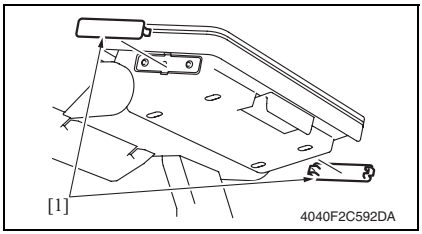
1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Left Cover [1].
3. Remove two screws [2] and the Rear Left Cover [3].
4. Remove the Rear Cover.
See P.52
5. Remove the Paper Output Cover.
See P.53
6. Remove three screws [4] and the Left Cover [5].

6.3.10 Rear Manual Bypass Cover/Front Manual Bypass Cover/Lower Right Cover

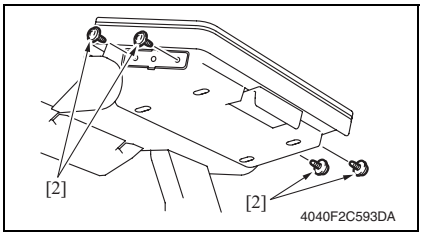


1. Remove two screws [1] and the Rear Manual Bypass Cover [2].
2. Remove the screw [3] and the Front Manual Bypass Cover [4].
3. Remove the Manual Bypass Unit.
See P.72
4. Remove two tabs [5] and the Lower Right Door Cover [6].

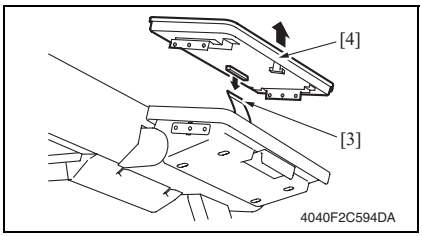
6.3.11 Control Panel



1. Remove two screw covers [1].

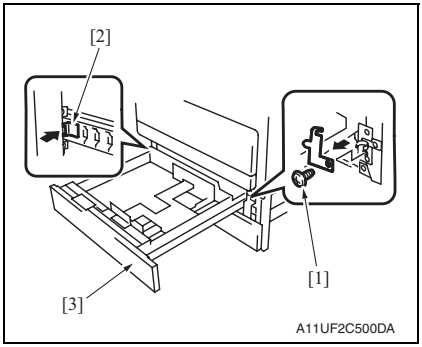


2. Remove the four screws [2] on the sides of the Control Panel.



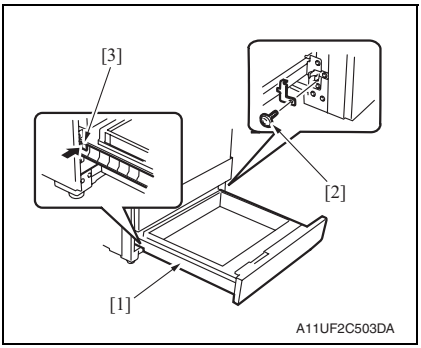
3. Disconnect the connector [3] and remove the Control Panel [4].

6.3.12 Tray 1



1. Slide out the Tray 1 [3].
2. Remove the screw [1] and, holding the stopper [2], remove the Tray 1 [3].

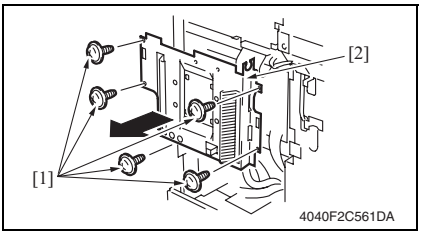
6.3.13 Tray 2



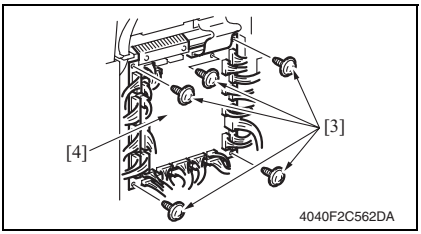
1. Slide out the Tray 2 [1].
2. Remove the screw [2] and, holding the stopper [3], remove the Tray 2 [1].

6.3.14 Mechanical Control Board Cover

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



3. Remove five screws [1] and the Mechanical Control Board Cover [2].



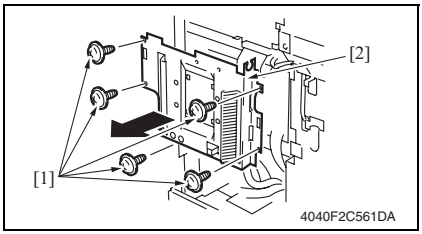
4. Unplug the all connectors.
5. Remove five screws [3] and the Mechanical Control Board [4].

NOTE

- **When replacing the Mechanical Control Board, be sure to replace the EEPROM.**
See P.111
- **When the Mechanical Control Board has been replaced with a new one, check the ROM version and upgrade the firmware to the latest version.**
See P.41

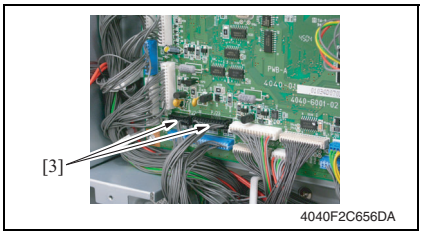
6.3.15 FD Paper Size Board 1

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52

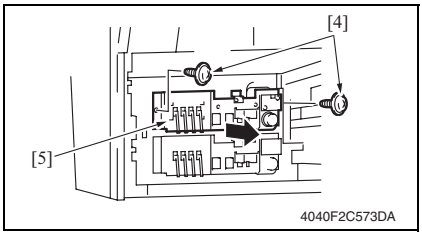


3. Remove five screws [1] and the Mechanical Control Board Cover [2].

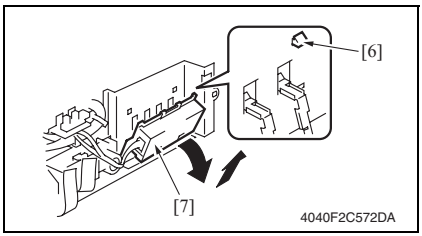
4. Remove the Tray 1.
See P.57



5. Disconnect two connectors (PJ23, PJ24) [3] from the Mechanical Control Board.



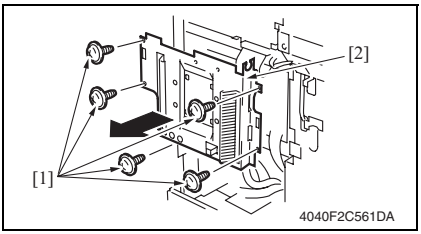
6. Remove two screws [4] and the Lift-Up Assy [5].



7. Remove four tabs [6] and the FD Paper Size Board Assy [7].

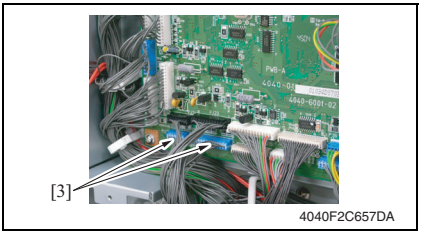
6.3.16 FD Paper Size Board 2

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52

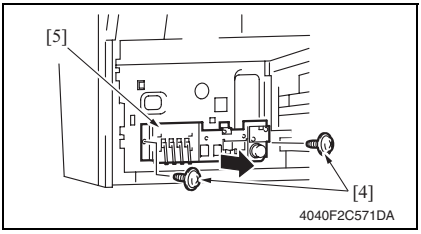


3. Remove five screws [1] and the Mechanical Control Board Cover [2].

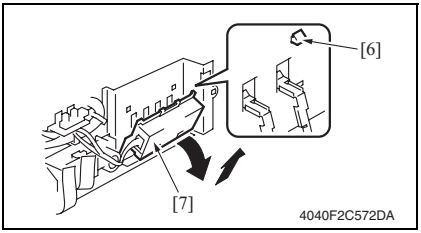
4. Remove the Tray Rear Cover.
See P.50
5. Remove the Lower Rear Cover.
See P.50
6. Remove the Tray 2.
See P.58



7. Disconnect two connectors (PJ25, PJ26) [3] from the Mechanical Control Board.



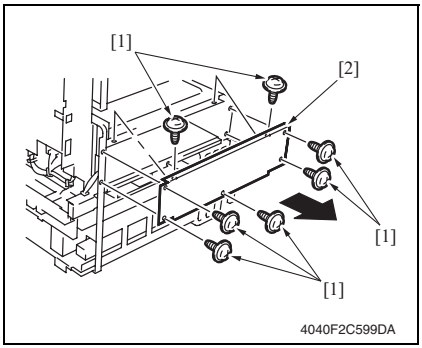
8. Remove two screws [4] and the Lift-Up Assy [5].



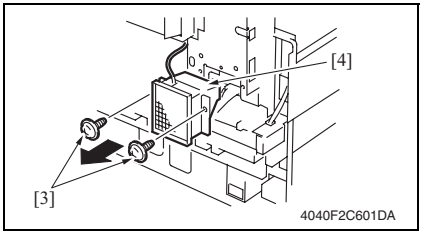
9. Remove four tabs [6] and the FD Paper Size Board Assy [7].

6.3.17 Power Supply Unit

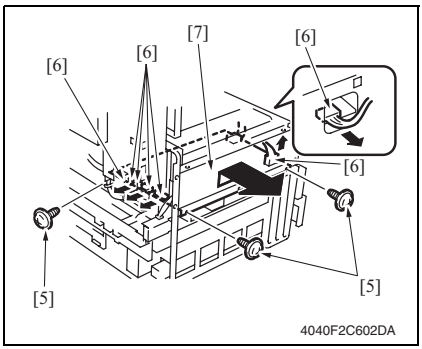
1. Remove the Paper Output Cover.
See P.53
2. Remove the Upper Rear Cover.
See P.51
3. Remove the Rear Cover.
See P.52
4. Remove the Rear Left Cover.
See P.55
5. Remove the Left Cover.
See P.55



6. Remove seven screws [1] and the Power Supply Unit Cover [2].



7. Remove two screws [3] and the Power Supply Cooling Fan Motor [4].



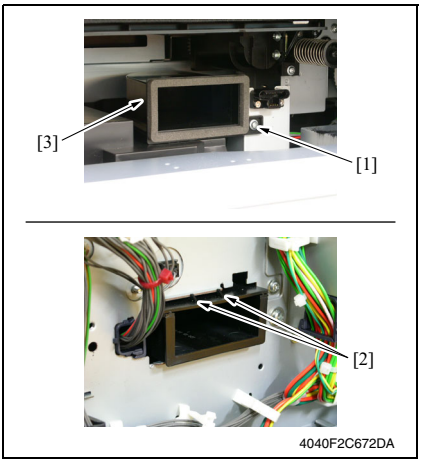
8. Unplug seven connectors [6] and remove three screws [5] and the Power Supply Unit Assy [7].

⚠ CAUTION

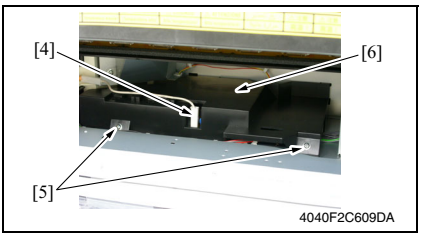
- **At reinstallation, make sure that the harness is not slack.**

6.3.18 High Voltage Unit

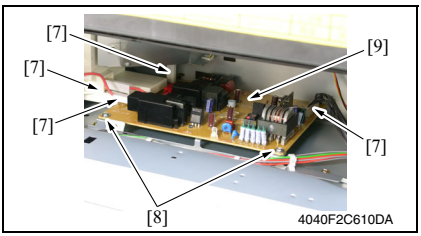
1. Open the Right Door.
2. Remove the Imaging Unit.
3. Remove the Upper Rear Cover.
See P.51
4. Remove the Rear Cover.
See P.52
5. Remove the Toner Suction Fan Motor.
See P.87



6. Remove the screw [1] and unhook two tabs [2] on the rear side surface. Then, remove the Toner Suction Duct [3].



7. Unplug the connector [4] and remove two screws [5] and the High Voltage Unit Cover [6].



8. Unplug four connectors [7] and remove two screws [8] and the High Voltage Unit [9].

6.3.19 MFBS Board/MFBS2 Board

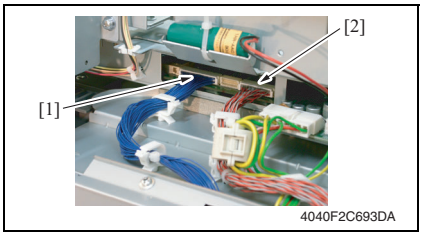
NOTE

- **The following table details the setting changes and compatibility requirements between the main body and the MFBS Board or MFBS2 Board.**
- **For the exact applicable serial No., see the "Serial No. List" provided for reference.**
- **Failure to adhere to the compatibility requirements and setting changes shown in the below table will result in incorrect operation.**

Phase	Model	Serial Number	MFBS Board	MFBS2 Board
1.0	bizhub 222 A11W-011 bizhub 282 A11V-011 bizhub 362 A11U-011	Up to and including A11W011002050 A11V011001337 A11U011001705	Usable	Usable Requires a change to jumper settings: To be plugged into the 300MHz side. See replacement procedure for details.
2.0	bizhub 222 A11W-011 bizhub 282 A11V-011 bizhub 362 A11U-011	A11W011002051 A11V011001338 A11U011001760 and onward	Not usable	Usable Requires no change of jumper settings: To be plugged into the 400MHz side (default).

A. Removal procedure

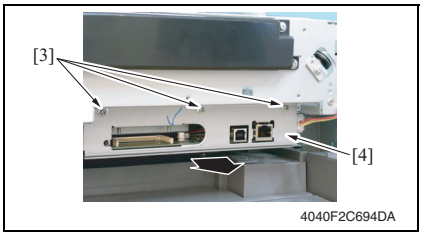
1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Right Cover.
See P.52



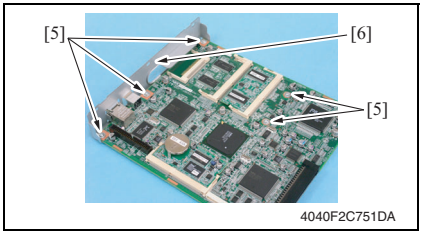
3. Unplug the connector (CN7) [1].

NOTE

- **If the Fax Kit is mounted, disconnect the two connectors (CN7 [1], CN6 [2]).**



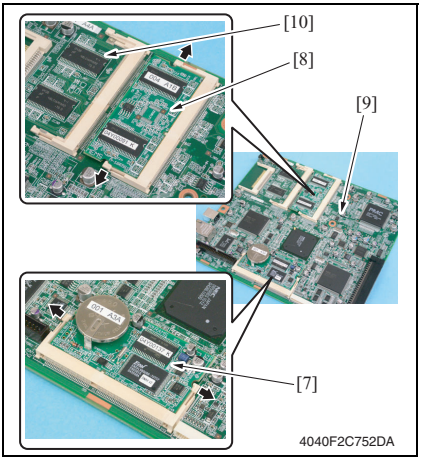
4. Remove three screws [3] and the MFBS Board/MFBS2 Board Assy [4].



5. Remove five screws [5] and the MFBS Board/MFBS2 Board mounting bracket [6].

NOTE

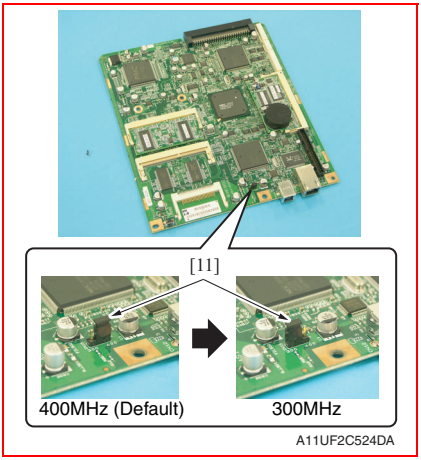
- **Remove the Hard Disk if one is mounted.**



6. Remove the stopper, RAMS Board [7], and MEMS Board [8].
7. Remove the MFBS Board/MFBS2 Board [9].

NOTE

- **Remove the MEM Board [10] if mounted in the expansion slot.**



B. Replacement procedure

8. Mount the RAMS Board, MEMS Board, and MEM Board that have been removed from the old board (MFBS Board or MFBS2 Board) on the new board (MFBS Board or MFBS2 Board).

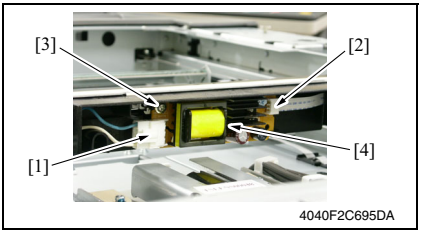
NOTE

- **Be sure to perform the following steps if the MFBS Board on the main body (with a serial number of up to and including XXX (Phase1.0)) is changed to the MFBS2 Board.**

9. Unplug the jumper socket [11] and plug it into the “300” side.
10. Reinstall the above parts following the removal procedure in reverse.

6.3.20 Inverter Board

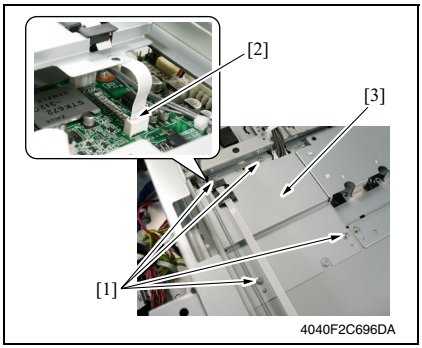
1. Remove the IR Upper Left Cover. See P.50
2. Remove the Front Holding Bracket. See P.50
3. Remove the Original Glass. See P.50



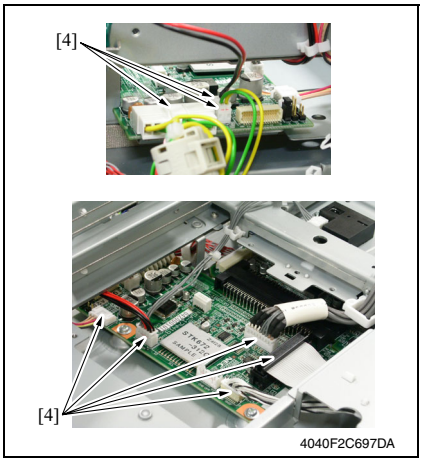
4. Disconnect the connector [1] and remove the flat cable [2], screw [3], and the Inverter Board [4].

6.3.21 BCRS Board

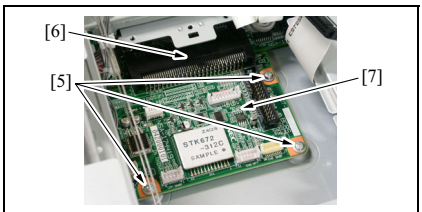
1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Upper Left Cover.
See P.50
3. Remove the Front Holding Bracket.
See P.50
4. Remove the Original Glass.
See P.50



5. Remove four screws [1], flat cable [2], and the BCRS Board cover [3].



6. Unplug eight connectors [4].

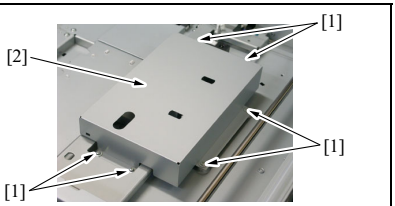


7. Remove three screws [5], disconnect the connector [6], and remove the BCRS Board [7].

6.3.22 CCD Unit

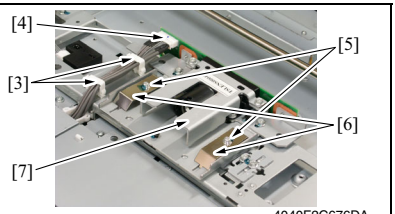
A. Replacing Procedure

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50



4040F2C675DA

4. Remove six screws [1] and the CCD Unit Cover [2].



4040F2C676DA

5. Move the Exposure Unit, remove two wiring saddles [3], and disconnect the connector [4].
6. Remove two screws [5] and two flat springs [6]. Then, remove the CCD Unit [7].

NOTE

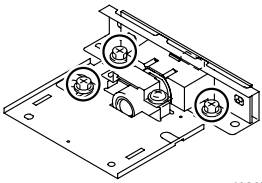
When the CCD Unit has been replaced with a new one, make the installation adjustment that must be made when the CCD Unit is replaced.

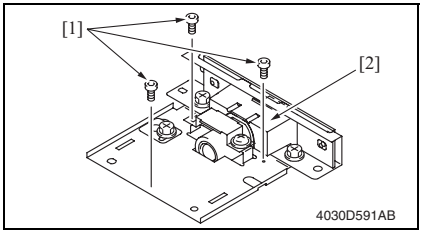
See P.66

B. Installation Adjustment to be Made when CCD Unit is Replaced

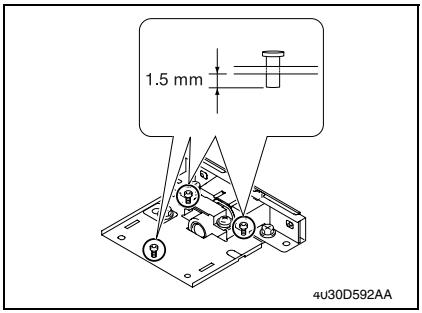
NOTE

- **Make this adjustment only when the CCD Unit has been replaced with a new one.**
- **Before attempting to make this adjustment, make sure that registration and erase adjustments for the printer have been completed.**
- **Do not loosen or remove the screws shown below.**


4030D601AA



1. Screw the three adjusting screws [1] into the CCD Unit [2] only to half the thread length of each screw.

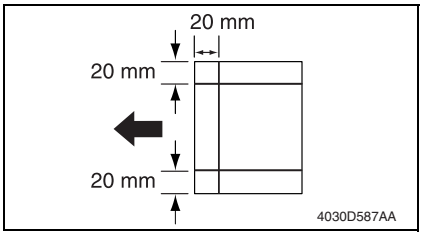


2. From the bottom side of the CCD Unit, adjust the dimension of the screw thread protrusion to 1.5 mm (at three places).

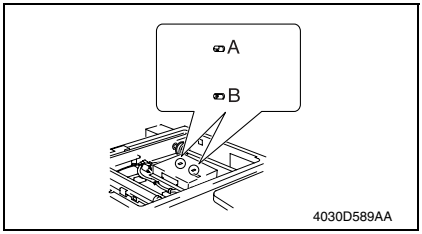
3. Using two screws and a flat spring, install the CCD Unit in position.
4. Fit two cables to the CCD Unit.
5. Using six screws, install the CCD Unit cover.
6. Install the Original Glass, Front Holding Bracket and IR Upper Left Cover.

NOTE

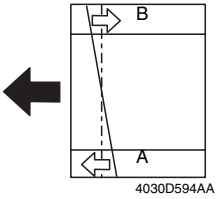
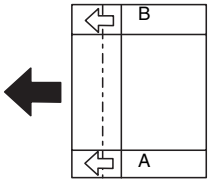
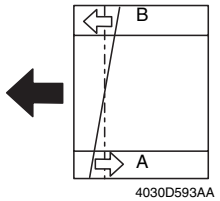
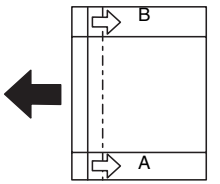
- **The CCD Unit is to be adjusted through the subsequent procedures and there is no need to tighten the screws of the Original Glass, Front Holding Bracket, and IR Upper Left Cover.**

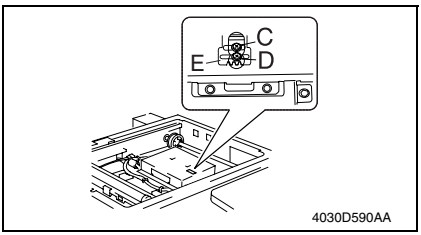


7. Turn ON the main power switch.
8. If the setting in Scanner Registration or Scanner Zoom Adjust available from the Adjust mode has been changed, set the function to 0 (zero) or 1.000 (zoom ratio).
9. Prepare a test chart as shown on the left and make a copy of it.



10. Measure tilt and deviation in the FD direction of the produced copy as compared with reference to the reference line in the FD direction of the test chart.
11. If there is any tilt or deviation in the FD direction, follow the steps given below to make an adjustment using screws A and B.

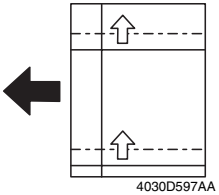
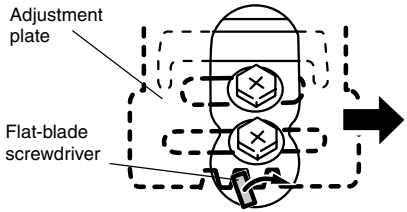
Tilt and FD Deviation	Adjustment Procedure Using Screws A and B
 4030D594AA  4030D595AA	• If tilt or deviation in the FD direction is as shown on the left A: Using an Allen wrench (3 mm), turn screw A counterclockwise. B: Using an Allen wrench (3 mm), turn screw B clockwise. * 1/4 turn of the screw results in deviation of 1 mm.
 4030D593AA  4030D596AA	• If tilt or deviation in the FD direction is as shown on the left A: Using an Allen wrench (3 mm), turn screw A counterclockwise. B: Using an Allen wrench (3 mm), turn screw B clockwise. * 1/4 turn of the screw results in deviation of 1 mm.

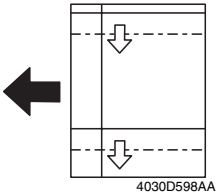
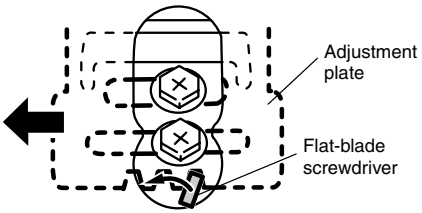


4030D590AA

12. Measure deviation in the CD direction of the produced copy as compared with reference to the reference line in the CD direction of the test chart.

13. If there is any deviation in the CD direction, loosen screws C and D and follow these steps to make an adjustment using adjustment plate E.

<table>
<tr><th>CD Deviation</th><th>Adjustment Procedure Using Adjustment Plate E</th></tr>
<tr><td> 
</td><td>• If deviation in the CD direction is as shown on the left
1. Using a flat-blade screwdriver, turn adjustment plate E counterclockwise.
 

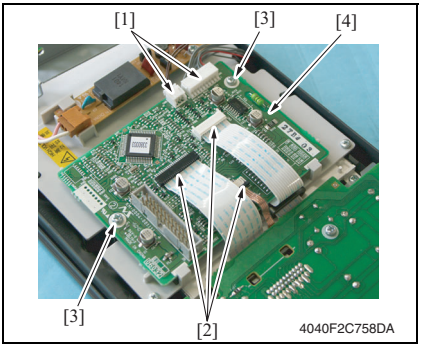
2. Tighten screws C and D.</td></tr>
<tr><td> 
</td><td>• If deviation in the CD direction is as shown on the left
1. Using a flat-blade screwdriver, turn adjustment plate E clockwise.
 

2. Tighten screws C and D.</td></tr>
</table>

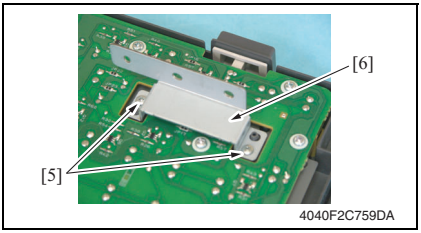
14. Remove the CCD Unit cover.
15. Apply lock paint to adjusting screws A, B, C, and D.
16. Reinstall the CCD Unit cover.
17. Reinstall the Original Glass, Front Holding Bracket and IR Upper Left Cover.
18. Reinstall all covers that have been removed.

6.3.23 Operation Board

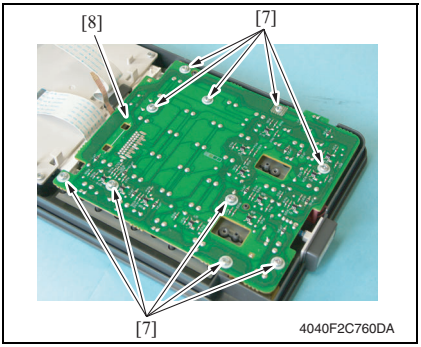
1. Remove the Operation Panel.
See P.57



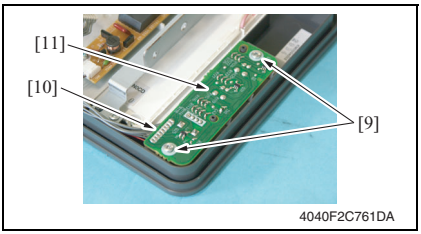
2. Disconnect two connectors [1] and remove three flat cables [2]
3. Remove two screws [3] and the Operation Board 1 [4].



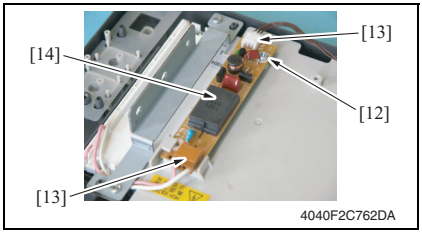
4. Remove two screws [5] and the Bracket [6].



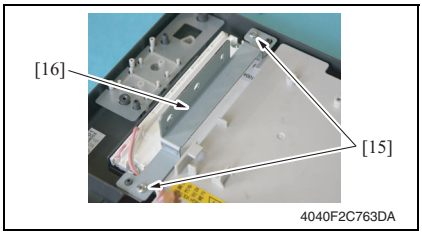
5. Remove ten screws [7] and the Operation Key Board 1 [8].



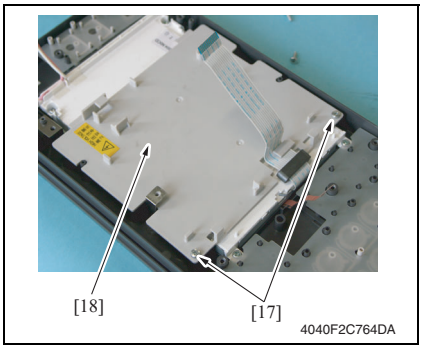
6. Remove two screws [9], connector [10], and the Operation Key Board 2 [11].



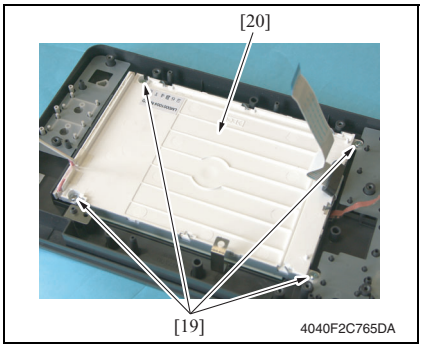
7. Remove the screw [12], two connectors [13], and the Operation Board 2 [14].



8. Remove two screws [15] and the Bracket [16].



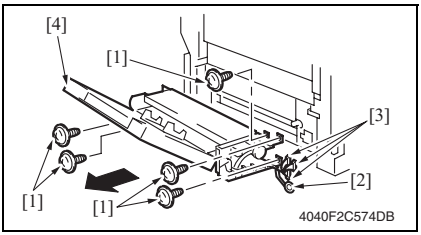
9. Remove two screws [17] and the LCD Board Cover [18].



10. Remove four screws [19] and the LCD Board [20].

6.3.24 Manual Bypass Unit

1. Remove the Rear Right Cover.
See P.51
2. Remove the Lower Right Rear Cover.
See P.50
3. Remove the Front Manual Bypass Cover.
See P.56
4. Remove the Rear Manual Bypass Cover.
See P.56



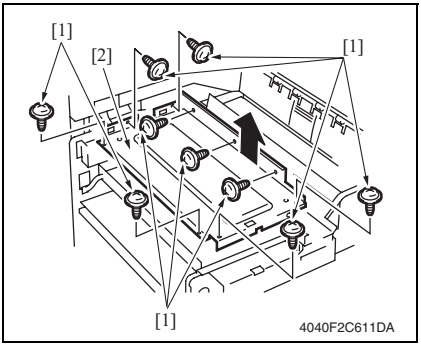
5. Remove five screws [1] and ground wire [2], disconnect the three connectors [3], and remove the Manual Bypass Unit [4].

NOTE

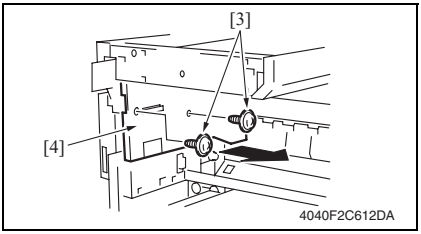
- **When the Manual Bypass Unit has been mounted, be sure to perform the Manual Bypass Unit Installation Check procedures.**
See P.230

6.3.25 PH Unit

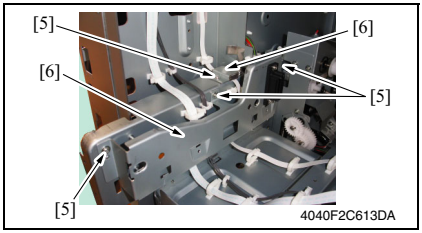
1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52
3. Open the Front Door.
4. Remove the Paper Output Cover.
See P.53



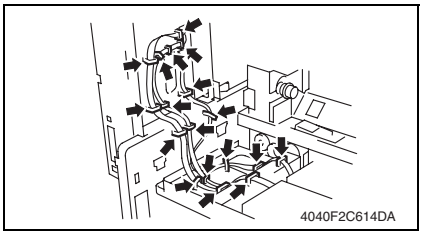
5. Remove nine screws [1] and the PH protective metal bracket [2].



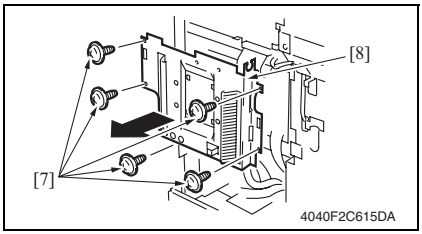
6. Remove two screws [3] and the Paper Output Tray Rear Cover [4].



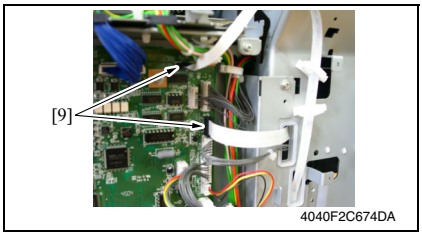
7. Remove four screws [5] and two harness protective metal brackets [6].



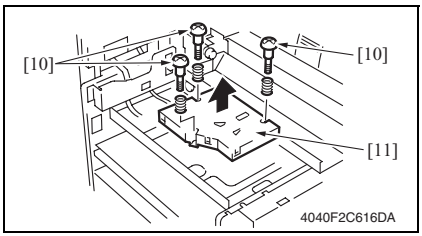
8. Remove the harness from the cord holder.



9. Remove five screws [7] and the Mechanical Control Board Cover [8].



10. Remove two flat cables (PJ3, PJ35) [9].



11. Remove three screws [10] and the PH Unit [11].

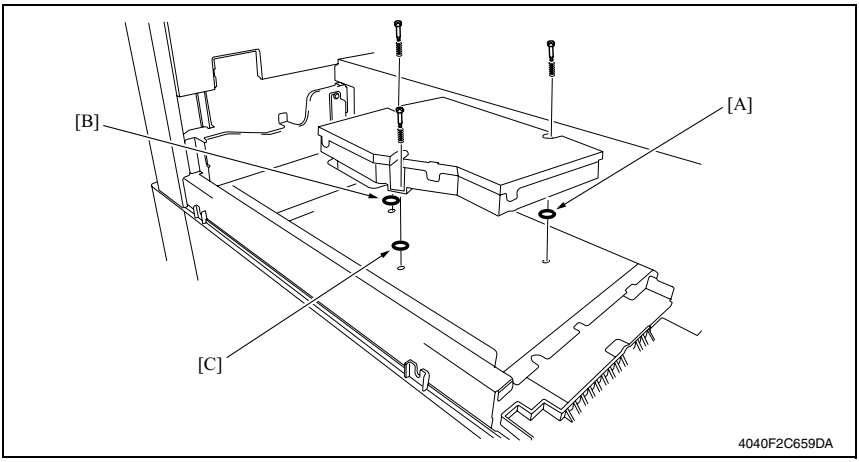
- **When replacing the PH, install spacers according to the color of the labels affixed to the PH.**

	Screw Position		
PH label color	A	B	C
Green label	No spacer	No spacer	No spacer
Blue label	No spacer	0.1 mm spacer	0.2 mm spacer
Yellow label	0.2 mm spacer	0.1 mm spacer	No spacer

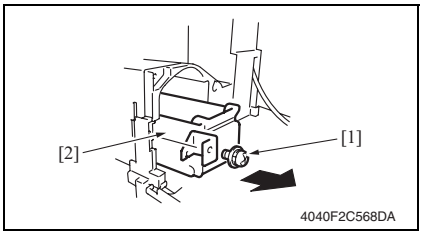
- Spacers Used

	Part No.	Spacer Color
0.1 mm spacer	4030-2053-01	Black
0.2 mm spacer	4030-2054-01	White

- Should be screw installation position



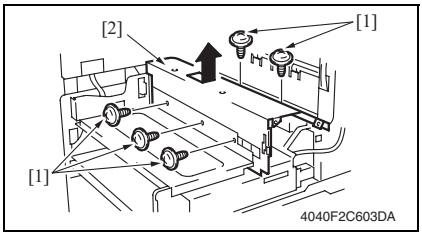
6.3.26 Toner Hopper Unit



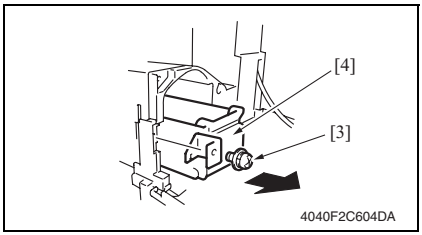
1. Open the Front Door.
2. Remove the screw [1] and the Toner Hopper Unit [2].

6.3.27 Toner Replenishing Drive Unit

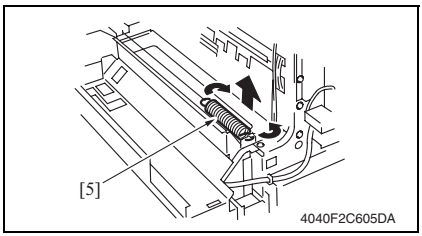
1. Remove the Imaging Unit.
2. Remove the Front Door.
See P.52
3. Remove the Paper Output Cover.
See P.53
4. Open the Right Door.
5. Remove the Front Cover.
See P.54
6. Remove the Lower Front Cover.
See P.53



7. Remove five screws [1] and the toner hopper protective metal bracket [2].



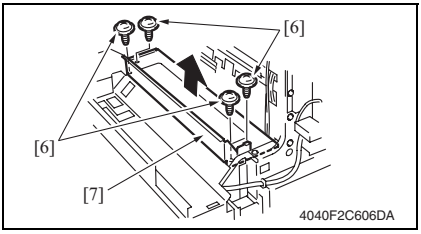
8. Remove the screw [3] and the Toner Hopper Unit [4].



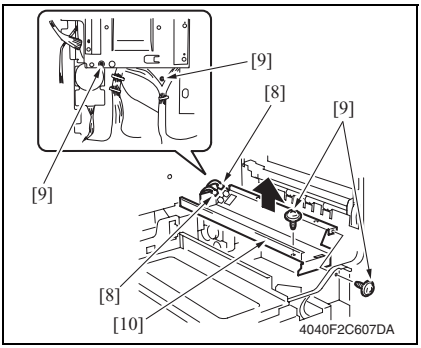
9. Close the right door and remove the pressure spring [5].

NOTE

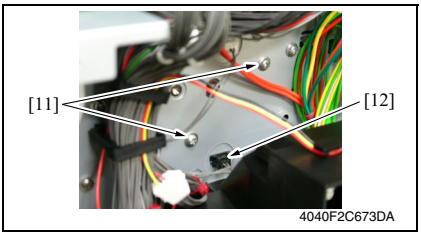
- **Make sure that the right door is kept closed.**



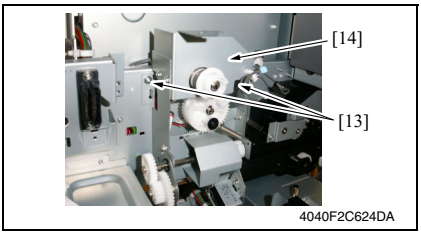
10. Remove four screws [6] and the imaging unit protective metal bracket [7].



11. Unplug two connectors [8] and remove four screws [9] and the Toner Hopper Assy [10].



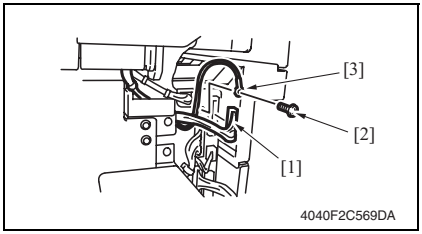
12. Remove the two screws [11] and disconnect the connector [12] from the rear side surface.



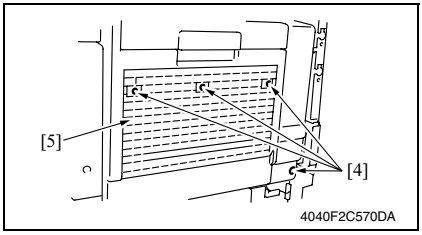
13. Remove two screws [13] and the Toner Replenishing Drive Unit [14].

6.3.28 Duplex Unit

1. Remove the Lower Right Rear Cover.
See P.50



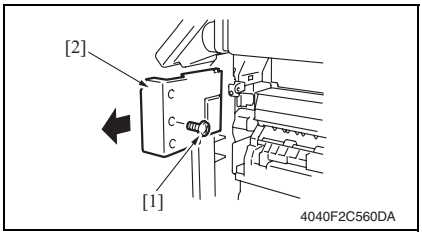
2. Disconnect the connector [1] and remove the screw [2] and ground wire [3].



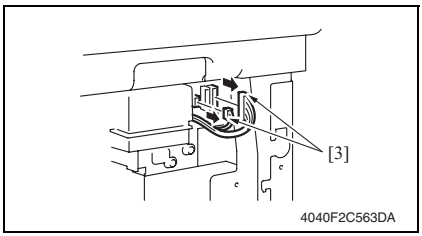
3. Remove four screws [4] and the Duplex Unit [5].

6.3.29 Switch Back Unit

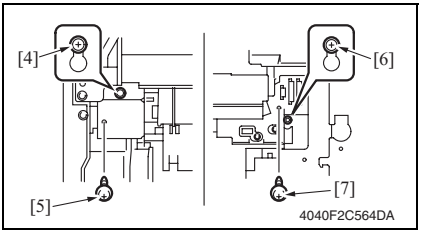
1. Open the Right Door.
2. Remove the Rear Right Cover.
See P.51



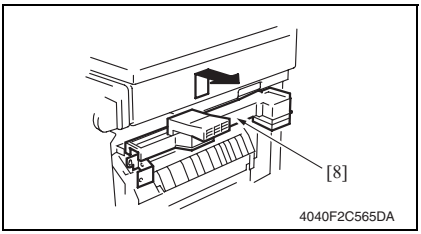
3. Remove the screw [1] and the Front Right Cover [2].



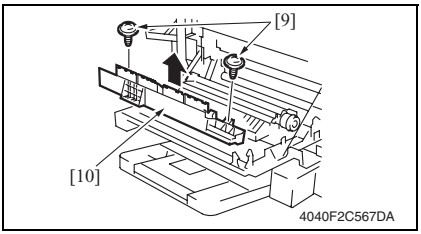
4. Unplug two connectors [3] of the Switch Back Unit.



5. Loosen the screw [4] in front.
6. Remove the screw [5] in front.
7. Loosen the screw [6] in the back.
8. Remove the screw [7] in the back.



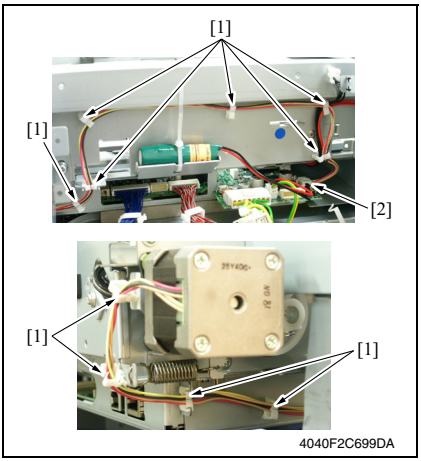
9. Remove the Switch Back Unit [8].



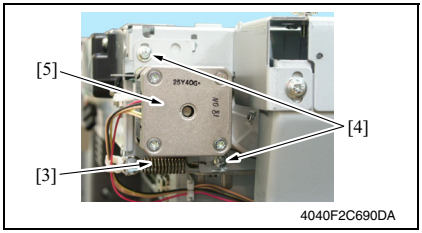
10. Remove two screws [9] and the lower Switch Back Unit [10].

6.3.30 Scanner Motor

1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Right Cover.
See P.52



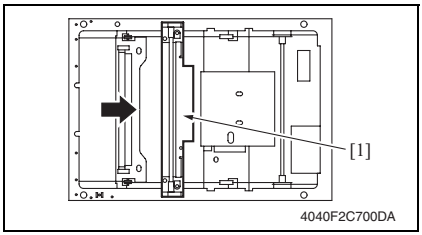
3. Remove ten wiring saddles [1] and disconnect the connector [2].



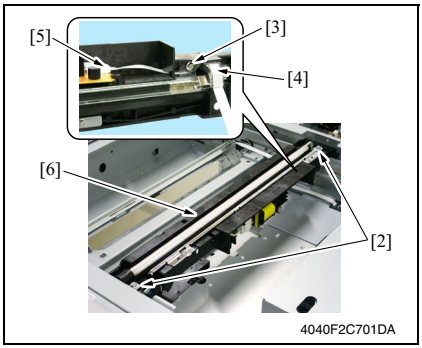
4. Remove the spring [3], two screws [4] and the scanner motor [5].

6.3.31 Exposure Unit

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50



4. Slide the Exposure Unit [1] to the removal position.

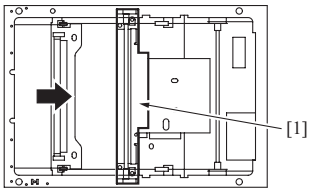


5. Remove two screws [2].
6. Remove the screw [3] and the flat cable [4].
7. Remove the flat cable [5] and the Exposure Unit [6].
8. To reinstall, reverse the order of removal.

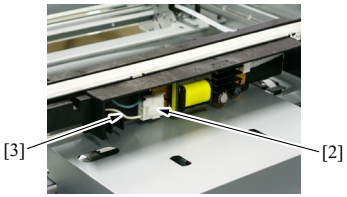
NOTE

- **If the Exposure Unit has been removed, be sure to make the Scanner positioning adjustment.**
See P.228

6.3.32 Exposure Lamp

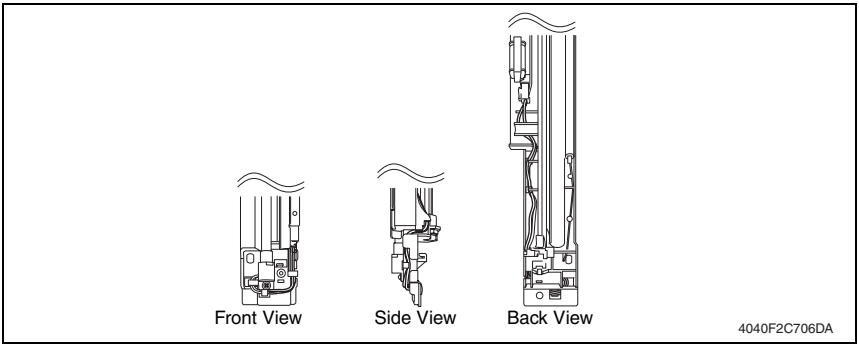


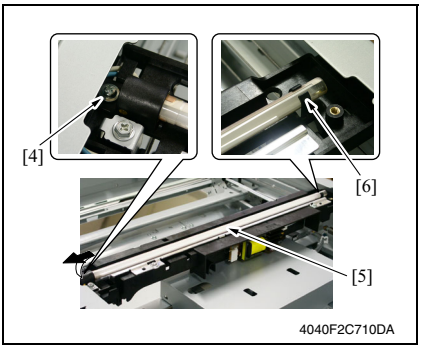
1. Remove the IR Upper Left Cover. See P.50
2. Remove the Front Holding Bracket. See P.50
3. Remove the Original Glass. See P.50
4. Move the Exposure Unit [1] to the removal position.



5. Disconnect the connector [2] and remove the Exposure Lamp harness [3].

- Reinstall the Exposure Lamp harness as follows.



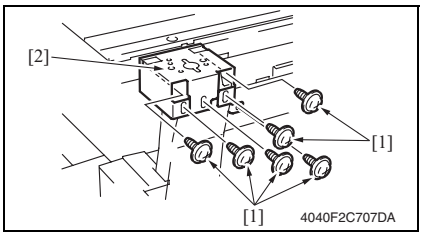


6. Remove the screw [4].
7. Slide the Exposure Lamp [5] to the front and pull it off the holder [6].

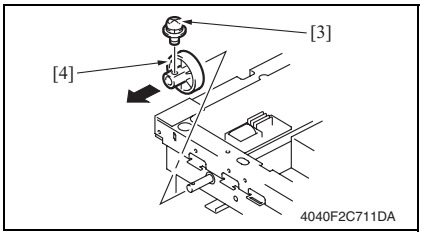
6.3.33 Scanner Drive Cables

A. Removal Procedure

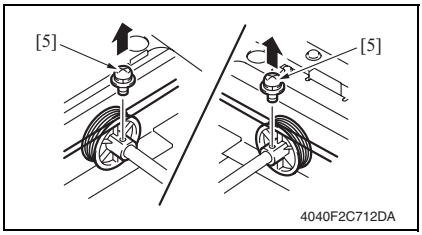
1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Upper Left Cover.
See P.50
3. Remove the Front Holding Bracket.
See P.50
4. Remove the Original Glass.
See P.50
5. Remove the Exposure Unit.
See P.79
6. Remove the Scanner Motor.
See P.78



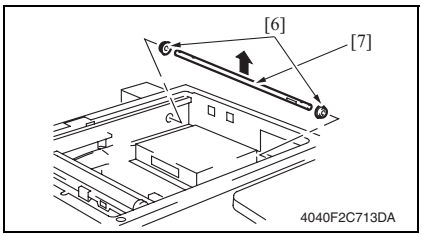
7. Remove six screws [1] and the Original Cover hinge support [2].



8. Remove the screw [3] and the Scanner Drive Gear [4] from the shaft.



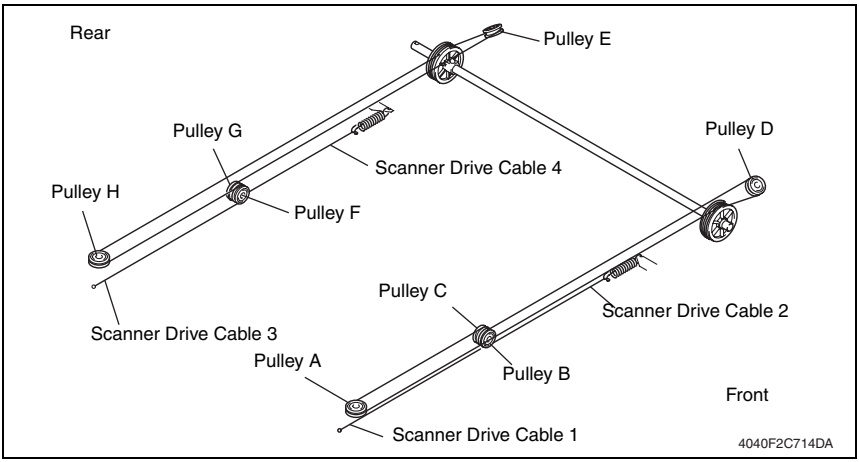
9. Remove two screws [5] and the front and rear pulleys.

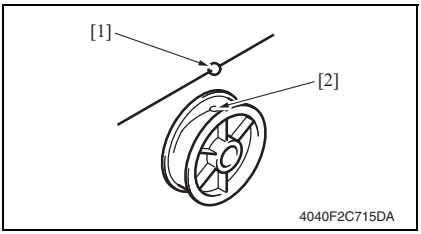


10. Remove the bearing [6] and shaft [7].
11. Remove the Scanner Drive Cables from each hook.

B. Reinstallation Procedure

<General View>



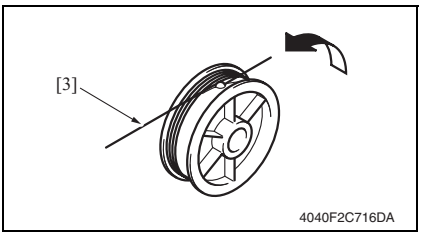


<Front>

1. Position the round bead [1] of the Scanner Drive Cable in the slit [2] in the pulley.

NOTE

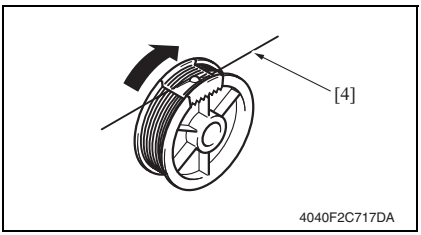
- **Make sure that the bead snugly rests in the slit in the pulley.**



2. Wind Scanner Drive Cable 1 [3] around the pulley four turns counter-clockwise, from the rear toward the front side.

NOTE

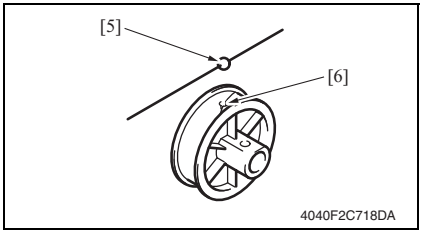
- **Make sure that no part of the cable rides on the other.**



3. Wind Scanner Drive Cable 2 [4] four turns clockwise from the front to the rear side. Then, secure the cable with tape.

NOTE

- **Make sure that no part of the cable rides on the other.**

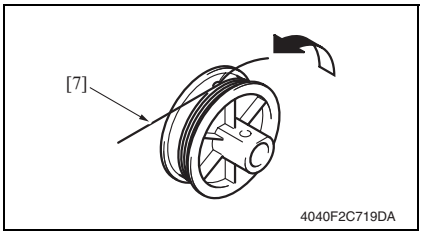


<Rear>

4. Position the round bead [5] of the Scanner Drive Cable in the slit [6] in the pulley.

NOTE

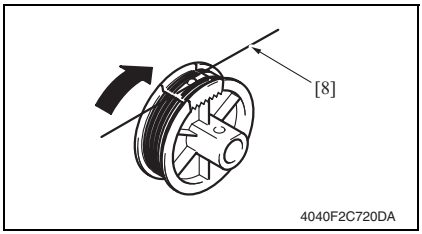
- **Make sure that the bead snugly rests in the slit in the pulley.**



5. Wind Scanner Drive Cable 3 [7] around the pulley four turns counter-clockwise, from the rear toward the front side.

NOTE

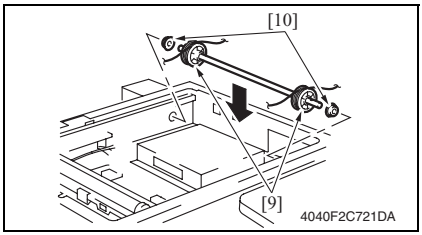
- **Make sure that no part of the cable rides on the other.**



6. Wind Scanner Drive Cable 4 [8] four turns clockwise from the rear to the front side. Then, secure the cable with tape.

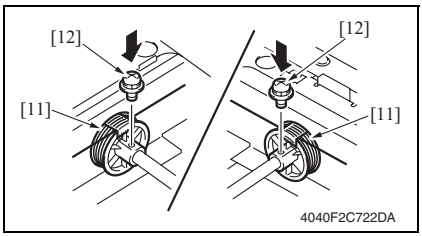
NOTE

- **Make sure that no part of the cable rides on the other.**

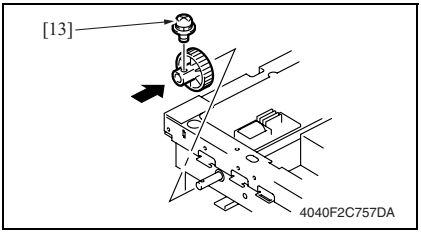


7. Install two pulleys (front and rear) [9] to the shaft.

8. Attach two bushings [10] to the shaft.



9. Secure the front and rear pulleys [11] using one screw each [12].

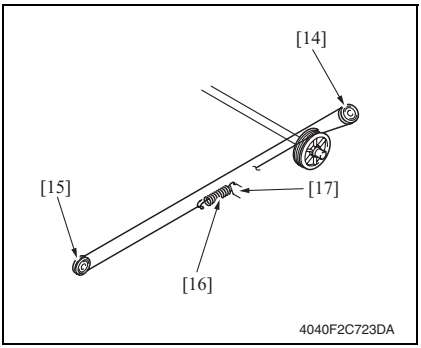


10. Attach the Drive Gear [13] using one screw.

NOTE

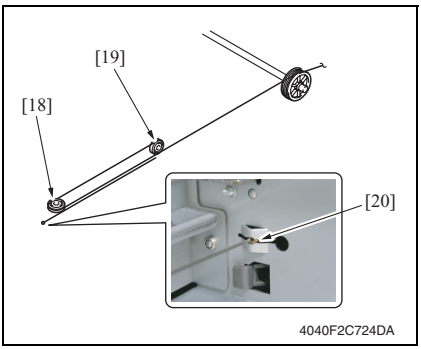
- **Allow a clearance of about 0.1 mm between the Drive Gear and bushing.**

11. Mount the Scanner Motor Assy.
See P.78

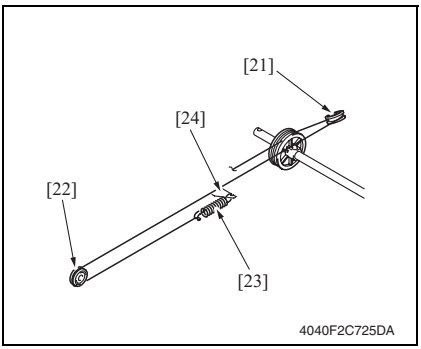


<Front>

12. Wind Scanner Drive Cable 2 around pulley D [14] and pulley B [15], hook the fixing bead to the fixing spring [16], and then hook the spring to the catch [17] in the frame.

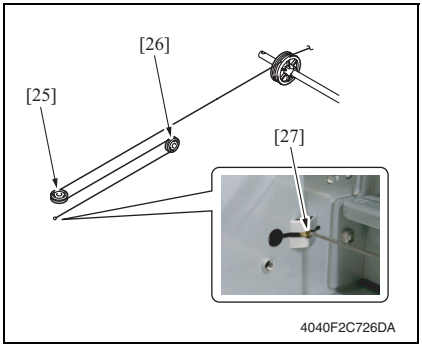


13. Wind Scanner Drive Cable 1 around pulley A [18] and pulley C [19] and hook the bead to the side surface [20] of the Scanner Frame.



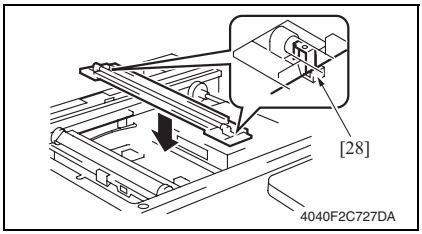
<Rear>

14. Wind Scanner Drive Cable 4 around pulley E [21] and pulley G [22] and hook the fixing bead to the fixing spring [23], and then hook the spring to the catch [24] in the frame.



15. Wind Scanner Drive Cable 3 around pulley H [25] and pulley F [26] and hook the bead to the side surface [27] of the Scanner Frame.

16. Remove the pulley tape.

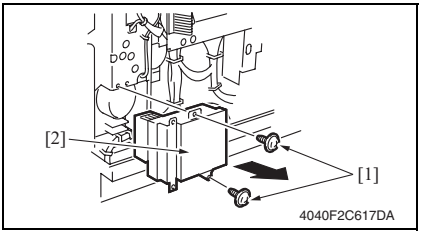


17. Mount the cable to the Exposure Unit [28].

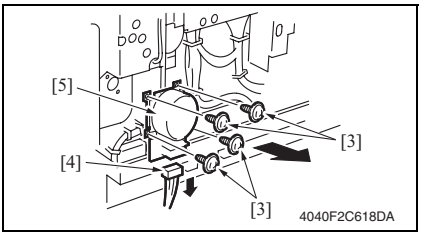
18. Readjust the position of the Exposure Unit.
See P.228

6.3.34 Main Motor

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52
3. Remove the Rear Right Cover.
See P.51



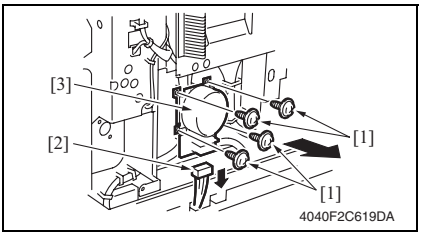
4. Remove two screws [1] and the Ozone Filter Assy [2].



5. Remove four screws [3], disconnect the connector [4], and remove the Main Motor [5].

6.3.35 IU Motor

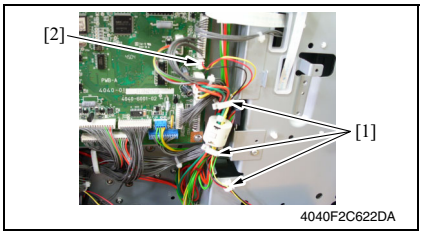
1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



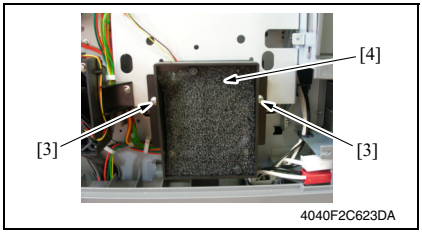
3. Remove four screws [1], disconnect the connector [2], and remove the IU Motor [3].

6.3.36 Power Supply Cooling Fan Motor

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



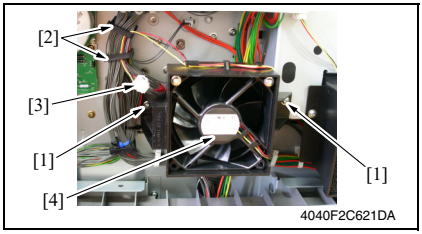
3. Remove three wiring saddles [1] and disconnect the connector (PJ33) [2].



4. Remove two screws [3] and the Power Supply Cooling Fan Motor [4].

6.3.37 Toner Suction Fan Motor

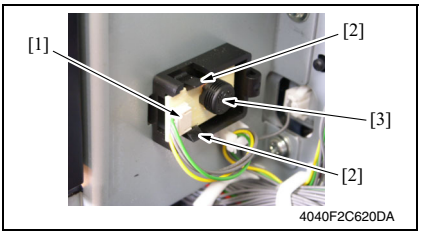
1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



3. Remove two screws [1] and two wiring saddles [2], disconnect the connector [3], and remove the Toner Suction Fan Motor [4].

6.3.38 Temperature/humidity Sensor

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



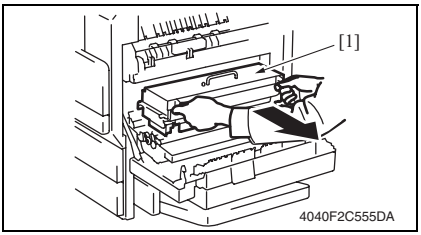
3. Disconnect the connector [1], widen the two tabs [2], and remove the Temperature/humidity Sensor [3].

6.3.39 ATDC Sensor

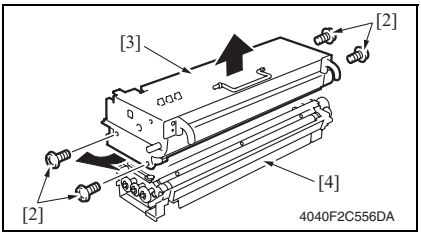
1. Select Tech. Rep. Mode → [Counter] → [Special Parts Counter] → [Developer] and clear the counter.
2. Turn OFF the main power switch.

NOTE

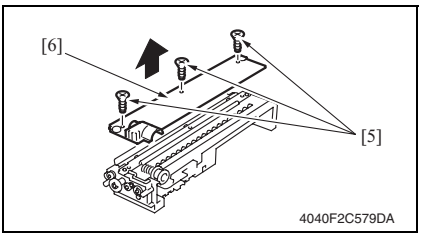
- **Clear the counter before removing the IU.**
- **After clearing the counter, be sure to turn OFF the Main Power Switch.**



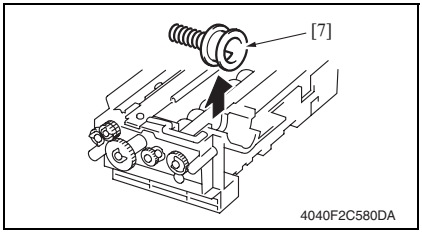
3. Open the Right Door.
4. Remove the Imaging Unit [1].



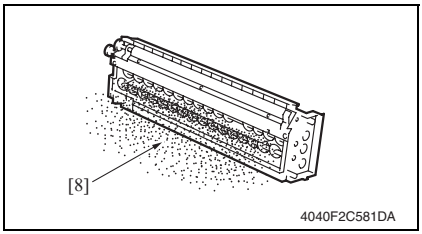
5. Remove four screws (silver) [2] and disassemble the Photo Conductor Unit [3] and the Developing Unit [4].



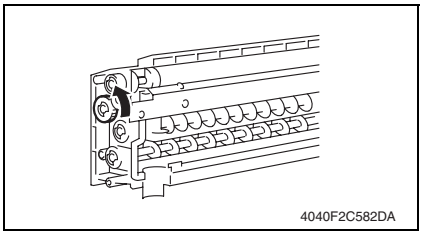
6. Remove three screws [5] and the Developer Scattering Prevention Plate [6].



7. Remove the Toner Supply Port [7].

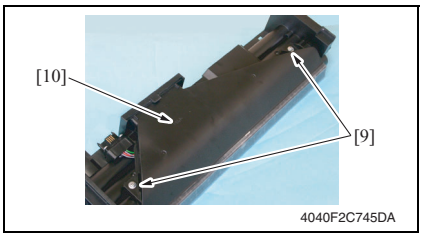


8. Remove the developer [8].

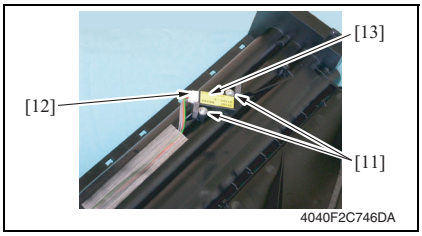


Removal of the Developer

- **Dump the developer on the Sleeve Roller by rotating the gear in the direction of the arrow.**
- **If you rotate the gear in reverse, mylar for cleaning the ATDC Sensor**
- **Dump developer until almost no developer sticks to the Sleeve Roller.**



9. Remove two screws [9] and open the Cover [10].



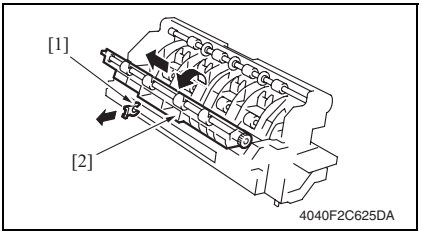
10. Remove two screws [11], disconnect the connector [12], and remove the ATDC Sensor [13].

11. Add developer.

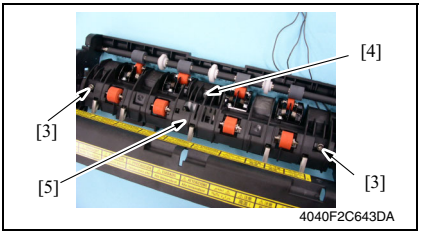
See P.34

6.3.40 Thermistor

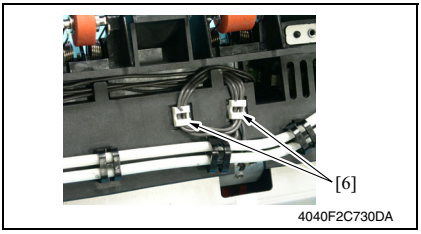
1. Remove the Fusing Unit.
See P.37



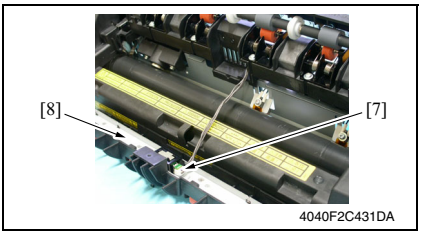
2. Snap off the C-clip [1] and remove the Fusing Entrance Guide Plate [2].



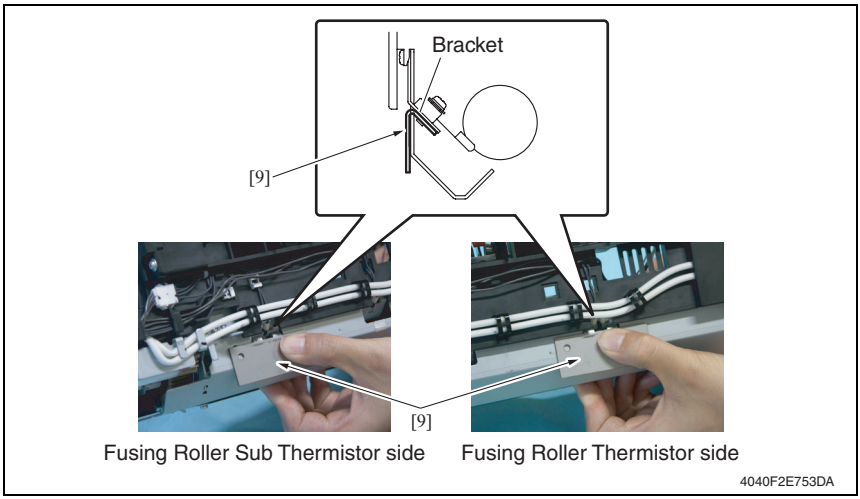
3. Remove two shoulder screws [3], the screw [4], and the Exit Rolls 2 Assy [5].



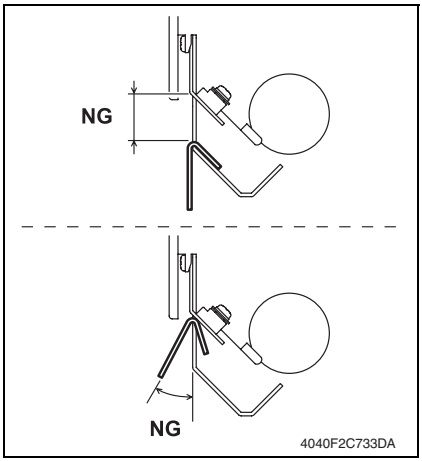
4. Remove two wiring saddles [6] and the harness.



5. Disconnect the connector [7] of the Exit Sensor and remove the Exit Rolls 2 Assy [8].

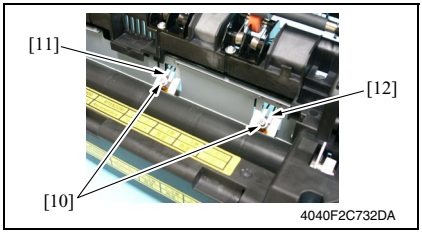


6. Press the Thermistor Holding/Check Jig [9] up against the bracket and fix it in position.



⚠ CAUTION

- **Press the Thermistor Holding/ Check Jig squarely so as to eliminate no gap between the bracket that supports the thermistor and the jig.**



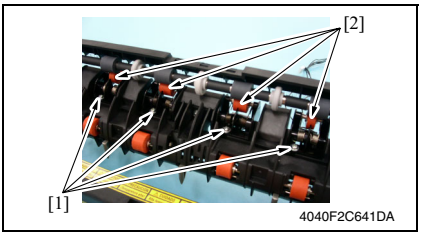
7. Remove two screws [10], the Fusing Roller Thermistor [11], and Fusing Roller Sub Thermistor [12].

Precautions for mounting the thermistors

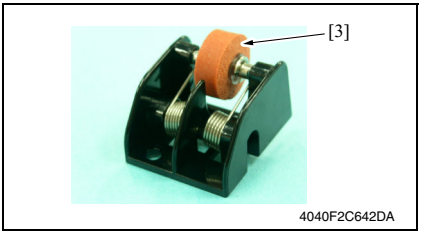
- **When reinstalling the thermistors, use the Thermistor Holding/Check Jig.**
- **After installation, use the jig to make sure that the bracket is not bent.**

6.3.41 Paper Exit Roll 1

1. Remove the Fusing Unit.
See P.37



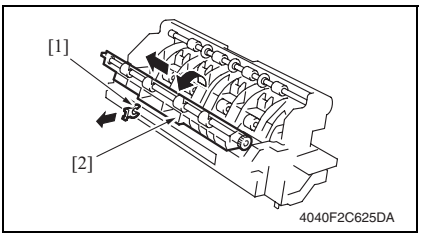
2. Remove four screws [1] and four Exit Rolls 1 Assy [2].



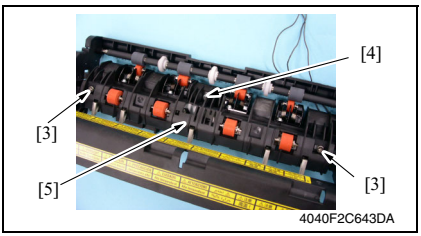
3. Remove the Exit Roll 1 [3].

6.3.42 Paper Exit Roll 2

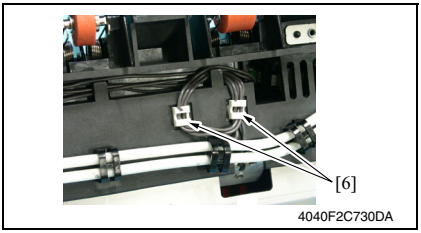
1. Remove the Fusing Unit.
See P.37



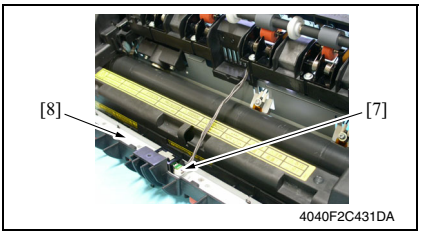
2. Snap off the C-clip [1] and remove the Fusing Entrance Guide Plate [2].



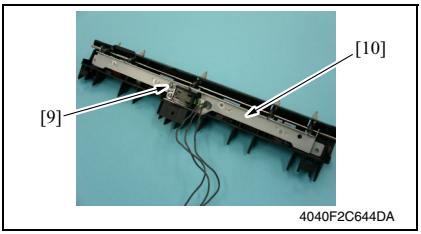
3. Remove two shoulder screws [3], the screw [4], and the Exit Rolls 2 Assy [5].



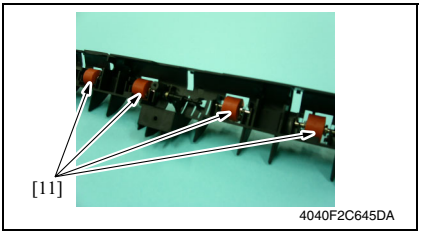
4. Remove two wiring saddles [6] and the harness.



5. Disconnect the connector [7] of the Exit Sensor and remove the Exit Rolls 2 Assy [8].



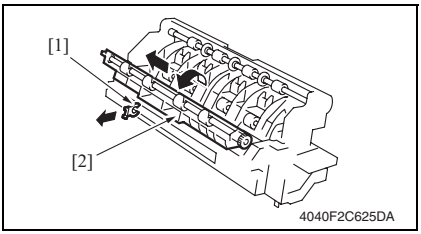
6. Remove the screw [9] and the Separation Claw Assy [10].



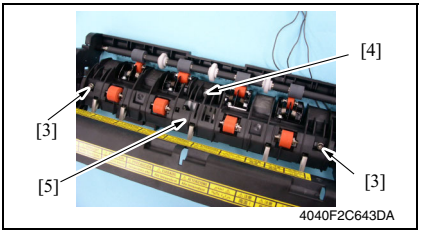
7. Remove four Exit Rolls 2 [11].

6.3.43 Separation Claw

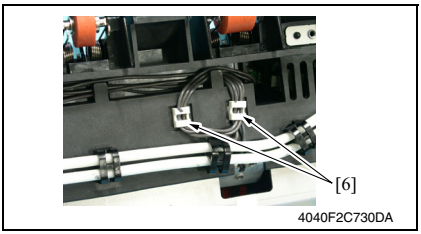
1. Remove the Fusing Unit.
See P.37



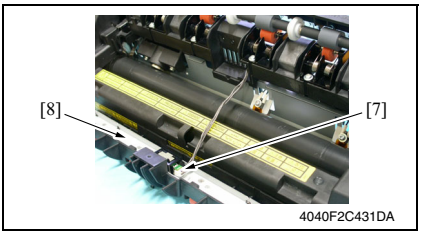
2. Snap off the C-clip [1] and remove the Fusing Entrance Guide Plate [2].



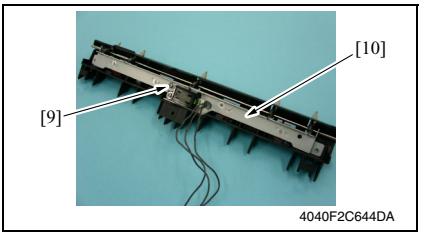
3. Remove two shoulder screws [3], the screw [4], and the Exit Rolls 2 Assy [5].



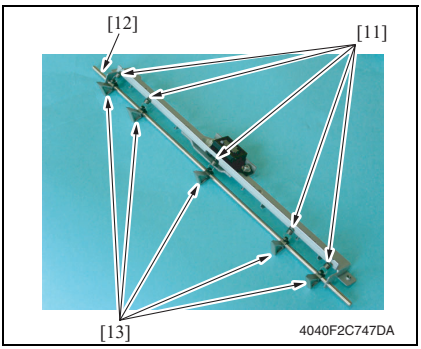
4. Remove two wiring saddles [6] and the harness.



5. Disconnect the connector [7] of the Exit Sensor and remove the Exit Rolls 2 Assy [8].



6. Remove the screw [9] and the Separation Claw Assy [10].



7. Remove five springs [11], the shaft [12], and five Separation Claws [13].

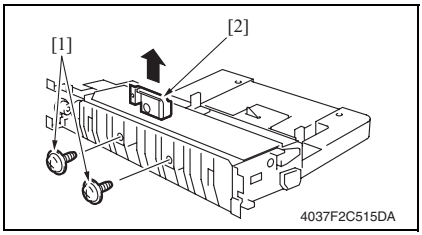
6.4 Cleaning procedure

NOTE

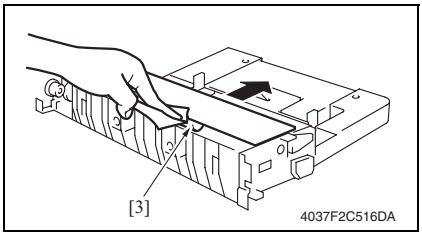
- **The alcohol described in the cleaning procedure represents the isopropyl alcohol.**

6.4.1 Manual Bypass Feed Roller

1. Remove the Manual Bypass Unit.
See P.72



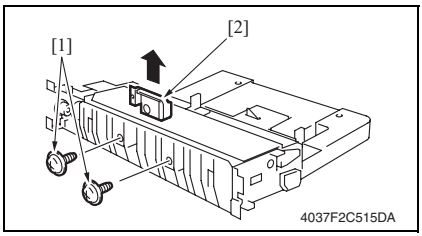
2. Remove two screws [1] and the Manual Bypass Separation Fixing Bracket Assy [2].



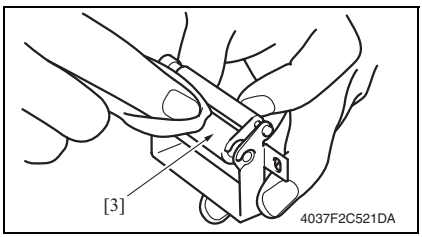
3. Using a soft cloth dampened with alcohol, wipe the Manual Bypass Feed Roller [3] clean of dirt.

6.4.2 Manual Bypass Separation Roller

1. Remove the Manual Bypass Unit.
See P.72

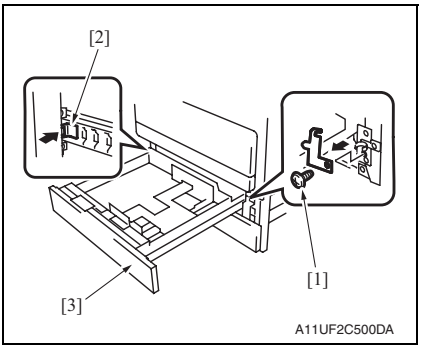


2. Remove two screws [1] and the Manual Bypass Separation Fixing Bracket Assy [2].

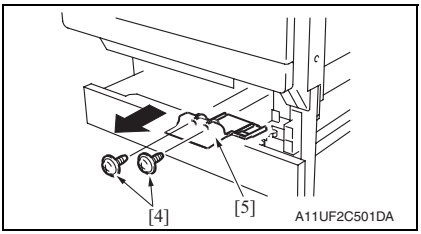


3. Using a soft cloth dampened with alcohol, wipe the Manual Bypass Separation Roller [3] clean of dirt.

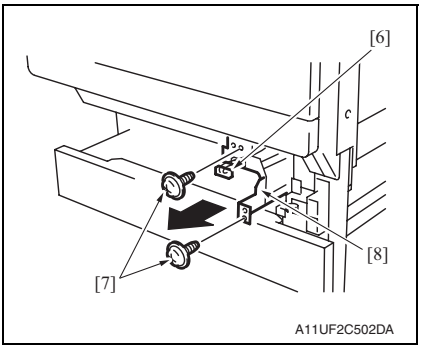
6.4.3 Tray 1 Feed Roller



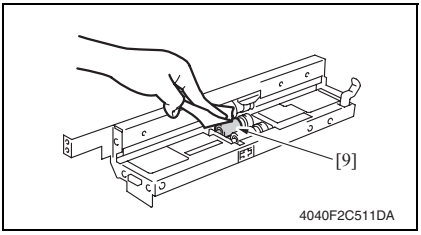
1. Remove the screw [1] and, holding the stopper [2], remove the Tray 1 [3].



2. Remove two screws [4] and the Connector Cover [5].

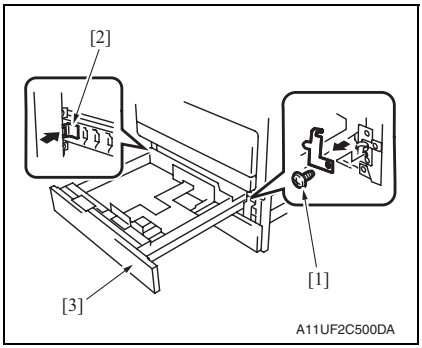


3. Unplug the connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].

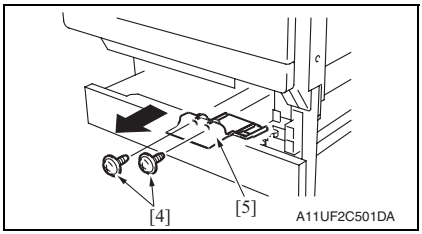


5. Using a soft cloth dampened with alcohol, wipe the Tray 1 Feed Roller [9] clean of dirt.

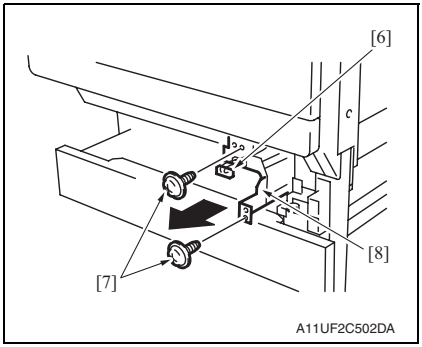
6.4.4 Tray 1 Pick-up Roller



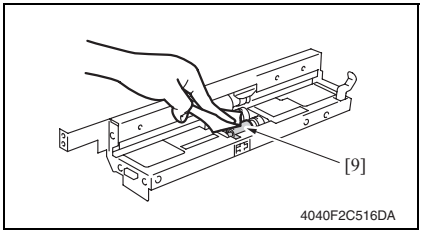
1. Remove the screw [1] and, holding the stopper [2], remove the Tray 1 [3].



2. Remove two screws [4] and the Connector Cover [5].

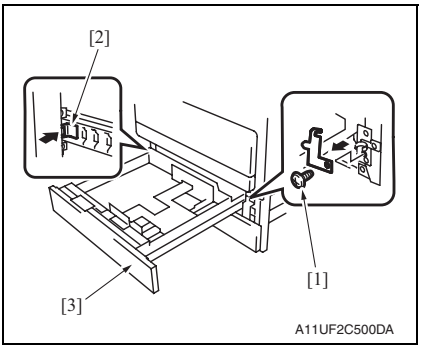


3. Remove the connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].

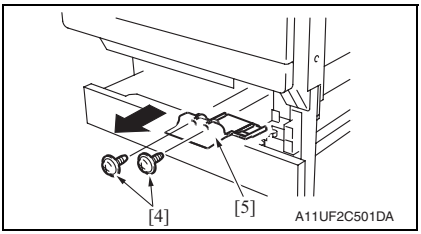


5. Using a soft cloth dampened with alcohol, wipe the Tray 1 Pick-up Roller [9] clean of dirt.

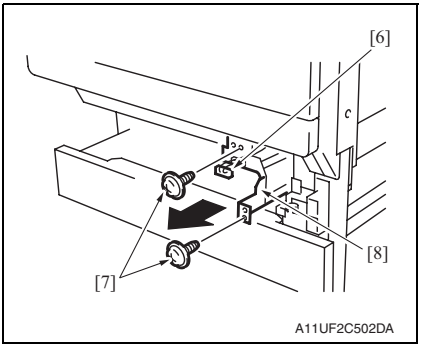
6.4.5 Tray 1 Separation Roller



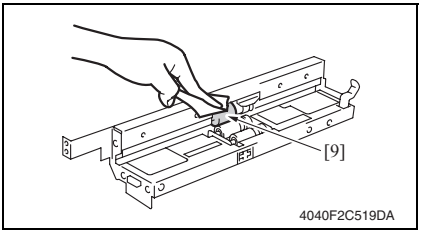
1. Remove the screw [1] and, holding the stopper [2], remove the Tray 1 [3].



2. Remove two screws [4] and the Connector Cover [5].



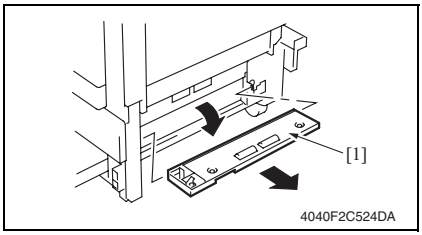
3. Remove the connector [6].
4. Remove two screws [7] and the Tray 1 Feed Roller Assy [8].



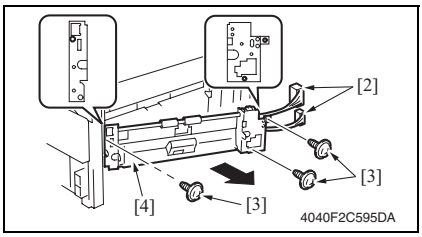
5. Using a soft cloth dampened with alcohol, wipe the Tray 1 Separation Roller [9] clean of dirt.

6.4.6 Tray 2 Feed Roller

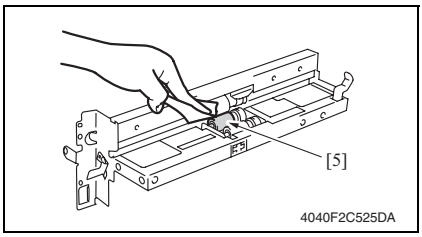
1. Slide out the Tray 2.
2. Remove the Manual Bypass Unit.
See P.72



3. Remove the Lower Right Cover [1].



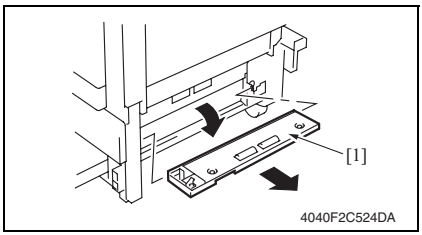
4. Remove two connectors [2].
5. Remove three screws [3] and the Tray 2 Feed Roller Assy [4].



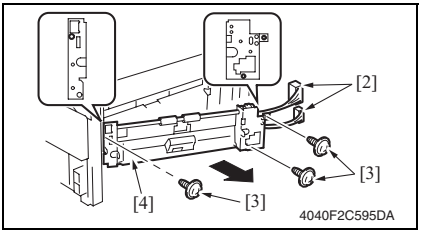
6. Using a soft cloth dampened with alcohol, wipe the Tray 2 Feed Roller [5] clean of dirt.

6.4.7 Tray 2 Pick-up Roller

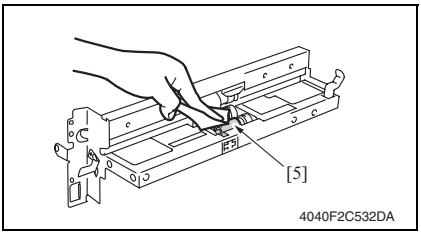
1. Slide out the Tray 2.
2. Remove the Manual Bypass Unit.
See P.72



3. Remove the Lower Right Cover [1].



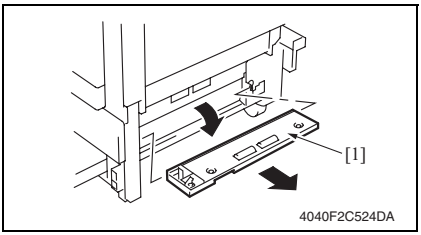
4. Remove two connectors [2].
5. Remove three screws [3] and the Tray 2 Feed Roller Assy [4].



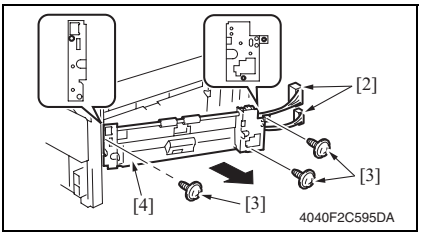
6. Using a soft cloth dampened with alcohol, wipe the Tray 2 Pick-up Roller [5] clean of dirt.

6.4.8 Tray 2 Separation Roller

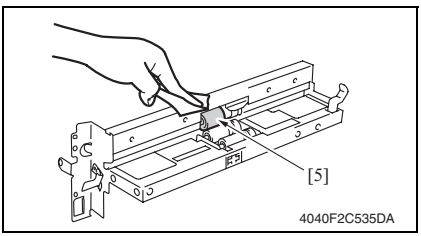
1. Slide out the Tray 2.
2. Remove the Manual Bypass Unit.
See P.72



3. Remove the Lower Right Cover [1].

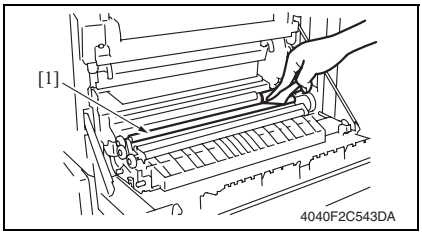


4. Remove two connectors [2].
5. Remove three screws [3] and the Tray 2 Feed Roller Assy [4].



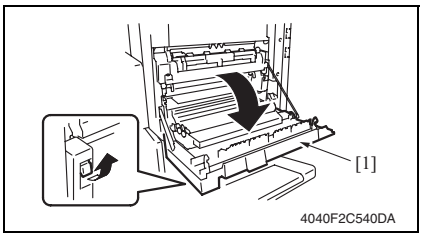
6. Using a soft cloth dampened with alcohol, wipe the Tray 2 Separation Roller [5] clean of dirt.

6.4.9 Registration Roller

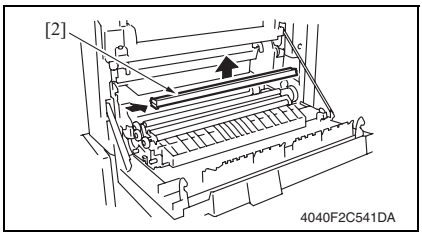


1. Remove the Paper Dust Remover See P.31
2. Using a soft cloth dampened with alcohol, wipe the Registration Roller [1] clean of dirt.

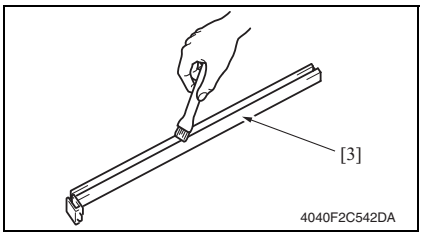
6.4.10 Paper Dust Remover



1. Open the Right Door [1].

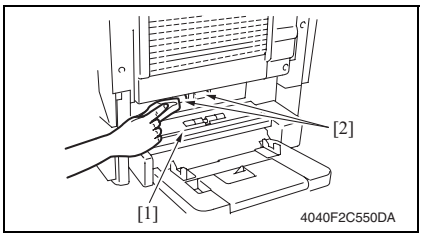


2. Remove the Paper Dust Remover [2].



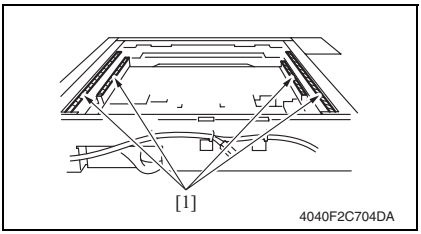
3. Using a brush, whisk dust and dirt off the Paper Dust Remover [3].

6.4.11 Transport Roller



1. Open the Lower Right Door [1].
2. Using a brush, whisk dust and dirt off the Transport Roller [2].

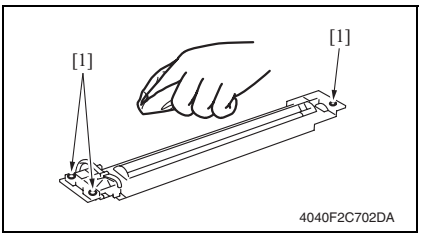
6.4.12 Scanner Rails



1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50
4. Using a soft cloth dampened with alcohol, wipe four Scanner Rails [1] clean of dirt.

6.4.13 Bushings

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50
4. Remove the Exposure Unit.
See P.79



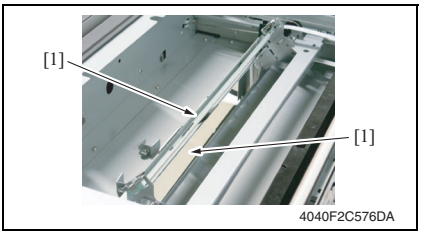
5. Using a soft cloth dampened with alcohol, wipe three Bushings [1] clean of dirt.

NOTE

- **When installing the Exposure Unit, be sure to perform scanner position adjustment.**
See P.228

6.4.14 Mirrors

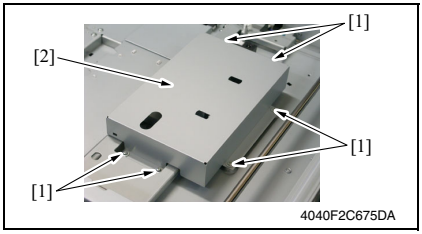
1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50



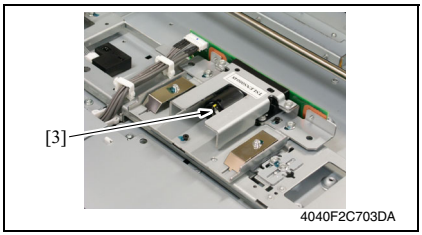
4. Using a soft cloth dampened with alcohol, wipe two Mirrors [1] clean of dirt.

6.4.15 Lens

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50

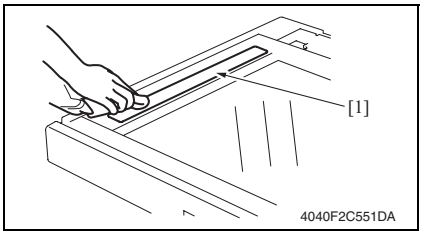


4. Remove six screws [1] and the CCD Unit Cover [2].



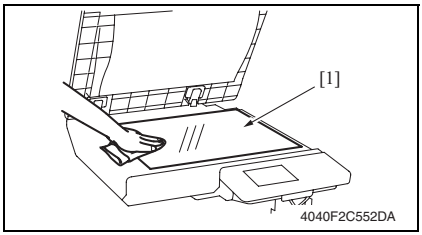
5. Using a soft cloth dampened with alcohol, wipe the Lens [3] clean of dirt.

6.4.16 Original Scanning Glass



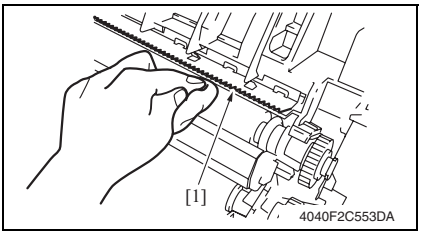
1. Using a soft cloth dampened with alcohol, wipe the Original Scanning Glass [1] clean of dirt.

6.4.17 Original Glass



1. Using a soft cloth dampened with alcohol, wipe the Original Glass [1] clean of dirt.

6.4.18 Charge Neutralizing Plate



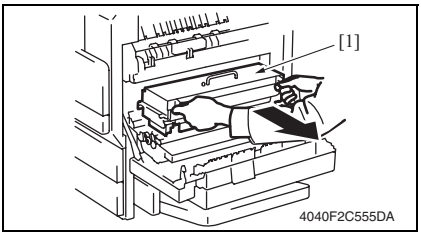
1. Open the Right Door.
2. Wipe the Charge Neutralizing Plate [1] clean of dirt with a cloth.

6.4.19 Ds Collar

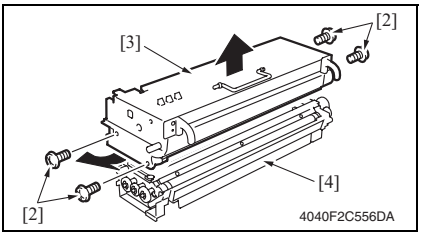
1. Turn OFF the main power switch.

NOTE

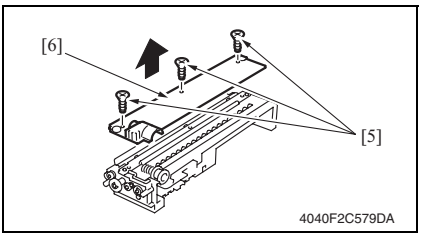
- **Clear the PC Life counter before removing the IU.**
- **After clearing the PC counter, be sure to turn OFF the Main Power Switch.**



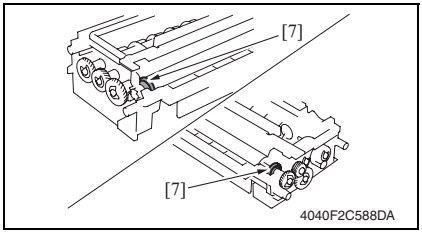
2. Open the Right Door.
3. Remove the Imaging Unit [1].



4. Remove four screws (silver) [2] and disassemble the Photo Conductor Unit [3] and the Developing Unit [4].



5. Remove three screws [5] and the Developer Scattering Prevention Plate [6].



7. Turn ON the main power switch.

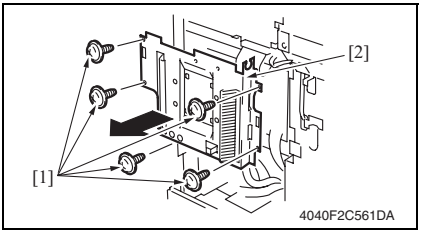
6. Using a soft cloth dampened with alcohol, wipe the Ds Collar [7] clean of dirt.

NOTE

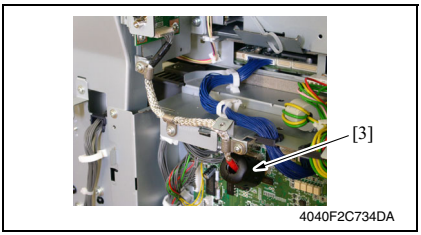
- **Make sure the alcohol does not touch the Developer Roller.**

6.5 Mount Kit MK-709

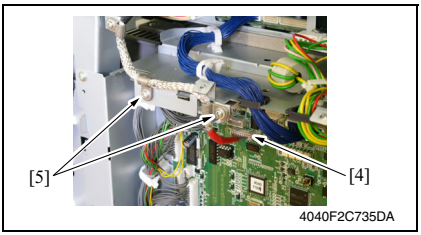
1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



3. Remove five screws [1] and Mechanical Control Board Cover [2].



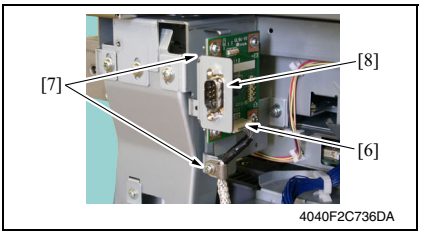
4. Remove the ferrite core (black) [3].



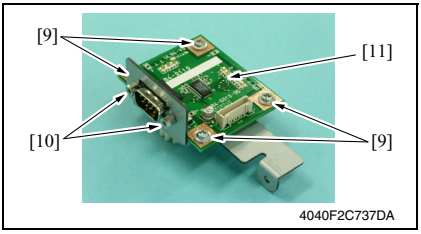
5. Remove the Connector [4].
6. Remove two screws [5], shield clamp, and harness.

NOTE

- **When the connector is to be connected, plug the side of the harness, around which red tape is wound, in the connector (PJ38) of the Mechanical Control Board.**



7. Remove the Connector [6].
8. Remove two screws [7] and the Mount Kit Assy [8].



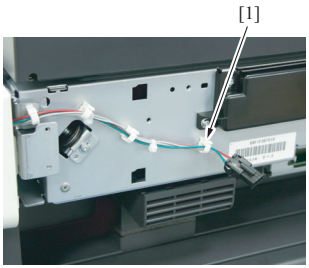
9. Remove four screws [9], two shoulder screws [10], and the Mount Kit Board [11].

6.6 Option counter

6.6.1 Installation method for the Key Counter

A. KEY COUNTER KIT 4 (4599-211) / KEY COUNTER MOUNT KIT (4623-471)

1. Remove the Upper Rear Cover.
See P.51
2. Remove the IR Right Cover.
See P.52



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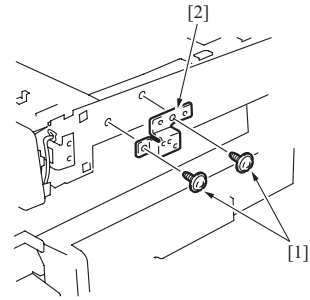
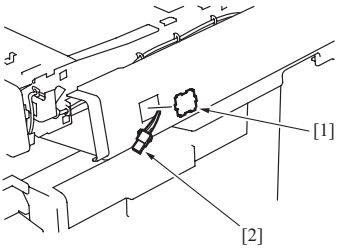
3. Remove the harness from the wire saddle [1].



A11UF2C522DA

4. Install the bracket [2] using two screws [1].



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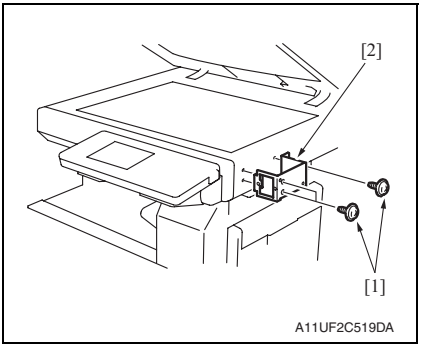
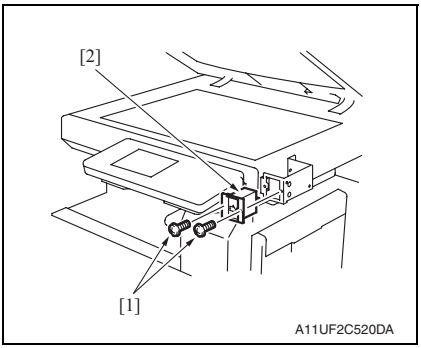
5. Remove the knockout [1] from the IR Right Cover.
6. Pass the Key Counter Harness [2] through the IR Right Cover.
7. Reinstall the IR Right Cover.

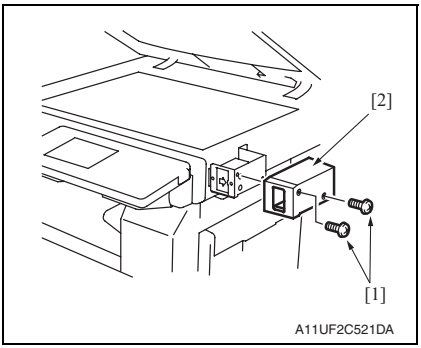


8. Using three screws [1], secure the Counter Mounting Bracket [2].



9. Connect the Key Counter Socket connector.

10. Using two screws [1], secure the counter socket [2].

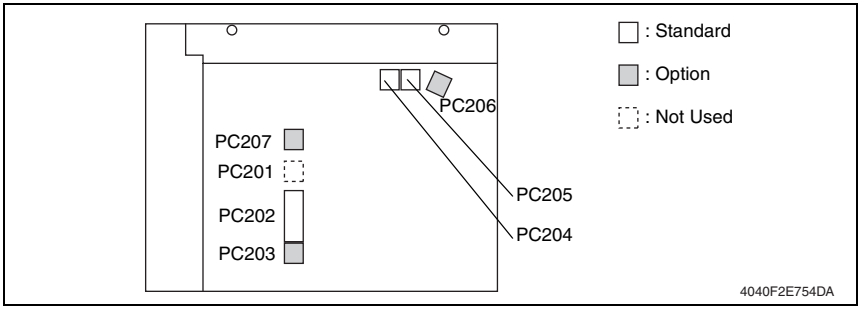


11. Using two screws [1], secure the Key Counter Cover [2].

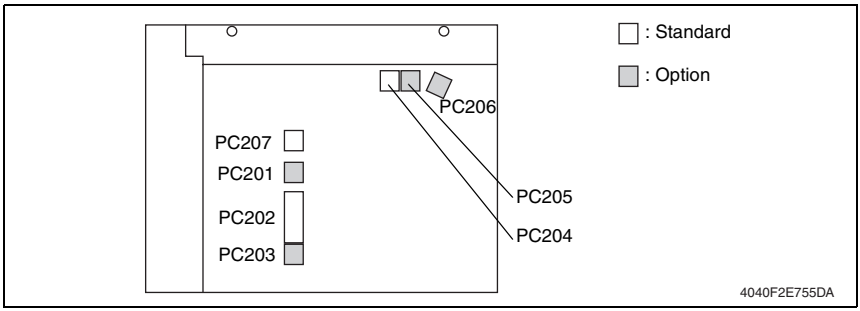
6.7 Original Size Detecting Sensors

6.7.1 Original Size Detecting Sensor Layout

A. For U.S.



B. For Europe and Others



6.7.2 Mounting of the Original Size Detecting Sensors (Option)

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50
4. Mount the Original Size Detecting Sensor (option).
5. Reinstall all parts which have been removed.
6. Select the functions as follows: Tech. Rep. Mode → [System Input] → [Original Size Detecting Option]. Then, change the setting for Original Size Detecting Option from [No] to [Yes].
7. Select the Tech. Rep. Mode → [Function] → [F7-1].

NOTE
- **Select [F7-2] if the Fax Kit is mounted.**

8. Stack five sheets of blank A3 paper on the Original Glass.
9. Press the Start key to perform automatic adjustment by the Original Size Detecting Sensor
10. Turn OFF the Main Power Switch, wait for 10 sec., then turn the switch ON.

NOTE
- **The Start key remains lit up orange while this function is being run and lights up green as soon as the sequence is completed.**

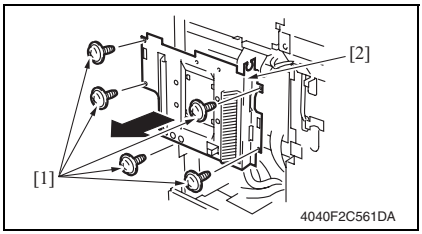
6.8 EEPROM

6.8.1 Remounting of the EEPROM

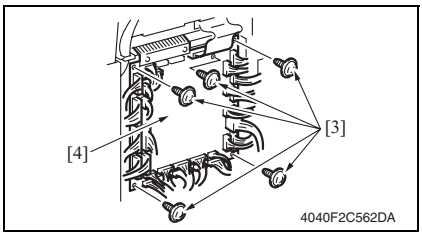
NOTE

- **When the Mechanical Control Board is replaced with a new one, be sure to demount the EEPROM (IC3A) from the old Mechanical Control Board and mount it on the new Mechanical Control Board.**

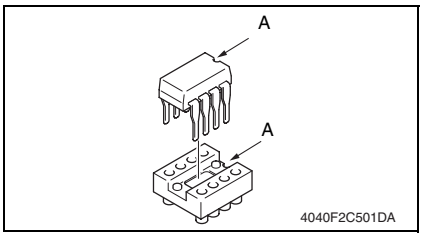
1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52



3. Remove five screws [1] and Mechanical Control Board Cover [2].



4. Unplug the all connectors.
5. Remove five screws [3] and Mechanical Control Board [4].



6. Demount the EEPROM (IC3A) from the new Mechanical Control Board.
7. Mount the EEPROM (IC3A) from the old Mechanical Control Board to the new Mechanical Control Board.

NOTE

- **Note the alignment notch on the EEPROM (IC3A) when mounting the IC.**

Blank Page

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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

8. Utility/Counter Mode

8.1 Utility/Counter Mode function tree

- The function tree is shown to comply with the format displayed on the screen.

Utility/Counter					Ref. page
User Setting *1	User's Choice	1/6	Mixed Original Detection		P.119
			Language Selection		P.119
			Measurement Unit Setting		P.119
			Machine Authentication PW Change *1		P.119
		2/6	Default Setting Simplex/Duplex		P.120
			Auto Paper/Auto Zoom		P.120
			Priority Tray		P.120
			Special Paper Setting		P.120
			Zoom Ratio for Combine Booklets		P.120
		3/6	Low Power Mode		P.121
			Sleep Mode		P.121
			LCD Back-Light OFF		P.121
			Auto Reset		P.121
			Auto Reset when Account is changed		P.122
		4/6	4in1 Copy Order		P.122
			Default Quality/Density Modes		P.122
			Default Copy Density Levels		P.122
			Print Density		P.123
			Default Finishing Mode		P.123
		5/6	Sort/Non-Sort Auto Change		P.123
			Output Tray Settings *1		P.123
			Auto Paper Select for Small Original		P.124
			Dehumidify Scanner *1		P.124
			Crease/Center Staple *1		P.124
		6/6	Default Screen	Default LCD Screen	P.125
				Default E-Mail Screen	P.125
			Default Device		P.125
			Image Quality (ADF)		P.125
	E-mail Input *2 *3 *6		One-Touch		P.125
			Index		
			E-Mail Program *2		
			Domain Name		
			Bulletin *1		
			Conf. Box *1		
	Store Overlay *1				P.126

Utility/Counter					Ref. page
User Management	Confirmation Beep				P.127
	Alarm Volume				P.127
	Line Monitor Sound *1 *3				P.127
	Job Complete Beep				P.127
	Panel Cleaning				P.127
	Dehumidify				P.127
	Toner Supply				P.128
	Memory RX ON/OFF *3				P.128
	POP3 RX *3				P.128
Admin. Management	Admin.1	Initial Setting	Date & Time Setting	Date & Time Setting	P.129
				Time Zone	P.129
				Day Light Saving Time	P.129
			Language for Communication *3		P.129
			Self-Telephone # information *1 *3		P.129
			TSI Registration *3		P.129
			Self-ID *1 *3		P.129
		Admin. Set	Administrator Code Input		P.129
			Max. Copy Sets		P.130
			Disable Sleep Mode		P.130
			Restrict One-Touch Editing *3 *5		P.130
			Activity Report E-Mail TX *1		P.130
		Call Remote Center *1			P.199
		Account/ User Auth.	User Authentication ON/OFF		P.130
			Allow Print without Authentication *1		P.131
			External Server Authentication *1	General Settings	P.131
				Domain Setting	
			Machine Auth. Setting *1	User Registration	P.131
			Account Track Setting *1	Account Data	P.132
		TX Settings *3	Quality/Mode	Default Quality	P.132
				Default Density	
				Communication Mode	
			Comm. Menu	TX	
				TSI	
				Rotation TX	
				2-Sided TX	

Utility/Counter					Ref. page
		RX Settings *3	Memory RX Time Setting	Memory Lock Time	P.132
				Memory Lock Password	
			Confidential RX User Box Delete *1		
		FAX Setting *1 *3	RX Functions	Reception Mode	P.132
				Numbers of RX Call Rings	
			Password Communication	Communication Password	
		Print Lists *3	Setting List		P.132
		Report Settings *3	TX Report		P.132
			Activity Report		
		Document Management *3	TX Document		P.132
			RX Document		
	Admin. 2	Network Setting	Network Setting 1	Basic Settings	P.132
				DNS Settings	P.134
				Machine Name	P.134
				SMTP Settings	P.134
				POP3 Settings	P.135
				Priority Compress Level	P.136
				Scanner Settings	P.136
				LDAP Setting	P.138
				Frame Type Set	P.141
				IP Filtering	P.141
			Network Setting 2	IP Relay Settings *1	P.141
				SIP-FAX Settings *1 *3	P.141
				Prefix/Suffix Settings	P.142
		Printer Setting	Timeout		P.142
			No Matching Paper in Tray Setting		P.143
		Software SW			P.143
		Ping			P.143
		Security Setting	Enhance Security *1		P.144
			Unlock		P.144
			SSL/TLS *5		P.144
		Delete Job *3			P.145
		Memory Management *4	Overwrite All data		P.145
		HDD Management *4	Overwrite All data		P.145
			HDD Lock Setting		P.146
			Encryption Setting		P.147
			Format		P.147

Utility/Counter				Ref. page
Reports *3 *6	TX Report			P.147
	RX Report			
	One-Touch List			
	Program List *3			
	Bulletin List *1 *3			
	Confidential List *1 *3			
Printer Setting	MFP Set	Proof Print Hold Time		P.148
		Overwrite A4 ←→ Letter		P.148
		Document Hold Time		P.148
		PostScript Error Report		P.148
	Default Set	Basic	Tray	P.148
			Paper Size	P.149
			Original Direction	P.149
			Print Method	P.149
			# of Sets	P.149
		Font	Font #	P.149
			Symbol Set	P.150
			Number Lines	P.150
			Font Size	P.150
			CR/LF Mapping	P.150
	PDL Set			P.150
	Test Print			P.151
Check Detail				P.151

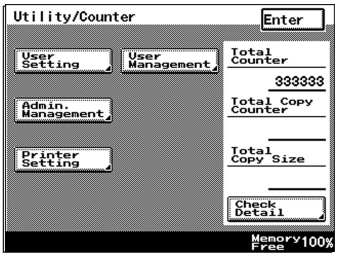
NOTE

- **Keys displayed on screens are different depending on the setting.**
- ***1: Become available on the screen if a corresponding option is mounted or depending on the setting made.**
- ***2: Key names are different if the Fax Kit FK-503 is mounted.**
- ***3: For more details, see the FK-503 manual.**
- ***4: If HD-504 is mounted, [Memory Management] is changed to [HDD Management].**
- ***5: If enhance security mode is set ON, menu is not shown.**
- ***6: If enhance security is set ON, different screen is shown.**
- **If HD-504 is not mounted, [User's Choice] is directly shown.**

8.2 Utility/Counter Mode function setting procedure

8.2.1 Procedure

1. Press the Utility/Counter key.
2. The Utility/Counter mode screen will appear.



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8.2.2 Exiting

- Touch the [Enter] key.

8.2.3 Changing the setting value in Utility Mode functions

- Use the +/- key to enter or change the setting value.
- Use the 10-Key Pad to enter the setting value. (To change the setting value, first press the Clear key before making an entry.)

8.3 Settings in the User Setting

8.3.1 User's Choice 1/6

A. Mixed Original Detection

Functions	• To set whether or not the Mixed Original Detection function is selected when the screen shifts to the initial one.
Use	• To set Mixed Original Detection as the default.
Setting/ Procedure	• The default setting is "OFF". ON "OFF"

B. Language Selection

Functions	• To select the language of the Touch Panel messages.
Use	• To change the language of the control panel display to the corresponding language.
Setting/ Procedure	• Select the language, and then touch [Enter] to set the language. <For U.S.> Japanese "English" French Spanish <For Europe> Japanese "English" French Spanish German Italian

C. Measurement Unit Setting

Functions	• To select the unit displayed on the LCD display. • Available only in machines for U.S.
Use	• To change the unit displayed on the control panel.
Setting/ Procedure	• The default setting is "Inch (Fraction)". Inch (Num. Value) "Inch (Fraction)"

D. Machine Authentication PW Change

Functions	• The password entered for machine authentication with user authentication can be changed. • Available only when the machine authentication setting is made.
Use	
Setting/ Procedure	[Current Password]: Type in the currently specified machine authentication password. [New Password]: Type in the new machine authentication password. [Confirm New Password]: Type in the new machine authentication password again for confirmation.

8.3.2 User's Choice 2/6

A. Default Setting Simplex/Duplex

Functions	• To set the default copy mode selected when the screen shifts to the initial one.
Use	• To change the default copy mode selected when the screen shifts to the initial one.
Setting/ Procedure	• The default setting is "1 → 1" if "Simplex/Duplex" is "Simplex & Duplex" that is accessed by the following: Tech. Rep. Mode → [Tech. Rep. Choice] → [System Set] → Simplex/ Duplex. 1→2 2→2 1→1 • The default setting is "1 → 2" if "Simplex/Duplex" is "Duplex Only" that is accessed by the following: Tech. Rep. Mode → [Tech. Rep. Choice] → [System Set] → Simplex/ Duplex. 1→2 2→2

B. Auto Paper/Auto Zoom

Functions	• To set the default Auto mode selected when the screen shifts to the initial one.
Use	• To change the default Auto mode selected when the screen shifts to the initial one.
Setting/ Procedure	• The default setting is "Auto Paper Select". "Auto Paper Select" Auto Zoom Manual

C. Priority Tray

Functions	• To select the priority paper source that is selected when the copier is set to [Auto Size] or [Manual].
Use	• To set a priority paper source.
Setting/ Procedure	• The default setting is "Tray 1". "Tray 1" Tray 2 Tray 3 Tray 4

D. Special Paper Setting

Functions	• To specify the type of paper used in each paper Tray.
Use	• To set the type of paper used in each paper Tray.
Setting/ Procedure	• The default setting is "Normal". "Normal" 1-Sided only Recycled Special Paper

E. Zoom Ratio for Combine Booklets

Functions	• To select whether or not to call up an optimum zoom ratio automatically when the 2in1, 4in1, or Booklet function is selected.
Use	• To set so as to call up an optimum zoom ratio automatically when the 2in1, 4in1, or Booklet function is selected.
Setting/ Procedure	• The default setting is "Recall". "Recall" Do Not Recall • 4in1: ×0.500 • 2in1/Booklet: ×0.647 <For U.S.> 2in1/Booklet: ×0.707 <For Europe>

8.3.3 User's Choice 3/6

A. Low Power Mode

Functions	• To set the time until Low Power starts operating after the last key operation has been completed. • Low Power: To turn LED and LCD OFF, and lower the power consumption.
Use	• To change the time until Low Power starts.
Setting/ Procedure	• Use the 10-Key Pad for setting. • The default setting is "15 min." "15 min" (10 to 240)

B. Sleep Mode

Functions	• To set the time until Sleep Mode starts operating after the last key operation has been completed. • Turn all lines OFF except 3.3 V line for Control. • "OFF" will only be displayed when "Disable Sleep Mode" in Admin. Management is set.
Use	• To change the time until the Sleep Mode starts.
Setting/ Procedure	• Use the 10-Key Pad for setting. • The default setting is "1 min." "1 min" (1 to 240) OFF

C. LCD Back-Light OFF

Functions	• To set the time until LCD Back-Light OFF starts operating after the last key operation has been completed.
Use	• To change the time until LCD Back-Light OFF starts operating after the last key operation has been completed.
Setting/ Procedure	• Use the 10-Key Pad for setting. • The default setting is "1 min." "1 min" (1 to 240)

D. Auto Reset

Functions	• To set the time until Auto Reset starts operating after the last key operation has been completed. • Auto Reset: Resets the panel to the default settings.
Use	• To change the time until Auto Reset starts operating after the last key operation has been completed.
Setting/ Procedure	• The default setting is "1 min." 30 seconds "1 min" 2 min 3 min 5 min OFF

E. Auto Reset when Account is changed

Functions	• To set so that the screen changes to the initial one when the Plug-in Counter is removed, a Data Controller card is removed, or the administrator access code is entered to access the Admin. Management mode.
Use	• To select not to allow the screen to change to the initial one even when the users are changed as they use a machine for account management.
Setting/ Procedure	• The default setting is “ON” “ON” OFF

8.3.4 User’s Choice 4/6

A. 4in1 Copy Order

Functions	• To select the layout of copied images when a 4in1 Copy setting is selected.
Use	• To change the layout of copied images when a 4in1 Copy setting is selected.
Setting/ Procedure	• The default setting is the following layout of copied images. 1 2 / 3 4 (Default) 1 3 / 2 4

B. Default Quality/Density Modes

Functions	• To set the default image density and image quality selected when the screen shifts to the initial one.
Use	• To change the default image density and image quality selected when the screen shifts to the initial one.
Setting/ Procedure	<Density> • The default setting is “Auto”. “Auto” Manual <Original Type> • The default setting is “Text” “Text” Photo Text & Photo Dot Matrix

C. Default Copy Density Levels

Functions	• To set the default image density level when the Auto or Manual Exposure is selected.
Use	• To change the default image density level when the Auto or Manual Exposure is selected.
Setting/ Procedure	When “Auto” is selected: • The default setting is “Std.” Lighter “Std.” Darker When “Manual” is selected: • The default setting is “EXP5” EXP1 (Light) through EXP9 (Dark)

D. Print Density

Functions	• To specify the default print density.
Use	• To change the default print density.
Setting/ Procedure	• The default setting is “0”. -2 -1 “0” 1 2

E. Default Finishing Mode

Functions	• To set the default finishing mode selected when the screen shifts to the initial one. • The contents of the display vary depending on the types of finishing options mounted on the machine.
Use	• To change the default finishing mode selected when the screen shifts to the initial one.
Setting/ Procedure	• The default setting is “Non-Sort”. “Non-Sort” Sort Group Corner Staple 2 Staples

8.3.5 User’s Choice 5/6

A. Sort/Non-Sort Auto Change

Functions	• To select whether to enable or disable the function that automatically switches between [Sort] and [Non- Sort] according to the number of originals and the number of copy sets to be made.
Use	• To set so as to enable the function that automatically switches between [Sort] and [Non-Sort] according to the number of originals and the number of copy sets to be made.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

B. Output Tray Settings
(1) Copier/Printer

Functions	• To specify the output tray for copies and computer printouts when output options are mounted on the copier. • The screen that appears differs depending on the options that are mounted on the copier.
Use	• To change the output tray for copies and computer printouts.
Setting/ Procedure	<Printer> • The default setting is “1”. “1” 2 (3) <Copies> • The default setting is “2”; or “1” if the Mailbin Kin is mounted. (“1”) “2” 3 * ( ): when the Mailbin Kit is mounted

C. Auto Paper Select for Small Original

Functions	• To set whether or not to specify the paper tray when an original, whose size falls outside the detectable range, is loaded or no originals are loaded at all with the [Auto Paper Select] setting selected.
Use	• [Copy]: Enables copying by using the priority paper source. • [Prohibit Copy]: Displays a screen prompting the user to select the paper source.
Setting/ Procedure	• The default setting is “Copy”. “Copy” Prohibit Copy • If “Copy” is selected, the copy can be made after a paper source is selected.

D. Dehumidify Scanner

Functions	• To set the time at which the Scanner is dehumidified in order to prevent dew condensations from being formed on the Scanner. • Becomes available when the corresponding Tech. Rep. Mode function is set.
Use	• To change the time at which the Scanner is dehumidified.
Setting/ Procedure	• The 10-Key Pad is used for setting the time. Hour: 00 to 24 Minute: 00 to 59

E. Crease/Center Staple

Functions	• To specify the folding position when the [Crease] setting is selected. • To specify the binding position when the [Corner Staple] setting is selected. • Available only when the options mounted.
Use	• To adjust the folding position of the [Crease] function and the binding position of the [Center Staple] function.
Setting/ Procedure	*1.* Select [Crease/Center Staple]. *2.* Select the paper size. *3.* Adjust the position of crease and center staple. <Crease> • The default setting is “0” -10 to +10 <Center Staple> • The default setting is “0” -10 to +10

8.3.6 User's Choice 6/6

A. Default Screen

(1) Default LCD Screen

Functions	• To set the default screen selected when the screen shifts to the initial one.
Use	• To change the default screen selected when the screen shifts to the initial one.
Setting/ Procedure	• The default setting is "Copy" "Copy" E-mail

(2) Default E-Mail Screen

Functions	• To set the default screen selected when the Scanner is selected. * If FAX kit FK-503 is mounted, the screen changes to [Default FAX Screen].
Use	• To change the default screen selected when the Scanner is selected.
Setting/ Procedure	• The default setting is "One-Touch" "One-Touch" Search Address Input Index

B. Default Device

Functions	• To set the mainly used function.
Use	• To change the mainly used function.
Setting/ Procedure	• The default setting is "Copy" "Copy" Printer

C. Image Quality (ADF)

Functions	• To adjust the copy image density level when the ADF is being used. • Mode 1: When a standard original (text, etc.) is used • Mode 2: To improve the reproduction of a faint original.
Use	• To change the copy image density level when the ADF is being used.
Setting/ Procedure	• The default setting is "Mode 1" Mode1 (for black lines): " " Mode2 (standard):

8.3.7 E-mail Input

See P.16 of the FK-503 service manual.

8.3.8 Store Overlay

NOTE

- **Available only when the HD-504 is mounted.**

A. Set

Functions	• To store an image to be called up in overlay.
Use	• To store image in the Hard Disk.
Setting/ Procedure	*1.* Place the original to be stored for overlay. *2.* Press the Utility/Counter key. *3.* Touch [User Setting] and then [Store Overlay]. *4.* Touch [Set] and select the number key, in which the image is to be stored. *5.* Select the size of the range to be read. *6.* Touch [Auto Detect] to let the machine automatically detect the reading range according to the image of the original. *7.* Touch [Custom Size]. Then, a screen that prompts the user to enter an irregular size will appear. Touch [X] or [Y], enter the value from the 10-Key Pad, and touch [Enter]. *8.* Touch the [Enter]. *9.* Select the orientation of the original. Portrait: “  ” Landscape:  *10.*Press the Start key.

B. Delete

Functions	• To delete an image that has previously been stored.
Use	• To delete an image that has previously been stored in the Hard Disk.
Setting/ Procedure	*1.* Press the Utility/Counter key. *2.* Touch [User Setting] and then [Store Overlay]. *3.* Touch [Delete] and select the number key, in which the image to be deleted is stored.

C. Check

Functions	• To check the image that has previously been stored by having it printed.
Use	• To check the image that has previously been stored in the Hard Disk.
Setting/ Procedure	*1.* Press the Utility/Counter key. *2.* Touch [User Setting] and then [Store Overlay]. *3.* Touch [Set] and select the number key, in which the image to be checked is stored. *4.* Select paper and press the Start key.

8.4 Settings in the User Management

8.4.1 Confirmation Beep

Functions	• To set whether or not to produce a sound when a key in the Keypad is pressed.
Use	• To change whether or not to produce a sound when a key in the Keypad is pressed.
Setting/ Procedure	• The default setting is “3”. 0 to 5

8.4.2 Alarm Volume

Functions	• To specify the volume of the alarm that sounds when an error occurs or an incorrect operation is specified.
Use	• To change the volume of the alarm that sounds when an error occurs or an incorrect operation is specified.
Setting/ Procedure	• The default setting is “3”. 0 to 5

8.4.3 Line Monitor Sound

See P.17 of the FK-503 service manual.

8.4.4 Job Complete Beep

Functions	• To set the volume of the beep that sounds when a job is completed.
Use	• To change the volume of the beep that sounds when a job is completed.
Setting/ Procedure	• The default setting is “3”. 0 to 5

8.4.5 Panel Cleaning

Functions	• To disable control panel key operations.
Use	• To disable control panel keys before cleaning the display on the control panel.
Setting/ Procedure	• To cancel this function, press the Panel Reset key to display the Basics screen.

8.4.6 Dehumidify

Functions	• To dehumidify the Scanner when dew condensations are formed on the Scanner because of sudden changes in temperature or high humidity. * Becomes available when the corresponding Tech. Rep. Mode function is set.
Use	• To prevent dew condensations from being formed on the Photo Conductor during changes in ambient conditions.
Setting/ Procedure	• When [Dehumidify] is touched, the Photo Conductor or Exposure Lamp is operated for a predetermined period of time and then stops in the mode set by the corresponding Tech. Rep. Choice function.

8.4.7 Toner Supply

Functions	• To adjust the set toner-to-carrier level by providing an auxiliary supply of toner when a low image density occurs due to a lowered toner-to-carrier ratio after large numbers of copies have been made of originals having a high image density.
Use	• To replenish the supply of toner in an auxiliary manner.
Setting/ Procedure	• Touch [Toner Supply] for the copier to detect the current toner density and, if the density is lower than the standard value, a toner-replenishing sequence, then a developer agitation sequence are performed. If the toner density is detected to be higher than the standard value, only a developer agitation sequence is performed.

8.4.8 Memory RX ON/OFF

See P.17 of the FK-503 service manual.

8.4.9 POP3 RX

See P.17 of the FK-503 service manual.

8.5 Settings in the Admin. Management

- The Admin. Management will be available by entering the administrator password (8 digits) set by the Admin. Set. (The administrator password is initially set to “12345678”)

8.5.1 Admin. 1

A. Initial Setting

(1) Date & Time Setting

<Date & Time Setting>

Functions	• To set the date and time of day.
Use	• To set or change the date and time of day.
Setting/ Procedure	• Use the Keypad to type in the date (Month, Day, and Year) and time of the day. • Touching [Enter] will start the clock.

<Time Zone>

Functions	• To set the time difference from the standard time appended to the mail header when sending e-mail.
Use	• To change the time difference from the standard time.
Setting/ Procedure	• The default setting is “-05:00”. -12:00 to +12:00

<Day Light Saving Time>

Functions	• To adjust daylight saving time automatically.
Use	• To set daylight saving time.
Setting/ Procedure	• The default setting is “Auto”. “Auto” OFF

(2) Language for Communication

See P.18 of the FK-503 service manual.

(3) Self-Telephone # information

See P.18 of the FK-503 service manual.

(4) TSI Registration

See P.18 of the FK-503 service manual.

(5) Self-ID

See P.19 of the FK-503 service manual.

B. Admin. Set

(1) Administrator Code Input

Functions	• To change the administrator access code.
Use	• To change the administrator access code. * To set enhance security mode ON, change the default administrator password to 8 digits code that is not using all the same numbers.
Setting/ Procedure	[Current Code]: Enter the current administrator access code. [New Code]: Enter the new administrator access code. [Retype New Code]: Enter the new administrator access code again for confirmation.

(2) Max. Copy Sets

Functions	• To set whether or not to limit the number of copies to be made at one time.
Use	• To limit the number of copies to be made at one time.
Setting/ Procedure	• The default setting is “OFF”. 1 to 99 “OFF”

(3) Disable Sleep Mode

Functions	• To display the setting [OFF] in the Sleep Mode Setting screen, available from the User’s Choice screen.
Use	• To enable the setting of [OFF] in the Sleep Mode Setting screen available from the User’s Choice screen.
Setting/ Procedure	• The default setting is “No”. Yes “No”

(4) Restrict One-Touch Editing

See P.19 of the FK-503 service manual.

(5) Activity Report E-Mail TX

See P.19 of the FK-503 service manual.

C. Account/User Auth.

NOTE

- **When selecting Vender 2 or Management Device 2 for Meter count Mode, Account/ User Auth. key is not displayed.**

(1) User Authentication ON/OFF

Functions	• To set whether or not to make user authentication. * [User Authentication ON/OFF] and [Account Track ON/OFF] cannot be set at the same time.
Use	• To select the scheme of user authentication, whether it is made by an external server or MFP.
Setting/ Procedure	<User Auth. Setting> • The default setting is “OFF”. ON (External Server) ON (MFP) “OFF” <Account Track> • The default setting is “OFF”. ON “OFF” <synchronize> When either [ON (External Server)] or [ON (MFP)] is selected, ON/OFF setting appears. * When [ON (External Server)] is selected, OFF is automatically set. ON “OFF”

(2) Allow Print without Authentication

Functions	• To set whether or not to allow print of data that doesn't set user/account authentication at PC print during login with user authentication or account track is being made. * It is displayed only when [Account Track ON/OFF] is set ON, and [User Authentication ON/OFF] is set ON (External server) or ON (MFP). * The menu is not shown when enhance security mode is set ON.
Use	• To set whether or not to allow print of data that doesn't set user/account authentication at PC print during login with user authentication or account track is being made.
Setting/ Procedure	• The default setting is "OFF". ON "OFF"

(3) External Server Authentication

Functions	• To set an authentication scheme depending on individual user network and server configurations.
Use	
Setting/ Procedure	<General Settings> *1.* Touch [External Server Authentication]. *2.* Touch [General Settings] and select the authentication scheme. • The default setting is "Active Directory". "Active Directory" NTLM NDS <Domain Setting> *3.* Touch [External Server Authentication]. *4.* Touch [Domain Setting] and enter the domain name (up to 64 en-size characters). **NOTE** **• If [NDS] is selected, enter [Tree Name] and [Context Name].**

(4) Machine Auth. Setting

<User Registration>

Functions	To control the Total Counter by setting a password for each user.
Use	• To set authentication by MFP.
Setting/ Procedure	*1.* Touch [Machine Auth. Setting]. *2.* Touch [User Registration]. *3.* Select an unused account number (000 to 999). *4.* Enter the Account Name and Password. *5.* Set the Max. Print Allowance (0 to 999999). *6.* Touch [Enter].

(5) Account Track Setting

<Account Data>

Functions	• To control the Total Counter by setting a password and the upper limit for the output pages for each account. * Available only when [Account Track] is set to [ON].
Use	• To set, control, or delete account data.
Setting/ Procedure	<Set> *1.* Select the account number to be controlled. *2.* Select [Counter].: Each of different counters of the selected account will be displayed. *3.* Select [General Settings].: Change the settings made for the selected account. *4.* Select [Clear Counter].: The counter of the selected account is cleared. *5.* Touch [Enter]. <Delete> *1.* Select the account number to be deleted. *2.* Select [Delete Account]. *3.* Select [Yes] and touch [Enter].

D. TX Settings

See P.19 of the FK-503 service manual.

E. RX Settings

See P.21 of the FK-503 service manual.

F. FAX Setting

See P.21 of the FK-503 service manual.

G. Print Lists

See P.22 of the FK-503 service manual.

H. Report Settings

See P.22 of the FK-503 service manual.

I. Document Management

See P.23 of the FK-503 service manual.

8.5.2 Admin. 2

A. Network Setting

(1) Network Setting 1

<Basic Settings>

- DHCP

Functions	• To set DHCP for the network.
Use	• To use DHCP.
Setting/ Procedure	• The default setting is “IP Input”. Auto-Obtain “IP Input”

- IP Address Setting

Functions	• To set the IP address of the device used in the network.
Use	• To enter the IP address of the machine. • Use this function when [IP Input] is selected for [DHCP].
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

• Subnet Mask

Functions	• To set the subnet mask of the device used in the network.
Use	• To enter the subnet mask of the machine. • Use this function when [IP Input] is selected for [DHCP].
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

• Gateway

Functions	• To set the gateway address of the device used in the network.
Use	• To enter the gateway address of the machine. • Use this function when [IP Input] is selected for [DHCP].
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

• Self-Domain Name

Functions	• To set the domain name of the local machine.
Use	• To enter the domain name of the local machine.
Setting/ Procedure	*1.* Touch the [Self-Domain Name]. *2.* Enter the domain name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

• Network Board Set

Network Board Speed

Functions	• To set the data transfer rate of the Network Board.
Use	• To set a specific network data transfer rate.
Setting/ Procedure	• The default setting is “Auto”. “Auto” 100M 10M **NOTE** • **Be sure to set the correct transfer rate so as to ensure that communications are carried out correctly.** • **If the network data transfer rate has been changed, be sure to turn OFF the Main Power Switch of the machine, wait for 10 sec. or more, and then turn the switch ON again.**

Duplex

Functions	• To set the packet transmission/reception mode when the switching hub is connected.
Use	• To change the setting between Full Duplex and Half Duplex. • Use this function when Network Board Speed has been set to [100M] or [10M].
Setting/ Procedure	• The default setting is “Half Duplex”. “Half Duplex” Full Duplex **NOTE** • **If the Duplex setting has been changed, be sure to turn OFF the Main Power Switch of the machine, wait for 10 sec. or more, and then turn the switch ON again.**

<DNS Settings>

Functions	• To set the DNS Server.
Use	• To enter DNS Server.
Setting/ Procedure	• The default setting is “NO”. YES “NO” <Host Name> *1.* Touch the [Host Name]. *2.* Enter the host name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter]. <Domain Name> *1.* Touch the [Domain Name]. *2.* Enter the domain name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter]. <DNS Server Address> • IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255] * Up to three places can be set.

<Machine Name>

Functions	• To set the name of the machine.
Use	• To enter the name of the machine.
Setting/ Procedure	*1.* Touch the [Machine Name]. *2.* Enter the machine name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

<SMTP Settings>

• SMTP Server Address

Functions	• To set the SMTP server address.
Use	• To set the SMTP server address required for performing Scan to E-Mail and Internet Fax.
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

• E-Mail Address

Functions	• To set the e-mail address of the machine.
Use	• To enter the e-mail address of the machine.
Setting/ Procedure	*1.* Touch the [E-Mail Address]. *2.* Enter the e-Mail address of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

• SMTP Authentication User Name

Functions	• To set the user name for SMTP authentication.
Use	• To enter the user name when the mail transfer authentication (SMTP authentication) function is used.
Setting/ Procedure	*1.* Touch the [SMTP Authentication User Name]. *2.* Enter the SMTP Authentication User Name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

• SMTP Authentication Password

Functions	• To set the password for SMTP authentication.
Use	• To enter the password when the mail transfer authentication (SMTP authentication) function is used.
Setting/ Procedure	*1.* Touch the [SMTP Authentication Password]. *2.* Touch [New Password], enter the password, and then touch [Enter]. *3.* Touch [Confirm New Password], enter the password once again, and then touch [Enter].

<POP3 Settings>

• POP3 Server Address

Functions	• To set the POP3 server address.
Use	• To enter the POP3 server address required for receiving Internet Fax.
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

• POP3 User Name

Functions	• To set the POP3 server user name.
Use	• To enter the POP3 server user name required for receiving Internet Fax.
Setting/ Procedure	*1.* Touch the [POP3 User Name]. *2.* Enter the POP3 User Name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

• POP3 Password

Functions	• To set the POP3 password.
Use	• To enter the POP3 password.
Setting/ Procedure	*1.* Touch the [POP3 Password]. *2.* Touch [New Password], enter the password, and then touch [Enter]. *3.* Touch [Confirm New Password], enter the password once again, and then touch [Enter].

• Auto-RX Check

Functions	• To set intervals, at which a check is made by connecting to the POP3 server.
Use	• To change the intervals, at which a check is made by connecting to the POP3 server.
Setting/ Procedure	• The default setting is “Check OFF”. • Setting range: 1 to 99 M *1.* Touch the [Auto-RX Check]. *2.* Enter the value from the 10-Key Pad and touch [Enter]. *3.* Select [Check OFF] to select not to make the auto check.

<Prioruty Compress Level>
• E-Mail Mode
TX Size (Max.)

Functions	• To set the upper limit of the size of the document to be sent.
Use	• To set the default upper limit of the size of the document for Internet Fax.
Setting/ Procedure	• The default setting is “11x17”. Letter/Legal “11x17”

TX Quality (Max.)

Functions	• To set the upper limit of the image quality to be sent.
Use	• To set the upper limit of the image quality to be sent.
Setting/ Procedure	• The default setting is “600 dpi”. 200 dpi 400 dpi “600 dpi”

Coding Method

Functions	• To set the coding method for the data to be sent.
Use	• To set the coding method for the data to be sent.
Setting/ Procedure	• The default setting is “MH”. “MH” MR MMR

• Scan Mode
File Type

Functions	• To set the file type of the data to be sent.
Use	• To set the file type of the data to be sent.
Setting/ Procedure	• The default setting is “TIFF”. “TIFF” PDF

Coding Method

Functions	• To set the coding method for the selected file type.
Use	• To set the coding method for the selected file type.
Setting/ Procedure	• The default setting is “MH”. “MH” MMR

<Scanner Settings>
• Activity Report

Functions	• To set whether or not to give an activity report.
Use	• To set whether or not to return an activity report to the sending end of e-mail.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

• RX Doc. Header Print

Functions	• To set whether or not to print header in a received document.
Use	• To set whether or not to print the e-mail header on the first page of a received document.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

• E-Mail Header Text

Functions	• To set whether or not to insert text in a transmitted document.
Use	• To set the insertion method of text to be inserted in the transmitted document.
Setting/ Procedure	• The default setting is “Fixed Text”. “Fixed Text” Custom Text OFF

• Gateway TX

Functions Use	• To set whether to enable or disable transmission of e-mail during fax transfer in gateway communications.
Setting/ Procedure	• The default setting is “Restrict”. Allow “Restrict”

• Subject Registration

Functions	• To set the subject during transmission.
Use	• To enter the subject during transmission.
Setting/ Procedure	• The maximum number of characters to be registered is 40 en-size (20 em-size) characters.

• Division Settings

Page Division

Functions	• To set whether or not to make page division during transmission.
Use	• To transmit data by dividing it by the page.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

Binary Division

Functions	• To set whether or not to make binary division during transmission.
Use	• To transmit data through binary division.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

Binary Division Size

Functions	• To set the binary division size.
Use	• To set the binary division size when Binary Division is set to [ON].
Setting/ Procedure	• The default setting is “500 KB”. • Setting range: 16 to 2000 KB • Enter the value from the 10-Key Pad and touch [Enter].

<LDAP Setting>

• LDAP Search

Functions	• To enable or disable address search using the LDAP server.
Use	• To enable address search using the LDAP server.
Setting/ Procedure	• The default setting is “No”. Yes “No”

• LDAP Server Setting

LDAP Server Name

Functions	• To set the LDAP server name.
Use	• To enter the LDAP server name.
Setting/ Procedure	*1.* Touch the [LDAP Server Setting]. *2.* Touch the LDAP server key to be registered or changed. *3.* Touch the [LDAP Server Name]. *4.* Enter the LDAP Server Name of the local machine from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

Server Address

Functions	• To set the IP address of the LDAP server.
Use	• To enter the IP address of the LDAP server.
Setting/ Procedure	• IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255]

Search Base

Functions	• To set the starting point of LDAP search.
Use	• To enter the starting point of LDAP search.
Setting/ Procedure	*1.* Touch the [Search Base]. *2.* Enter the starting point from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

Authentication Setting

Functions	• To make settings for authentication.
Use	• General Settings: Use to select the LDAP authentication method. • Login name: Use to set the logon name for authentication. • Password: Use to set the password for authentication. • Domain Name: Use to set the domain name for authentication by GSS-SPNEGO.
Setting/ Procedure	<General Settings> • The default setting is “Anonymous”. “Anonymous” Simple Digest-MD5/CRAM-MD5 GSS-SPNEGO <Login name> *1.* Touch the [Login name]. *2.* Enter the logon name from the 10-Key Pad or the keyboard on the screen and then touch [Enter]. <Password> *1.* Touch the [Password]. *2.* Touch [New Password], enter the password, and then touch [Enter]. *3.* Touch [Confirm New Password], enter the password once again, and then touch [Enter]. <Domain Name> *1.* Touch the [Domain Name]. *2.* Enter the domain name from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

Maximum number of search

Functions	• To change the maximum number of search items for LDAP search.
Use	
Setting/ Procedure	• The default setting is “100”. 5 to 100

Connection time out

Functions	• To change the connection time out for the LDAP server.
Use	
Setting/ Procedure	• The default setting is “60 sec”. 5 to 300

SSL/TLS

Functions	• To set whether or not to use SSL/TLS during communications carried out with the LDAP server.
Use	• To use SSL/TLS during communications carried out with the LDAP server.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

Management Function

Functions	• To set the authentication method when authentication device is used. **NOTE** • **In meter count mode, the menu is not displayed when the authentication is not mounted.**
Use	• To change the authentication method when authentication device is used. Keep Card : Authentication is available leaving the card in the given place when making authentication with the device. Touch and Go : Card is placed only when authentication is made with the device and if the card is left for a given time (Authentication reset time) the authentication setting is reset. • When selecting “Touch and Go”, authentication reset is set after completing the job in [Authentication Time].
Setting/ Procedure	<Authentication Method> • The default setting is Keep Card. “Keep Card” Touch and Go <Authentication Time> • The default setting is 1 min. “1 min” 2 min 3 min 4 min 5 min <Authentication Log-out When Job is Completed> • The default setting is No. Yes “No”

Port Number

Functions Use	• To change the port number used for communications with the LDAP server.
Setting/ Procedure	• The default setting is “389”. 1 to 65535

Initialize Setting

Functions Use	• To format all settings made in LDAP Server Setting.
Setting/ Procedure	*1.* Touch the [Initialize Setting]. *2.* Select [Yes] and touch [Enter].

Check Connection

Functions Use	• To check connection to the LDAP server.
Setting/ Procedure	*1.* Touch the [Check Connection]. *2.* When the message indicating the completion of connection check appears, touch [Enter].

<Frame Type Set>

Functions	• To set the frame type for NetWare settings of NIC.
Use	• To specify the frame type used for communications.
Setting/ Procedure	• The default setting is “Auto Detect”. “Auto Detect” Ethernet-II 802.2 802.3 SNAP

<IP Filtering>

Functions	• To set IP filtering
Use	• To set whether or not to accept it within the numeric area that specifies IP address.
Setting/ Procedure	<Accept Setting> *1.* Select [Enable] or [Disable] at [Accept Setting] *2.* Select 1 to 3 and enter the address with 10-key pad. *3.* Press [Enter] to complete the setting. <Deny Access> *1.* Select [Enable] or [Disable] at [Deny Access]. *2.* Select 1 to 3 and enter the address with 10-key pad. *3.* Press [Enter] to complete the setting.

(2) Network Setting 2

<IP Relay Settings>

Functions	• To specify a relay machine from multiple machines (of this model) connected to the LAN and send a fax through a telephone line. * Set [Gateway TX] to [Restrict] in [Scanner Settings] selecting [Admin. Management] - [Admin. 2] - [Network Settings] - [Network Setting 1].
Use	• When sending a fax through intranet. • When setting a IP relay machine.
Setting/ Procedure	<IP Relay Station Registration> *1.* Touch the [IP Relay Settings]. *2.* Touch the [IP Relay Station Registration]. *3.* Select a number where a relay station is to be registered. *4.* Press [IP Relay Address] and enter the IP address of the relay machine. If a host name needs to be entered, press [Host Name] and enter the name. *5.* Press [Port] and enter a new number when the port number needs to be changed. *6.* Touch the [Enter]. *7.* Press [Domain Name] and enter the domain name of the IP relay station. *8.* Touch the [Enter]. <Secure Print Waiting> *1.* Touch the [Secure Print Waiting]. *2.* Select the number of the relay station to be used, and press [Enter]. <Result reception port> *1.* Touch the [Relay Result Port]. *2.* Enter a port number where relay results are received, and press [Enter].

<SIP-FAX Settings>

See P.24 of the FK-503 service manual.

<Prefix/Suffix Settings>

- ON/OFF Setting

Functions	• To set whether to add Prefix or Suffix to the address when calling or entering an address.
Use	• To add Prefix or Suffix to the address.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

- Key Name

Functions	• To set the Key Name for Prefix/Suffix Settings.
Use	• To enter the Key Name for Prefix/Suffix Settings.
Setting/ Procedure	*1.* Touch the [Key Name]. *2.* Enter the Key Name (consisting of up to eight en-size characters) from the 10-Key Pad or the keyboard on the screen and then touch [Enter].

- Fixed File Format

Functions	• To set whether or not to fix the file format.
Use	• To select not to fix the file format.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

- Prefix Setting

Functions	• To register or change the Prefix.
Use	• To register or change the address displayed for Prefix.
Setting/ Procedure	• Up to ten en-size characters can be used.

- Suffix Setting

Functions	• To register or change the Suffix.
Use	• To register or change the address displayed for Suffix.
Setting/ Procedure	• Up to 30 en-size characters can be used.

B. Printer Setting

(1) Timeout

Functions	• To set the timeout for reception of print data.
Use	• To change the timeout for reception of print data.
Setting/ Procedure	*1.* Touch the [Timeout]. *2.* Press the Clear key and enter the value from the 10-Key Pad. • The default setting is “300 sec”. 10 to 1000

(2) No Matching Paper in Tray Setting

Functions	• To set whether or not to automatically switch from a specified input tray to another tray during PC printing.
Use	• To prevent automatic switching of an input tray from a specified one to another during PC printing.
Setting/ Procedure	• The default setting is “Tray Priority”. “Tray Priority” Tray Fixed Tray Priority: Automatically to switch from a specified input tray to another tray during PC printing Tray Fixed: Not to switch from a specified input tray to another tray during PC printing The job is deleted if the setting paper is not match the specified input tray.

C. Software SW

Functions	• To set the status of each function according to the use using the software switch.
Use	• To change the status of each function using the software switch.
Setting/ Procedure	*1.* Call Admin. 2 to the screen and touch [Software SW]. *2.* Touch [Mode Selection] and enter the mode number (a 3-digit numeral) using the 10-Key Pad. *3.* Touch [Bit Selection]. *4.* Align the cursor using [←] or [→] key and define the bit with 0 or 1 of the 10-Key Pad. (To define the value in hexadecimal, touch [HEX Selection] and enter the value using the 10-Key Pad and A to F keys.) *5.* Touch the [Enter].

D. Ping

Functions	• To execute Ping.
Use	• To check the TCP/IP network for condition.
Setting/ Procedure	*1.* Touch the [Ping]. *2.* Select the address key to be executed and press the Start key.

E. Security Setting

NOTE

Confirm items shown below before setting enhance security system. If any following items are not set, security setting menu is not shown.

- **Make sure the numbers of administrator code are not all the same.**
- **Make sure the numbers of service code are not all the same.**
- **If HDD is mounted, make sure HDD lock password or Encryption Setting is set.**
- **Make sure CS Remote Care is not set.**
- **Make sure SSL certification is made with PSWC.**

To mount the optional HDD when enhance security mode is set ON, turn OFF the enhance security mode first.

(1) Enhance Security

Functions	• To set weather or not to enhance security system.
Use	• If enhance security is set [ON], the following items are assured. • Password regulation is applied. • Unauthorized access penalty system becomes available, and if wrong password is entered three times continuously at operations that require password authentication, password entering will be rejected. • Setting of Software DIPSW cannot be changed. • [User List] is not shown among the keys displayed on user authentication. • Print without authentication cannot be used. • Auto reset cannot be set [OFF]. If auto reset is set [OFF] before adopting enhance security, the time is changed to [1 min.]. • Restrict One Touch Editing become available. • HDD Temporary Overwrite Data become available. • Some menus of Tech. Rep. Mode are not shown. • Setting of network MIB cannot be changed.
Setting/ Procedure	*1.* Press [Enhance Security]. *2.* Select ON and press [Enter]. *3.* Turn OFF/ON the main power.

(2) Unlock

Functions	• To unlock the password entering after wrong password is entered (three times).
Use	• To unlock the password entering after wrong password is entered (three times).
Setting/ Procedure	*1.* Press [Unlock]. *2.* Select the menu to be unlocked and press [Enter]. *3.* Turn OFF/ON the main power.

(3) SSL/TLS

Functions	• To set whether or not to use SSL/TLS for HTML communications. * If enhance security mode is set ON, menu is not shown.
Use	• To use SSL/TLS for communications.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

F. Delete Job

Functions	• To delete all confidential print jobs.
Use	
Setting/ Procedure	*1.* Touch the [Delete Job]. *2.* Select [Yes] and touch [Enter].

G. Memory Management

NOTE

- **If optional Hard Disk (HD-504) is mounted, memory management display is changed to [HDD management].**

(1) Overwrite All data

Functions	• To delete the date stored in the memory and initialize the registered and set data
Use	• To delete and initialize the data in the memory.
Setting/ Procedure	*1.* Make sure 2 minutes passed since the main power has been turned ON. *2.* Press [Memory Management]. *3.* Press [Overwrite All data]. *4.* Select [YES] and press [Enter]. *5.* Turn off the main power, wait for 10 seconds or more and turn on the power.

H. HDD Management

NOTE

- **If optional Hard Disk (HD-504) is unmounted, memory management display is changed to [Memory Management].**

(1) Overwrite All data

Functions	• To overwrite all data in Hard Disk. * It takes 35 hours to complete all data delete.
Use	• To be used for disposing the hard disk or etc. • The overwrite procedures are as follows. Overwrite with 0x00 → Overwrite with 0xff → Overwrite with 0x00 → Overwrite with 0xff Overwrite with 0x00 → Overwrite with 0xff → Overwrite with 0xaa → Verification
Setting/ Procedure	*1.* Make sure 2 minutes passed since the main power has been turned ON. *2.* Press [HDD Management]. *3.* Select [Overwrite All Date] and press [Enter].

(2) HDD Lock Setting

NOTE

- **Be sure to keep the password in a safe place so that it will not be lost. If the password is lost, significant restoration operations will be required for recovery.**

<Input Password>

Functions	• To set password of HDD in order to prevent unauthorized access to HDD.
Use	• To set the password of HDD.
Setting/ Procedure	*1.* Press [HDD Management]. *2.* Press [HDD Lock Setting]. *3.* Select [Input Password] and press [New Password]. *4.* Enter 20-digits password and press [Enter]. *5.* Select [Confirm New Password], enter new 20-digits password and press [Enter]. *6.* Press [Enter]. *7.* Select [Yes] and press [Enter]. *8.* Turn off the main power, wait for 10 seconds or more and turn on the power.

<Change Password>

Functions	• To change the password of HDD set at Input Password.
Use	• To be used for changing HDD password.
Setting/ Procedure	*1.* Press [HDD Management]. *2.* Press [HDD Lock Setting]. *3.* Press [Change Password]. *4.* Enter the present password and press [Enter]. *5.* Select [New Password], enter 20-digits password and press [Enter]. *6.* Select [Confirm New Password], enter new 20-digits password and press [Enter]. *7.* Press [Enter]. *8.* Select [Yes] and press [Enter]. *9.* Turn OFF the main power, wait for 10 seconds or more and turn ON the power.

<Delete Password>

Functions	• To delete the password set in HDD. * If enhance security is set ON, it's not shown.
Use	• To delete the password set in HDD.
Setting/ Procedure	*1.* Press [HDD Management]. *2.* Press [HDD Lock Setting]. *3.* Select [Delete Password]. *4.* Enter the present password and press [Enter]. *5.* Select [Yes] and press [Enter]. *6.* Turn OFF the main power, wait for 10 seconds or more and turn ON the power.

(3) <Encryption Setting>

Functions	• To encrypt data stored in HDD. * This function is available when a security kit SC-504 is installed.
Use	• To be used when setting encryption codes. **NOTE** **• HDD needs to be formatted after this setting. Before making this setting, be sure to take out necessary data from HDD.**
Setting/ Procedure	*1.* Touch [HDD Management]. *2.* Touch [Encryption Setting]. *3.* Touch [Input]. *4.* Type in the encryption key. Touch [New Encryption Key], type in the encryption key, and then touch [Enter]. *5.* Touch [Re-enter Encryption Key], type in the encryption key again, and then touch [Enter]. *6.* Select [Enter] on the confirmation screen of the encryption codes and press [Enter]. *7.* Turn OFF the main power, wait for 10 seconds or more and turn ON the power. *8.* Format the HDD. *9.* Turn OFF the main power, wait for 10 seconds or more and turn ON the power.

(4) Format

Functions	• To format HDD.
Use	• To initialize the hard disk.
Setting/ Procedure	*1.* Make sure 2 minutes passed since the main power has been turned ON. *2.* Press [HDD Management]. *3.* Press [Format]. *4.* Select [Yes] and press [Enter]. *5.* Turn OFF the main power, wait for 10 seconds or more and turn ON the power.

8.6 Settings in the Reports

NOTE

- **When selecting Management Device 2 for Meter Count Mode, the print list key is not accepted.**
- **But it is acceptable when the card for management device is inserted.**
- **When selecting the Vender 2 for Meter Count Mode, the print list key is not displayed and moves to the following menu.**

See P.24 of the FK-503 service manual.

8.7 Settings in the Printer Setting

8.7.1 MFP Set

A. Proof Print Hold Time

Functions	• To change the hold time of the proof print job.
Use	
Setting/ Procedure	• The default setting is “10 min.” “10 min.” 20 min. 30 min.

B. Overwrite A4←→Letter

Functions	• To set whether to enable or disable the override function of A4 and Letter.
Use	• To enable the function that allows Letter to be used instead of A4, or vice versa, for printout.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

C. Document Hold Time

Functions	• To change the hold time of print data invoked when a condition, in which memory capacity has exceeded, at the expiration of which the print data is discarded.
Use	
Setting/ Procedure	• The default setting is “5Min”. • Setting range: 0 to 30

D. PostScript Error Report

Functions	• To set whether or not to print error information when an error occurs during computer printing.
Use	• To print error information when an error occurs during computer printing.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

8.7.2 Default Set

A. Basic

(1) Tray

Functions	• To set a paper source when none is specified by the printer driver during computer printing.
Use	• To specify a paper source when one cannot be specified by the printer driver during printing from Windows DOS or in a similar case.
Setting/ Procedure	• The default setting is “Auto Paper Select”.

(2) Paper Size

Functions	• To set a paper size when none is specified by the printer driver during computer printing.
Use	• To specify a paper size when one cannot be specified by the printer driver during printing from Windows DOS or in a similar case.
Setting/ Procedure	<For U.S.> • The default setting is “Letter”. <For Europe> • The default setting is “A4”.

(3) Original Direction

Functions	• To set orientation of the image when none is specified by the printer driver during computer printing.
Use	• To specify orientation of the image when one cannot be specified by the printer driver during printing from Windows DOS or in a similar case.
Setting/ Procedure	• The default setting is “Portrait”.

(4) Print Method

Functions	• To set a print method when none is specified by the printer driver during computer printing.
Use	• To specify a print method when one cannot be specified by the printer driver during printing from Windows DOS or in a similar case.
Setting/ Procedure	[Print Method] • The default setting is “Simplex”. “Simplex” 2-Sided Print [Binding Method] • The default setting is “Left bind”. “Left bind” Top bind

(5) # of Sets

Functions	• To set the number of copy sets when none is specified by the printer driver during computer printing.
Use	• To specify the number of copy sets when one cannot be specified by the printer driver during printing from Windows DOS or in a similar case.
Setting/ Procedure	• The default setting is “1 Set”. • Setting range: 1 to 999

B. Font

(1) Font

Functions	• To set the font when not specified by the printer driver during PC printing.
Use	• To use when the printer driver cannot specify the font during printing from Windows DOS, etc.
Setting/ Procedure	• The default setting is “0” (Courier). • Setting range: 0 to 80

(2) Symbol Set

Functions	• To set the Font Symbol Set when not specified by the printer driver during PC printing.
Use	• To use when the Font Symbol Set cannot be specified by the printer driver during printing from Windows DOS, etc.
Setting/ Procedure	• Setting range: 0 to 35 <For U.S.> • The default setting is “29” (Window 3.1 Latin2). <For Europe> • The default setting is “35” (ISO8859-10).

(3) Number Lines

Functions	• To set the number of lines per page for printing the text data.
Use	• To change the number of lines per page for printing the text data.
Setting/ Procedure	• Setting range: 5 to 128 <For U.S.> • The default setting is “60”. <For Europe> • The default setting is “64”.

(4) Font Size

Functions	• To set the font size when not specified by the printer driver during PC printing.
Use	• To set the font size when it cannot be specified by the printer driver during printing from Windows DOS, etc.
Setting/ Procedure	• The default setting is “Bit Map Font Size” (10.00 Pitch). • Setting range: Scalable font (4.00 to 999.75 points) • Setting range: Bit map font size (0.44 to 99.00 pitch)

(5) CR/LF Mapping

Functions	• To set the mode for replacing data when printing the text data.
Use	• To change the mode for replacing data when printing the text data. OFF: Does not replace Mode 1: Replacing CR with CR-LF Mode 2: Replacing LF with CR-LF Mode 3: Replacing CR and LF with CR-LF, and FF with CR-FF
Setting/ Procedure	• The default setting is “OFF”. “OFF” Mode 1 Mode 2 Mode 3

8.7.3 PDL Set

Functions	• To set the PDL (Page Description Language) for PC printing.
Use	• To fix the PDL as necessary. It usually switches automatically.
Setting/ Procedure	• The default setting is “Auto”. “Auto” PCL PostScript

8.7.4 Test Print

Functions	• To output the report or Demo Page concerning the print setting. **NOTE** • **When Vender 2 is selected for Meter Count Mode, the Test Print key will be under the following setting.** • **[Admin. 2] - [Printer Setting] - [Test Print]**
Use	• To check the setting concerning the printer. The types of report available for output are as follows. Check Job Details: The list of printer setting will be output. PCL Demo Page: PCL Demo page will be output. PS Font List: PS Font List will be output. PCL Font List: PCL Font List will be output.
Setting/ Procedure	*1.* Press the Utility/Counter key, and then touch [Printer Setting] and [Test Print] in that order. *2.* Touch the test print key, for which test print is to be produced.

8.8 Check Detail

Functions	• To check the counter reading or display a list of counters.
Use	
Setting/ Procedure	*1.* Press the Utility/Counter key. *2.* Touch the [Check Detail].

9. Adjustment item list

Adjustment/Setting Items				N0	Replace Feed Roller	Replace Separation Roller	Replace Pick-up Roller	Replace Registration Roller Bearing	Replace Registration Roller Gear	Replace Transfer Roller Unit	Replace Photo Conductor Unit	Replace Developer	Replace Developing Unit	Replace Fusing Unit
Adjust Mode	Printer	Registration (CD)		1										
		Registration (FD)		2										
	Scanner	Registration (CD)		3										
		Registration (FD)		4										
		Zoom (CD)		5										
		Zoom (FD)		6										
Tech. Rep. Mode	Function	F7-1	Document detection adjustment	7										
		F8	ATDC Sensor adjustment	8							(4)	(4)	(5)	
		F1	Paper passage test	9	(2)	(2)	(2)	(1)	(1)					
		FD	Bypass paper max/ min set	10										
		HDD Format		11										
	Counter	Special Parts Counter	PC Life Clear	12							(1)	(1)	(1)	
			I/C Life Clear	13							(2)	(2)	(2)	
			Developer Clear	14									(3)	
			Counter clear	15	(1)	(1)	(1)			(1)				(1)
	Tech. Rep. Choice	Sheet-through-ADF	Registration Loop	16										
			Zoom	17										
			Feed (CD)	18										
			Feed (FD)	19										
		Printer	Leading Edge Erase	20										
			Trailing Edge Erase	21										
			Right/Left Edge Erase	22										
			Loop Adjustment	23				(2)	(2)					
	System Input	HDD selection		24										
		Optional Original Size Sensor selection		25										
Scanner Position Adjustment				26										
Remounting of the EEPROM				27										
Install I/U in machine				28							(3)	(3)	(4)	
Replace Developer				29										
F/W upgrading				30										

- 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 in the parentheses.

N0	Replace ATDC Sensor	Replace Mechanical Control Board	Replace PH Unit	Replace CCD Unit	Wind Scanner Drive Cables	Install Scanner Unit	Replace Multi Bypass Unit	Install Hard Disk	Install Optional Original Size Sensors
1			(1)						
2			(2)						
3			(8)	(2)					
4			(9)		(3)				
5			(6)	(1)					
6			(7)		(2)				
7									(2)
8	(5)								
9							○		
10									
11								(2)	
12	(1)								
13	(2)								
14									
15									
16									
17									
18									
19									
20									
21			(3)						
22			(4)						
23			(5)						
24								(1)	
25									(1)
26					(1)	○			
27		(1)							
28	(4)								
29	(3)								
30		(2)							

10. Tech. Rep. Mode

10.1 Tech. Rep. Mode function setting procedure

NOTE

- **Ensure appropriate security for Service mode function setting procedures. They should NEVER be shown to any unauthorized person not involved with service jobs.**

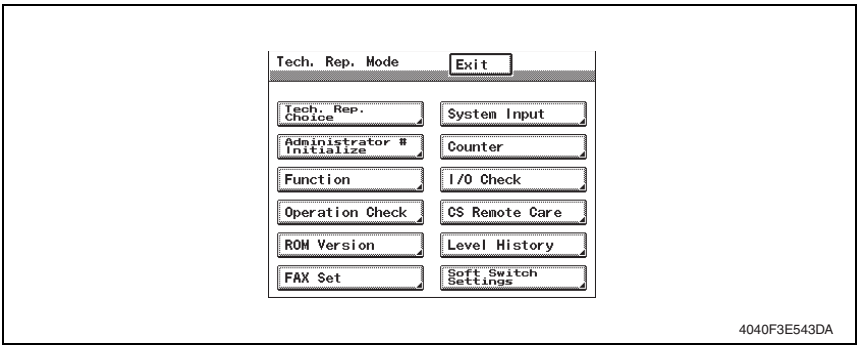
A. Procedure

1. Press the Utility/Counter key.
2. Touch [Check Detail].
3. Press the following keys in this order.
   Stop → 0 → 0 → Stop → 0 → 1
4. Enter the 8-digit service code and touch [END]. (Default value: 00000000)

NOTE

- **When [END] is touched after a wrong service code has been entered, the Basic screen reappears.**
- **At the fourth access after entries of three wrong access codes, [END] is not available on the screen. It is therefore necessary to turn OFF and ON the Main Power Switch.**
- **If you forget the service code, it becomes necessary to replace the RAMS Board with a new one. Take necessary steps not to forget the service code.**
- **The RAMS Board is not available as a replacement part. If it requires replacement, contact Office Printing Support Division by way of CSES.**

5. The Tech. Rep. Mode menu will appear.



NOTE

- **To change the service code, see "Service Security Mode."**
  See P.211

B. Exiting

- Touch the [Exit] key.

C. Changing the Setting Value in Service Mode Functions

- Use the +/- key to enter or change the setting value.
- Use the 10-Key Pad to enter the setting value. (To change the setting value, first press the Clear key before making an entry.)

10.2 Tech. Rep. Mode function tree

- The function tree is shown to comply with the format displayed on the screen.

Tech. Rep. Mode			Ref. page
Tech. Rep. Choice	System Set	Auto Paper Configuration	P.157
		Priority Foolscap	P.157
		Simplex/Duplex	P.157
		Dry Key Set	P.158
		Function Limit	P.158
		★ (Special image setting)	P.158
	Printer	Edge Erase	P.159
		Loop Adjustment	P.159
		Image Density	P.160
		ATDC Sensor Gain	P.160
		Grid Voltage Adjustment	P.160
		Fuser Temp.	P.161
	Sheet-through-ADF	Registration Loop	P.162
		Zoom	P.163
		Feed (CD)	P.163
		Feed (FD)	P.163
	Center Erase Width		P.163
	Country Set *1		P.163
	Orientation Change		P.163
	Finisher	Punch Stop Position	P.164
		Punch Loop Adjustment	P.164
	Trail Erase (Dup)		P.164
	Internet ISW *2		P.164
System Input	LCT Paper Size		P.166
	Change Fixed Zoom		P.166
	Machine Configuration		P.166
	Serial Number		P.166
	Hard Disk		P.167
	Original Size Detecting Option		P.167
Administrator # Initialize *2			P.167
Counter	Paper		P.168
	Jam Counter		P.168
	Special Parts Counter		P.169
	Service Call Counter		P.169
	Application Counter		P.169
	Maintenance Counter		P.170
	Fax Comm. Error Counter *1		P.170

Tech. Rep. Mode			Ref. page
Function	F1		P.171
	F2		P.171
	F7-1		P.171
	F7-2		P.171
	F8		P.171
	F12		P.172
	Hard Disk Format		P.172
	FD		P.172
	FC		P.173
	Org. Width Detect Adjust		P.173
	Download Firmware		P.173
I/O Check	Printer	Bypass/Duplex	P.177
		Tray 1	
		Tray 2	
		Tray 3	
		Tray 4	
		Toner/Side Cover	
		Drive Motor Detect	
		LCT	
		Engine	
	Scanner		P.182
	Job Tray		P.182
	Sheet-through-ADF (2-sided)		P.182
	Finisher		P.183
Operation Check	ADF	Paper Passage	P.185
		ADF Sensor Adjust	P.185
		Backup Data Initialization	P.185
	Exp. Lamp Check		P.185
	Scanner		P.185
CS Remote Care *2			P.186
ROM Version			P.210
Level History			P.210
FAX Set *1 *2			P.210
Soft Switch Settings *1 *2			P.210

*1: For more details, see FK-503 Service Manual.
*2: If enhance security mode is set ON, menu is not shown.

10.3 Settings in the Tech. Rep. Choice

10.3.1 System Set

A. Auto Paper Configuration

Functions	• To select whether the paper source is selected according to the results of the original size detection or whether the nearest larger size is selected according to the marketing region.
Use	<Inch/Metric> • <Metric> or <Inch> is displayed according to the applicable marketing area. <Inches> • All original sizes detected are corrected to ones in mm.
Setting/ Procedure	• The default setting is “Inch/Metric”. <For U.S.> “Inch/Metric” Inches <For Europe and Others> “Inch/Metric” Metric

B. Priority Foolscap

Functions	• To set the paper size for foolscap.
Use	• To change the paper size for foolscap.
Setting/ Procedure	• Select the foolscap paper size from among the following four. • The default setting is “F: 330 mm, C: 210 mm”. F: 330 mm “F: 330 mm” F: 330 mm F: 330 mm C: 203 mm “C: 210 mm” C: 216 mm C: 220 mm

C. Simplex/Duplex

Functions	• To select whether or not the [1→1] setting is available for the [Default Setting Simplex/Duplex] function in User’s Choice.
Use	<Simplex & Duplex> • To display all modes in [Default Setting Simplex/Duplex] of User’s Choice. <Duplex Only> • To display Duplex only in [Default Setting Simplex/Duplex] of User’s Choice.
Setting/ Procedure	• The default setting is “Simplex & Duplex”. “Simplex & Duplex” Duplex Only

D. Dry Key Set

Functions	• To select whether or not the [Dehumidify] button is available on the User Management screen of the Utility/Counter mode.
Use	• When the image density is low <Scanner> • The [Dehumidify] button appears and the operation is performed only for the scanner. <Scanner/Drum> • The [Dehumidify] button appears and the operation is performed for both the scanner and the PC Drum. <Disable> • The [Dehumidify] button does not appear.
Setting/ Procedure	• The default setting is “Scanner/Drum”. Scanner “Scanner/Drum” Disable

E. Function Limit

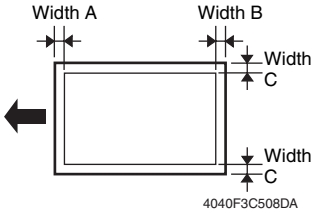
Functions	• To select whether or not access to some of the copy functions is restricted.
Use	• To disable some of the copy functions.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

F. [✱] (Special image setting)

Functions	• To select whether or not to display the special image [✱] key on the Density screen.
Use	• Highlight the [✱] key on the Density screen and then select the appropriate mode to produce a special image output. • When Photo mode is selected: Low density mode • When Text mode is selected: The image density level is increased two steps higher than in the ordinary Text mode. • When Text/Photo mode is selected: The image density level is increased one step higher than in the ordinary Text mode.
Setting/ Procedure	<[✱] highlighted> • The special image key is displayed on the Density screen. <[✱] not highlighted> • The special image key is not displayed on the Density screen.

10.3.2 Printer

A. Edge Erase

Functions	• To change the laser emission timing to adjust the width of the image area that is erased at the leading edge, trailing edge and top and bottom.
Use	• When the PH unit is replaced
Adjustment Specification	 Adjust the following erase width values so that each falls within the following adjustment range: Width A (Leading Edge); Width B (Trailing Edge); and Width C (Top/Bottom). Default setting: 4 mm Adjustment range: 0 to 5 mm (in 1-mm increments) The default setting for 2-sided trailing edge erase width is “2 mm.”
Adjustment Instructions	To make the erase width (Width A, B, or C) smaller, decrease the setting value. To make the erase width (Width A, B, or C) greater, increase the setting value.
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [Edge Erase]. *3.* Select the specific edge to be adjusted. *4.* Press the Clear key and change the setting value using the 10-Key Pad. *5.* Touch [END] to validate the new setting value.

B. Loop Adjustment

Functions	• To adjust the length of the loop formed in the paper before the Regist Rollers.
Use	• When a paper skew occurs. • When a paper jam occurs.
Adjustment Range	• The default setting is “0”. • The adjustment range is -5 mm to +5 mm. (in 1 mm increments)
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [Loop Adjustment]. *3.* Select the paper source, for which the adjustment is made. *4.* Press the Clear key and change the setting value using the 10-Key Pad. *5.* Change the + or - sign using the Access key or * key. *6.* Touch [END] to validate the new setting value.

C. Image Density

Functions	• To change the Vg and Vb of the engine to select the image density.
Use	• When the image density is high or low: • With the Printing Density setting specified in User's Choice as a reference point, the density can be set to one of seven settings.
Adjustment Range	• The default setting is "0". • The adjustment range is -3 mm to +3 mm. (in 1 mm increments)
Adjustment Instructions	If the image density is high, decrease the setting value. If the image density is low, increase the setting value.
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [Image density]. *3.* Press the Clear key and change the setting value using the 10-Key Pad. *4.* Change the + or - sign using the Access key or * key. *5.* Touch [END] to validate the new setting value.

D. ATDC Sensor Gain

Functions	• To display the value automatically adjusted using function F8 and to change that value.
Use	• When the spare Developing Unit or the Imaging Unit has been temporarily used <Current> • ATDC control voltage automatically adjusted using function F8 <Job Setting> • Normally, the value displayed here is the same as that displayed for Current. **NOTE** • **If a Developing Unit other than a new one is installed, type in the setting for the installed product.**
Adjustment Range	• The adjustment range is 0 to 255.
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [ATDC Sensor Gain]. *3.* Press the Clear key and change the setting value using the 10-Key Pad *4.* Touch [END] to validate the new setting value.

E. Grid Voltage Adjustment

Functions	• To change the Vg setting for sensitivity variations due to the durability of the PC Drum and adjust the image density.
Use	• When the PC Drum Unit is replaced • If a foggy background occurs, increase the setting value.
Adjustment Range	• The default setting is "0". • The adjustment range is -2 to +2.
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [Grid Voltage Adjustment]. *3.* Press the Clear key and change the setting value using the 10-Key Pad *4.* Touch [END] to validate the new setting value.

F. Fuser Temp.

Functions	• To adjust the temperature of the Fusing Roller for each paper type in order to change the fusing performance according to the operating environment and paper type.
Use	• To adjust the fusing temperature for each type of paper. • When a fusing failure occurs. • When the paper type is changed.
Adjustment Range	• The default setting is "1". • Setting Range: 1 to 4 (Normal) 1 to 3 (Thick Paper) 1 to 3 (OHP) 1 to 3 (Thin Paper)
Adjustment Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the keys in this order: [Tech. Rep. Choice] → [Printer] → [Fuser Temp.]. *3.* Select the paper, for which the adjustment is made. *4.* Press the Clear key and change the setting value using the 10-Key Pad *5.* Touch [END] to validate the new setting value. • For more details, see the temperature table for fusing temperature adjustment. P.161

(1) Table of Temperatures for Adjusting the Fusing Temperature

<Standard paper>

Touch Panel Setting		Paper width	Marketing region	Mode 1	Mode 3
				Heater temperature (main/sub)	
1	bizhub 362	221 or more	U.S.	180 °C	
			Europe	200 °C	190 °C
		220 mm or less	U.S.	170 °C	
			Europe	180 °C	
	bizhub 282 bizhub 222	221 or more	U.S.	180 °C	
			Europe		
		220 mm or less	U.S.	160 °C	
			Europe	180 °C	
2	bizhub 362	221 or more	U.S.	190 °C	
			Europe	200 °C	
		220 mm or less	U.S.	180 °C	
			Europe	190 °C	
	bizhub 282 bizhub 222	221 or more	U.S.	190 °C	
			Europe		
		220 mm or less	U.S.	170 °C	
			Europe	190 °C	
3	bizhub 362	221 or more	U.S.	200 °C	
			Europe	190 °C	
		220 mm or less	U.S.	190 °C	
			Europe	170 °C	
	bizhub 282 bizhub 222	221 or more	U.S.	200 °C	
			Europe		
		220 mm or less	U.S.	180 °C	
			Europe	200 °C	

Touch Panel Setting		Paper width	Marketing region	Mode 1	Mode 3
				Heater temperature (main/sub)	
4	bizhub 362	221 or more	U.S.	170 °C	
			Europe	180 °C	
		220 mm or less	U.S.	160 °C	
			Europe		
	bizhub 282 bizhub 222	221 or more	U.S.	170 °C	
			Europe		
		220 mm or less	U.S.	160 °C	
			Europe	170 °C	

<Special Paper>

Touch Panel Setting	Heater temperature (main/sub)
1	200 °C
2	190 °C
3	180 °C

<OHP>

Touch Panel Setting		Heater temperature (main/sub)
1	bizhub 362	165 °C
	bizhub 282 bizhub 222	160 °C
2	bizhub 362	170 °C
	bizhub 282 bizhub 222	170 °C
3	bizhub 362	155 °C
	bizhub 282 bizhub 222	150 °C

<Thin Paper>

Touch Panel Setting	Heater temperature (main/sub)
1	170 °C
2	180 °C
3	160 °C

10.3.3 Sheet-through-ADF

A. Registration Loop

Functions	• To adjust the length of the loop formed in the paper before the Registration Rollers.
Use	• If slippage occurs due to a worn Document Take-Up Roller, which sometimes results in misfeeds, the loop length may be increased as a temporary measure until the part can be replaced with a new one.
Setting/ Procedure	See P.18 of the DF-620 service manual.

B. Zoom

Functions	• To set the scanning zoom ratio in the main and sub scanning directions of the Sheet-through-ADF.
Use	• Upon setup of the Automatic Document Feeder
Setting/ Procedure	See P.18 of the DF-620 service manual.

C. Feed (CD)

Functions	• To adjust the scan start position in the main scanning direction (CD) of the Sheet-through-ADF.
Use	• Upon setup of the Automatic Document Feeder
Setting/ Procedure	See P.18 of the DF-620 service manual.

D. Feed (FD)

Functions	• To adjust the scan start position in the sub scanning direction (FD) of the Sheet-through-ADF.
Use	• Upon setup of the Automatic Document Feeder
Setting/ Procedure	See P.18 of the DF-620 service manual.

10.3.4 Center Erase Width

Functions	• To set the amount of center erase for bound originals.
Use	• To change the amount of center erase for bound originals.
Setting/ Procedure	• The default setting is “12 mm”. • The adjustment range is 2 to 20 mm.

10.3.5 Country Set

See P.33 of the FK-503 service manual.

10.3.6 Orientation Change

Functions	• To set whether or not to match the orientation of the image when paper is fed out between the normal mode and Staple and Punch mode.
Use	<ON> • Turn ON the function if the orientation of the image when paper is fed out is matched between the normal mode and Staple and Punch mode. <OFF> • Turn OFF the function if the orientation of the image when paper is fed out is not matched between the normal mode and Staple and Punch mode.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

10.3.7 Finisher

A. Punch Stop Position

Functions	• To adjust the paper stop position for punching.
Use	• To adjust the punch position.
Setting/ Procedure	See P.32 of the FS-530/PU-501/OT-602 service manual.

B. Punch Loop Adjustment

Functions	• To adjust the length of the loop for correcting skew during punching.
Use	• To correct any skew in the punch position.
Setting/ Procedure	See P.33 of the FS-530/PU-501/OT-602 service manual.

10.3.8 Trail Erase (Dup)

Functions	• To set the adjustment value for the amount of erase on the trailing edge for 2-sided printing.
Use	• The amount erased at the trailing edge of the second side of a 2-sided print is the Trailing setting for Edge Erase + Duplex Trailing Erase setting.
Setting/ Procedure	• The default setting is “2 mm”. • The adjustment range is 0 to 5 mm.

10.3.9 Internet ISW

- By using this setting, the firmware stored in the server can be downloaded over internet for upgrading.
- For details for upgrading the firmware, refer to “Firmware rewriting by the Internet ISW” in the MAINTENANCE section.
  See P.45

A. Login name

Functions	• To register the login name for accessing the program server where firmware is to be stored.
Use	
Setting/ Procedure	1. Select [Login name]. 2. Enter the login name (up to 64 one-byte characters) on the on-screen keyboard.

B. Password

Functions	• To register the password for accessing the program server where firmware is to be stored.
Use	
Setting/ Procedure	1. Select [New Password]. 2. Enter the password (up to 64 characters) on the on-screen keyboard, and touch [Enter]. 3. Select [Confirm New Password]. 4. Enter the password (up to 64 characters) on the on-screen keyboard again, and touch [Enter]. 5. Touch [Enter].

C. Port Number

Functions	• To set the port number for the proxy server.
Use	• To use when accessing the server via proxy server.
Setting/ Procedure	• Enter the value between 1 and 65535 using the 10-key pad. (The default setting is 21)

D. Use Proxy

Functions	• To set whether or not to connect via proxy server when accessing the server.
Use	• To use when accessing the server via proxy server.
Setting/ Procedure	• The default setting is “OFF”. ON “OFF”

E. Connection Timeout

Functions	• To set the timeout period for connecting to FTP server.
Use	• To change the timeout period for connecting.
Setting/ Procedure	• Enter the value between 1 and 60 using the 10-key pad. (The default setting is 1 min)

F. Passive Mode

Functions	• To enable or disable the PASV (passive) mode during access to the FTP server.
Use	• To use when connecting by the PASV (passive) mode (FTP server side will inform the connection port before connecting).
Setting/ Procedure	• The default setting is “Disable”. Enable “Disable”

10.4 Settings in the System Input

10.4.1 LCT Paper Size

Functions Use	• To enter the paper size when the LCT is installed. • The function can be set only when the LCT is mounted on the machine.
Setting/ Procedure	• The default setting is “Letter”. <For U.S.> A4 “Letter” <For Europe and Others> “A4” Letter

10.4.2 Change Fixed Zoom

Functions Use	• To change the fixed zoom ratio.
Adjustment Range	• x0.250 to x4.000 (common to all zoom keys)
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [System Input] and [Change Fixed Zoom] in that order. *3.* Select the specific zoom ratio to be changed. *4.* Press the Clear key and change the setting value using the 10-Key Pad. *5.* Touch [Set] to validate the setting value.

10.4.3 Machine Configuration

Functions	• Displays the machine configuration.
Use	• [Yes] or [No] indicates whether or not the option is installed.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [System Input] and [Machine Configuration] in that order.

10.4.4 Serial Number

Functions Use	• Enter the serial number and other data.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [System Input] and [Technical Memo] in that order. *3.* Enter the Password from the 10-Key Pad or the keyboard on the screen and touch [Enter].

10.4.5 Hard Disk

Functions	• To set whether or not the HDD is mounted. * To mount HDD when enhance security mode is set ON, turn OFF the enhance security mode first.
Use	• To change the presence of HDD • [Yes] is automatically set when Hard Disk Format is executed. **NOTE** **• When mounting or removing HDD with Vender 2 being selected at Meter Counter Mode, Clear FAX Setting needs to be conducted.**
Setting/ Procedure	• The default setting is “No”. Yes “No” * Turn OFF/ON the main power after setting is changed.

10.4.6 Original Size Detecting Option

Functions	• To set whether or not the optional Original Size Sensors are mounted.
Use	• Select [Yes] when the optional Original Size Sensors are mounted.
Setting/ Procedure	• The default setting is “No”. Yes “No”

10.5 Settings in the Administrator # Initialize

Functions	• To initialize the administrator number. * If enhance security mode is set ON, menu is not shown.
Use	• To initialize the administrator number (12345678).
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch the [Administrator # Initialize]. *3.* Select [Yes] and touch [Enter].

10.6 Settings in the Counter

10.6.1 Checking the counter reading

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch [Check] and the specific counter key whose reading is to be checked.

10.6.2 Clearing readings of all counters at once

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch the [Counter Reset].
4. Touch the counter keys to be cleared and then touch [OK].

10.6.3 Clearing the reading of a specific counter

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch the specific counter key to be cleared and press the Clear key.
   If the reading of a wrong counter key has been cleared, press the Interrupt key to undo the clearing operation.

10.6.4 Paper

Functions Use	• To display the number of sheets used for each paper size and each paper type. To clear the data for any counter.
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.5 Jam Counter

Functions Use	• To display the number and frequency of misfeeds. To clear the data for any counter.
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.6 Special Parts Counter

Functions	• To display the number of times that each PM part is used. To clear the data for any counter.
Use	• When any maintenance part is replaced. • PC Life: Is the ratio of the PC Drum rotation compared to PC Drum Life. Clear this counter when the PC Drum Unit or developer has been replaced. • I/C Life: Displays the number of prints according to the length of the paper. • Developer: Number of times that the Developing Unit is replaced. Automatically counts up when the PC Life counter is cleared. • Bypass: Number of sheets of paper fed from the Manual Feed Tray. • Tray 1: Number of sheets of paper fed from the Tray 1. • Tray 2: Number of sheets of paper fed from the Tray 2. • Tray 3: Number of sheets of paper fed from the Tray 3. • Tray 4: Number of sheets of paper fed from the Tray 4. • LCT Parts 1: Number of sheets of paper fed from the LCT. • Other PM Parts 1: Number of sheets of paper fed. • Other PM Parts 2: Number of sheets of paper fed. • Other PM Parts 3: Number of sheets of paper fed. • ADF Take-Up: Number of document pages fed through the take-up section of the ADF. • ADF Reverse: Number of document pages fed through the turnover unit of the ADF • IR 1: Number of IR scans. • IR 2: Number of IR scans. • Toner Pages: Number of pages equivalent to the number of black dots on A4 original with B/W 5% • Fusing Unit: Number of pages fed out.
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.7 Service Call Counter

Functions Use	• To check the number of malfunctions that have occurred for each type of malfunction. To clear the data for the counter.
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.8 Application Counter

Functions	• To display or clear the readings of application counters.
Use	• Copy: Number of copies made • Printer: Number of printed pages produced via computer • List Print: Number of printed pages of lists • Fax Print: Number of printed pages received as fax and mail • Fax Transmission: Number of pages of fax transmitted • Mail Transmission: Number of pages transmitted by fax/scanner
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.9 Maintenance Counter

Functions	• To set the counter value at which maintenance should be performed for any given part.
Use	<Maintenance Counter (Set)> • Use the Keypad to type in the maintenance counter value. • When the reading reaches a predetermined value, appears in the sub-message display area. <Maintenance Counter (Count)> • Counts up when a sheet of paper is fed through the copier.
Setting/ Procedure	Checking the counter reading P.167 Clearing the counter reading (all and a specific one) P.168

10.6.10 Fax Comm. Error Counter

See P.35 of the FK-503 service manual.

10.7 Settings in the Function

10.7.1 F1

Functions	• To check the paper feeding in the paper take-up/transport sections without printing on the paper with the engine unit.
Use	• When a paper misfeed occurs.
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [F1] in that order. *2.* Select the paper source, and then press the Start key. Touch [Duplex] to feed out the paper along the paper path for 2-sided copying. *3.* The sequence is halted when the Stop key is pressed or there is no paper. These pages are not counted with the counters.

10.7.2 F2

- This test is for factory adjustment only and should NOT be used.

10.7.3 F7-1

Functions	• To automatically adjust the Original Size Detecting Sensor.
Use	• When the Original Size Detecting Sensor is replaced • When an optional sensor is mounted
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [F7-1] in that order. P.110

10.7.4 F7-2

Functions	• To automatically adjust the Original Size Detecting Sensor. (only for a FAX)
Use	• When the Original Size Detecting Sensor is replaced • When an optional sensor is mounted
Setting/ Procedure	See P.35 of the FK-503 service manual.

10.7.5 F8

Functions	• To automatically adjust the ATDC sensor.
Use	• When developer is replaced
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [F8] in that order. *2.* Press the Start key to perform the ATDC sensor gain adjustment. • After the adjustment is finished, the operation stops automatically. • The adjusted setting overwrites the current setting for ATDC Sensor Gain in Printer of Tech. Rep. Mode.

10.7.6 F12

Functions	• To print on paper with the engine unit and check the printing and paper feeding in the paper take-up/transport sections.
Use	
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [F12] in that order. *2.* Select the paper source, and then press the Start key. Touch [Duplex] to feed out the paper along the paper path for 2-sided copying. *3.* The sequence is halted when the Stop key is pressed or there is no paper.

10.7.7 Hard Disk Format

Functions	• To format the hard disk.
Use	• When a hard disk drive is installed. • When the hard disk is initialized.
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [Hard Disk Format] in that order. *2.* Press the Start key to start the HDD formatting sequence. **NOTE** • **NEVER turn OFF the power while the formatting sequence is in progress.** *3.* Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch again.

10.7.8 FD

Functions	• To set the maximum and minimum sizes for manually fed paper.
Use	• When the Manual Feed Unit is replaced.
Setting/ Procedure	<Maximum Size> *1.* From the Tech. Rep. Mode screen, touch [Function] → [FD] in that order. *2.* Load paper with a maximum size of 301 mm into the Manual Feed Tray. *3.* In the Touch Panel, touch [Maximum Size], and then press the Start key to automatically adjust the setting. <Minimum Size> *1.* From the Tech. Rep. Mode screen, touch [Function] → [FD] in that order. *2.* Load paper with a minimum size of 89 mm into the Manual Feed Tray. *3.* In the Touch Panel, touch [Minimum Size], and then press the Start key to automatically adjust the setting.

10.7.9 FC

Functions	• To check the Finisher operations.
Use	Mode 1: Performs the move operation for the Stapling Unit. Mode 2: Performs the move operation for the Aligning Plate. Mode 3: Performs the ascent operation for the Elevator Tray. Mode 4: Performs the descent operation for the Elevator Tray. Mode 5 *1: Performs the Punch drive operation. Mode 6 *1: Performs the Punch drive operation. (2 holes) Mode 7: Performs the open/close operations for the Exit. Mode 8 *2: Performs the drive operation for the Creasing Unit. Mode 9 *2: Performs the open/close operations for the Saddle Exit. Mode 10: Drives the transport section. Mode 11: Performs the open/close operations for the Shutter. Mode 12 *3: Drives the Mail Bin Solenoid. Mode 13: Performs the single rotate operation for the Storage Paddle. Mode 14: Performs the single rotate operation for the Exit Paddle.
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Function] → [FC] in that order. *2.* Select an operation, and then press the Start key to begin the operation.

*1: appears only when the Punch Kit PU-501 is installed.
*2: appears only when the Saddle Kit SD-507 is installed.
*3: appears only when the Mail Bin Kit MT-502 is installed.

10.7.10 Org. Width Detect Adjust

Functions	• To set the maximum and minimum sizes of the original for the ADF.
Use	
Setting/ Procedure	See P.18 of the DF-620 service manual.

10.7.11 Download Firmware

Functions	• To upgrade the firmware of the engine or Finisher.
Use	
Setting/ Procedure	See P.43 of the main body service manual. See P.7 of the FS-530/PU-501/OT-602 service manual.

10.8 I/O Check

Functions	• To display the states of the input ports of sensors and switches when the machine remains stationary.
Use	• Used for troubleshooting when a malfunction or a misfeed occurs.
Setting/ Procedure	• The operation of each of the switches and sensors can be checked on a real-time basis. • It can be checked as long as the 5-V power line remains intact even when a cover is open.

10.8.1 Electrical Components Check Procedure Through Input Data Check

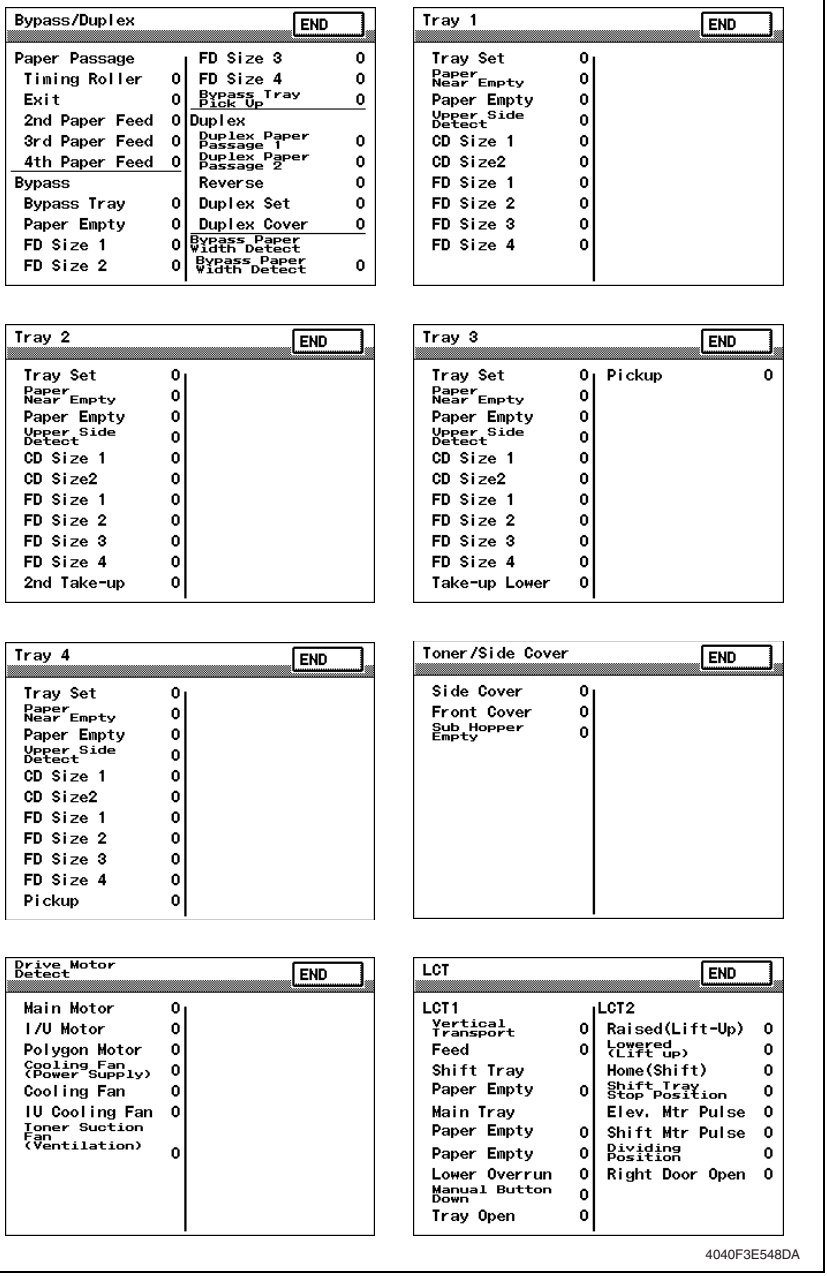
<Example>

- When a paper misfeed occurs in the paper take-up section of the machine, the Vertical Conveyance Sensor is considered to be responsible for it.

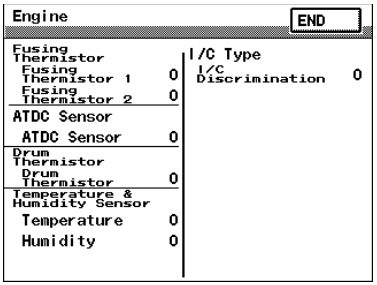
1. Remove the sheet of paper misfeed.
2. From the Sensor Check List that follows, check the panel display of the Vertical Conveyance Sensor. For the Vertical Conveyance Sensor, you check the data of “2nd Paper Feed”.
3. Call the Service mode to the screen.
4. Touch [I/O Check] → [Printer] → [Bypass/Duplex] in that order and call to the screen the sensor check screen that contains 2nd Paper Feed.
5. Check that the data for 2nd Paper Feed is [0] (sensor blocked).
6. Move the actuator to unblock the Vertical Conveyance Sensor.
7. Check that the data for 2nd Paper Feed changes from [0] to [1] on the screen.
8. If the input data is [0] change the sensor.

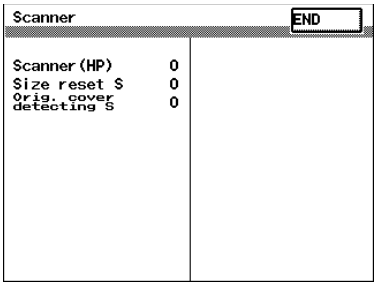
10.8.2 I/O Check Screens

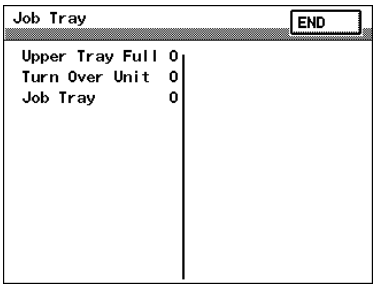
- These are only typical screens which may be different from what are shown on each individual machine.

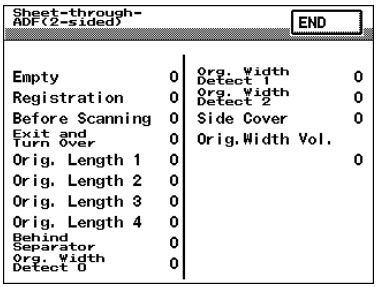


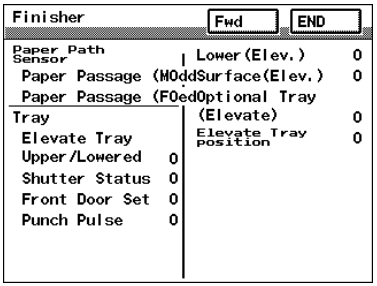
4040F3E548DA

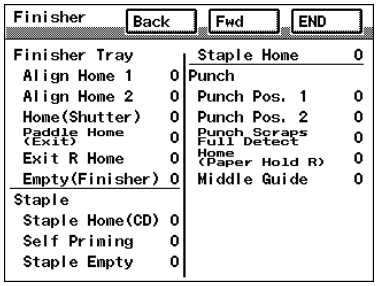


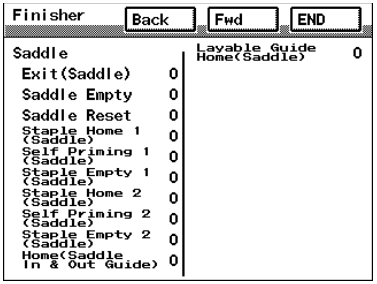


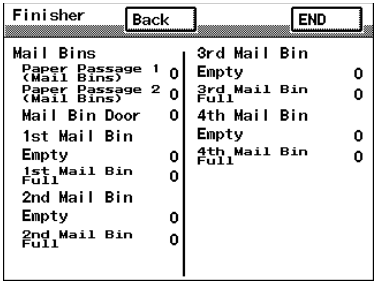












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10.8.3 I/O Check List

A. Printer (Main Body, PC-108, PC-206, PC-407)

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC1	Bypass/Duplex	Timing Roller	Synchronizing Roller Sensor	Paper present	Paper not present
PC4		Exit	Paper Exit Sensor	Paper present	Paper not present
PC2		2nd Paper Feed	Vertical Conveyance Sensor	Paper present	Paper not present
PC117-PF		3rd Paper Feed	Tray3 Vertical Conveyance Sensor	Paper present	Paper not present
PC126-PF		4th Paper Feed	Tray4 Vertical Conveyance Sensor	Paper present	Paper not present
-		Bypass Tray	Manual Bypass Tray Set signal	Not set	Set
PC18		Paper Empty	Bypass Paper Empty Sensor	Paper not present	Paper present
PC19		FD Size 1	Bypass FD Paper Size Sensor/1	Paper present	Paper not present
PC20		FD Size 2	Bypass FD Paper Size Sensor/2	Paper present	Paper not present
PC21		FD Size 3	Bypass FD Paper Size Sensor/3	Paper present	Paper not present
PC22		FD Size 4	Bypass FD Paper Size Sensor/4	Paper present	Paper not present
PC29		Bypass Tray Pick Up	Bypass Lift Sensor	Unblocked	Blocked
PC24		Duplex Paper Passage 1	Duplex Unit Upper Transport Sensor	Paper present	Paper not present
PC25		Duplex Paper Passage 2	Duplex Unit Lower Transport Sensor	Paper present	Paper not present
PC26		Reverse	Switch Back Unit Sensor	Paper present	Paper not present
-		Duplex Set	Duplex Unit Set signal	Out of position	Set
PC23		Duplex Cover	Duplex Unit Door Sensor	Open	Close
VR1		Bypass Paper Width Detect	Bypass Paper Size Detection Unit	Analog value	

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC7	Tray 1	Tray Set	Tray1 Set Sensor	Set	Out of position
PC8		Paper Near Empty	Tray1 Paper Near-Empty Sensor	Unblocked	Blocked
PC9		Paper Empty	Tray1 Paper Empty Sensor	Paper not present	Paper present
PC6		Upper Side Detect	Tray1 Paper Lift Sensor	At upper limit	Not at upper limit
PC11		CD Size 1	Tray1 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC10		CD Size 2	Tray1 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I1		FD Size 1	FD Paper Size Board 1	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC13	Tray 2	Tray Set	Tray2 Set Sensor	Set	Out of position
PC14		Paper Near Empty	Tray2 Paper Near-Empty Sensor	Unblocked	Blocked
PC15		Paper Empty	Tray2 Paper Empty Sensor	Paper not present	Paper present
PC12		Upper Side Detect	Tray2 Paper Lift Sensor	At upper limit	Not at upper limit
PC17		CD Size 1	Tray2 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC16		CD Size 2	Tray2 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I2		FD Size 1	FD Paper Size Board 2	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC3		2nd Take-up	Right Lower Door Sensor	Out of position	Set

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC112-PF	Tray 3	Tray Set	Tray3 Set Sensor	Set	Out of position
PC113-PF		Paper Near Empty	Tray3 Paper Near-Empty Sensor	Unblocked	Blocked
PC115-PF		Paper Empty	Tray3 Paper Empty Sensor	Paper not present	Paper present
PC114-PF		Upper Side Detect	Tray3 Lift Sensor	At upper limit	Not at upper limit
PC118-PF		CD Size 1	Tray3 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC119-PF		CD Size 2	Tray3 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I3 PF		FD Size 1	Tray3 FD Paper Size Detection Board	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC111-PF		Take-up Lower	Door Sensor	Open	Close
PC116-PF		Pickup	Tray3 Paper Take-Up Sensor	Paper present	Paper not present
PC121-PF	Tray 4	Tray Set	Tray4 Set Sensor	Set	Out of position
PC122-PF		Paper Near Empty	Tray4 Paper Near-Empty Sensor	Unblocked	Blocked
PC124-PF		Paper Empty	Tray4 Paper Empty Sensor	Paper not present	Paper present
PC123-PF		Upper Side Detect	Tray4 Lift Sensor	At upper limit	Not at upper limit
PC127-PF		CD Size 1	Tray4 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC128-PF		CD Size 2	Tray4 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I4 PF		FD Size 1	Tray4 FD Paper Size Detection Board	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC125-PF		Pickup	Tray4 Paper Take-Up Sensor	Maximum value	Not at maximum value

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
SW2	Toner/Side Cover	Side Cover	Right Side Door Interlock Switch 1	Out of position	Set
PC5		Front Cover	Front Door Sensor	Out of position	Set
SW4		Sub Hopper Empty	Sub Hopper Empty Switch	Toner not loaded: 1 and 0 alternately displayed. Toner loaded: 0 displayed	
M1	Drive Motor Detect	Main Motor	Main Motor	When turning	When stopped
M2		I/U Motor	IU Motor	When turning	When stopped
M9		Polygon Motor	Polygon Motor	When turning	When stopped
M4		Cooling Fan (Power Supply)	Power Supply Cooling Fan Motor	When turning	When stopped
M5		Cooling Fan	Cooling Fan Motor	When turning	When stopped
M6		IU Cooling Fan	IU Cooling Fan Motor	When turning	When stopped
M11		Toner Suction Fan (Ventilation)	Toner Suction Fan Motor	When turning	When stopped

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC2-LCT	LCT	Vertical Transport	Vertical Conveyance Sensor	Paper present	Paper not present
PC1-LCT		Feed	Paper Feed Sensor	Paper present	Paper not present
PC9-LCT		Shift Tray Paper Empty	Shift Tray Paper Empty Sensor	Paper present	Paper not present
PC3-LCT		Main Tray Paper Empty	Upper Paper Empty Sensor	Paper present	Paper not present
PWB-E LCT		Paper Empty	Paper Empty Board	Paper present	Paper not present
PC7-LCT		Lower Overrun	Lower Limit Sensor	Malfunction	Operational
UN1-LCT		Manual Button Down	Paper Descent Key	ON	OFF
PC6-LCT		Tray Open	Tray Set Sensor	Open	Close
PC4-LCT		Raised (Lift-Up)	Tray Upper Limit Sensor	At upper limit	Not at upper limit
PC13-LCT		Lowered (Lift up)	Tray Lower Position Sensor	At lower limit	Not at lower limit
PC12-LCT		Home (Shift)	Shifter Home Position Sensor	At home	Out of home
PC11-LCT		Shift Tray Stop Position	Shifter Return Position Sensor	At stop position	Not at stop position
PC10-LCT		Elev. Mtr Pulse	Elevator Motor Pulse Sensor	Blocked	Unblocked
PC8-LCT		Shift Mtr Pulse	Shift Motor Pulse Sensor	Blocked	Unblocked
PC14-LCT		Dividing Position	Shift Gate Home Position Sensor	At home	Out of home
PC5-LCT		Right Door Open	Right Lower Door Sensor	Open	Close
TH1	Engine	Fusing Thermistor 1	Fusing Roller Thermistor	Analog value	
TH2		Fusing Thermistor 2	Fusing Roller Sub Thermistor	Analog value	
UN2		ATDC Sensor	ATDC Sensor	Analog value	
TH4		Drum Thermistor	Drum Thermistor	Analog value	
TH3		Temperature	Temperature/humidity Sensor	Analog value	
		Humidity		Analog value	
—		I/C Discrimination	I/C Type Detection signal	Analog value	

B. Scanner

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC208	Scanner	Scanner (HP)	Scanner Home Sensor	At home	Out of home
SW201		Size reset S	Size Reset Switch	Lowered	Raised
PC209		Orig. cover detecting S	Original Cover Angle Sensor	Less than 15°	15° or more

C. Job Tray

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC1-JOB	Job Tray	Upper Tray Full	Paper Full Detection Sensor	Blocked	Unblocked
—		Turn Over Unit	Switch Back Unit Set signal	Set	Not set
—		Job Tray	Job Tray Set signal	Set	Not set

D. Sheet-through-ADF (2-sided)

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC5-ADF	Sheet-through-ADF (2-sided)	Empty	Empty Sensor	Paper present	Paper not present
PC9-ADF		Registration	Registration Sensor	Paper present	Paper not present
PC8-ADF		Before Scanning	Original Detection Sensor	Paper present	Paper not present
PC10-ADF		Exit and Turn Over	Exit/Turnover Sensor	Paper present	Paper not present
PC1-ADF		Orig. Length 1	FD Paper Size Detection Sensor 1	Paper present	Paper not present
PC2-ADF		Orig. Length 2	FD Paper Size Detection Sensor 2	Blocked	Unblocked
PC3-ADF		Orig. Length 3	FD Paper Size Detection Sensor 3	Paper present	Paper not present
PC4-ADF		Orig. Length 4	FD Paper Size Detection Sensor 4	Paper present	Paper not present
PC6-ADF		Behind Separator	Separator Sensor	Blocked	Unblocked
PWB-SIZE		Org. Width Detect 0	Mix Document Size Detection Board	Paper present	Paper not present
		Org. Width Detect 1		Paper present	Paper not present
		Org. Width Detect 2		Paper present	Paper not present
PC7-ADF		Side Cover	Upper Door Open/Close Sensor	Open	Close
PBA-VR		Orig. Width Vol.	Variable Resistor	Analog value	

E. Finisher

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC5-FN	Finisher	Paper Passage (Middle)	Transport Sensor	Paper present	Paper not present
PC4-FN		Paper Passage (Feed in)	Entrance Sensor	Paper present	Paper not present
PC3-FN		Elevate Tray Upper/Lowered	Elevator Tray Home Position Sensor	At upper limit	Not at upper limit
S2-FN		Shutter Status	Shutter Detection Switch	Close	Open
S1-FN		Front Door Set	Front Cover Detection Switch	Close	Open
PC2-PK		Punch Pulse	Punch Motor Pulse Sensor	Blocked	Unblocked
PC14-FN		Lower (Elev.)	Elevator Tray Lower Limit Sensor	Blocked	Unblocked
PC15-FN		Surface (Elev.)	Top Face Detection Sensor	Blocked	Unblocked
—		Optional Tray (Elevate)	—	Set	Not set
PC3-FN		Elevate Tray position	Elevator Tray Home Position Sensor	Blocked	Unblocked
PC6-FN		Align Home 1	Alignment Home Position Sensor 1	At home	Out of home
PC7-FN		Align Home 2	Alignment Home Position Sensor 2	At home	Out of home
PC16-FN		Home (Shutter)	Shutter Home Position Sensor	At home	Out of home
PC11-FN		Paddle home (Exit)	Exit Paddle Home Position Sensor	At home	Out of home
PC12-FN		Exit R Home	Exit Roller Home Position Sensor	At home	Out of home
PC8-FN		Empty (Finisher)	Storage Tray Detecting Sensor	Paper present	Paper not present
PC10-FN		Staple Home (CD)	Staple Home Position Sensor	Blocked	Unblocked
—		Self Priming	Self-Priming Sensor	Blocked	Unblocked
—		Staple Empty	Staple Empty Detection Sensor	Blocked	Unblocked
—		Staple Home	Staple Home Position Sensor	Blocked	Unblocked
PC3-PK		Punch Pos. 1	Punch Positioning Sensor 1	Unblocked	Blocked
PC4-PK		Punch Pos. 2	Punch Positioning Sensor 2	Unblocked	Blocked

Symbol	Panel Display		Part/Signal Name	Operation Characteristics/ Panel Display	
				1	0
PC1-PK	Finisher	Punch Scraps Full Detect	Punch Trash Full	Blocked	Unblocked
PC22-SK		Home (Paper Hold R)	Crease Roller Home Position Sensor	Blocked	Unblocked
S4-FN		Middle Guide	Transport Jam Detection Switch	Close	Open
PC20-SK		Exit (Saddle)	Saddle Exit Sensor	Paper present	Paper not present
PC21-SK		Saddle Empty	Saddle Tray Empty Sensor	Paper present	Paper not present
S4-SK		Saddle Reset	Saddle Interlock Switch	Open	Close
—		Staple Home 1 (Saddle)	Staple Home Position Sensor 1	Blocked	Unblocked
—		Self Priming 1 (Saddle)	Self-Priming Sensor 1	Blocked	Unblocked
—		Staple Empty 1 (Saddle)	Staple Empty Detection Sensor 1	Blocked	Unblocked
—		Staple Home 2 (Saddle)	Staple Home Position Sensor 2	Blocked	Unblocked
—		Self Priming 2 (Saddle)	Self-Priming Sensor 2	Blocked	Unblocked
—		Staple Empty 2 (Saddle)	Staple Empty Detection Sensor 2	Blocked	Unblocked
PC23-SK		Home (Saddle In & Out Guide)	In & Out Guide Home Sensor	Blocked	Unblocked
PC26-SK		Layable Guide Home (Saddle)	Layable Guide Home Sensor	Blocked	Unblocked
PC10-MK		Paper Passage 1 (Mail Bins)	Lower Transport Sensor	Paper present	Paper not present
PC9-MK		Paper Passage 2 (Mail Bins)	Upper Transport Sensor	Paper present	Paper not present
PC11-MK		Mail Bin Door	Cover Open/Close Sensor	Open	Close
PC1-MK		1st Mail Bin Empty	Paper Detection Sensor 1	Paper not present	Paper present
PC5-MK		1st Mail Bin Full	Paper Full Detection Sensor 1	Blocked	Unblocked
PC2-MK		2nd Mail Bin Empty	Paper Detection Sensor 2	Paper not present	Paper present
PC6-MK		2nd Mail Bin Full	Paper Full Detection Sensor 2	Blocked	Unblocked
PC3-MK		3rd Mail Bin Empty	Paper Detection Sensor 3	Paper not present	Paper present
PC7-MK		3rd Mail Bin Full	Paper Full Detection Sensor 3	Blocked	Unblocked
PC4-MK		4th Mail Bin Empty	Paper Detection Sensor 4	Paper not present	Paper present
PC8-MK		4th Mail Bin Full	Paper Full Detection Sensor 4	Blocked	Unblocked

10.9 Settings in the Operation Check

10.9.1 ADF

A. Paper Passage

Functions	• To let the document loaded in the ADF be fed through under the specified mode.
Use	• 1-sided No Detect • Double-Sided
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Operation Check] → [ADF] → [Paper Passage] in that order. *2.* Select the mode. *3.* Load the document in the ADF and press the Start key. *4.* When the Start key is then pressed, the paper passage operation is temporarily halted. Pressing the Stop key brings the paper passage operation to an immediate stop. The operation is stopped as soon as all pages of the document have been fed through.

B. ADF Sensor Adjust

Functions	• To carry out automatic adjustments of the ADF sensor.
Use	
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Operation Check] → [ADF] → [ADF Sensor Adjust] in that order. *2.* Press the Start key to begins the automatic adjustment of the sensors.

C. Backup Data Initialization

Functions	• Resets the settings specified with Sensor Auto Adjust.
Use	
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Operation Check] → [ADF] → [Backup Data Initialization] in that order. *2.* Select [Yes] and touch [Enter] to initialize the backup data.

10.9.2 Exp. Lamp Check

Functions	• To check the intensity of the Exposure Lamp in the Image Reading Section.
Use	
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Operation Check] → [Exp. Lamp Check] in that order.

10.9.3 Scanner

Functions	• To check the operation of the Scanner.
Use	• Turns on the Exposure Lamp. • Moves the Scanner.
Setting/ Procedure	*1.* From the Tech. Rep. Mode screen, touch [Operation Check] → [Scanner] in that order. *2.* Use the Keypad to type in the amount to move, and then touch [Set].

10.10 CS Remote Care

NOTE

- **If enhance security mode is set ON, menu is not shown.**

10.10.1 Outlines

- CS Remote Care enables the machine and the computer at CS Remote Care center to exchange data through telephone line or E-Mail in order to control the machine.
- CS Remote Care enables the machine to call the computer at the center when trouble occurs. It also enables the computer at the center to contact the machine for the necessary data.
- Data which CS Remote Care handles can be divided into the following groups.
  a. Data which show the status of use of the machine such as Total count, PM count.
  b. Data which show the abnormal situation on the machine such as where and how often errors occur.
  c. Data on adjustment
  d. Data on setting

10.10.2 Setting Up the CS Remote Care

NOTE

- **For resetting up the machine which CS Remote Care has already been set up, clear the RAM for CS Remote Care before resetting.**
  See P.201
- **When using the telephone line for connection, use the recommended modem. (For recommended modem, contact responsible person of KONICA MINOLTA.)**
- **When selecting Management Device 2, Authentication device (PageACSES) and Vender 2 at Meter Count Mode, a phone line modem cannot be used.**

Step	Procedure	
	Using the telephone line modem	Using E-mail
0	Register the device ID to the application at CS Remote Care Center. The initial connection is not available unless the device ID is registered.	
1	Connecting the modem Turn the power for the modem OFF. Connect the machine and the modem with a modem cable. Connect the modem and the wall jack with a modular cable. * For connecting the modular cable, see the manual for the modem.	Be sure to remove the telephone line modem when e-mail is used.
2	Clearing the RAM *1.* Select [Tech. Rep. Mode] → [CS Remove Care], and touch [Detail Setting]. *2.* Touch [RAM Clear]. *3.* Select [Yes], and touch [END]. P.201	
3	Selecting the CS Remote Care function Select [Tech. Rep. Mode] → [CS Remove Care] → [System Input], and touch [Modem].	Selecting the CS Remote Care function Select [Tech. Rep. Mode] → [CS Remove Care] → [System Input], and touch [E-Mail].
4	Inputting the ID Code *1.* Select [Tech. Rep. Mode] → [CS Remote Care] → [ID Code]. *2.* Input the seven digits ID of the service person, and touch [ID Code] again. P.200	

Step	Procedure	
	Using the telephone line modem	Using E-mail
5	Setting the date and time for CS Remote Care *1.* Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail Setting]. *2.* Touch [Date & Time Setting]. *3.* Input the date, time and the time zone using the 10-Key Pad, and touch [Job Start]. P.201	
6	Setting the Center ID and telephone number of the Center *1.* Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail Setting]. *2.* Touch [Basic] → [Center ID], and input the Center ID (five digits). P.200 *3.* Touch [Center Phone No]. *4.* Input the telephone number of the Center using the 10-Keys Pad and [P], [T], [W], [-] keys. P.200	Setting the Center ID *1.* Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail Setting]. *2.* Touch [Basic] → [Center ID], and input the Center ID (five digits). P.200
7	Setting the Device ID *1.* Touch [[Fwd] → [Device ID], and input Device ID (nine digits). P.200	Setting the Device ID *1.* Touch [Device ID], and input Device ID (nine digits). P.200
8	Inputting the Device telephone number *1.* Touch [Device Phone No]. *2.* Input the Device telephone number using the 10-Key Pad and [P], [T], [W], [-] keys. P.200	Setting the Respond Timeout *1.* Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail Setting]. *2.* Touch [Respond Timeout] and enter the response timeout using the 10-Key Pad. **NOTE** • **Under normal conditions, there is no need to change the default setting.** P.201

Step	Procedure	
	Using the telephone line modem	Using E-mail
9	Inputting the AT command for initializing the modem *1.* Select [Tech. Rep. Mode] → [CS Remote Care] → and touch [Detail Setting]. *2.* Touch [AT Command]. *3.* Input AT Command. **NOTE** • **Change this Command only when it is necessary. (They do not need to be changed in normal condition.)** • **For details on AT Command, see the manual for the modem.** P.202	Setting the E-mail address *1.* Select [Tech. Rep. Mode] → [CS Remote Care] → and touch [Server Setting]. *2.* Touch [Initial data]. *3.* Select [Yes] and touch [Enter] to perform initialization. *4.* Touch [Server for RX] and set POP3 Server Address, POP3 User Name, POP3 Password, and POP3 Port Number. P.202 *5.* Touch [RX Settings] and set E-Mail Address, Auto-RX Check, Connection Timeout, and APOP Authentication. P.202 *6.* Touch [TX Settings] and set SMTP Server Address, SMTP Port Number, Connection Timeout, and Authentication Setting. P.203 *7.* Touch [TX/RX Test] and press the Start key to carry out the transmission/reception test. Make sure that data is correctly transmitted and received and then proceed to the next step. If the test fails, make checks again by following the instructions given as the error message; then, carry out the transmission/ reception test once again. P.204
10	Setting the DIPSW for CS Remote Care **NOTE** • **This setting is not normally necessary. Take this step only when necessary in a specific connecting condition.**	To step 11
11	Executing the initial transmission *1.* Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail Setting]. *2.* Touch [initial transmission] on the right bottom of the screen to start initial transmission. *3.* When the machine is properly connected with the Center, CS Remote Care setting screen will be displayed. **NOTE** • **The initial transmission key at the right bottom of the screen will be displayed only when the Center ID, the Device ID, Telephone number of the Center and the Device telephone number have been input.** P.200	Executing initial connection mail reception The initial connection mail reception is performed from the Center side to the e-mail address of the local machine. **NOTE** • **If a CS Remote Care-related screen is open during reception of the initial connection mail from the center, the data being set up is discarded and the CS Remote Care setting screen appears.** • **For the initial connection mail transmission procedure, see the CS Remote Care center manual.** • **Transmission and reception of e-mail is possible only between the center and the machine which are initially connected.** • **The initial connection is made from the center, at which time the center mail address is stored in the machine.** • **After the initial registration has been completed, the center mail address is displayed in E-Mail address which is accessed as follows: Tech. Rep. Mode → [CS Remote Care] → [Detail Setting] → [Basic] → E-Mail address.**

10.10.3 Software SW setting for CS Remote Care

NOTE

- **In case you changed bit data by accident, be sure to restore the previous state.**

A. Input procedure

1. Select [Tech. Rep. Mode] → [CS Remote Care] → [Detail Setting], and touch [Software Switch Setting].
2. Touch [Mode Selection], and input the SW number (two digits) using the 10-Key Pad.
3. Touch [Bit Selection], and select SW bit number using the arrow keys, and input 0 or 1 using the 10-Key Pad.
   (For setting by hexadecimal numbers, touch [HEX Selection], and input using the 10-Key Pad or A to F keys.)
4. Touch [Enter].

NOTE

- **About functions of each switch, see to "B. List of software SW for CS Remote Care."**

B. List of software SW for CS Remote Care

SW No.	Functions	Ref. Page
01	• Dial Mode, Line for send only, Baud rate	P.190
02	• Emergency transmission, Date specified transmission, Call parts replace date, Call drum replace date, Call regular service date(PM), Auto call on the IC Life, Auto call of the IR shortage, Auto call on the zero reset of the fixed parts replacement	P.191
03	• Trouble display setting, Auto call on the toner empty, Auto call on the waste toner bottle full	P.191
04	• CS Remote Care communication mode	P.192
05	• Modem redial interval	P.192
06	• Modem redial times	P.193
07	• Redial for response time out	P.193
08	• Retransmission interval on E-Mail delivery error	P.193
09	• Retransmission times on E-Mail delivery error	P.194
10	• Time zone settings	P.194
11	• Timer 1 RING reception → CONNECT reception	P.194
12	• Timer 2 Dial request completed → CONNECT reception	P.195
13	• Reservation	—
14	• Timer 4 Line connection → Start request telegram delivery	P.195
15	• Timer 5 Wait time for other side's response	P.195
16	• Reservation	—
17	• Reservation	—
18	• Attention display To set weather to give the alarm display when using the modem but the power for the modem is OFF.	P.196
19	• Email/http communication mode	P.196

SW No.	Functions	Ref. Page
20	• http communication HeartBeat function, http communication HeartBeat periodic transmission	P.196
21	• Automatic transmission of chronological misfeed data at the time of transmission of misfeed frequent occurrence warning, transmission of paper-based misfeed frequent occurrence warning, transmission of original-based misfeed frequent occurrence warning	P.197
22	• Paper-based misfeed frequent occurrence threshold value	P.198
23	• Original-based misfeed frequent occurrence threshold value	P.198
24 : 40	• Reservation	—

NOTE

- **Do not change any bit not described on this table.**
- **Shaded portions denote default values.**

SW No.	Default		
01	Bit	7654 3210	HEX: 81
		1000 0001	

Bit	Functions	Logic		Description
		0	1	
7-4	Baud rate	0110		9600 bps
		0111		19.2 Kbps
		1000		38.4 Kbps
		Other		Not available
3-2	Reservation			
1	Line for send only	Disable	Enable	
0	Dial Mode	Pulse	Tone	

SW No.	Default		
02	Bit	7654 3210	HEX: FF
		1111 1111	

Bit	Functions	Logic		Description
		0	1	
7	Auto call on the zero reset of the fixed parts replacement	Disable	Enable	
6	Auto call of the IR shortage	Disable	Enable	
5	Auto call on the IC Life	Disable	Enable	
4	Call regular service date(PM)	Disable	Enable	
3	Call drum replace date	Disable	Enable	
2	Call parts replace date	Disable	Enable	
1	Date specified transmission	Disable	Enable	
0	Emergency transmission	Disable	Enable	

SW No.	Default		
03	Bit	7654 3210	HEX: 0A
		0000 1010	

Bit	Functions	Logic		Description
		0	1	
7-4	Reservation			
3	Auto call on the waste toner bottle full	Disable	Enable	
2	Reservation			
1	Auto call on the toner empty	Disable	Enable	
0	Trouble Display setting	When the CSRC is not connected	When the CSRC is connected	Select the type of message to be displayed at the time of automatic trouble notification made when the CSRC is connected, either the message when the CSRC is connected or that when the CSRC is not connected.

SW No.	Default		
04	Bit	7654 3210	HEX: 02
		0000 0010	

Bit	Functions	Logic		Description
		0	1	
7-2	Reservation			
1-0	CS Remote Care communication mode	00		DATA
		01		FAX
		10		E-mail
		11		Not available

SW No.	Default		
05	Bit	7654 3210	HEX: 03
		0000 0011	

Bit	Functions	Logic		Description
		0	1	
7-5	Reservation			
4-0	Modem redial interval	00001		1 minute
		00010		2 minutes
		00011		3 minutes
		00100		4 minutes
		00101		5 minutes
		00110		6 minutes
		00111		7 minutes
		01000		8 minutes
		01001		9 minutes
		01010		10 minutes
		Others		Not available

SW No.	Default		
06	Bit	7654 3210	HEX: 0A
		0000 1010	

Bit	Functions	Logic		Description
		0	1	
7-0	Modem redial times	0000 0000		0 time
		0000 0001		1 time
		:		:
		0000 1010		10 times
		:		:
		0110 0010		98 times
		0110 0011		99 times
		Others		Not available

SW No.	Default		
07	Bit	7654 3210	HEX: 01
		0000 0001	

Bit	Functions	Logic		Description
		0	1	
7-0	Redial for response time out	0000 0000		0 time
		0000 0001		1 time
		Others		Not available

SW No.	Default		
08	Bit	7654 3210	HEX: 06
		0000 0110	

Bit	Functions	Logic		Description
		0	1	
7-0	Retransmission interval on E-mail delivery error	0000 0000		0 minute
		0000 0001		10 minutes
		:		:
		0000 0110		60 minutes
		:		:
		0000 1011		110 minutes
		0000 1100		120 minutes
		Others		Not available

SW No.	Default		
09	Bit	7654 3210	HEX: 0A
		0000 1010	

Bit	Functions	Logic 0	Logic 1	Description
7-0	Retransmission times on E-mail delivery error	0000 0000		0 time
		0000 0001		1 time
		:		:
		0000 1010		10 times
		:		:
		0110 0010		98 times
		0110 0011		99 times
		Others		Not available

SW No.	Default		
10	Bit	7654 3210	HEX: 00
		0000 0000	

Bit	Functions	Logic 0	Logic 1	Description
7-0	Time zone settings	0000 0000		-12 hours
		0000 0001		-11 hours
		:		:
		0110 0010		+12 hours
		0001 1010		+13 hours
		Others		Not available

SW No.	Default		
11	Bit	7654 3210	HEX: 20
		0010 0000	

Bit	Functions	Logic 0	Logic 1	Description
7-0	Timer 1 RING reception → CONNECT reception	0000 0000		Not available
		0000 0001		1 sec
		:		:
		0010 0000		32 sec
		:		:
		1111 1110		254 sec
		1111 1111		255 sec

SW No.	Default		
12	Bit	7654 3210	HEX: 40
		0100 0000	

Bit	Functions	Logic		Description
		0	1	
7-0	Timer 2 Dial request completed → CONNECT reception	0000 0000		Not available
		0000 0001		1 sec
		:		:
		0100 0000		64 sec
		:		:
		1111 1110		254 sec
		1111 1111		255 sec

SW No.	Default		
14	Bit	7654 3210	HEX: 20
		0010 0000	

Bit	Functions	Logic		Description
		0	1	
7-0	Timer 4 Line connection → Start request telegram delivery	0000 0001		100 msec
		:		:
		0010 0000		3,200 msec
		:		:
		1111 1110		25,400 msec
		1111 1111		25,500 msec

SW No.	Default		
15	Bit	7654 3210	HEX: 1E
		0001 1110	

Bit	Functions	Logic		Description
		0	1	
7-0	Timer 5 Wait time for other side's response	0000 0001		1 sec
		:		:
		0001 1110		30 sec
		:		:
		1111 1110		254 sec
		1111 1111		255 sec

SW No.	Default		
18	Bit	7654 3210	HEX: 01
		0000 0001	

Bit	Functions	Logic		Description
		0	1	
7-1	Reservation			
0	Attention display To set weather to give the alarm display when using the modem but the power for the modem is OFF.	OFF	ON	

SW No.	Default		
19	Bit	7654 3210	HEX: 00
		0000 0000	

Bit	Functions	Logic		Description
		0	1	
7-1	Reservation			
0	Email/http communication mode	Bidirectional	Unidirectional	

SW No.	Default		
20	Bit	7654 3210	HEX: 00
		0000 0000	

Bit	Functions	Logic		Description
		0	1	
7-2	Reservation			
1	http communication HeartBeat periodic transmission	YES	NO	
0	http communication HeartBeat function	YES	NO	

SW No.	Default		
21	Bit	7654 3210	HEX: 00
		0000 0000	

Bit	Functions	Logic		Description
		0	1	
7-3	Reservation			
2	Automatic transmission of chronological misfeed data at the time of transmission of misfeed frequent occurrence warning	ON	OFF	
1	Original-based misfeed frequent occurrence threshold value	ON	OFF	
0	Paper-based misfeed frequent occurrence threshold value	ON	OFF	

SW No.	Default		
22	Bit	7654 3210	HEX: 05
		0000 0101	

Bit	Functions	Logic		Description
		0	1	
7-0	Paper-based misfeed frequent occurrence threshold value	0000 0001		1
		0000 0010		2
		:		:
		0000 0101		5
		:		:
		0000 1110		14
		0000 1111		15
		Others		Not available

SW No.	Default		
23	Bit	7654 3210	HEX: 05
		0000 0101	

Bit	Functions	Logic		Description
		0	1	
7-0	Original-based misfeed frequent occurrence threshold value	0000 0001		1
		0000 0010		2
		:		:
		0000 0101		5
		:		:
		0000 1110		14
		0000 1111		15
		Others		Not available

10.10.4 Setup confirmation

- **Follow the steps below to make sure that CS Remote Care has been properly set up.**

1. Call the Tech. Rep. Mode to the screen.
2. Touch [CS Remote Care].
3. Make sure that either [E-Mail] or [Modem], whichever has been selected, is displayed on the screen.

10.10.5 Calling the Maintenance

- When CE starts maintenance, inputting the ID code of CE (seven digits: numbers which CE can identify. They are controlled by the distributor.) will transmit the information to the Center side and tells that the maintenance has started. When the maintenance is finished, touching [Maintenance is completed.] key will transmit the information to the Center and tells that it is finished.

A. When starting the Maintenance

1. Select Tech. Rep. Mode and touch [CS Remote Care].
2. Touch [ID Code], and input ID Code.
3. Touch [ID Coke].

* The Start key blinks while maintenance is being carried out.

B. When finishing the Maintenance

1. Select Tech. Rep. Mode and touch [CS Remote Care].
2. Touch [Maintenance is completed.]

10.10.6 Calling the Center from the Administrator

- When the CS Remote Care setup is complete, the administrator can call the CS Remote Care center.

1. From the setting menu, touch the keys in this order: [Admin. Management] → [Admin. 1] → [Call Remote Center].
2. Touch [Call Remote Center].
3. Press the Start key.
   When the setup is not complete or another transmission is being carried out, the Admin. transmission key will not be displayed, and the transmission is not available.

NOTE

- **For transmitting data of the machine by calling the center on the specified date and time, refer to the manual for CS Remote Care Center.**

10.10.7 Checking the transmission log

- The transmission log list will be output to be checked.

1. Select [Tech. Rep. Mode] → [CS Remote Care], and touch [Detail setting].
2. Touch [Communication Log Print].
3. Load Tray 1 or Bypass tray with A4S paper.
4. When the Basic screen reappears after the Tech. Rep. mode has been exited, an output of the communication log is produced.

10.10.8 Detail on settings

A. System Input

Functions	• To select the system type for remote diagnosis.
Use	• Use to newly build or change the system.
Setting/ Procedure	• Select E-Mail or Modem. • The default setting is “E-Mail”. “E-Mail” Modem

B. ID Code

Functions	• To register the Service ID.
Use	• Use when registering and changing Service ID.
Setting/ Procedure	• Enter a 7-digit code from the 10-Key Pad. (0000001 to 9999999) Registration • Touch [ID Code] and enter the Service ID. • Touch [ID code] to register the ID. • The [Detail Setting] will appear when the ID has been registered.

C. Detail Setting

(1) Basic

Functions	• Execute the primary setting.
Use	• Use to change the set contents. • Use to register the machine to the CS Remote Care Center.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [CS Remote Care]. *3.* Touching the [Detail Setting] will display the primary setting. Primary Setting • Set the Center ID, Device ID, and the phone No. • When e-mail is selected for system and all setup procedures are completed, E-mail address of the Center is displayed. * When entering the phone No, 10-Keys and keys on the screen have following meanings. [-] Pose : Waits to start transmitting after dialing [W] Wait : Detects the dial tone of the other end [T] Tone dial : Carry out tone dialing [P] Pulse dial : Carry out pulse dialing [*],[#] : To be used as necessary Initial Transmission • Touching the Initial Transmission key will sent the information to the CS Remote Care Center to register the machine. (Only when the Modem is selected on the system Input.)

(2) Date & Time Setting

Functions	• To set the data and time-of-day
Use	• Use to set or change the date and time-of-day.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [CS Remote Care]. *3.* Touch [Detail Setting] to access Date & Time Setting. *4.* Enter the date (month, day and year), time-of-day, and the time zone from the 10-Key Pad. *5.* Touch [Job Start] to start the clock.

(3) RAM Clear

Functions	• To clear the following data at the Center ID Code, Primary Setting, Date/Time Input (Time Zone), Software SW Setting and AT Command.
Use	• To be used for setting CS Remote Care. • To be used for reset the every data of the Center to default. **NOTE** • **If RAM Clear is selected during transmission, RAM clear processing will be implemented at the time the transmission is completed regardless of whether it is done properly or not.**
Setting/ Procedure	• The default setting is “NO” YES “NO”

(4) Communication Log Print

Functions	• To print out the Communication Log.
Use	• Use to output and use the Communication Log.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [CS Remote Care]. *3.* Touch [Detail Setting] to access Communication Log Print. *4.* Load Tray 1 or Bypass Tray with A4S or 81/2 x 11 paper. *5.* When the Basic screen reappears after the Tech. Rep. mode has been exited, an output of the communication log is produced.

(5) Software Switch Setting

Functions	• To change the CS Remote Care settings.
Use	• To change the settings for CS Remote Care as necessary.
Setting/ Procedure	P.189

(6) Respond Timeout

Functions	• To set retry intervals for an e-mail transmission error. • This setting can be made only when [E-Mail] is selected in System Input.
Use	• To change the retry intervals for an e-mail transmission error.
Setting/ Procedure	• The default setting is “30 min.” 10 to 1440 min.

(7) AT Command

Functions	• To set the command to be issued at the time of Modem Initialization. • This setting is available only when [Modem] is selected for the system setting.
Use	• To set the command to be issued at the time of Modem Initialization.
Setting/ Procedure	• Enter the command and touch [Enter] to register.

D. Server Setting

• Server Setting can be set only when [E-Mail] is selected in System Input.

(1) Server for RX

<POP3 Server Address>

Functions	• To set the POP3 server address used for CS Remote Care.
Use	• To set the address of the POP3 server. • The POP3 server address can be set as an IP address or domain name.
Setting/ Procedure	<IP Address> • IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255] <FQDN> • Enter the domain name.

<POP3 User Name>

Functions	• To set the logon name for the POP3 server used for CS Remote Care.
Use	• To set the logon name for the POP3 server.
Setting/ Procedure	• Up to 63 characters (alphanumeric characters and symbols) can be used.

<POP3 Password>

Functions	• To set the logon password for the POP3 server used for CS Remote Care.
Use	• To set the logon password for the POP3 server.
Setting/ Procedure	• Up to 15 characters (alphanumeric characters and symbols) can be used.

<POP3 Port Number>

Functions	• To set the POP3 port number used for CS Remote Care.
Use	• To set the port number for the POP3 server.
Setting/ Procedure	• The default setting is “110” “110” (1 to 65535)

(2) RX Settings

<E-Mail Address>

Functions	• To set the e-mail address used for CS Remote Care.
Use	• To set the e-mail address.
Setting/ Procedure	• Up to 129 characters (alphanumeric characters and symbols) can be used.

<Auto-RX Check>

Functions	• To set whether or not to use Auto-RX Check and the time interval for the POP3 server used for CS Remote Care.
Use	• To select not to use Auto-RX Check. • To change the time interval for Auto-RX Check.
Setting/ Procedure	• The default setting is “OFF” “OFF” (1 to 120)

<Connection Timeout>

Functions	• To set the timeout period for connection during reception.
Use	• To change the timeout period for connection during reception.
Setting/ Procedure	• The default setting is “60 sec” “60 sec” (30 to 300)

<APOP Authentication>

Functions	• To set whether or not to enable APOP authentication during reception.
Use	• To enable APOP authentication during reception.
Setting/ Procedure	• The default setting is “OFF” ON “OFF”

(3) TX Settings

<SMTP Server Address>

Functions	• To set the SMTP server address for transmission used for CS Remote Care.
Use	• To set the address of the SMTP Server. • The SMTP server address can be set as an IP address or domain name.
Setting/ Procedure	<IP Address> • IP address Version 4 format [0 to 255] . [0 to 255] . [0 to 255] . [0 to 255] <FQDN> • Enter the domain name.

<SMTP Port Number>

Functions	• To set the SMTP port number for transmission used for CS Remote Care.
Use	• To set the port number of the SMTP Server.
Setting/ Procedure	• The default setting is “25” “25” (1 to 65535)

<Connection Timeout>

Functions	• To set the timeout period for transmission.
Use	• To change the timeout period for connection during transmission.
Setting/ Procedure	• The default setting is “60 sec” “60 sec” (30 to 300)

<Authentication Setting>

Functions	• To set whether or not to enable authentication during transmission via the SMTP server.
Use	• Use to enable authentication during transmission. Types of authentication to be set: POP Before SMTP, SMTP authentication
Setting/ Procedure	• The default setting is “OFF” ON “OFF” * If POP Before SMTP is set, make the setting for POP Before SMTP. • The default setting is “60 sec” “60 sec” (0 to 60) * If SMTP authentication is set, make the following settings. User ID: Enter the user ID for SMTP authentication. Password: Enter the password for SMTP authentication.

(4) TX/RX Test

Functions	• To carry out the transmission/reception tests for CS Remote Care.
Use	• To carry out the transmission/reception tests for CS Remote Care.
Setting/ Procedure	• Press the Start key to start transmission. • The test progress and results are displayed on the screen.

(5) Initial data

Functions	• To initialize server settings.
Use	• To initialize server settings.
Setting/ Procedure	• The default setting is “NO” YES “NO”

10.10.9 List of the CS Remote Care error code

A. For telephone line modem

Error code	Error	Solution
0001	The line is busy (Busy detection)	• Transmit again manually.
0002	Failure of the Modem default setting at transmitting (When the transmission completes with modem initial setting failed)	• Check if the power of the modem is ON. • Check the connecting condition between the modem and the main body.
0003	Timeout of CONNECT at transmitting (No response to ATD)	• Transmit again manually • Check if the power of the modem is ON. • Check the connecting condition between the modem and the main body.
0004	Timeout of Incoming request response (No response to incoming (starting) request MSG)	• Contact responsible person of KONICA MINOLTA.
0005	Timeout of CONNECT at receiving (No response to ATA)	• Check if the power of the modem is ON. • Check the connecting condition between the modem and the main body.
0006	Shut down of the data modem line (Host) (Carrier OFF is detected)	• No solution, because the line is shut down at the host side.
0007	Shut down of the data modem line (Main body) (Line is shut down forcibly due to event)	• Contact responsible person of KONICA MINOLTA.
0008	Timeout of start request telegram delivery (Start request telegram is not delivered after line connection)	• Transmit again manually.
0009	Timeout of finish request telegram delivery (Finish request telegram is not delivered (Start of shut down).)	• Transmit again manually.
000A	Receiving rejection (Receiving is made when the main body is set to reject receiving.)	• Check the setting condition of the host side. • Check the setting condition of the main body side.
000B	RS232C Driver Over Run (When the modem detects Over Run.)	• If the same error is detected several times, turn the modem power OFF and ON.
000C	If the same error is detected several times, turn the modem power OFF and ON.	• If the same error is detected several times, turn the modem power OFF and ON.
000D	Break Interrupt (BI) Indicator (When the modem detects Break Interrupt (BI) Indicator.)	• If the same error is detected several times, turn the modem power OFF and ON.
000E	Receiving RING Buffer Full (When the Receiving RING Buffer is full.)	• Contact responsible person of KONICA MINOLTA.
000F	Transmitting RING Buffer Full (When the Transmitting RING Buffer is full.)	• Contact responsible person of KONICA MINOLTA.

Error code	Error	Solution
0010	RX FIF0 ERROR (when Read / Write error occurs at RX FIF0)	• Contact responsible person of KONICA MINOLTA.
0011	Baud Rate ERROR (When selected Baud Rate is out of the specification (9600 bps to 38400 bps).)	• Check the Baud rate of the software DipSW.
0012	TX FIF0 Level Error (When the threshold of the selected TX FIF0 is not error value (1, 3, 9, 13).)	• Contact responsible person of KONICA MINOLTA.
0013	RX FIF0 Level Error (When the threshold of the selected RX FIF0 is not error value (0, 4, 8, 14).)	• Contact responsible person of KONICA MINOLTA.
0014	Receiving Data Over Error (When the data whose size exceeds the transmitting RING buffer is requested.)	• Contact responsible person of KONICA MINOLTA.
0015	Status Error (During modem operation is being confirmed)	• Contact responsible person of KONICA MINOLTA.
0016	Status Error (During receiving)	• Contact responsible person of KONICA MINOLTA.
0017	Status Error (During line is being shut down)	• Contact responsible person of KONICA MINOLTA.
0018	Machine ID has already been registered (Request telegram 2 (SET-UP) comes from the main body that has already registered Machine ID.)	• Set the initial registrations again for all including the host side.
0019	Center ID Error (Center ID of the host is not identical with the one of start request telegram.)	• Check Center ID setting of the main body side. • Check Center ID setting of the main body side.
001A	Device ID inconsistency (Device ID of the host is not identical with the one of start request telegram.)	• Check Device ID setting of the main body side. • Check the setting of the host side.
001B	Device ID Unregistered (Request telegram 2 (Constant data transmitting, Emergency call) comes from the main body that has not registered Machine ID yet.)	• Check Device ID setting of the main body side. • Check the setting of the host side.
001C	Grammar Error (Received response telegram is unregulated format.)	• Contact responsible person of KONICA MINOLTA.
001D	Impossible to change (Unchangeable items) (Host requests to change the setting of items which are not allowed to change.)	• Contact responsible person of KONICA MINOLTA.
001E	Impossible to change (During printing) (Setting cannot be changed because the setting change is made during the machine is printing or starts printing.)	• Try again when the machine is not printing.
001F	Impossible to change (Unread items) (The host tries to make writing on the items the current value has not been read.)	• Contact responsible person of KONICA MINOLTA.

Error code	Error	Solution
0020	Timeout of Telegram Delivery (At waiting mode of telegram delivery the machine fails to receive the telegram in a given time.)	• Try communication again.
0021	Telegram Size Over (The machine receives the telegram whose size exceeds the specification.)	• Contact responsible person of KONICA MINOLTA.
0022	Transmitting Phase Response NG (Transmitting phase response MSG is not appropriate.)	• Contact responsible person of KONICA MINOLTA.
0023	Timeout of Transmitting Phase Response MSG (Transmitting phase response MSG is timeout.)	• Contact responsible person of KONICA MINOLTA.
0024	Event Data Acquisition Function Error (Although the transmitting phase response MSG is OK, the function for Data acquisition shows “No event,”.)	• Contact responsible person of KONICA MINOLTA.
0025	Timeout of Driver transmitting check MSG (Transmitting check MSG from the driver task is timeout.)	• Contact responsible person of KONICA MINOLTA.
0026	Detection of Internal Contradiction (Unknown event is detected. Condition value is not correct or so on.)	• Contact responsible person of KONICA MINOLTA.
0027	Transmission / Receiving collision (Receiving is detecting during transmitting processing)	• Try communication again.

B. For e-mail

Error code	Error	Solution
0001	Connection timeout during transmission	• Check SMTP server on the user side.
0***	Failure in transmission ***: SMTP response code (hexadecimal form)	• Check SMTP server on the user side.
0003	Connection timeout during reception	• Check POP3 server on the user side.
0005	Failure in reception	• Check POP3 server on the user side.
1030	Machine ID mismatch (Mail with a machine ID different from that of the local machine has been received.)	• Check machine ID setting. • Check machine ID setting on the host side.
1050	Grammatical error • Mail with undefined CS Remote Care command portion (2 digits) has been received. • There is a mismatch between Subject Type and the attached file command.	• Check the details of the mail.
1061	Rewrite disabled • Rewrite request mail has been received from the host for the data item, for which setting change is disabled.	• Have the host send another rewrite instruction mail.

Error code	Error	Solution
1062	Rewrite disabled during copy cycle (To return rewrite disabled during copy cycle to the host)	• Have the host send another rewrite request mail.
1080	Data length error • There is a mismatch between the TEXT data LEN value and the actual data length.	• Have the host send another rewrite instruction mail.
1081	Frame number error (Last frame not received) (Some digits of frame number missing)	• Check the host side for machine registration status.
1082	Subject Type error • Code of undefined Subject Type has been received.	• Have the host send another rewrite instruction mail.
1084	Validity period exceeded (Validity period of data rewrite command is exceeded.)	• Have the host send another rewrite request mail.
1091	Command size over • Attached file with a size exceeding that of the reception buffer the main unit is equipped with has been received.	• Have the host send another rewrite instruction mail.
1092	Faulty mail has been received when the machine is yet to be registered.	• Check the host side for machine registration status.
2039	Socket is not connected (LAN cable on the server side is loose.)	• Check the SMTP server and POP3 server on the user side.
203C	Connection timeout during transmission	• Check SMTP server on the user side.
203E	Network is down (LAN cable on the copier side is loose.)	• Check the network connector for connection to the copier on the user side. • Check the network environment on the user side.
3000	POP3_AUTHORIZATION_ERR	• Check the POP3 server environment on the user side.
3001	POP3_TRANSACTION_ERR	• Check the POP3 server environment on the user side.
3002	POP3_CONNECT_ERR	• Check the POP3 server environment on the user side.
3003	POP3_TIMEOUT_ERR	• Check the POP3 server environment on the user side.
3004	POP3_FORMAT_ERR	• Check the POP3 server environment on the user side.
3005	POP3_MEMORY_ERR	• Check the POP3 server environment on the user side.
3006	POP3_JOBID_ERR	• Check the POP3 server environment on the user side.
3007	POP3_NO_DATA_ERR	• Check the POP3 server environment on the user side.
3008	POP3_DELETE_FAIL_ERR	• Check the POP3 server environment on the user side.
3009	POP3_MAILBOX_FULL	• Check the POP3 server environment on the user side.

Error code	Error	Solution
4103	Not ready (MIO) (An attempt is made to send or receive mail when e-mail reception is not ready yet after power has been turned ON.)	• Wait for some while and then retry.
4104	SMTP channel not ready	• Wait for some while and then retry.
4105	POP3 channel not ready	• Wait for some while and then retry.
4106	Not ready in conditions other than above	• Wait for some while and then retry.

10.10.10 Troubleshooting for CS Remote Care

If communication is not done properly during use of the modem, check the condition by following the procedures shown below.

1. Shift the screen in the order of [Tech. Rep. Mode] → [CS Remote Care] → [Detail Setting].
   At this time, in the cases of initial transmission / Call Remote Center / Maintenance Start transmitting / Maintenance is completed., the communication result will be displayed at the top of the screen.

* For the communication result, the following message will be displayed based on its success or failure.

Display of Communication result	Cause	Solution
Communicating	—	—
Communication trouble with the Center	Although the machine tries to communicate with the Center, there is any trouble and the communication completes unsuccessfully.	• See the list of error message and confirm the corresponding point. P.205
Complete successfully	—	—
Modem trouble	Although the machine tries to communicate with the Center, there is any trouble in the modem.	• Check if the Power of modem in ON. • Check if there is any problem in connection between the modem and the main body.
Busy line	Although the machine tries to communicate with the Center, the line to the Center is busy.	• Communicate with the Center again.
No response	Although the machine tries to communicate with the Center, there is no response from the Center.	• Communicate with the Center again. • Check the communication environment of the Center side.

10.11 ROM Version

Functions	• To check the ROM version.
Use	• To check the ROM version when firmware is upgraded. • To check the ROM version when the board is replaced with a new one.
Setting/ Procedure	*1.* Touch [ROM Version] from the Tech. Rep. mode. • MSC: MFBS/MFBS2 • Printer: PWB-A • ADF: PWB-A AF • LCT: PWB-C1 LCT • Finisher: PWB-A FN * If the option is not installed, [None] appears.

10.12 Level History

Functions	• To display the various level histories.
Use	• Used for troubleshooting of image problems.
Setting/ Procedure	*1.* Touch [Level History] from the Tech. Rep. mode. • ATDC Set: Displays the voltage set with the automatic ATDC sensor adjustment. • ATDC Current: Displays the T/C ratio for the ATDC sensor. • Vg Current: Displays the current value of the grid voltage. • Vb Current: Displays the current value of the developing bias voltage.

10.13 FAX Set

See P.35 of the FK-503 service manual.

10.14 Soft Switch Settings

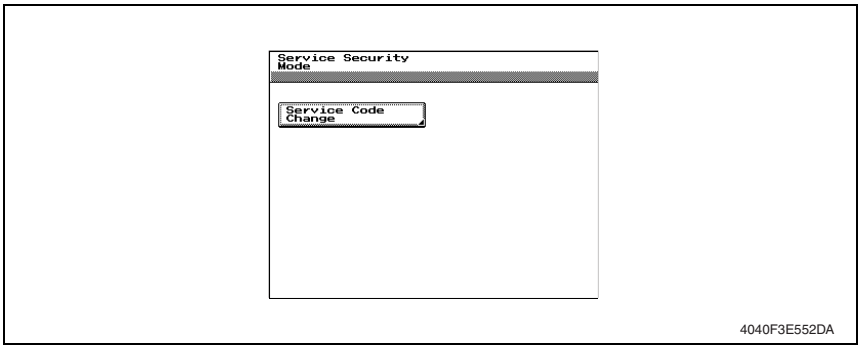
See P.38 of the FK-503 service manual.

11. Service Security Mode

11.1 Service Security Mode Function Setting Procedure

11.1.1 Procedure

1. Call the Tech. Rep. Mode to the screen.
2. Press the following keys in this order.
   Stop → 0→ Clear Key
3. Select a function.



11.1.2 Exiting

- Press the Reset Key.

11.2 Service Security Mode Function Tree

Tech. Rep. Mode		Ref. page
Service Security Mode	Service Code Change	P.211

11.3 Settings in the Service Security Mode

11.3.1 Service Code Change

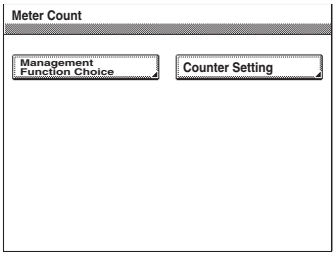
Functions	• To change the service code used to access the Tech. Rep. mode, Initial mode, and Maintenance mode.
Use	* To set enhance security mode ON, change the default service code to 8 digits code that is not using all the same numbers.
Setting/ Procedure	1. Call the Service Security mode from the Tech. Rep. mode and then touch [Service Code Change]. 2. Touch [Current Code] and enter the currently set 8-digit service code. 3. Touch [New Code] and enter a new 8-digit service code. 4. Touch [Retype New Code] and enter the new 8-digit service code once again. • The “#” and “*” keys may be used in combination with the 10-Key Pad for entry of the service code.

12. Meter Count

12.1 Meter Count Function Setting Procedure

12.1.1 Procedure

1. Call the Tech. Rep. Mode to the screen.
2. Press the following keys in this order.
   Stop → 9
3. Select a function.



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12.1.2 Exiting

- Press the Reset Key.

12.2 Meter Count Function Tree

Tech. Rep. Mode			Ref. page
Meter Count	Management Function Choice	Auth. Device	P.213
		Management Device 1	P.213
		Management Device 2	P.213
		Key Counter Only	P.214
		Vender 1	P.214
		Vender 2	P.214
	Counter Setting	Total Counter	P.215
		Large Size	P.215
		Copy Kit Counter	P.215
		Copy Kit	P.216
		Plug-In Counter	P.216

12.3 Settings in the Meter Count

12.3.1 Management Function Choice

A. Auth. Device

Functions	• To set whether or not the authentication device is installed.
Use	• Set when the authentication device (PageACSES) is mounted.
Setting/ Procedure	**NOTE** **• When authentication device (PageACSES) is set to ON, one-touch information is initialized (deleted). Check one-touch information before setting ON/OFF of the authentication device (PageACSES).** **• The modem version of the CS Remote Care is not available when the authentication device is set.** **• • The modem menu of the CS Remote Care is not available even it displayed on the operation panel.** **• When set the authentication device under the modem version of the CS Remote Care is set, [RAM Clear] of the CS Remote Care should be conducted.** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **• [Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

B. Management Device 1

Functions	• To set whether or not the management device 1 is installed.
Use	• Set when the management device 1 is mounted.
Setting/ Procedure	**NOTE** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **• [Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

C. Management Device 2

Functions	• To set whether or not the management device 2 is installed.
Use	• Set when the management device 2 is mounted.
Setting/ Procedure	• The default setting is “(Unset)”. “(Unset)” Mode 1 Mode 2 Mode 1: Use contact type device (Logout with ID key is not allowed.) Mode 2: Use non-contact type device (Logout with ID key is allowed.) NOTE **• The modem version of the CS Remote Care is not available when the management device 2 is set.** **• When set the management device 2 under the modem version of the CS Remote Care is set, [RAM Clear] of the CS Remote Care should be conducted.** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **• [Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

D. Key Counter Only

Functions	• To set whether only the key counter (no vender) is mounted or not.
Use	• Set when only the key counter is mounted.
Setting/ Procedure	• Select [key counter] and touch [END] when the key counter is mounted. **NOTE** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **• [Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

E. Vender 1

Functions	• To set whether or not the Vender 1 is installed.
Use	• Set when the Vender 1 is mounted.
Setting/ Procedure	• The default setting is “(Unset)”. “(Unset)” Type 1 Type 2 Type 1: Select the message (for Coin vender). Type 2: Select the message (for Card keeper). **NOTE** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **• [Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

F. Vender 2

Functions	• To set whether or not the Vender 2 is installed.
Use	• Set when the Vender 2 is mounted.
Setting/ Procedure	• The default setting is “(Unset)”. “(Unset)” Type 1 Type 2 Type 3 Type 1: Select the message (for Coin vender) Type 2: Select the message (for Card keeper) Type 3: Select the message (for Coin vender & Card keeper) **NOTE** **• The modem version of the CS Remote Care is not available when the Vender 2 is set.** **• When set the Vender 2 under the modem version of the CS Remote Care is set, [RAM Clear] of the CS Remote Care should be conducted.** **• When mounting or removing HDD with Vender 2 being selected, Clear FAX Setting (Initial Mode) should be conducted.** **• This setting is valid only when User Auth setting under the following setting is [OFF], and Account Track is [OFF].** **[Admin. Management] - [Admin. 1] - [Account/User Auth.] - [User Authentication ON/OFF]**

12.3.2 Counter Setting

NOTE

- **Counter Setting is valid only when Vender 1 and management device 1 is mounted.**

A. Total Counter

Functions Use	• To set the counting method for the Total Counter.
Setting/ Procedure	• The default setting is “Mode 1”. “Mode 1” Mode 2 Mode 3 • Mode 1: 1 count per copy cycle • Mode 2, Mode 3: 2 counts according to the paper size and copy mode

B. Large Size

Functions Use	• To set the counting method for the Size Counter.
Setting/ Procedure	• The default setting is “A3/11x17”. No Count “A3/11x17” A3/B4/11x17/Legal A3/11x17/B4/11x14/Foolscape/Legal

<Count Table for the Total Counter and Size Counter>

Copy Mode		For 1-sided copies						For 2-sided copies					
Setting	Large Size Counter	Non-standard size			Standard size			Non-standard size			Standard size		
	Total Counter	Mode			Mode			Mode			Mode		
		1	2	3	1	2	3	1	2	3	1	2	3
Count	Total Counter	1			1	2	2	2			2	4	4
	Large Size Counter	0			1	1	2	0			2	2	0
	2-Sided Total Counter	0			0			1	1	2	1	1	4
	Total by Account	1			1	2	2	2			2	4	4
	Large Size by Account	0			1	1	2	0			2	2	0

C. Copy Kit Counter

Functions Use	• To select whether to enable or disable the Copy Kit Counter.
Setting/ Procedure	• The default setting is “Mode 1”. “Mode 1” Mode 2 Mode 3 • Mode 1: The Copy Kit Counter is disabled. • Mode 2: Copying continues even after the set value is reached. • Mode 3: Copying is prohibited after the set value is reached.

D. Copy Kit

Functions Use	• To enter a value for the Copy Kit Counter.
Setting/ Procedure	• When the current value reaches the set value, the following appears. • For mode 2: The icon appears in the Additional Message Display. • For mode 3: The maintenance call reminder “M4” appears and copying is prohibited. • Press the Clear key to clear the set value. • Use the Keypad to type in the set value.

E. Plug-In Counter

Functions Use	• To select the counting method.
Setting/ Procedure	• The default setting is “Paper Counter”. “Paper Counter” Copy Cycle • Paper Counter: The count increments according to the number of pages that is output-ted. • Copy Cycle: The count increments according to the number of copies.

<Count Table for the Plug-In Counter>

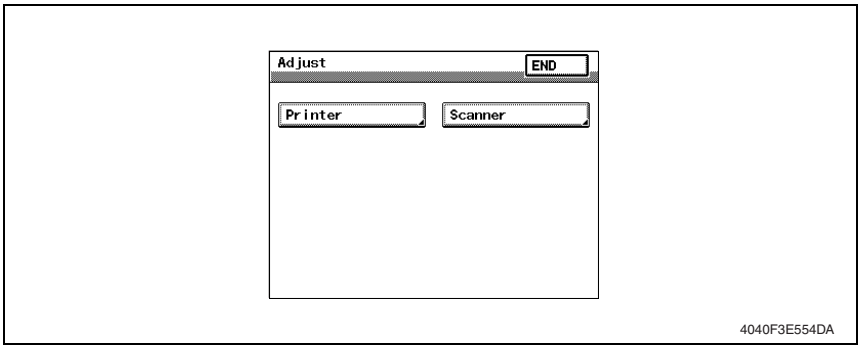
Copy Mode		For 1-sided copies						For 2-sided copies					
Setting	Large Size Counter	Non-standard size			Standard size			Non-standard size			Standard size		
	Total Counter	Mode			Mode			Mode			Mode		
		1	2	3	1	2	3	1	2	3	1	2	3
Count	With “Paper Counter” selected	1			1	2	2	1	2	2	1	4	4
	With “Copy Cycle” selected	1			1	2	2	2			2	4	4

13. Adjust Mode

13.1 Adjust Mode Function Setting Procedure

13.1.1 Procedure

1. Call the Tech. Rep. Mode to the screen.
2. Press the following keys in this order.
   Stop → Start Key
3. Select a function.



13.1.2 Exiting

- Press the Reset Key.

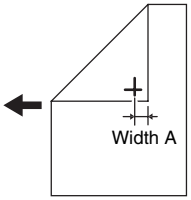
13.2 Adjust Mode Function Tree

Tech. Rep. Mode				Ref. page
Adjust	Printer	Registration (CD)		P.218
		Registration (FD)		P.219
	Scanner	Registration	CD	P.220
			FD	P.221
		Zoom	CD	P.222
			FD	P.223

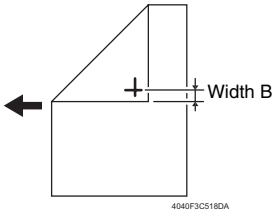
13.3 Settings in the Adjust Mode

13.3.1 Printer

A. Registration (CD)

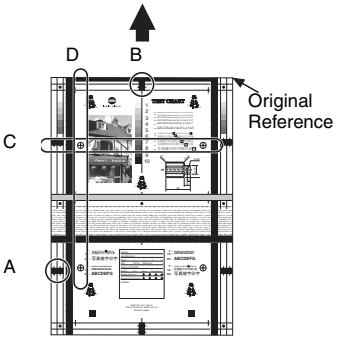
Functions	• To vary and adjust the image start position in the main scanning direction for each paper source.
Use	• The PH Unit has been replaced. • The image on the copy deviates in the main scan direction. • A faint image occurs on the leading edge of the image.
Adjustment Specification	 4040F3C517DA Width A on the test pattern produced should fall within the following range. Specifications: 10 mm ± 2.0 mm Setting Range: -4.0 mm to +4.0 mm (in 0.1 mm increments)
Adjustment Instructions	If width A on the test pattern is wider than specifications. Longer than the actual scale: decrease the setting value. Shorter than the actual scale: increase the setting value.
Setting/ Procedure	*1.* Enter the Adjust Mode. *2.* Touch [Printer] and [Registration (CD)] in that order. *3.* Touch the [Test Print]. *4.* Select the paper source and press the Start key. *5.* Check the dimension of width A on the test pattern. *6.* If it fails to meet the specifications, change the setting and redo the check. *7.* If it meets the specifications, touch [END]. *8.* Following the same procedure, adjust for all other paper sources.

B. Registration (FD)

Functions	• To vary and adjust the image start position in the sub scanning direction for each paper source.
Use	• The PH Unit has been replaced. • The image on the copy deviates in the sub scan direction.
Adjustment Specification	 Width B on the test pattern produced should fall within the following range. Specifications: 11.3 mm ± 1.5 mm Setting Range: <bizhub 362> -19 (-6.08 mm) to +19 (+6.08 mm) (in 0.32 mm increments) <bizhub 282/bizhub 222> -21 (-5.88 mm) to +21 (+5.88 mm) (in 0.28 mm increments)
Adjustment Instructions	If width B on the test pattern is wider than specifications. Longer than the actual scale: decrease the setting value. Shorter than the actual scale: increase the setting value.
Setting/ Procedure	*1.* Enter the Adjust Mode. *2.* Touch [Printer] and [Registration (FD)] in that order. *3.* Touch the [Test Print]. *4.* Select the paper source and press the Start key. *5.* Check the dimension of width B on the test pattern. *6.* If it fails to meet the specifications, change the setting and redo the check. *7.* If it meets the specifications, touch [END]. *8.* Following the same procedure, adjust for all other paper sources.

13.3.2 Scanner

- Use the following Test Chart for the adjustment of the Scanner Section.
- If the Test Chart is not available, a scale may be used instead.



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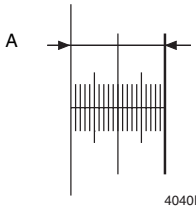
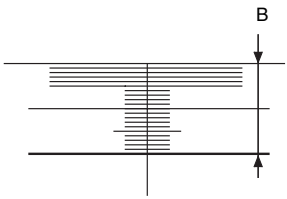
- A: Scan image position: CD adjustment
- B: Scan image position: FD adjustment
- C: Scanner CD zoom ratio adjustment
- D: Scanner FD zoom ratio adjustment

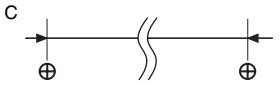
A. Registration (CD)

Functions	• To adjust for variations in the accuracy of IR parts and their mounting accuracy by varying the scan start position in the main scanning direction.
Use	• When the Original Glass is replaced. • When the CCD Unit is with a new one.
Adjustment Specification	 4040F3C523DA • Adjust so that width A on the sample copy made falls within the following range. • It is required that Registration (CD) of Printer be adjusted so as to meet the specifications. Specifications: 20 mm ± 1.0 mm Setting Range: -72 to +72 (1 mm = 24 dot)
Adjustment Instructions	If width A of the output copy falls outside the specified range and if width A is 19 mm or less: increase the setting value. if width A is 21 mm or greater: decrease the setting value.
Setting/ Procedure	*1.* Position the Test Chart correctly so that the original reference point is aligned with the scale. *2.* Press the Start key to make a copy. *3.* Check point A on the image of the copy. *4.* If width A on the copy falls outside the specified range, enter the Adjust mode. *5.* Touch [Scanner] → [Registration] → [CD] in that order. *6.* Press the Clear key and enter the value from the 10-Key Pad. *7.* Make adjustments until the specifications are met.

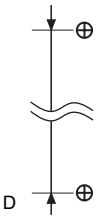
B. Registration (FD)

Functions	• To adjust for variations in the accuracy of IR parts and their mounting accuracy by varying the scan start position in the sub scanning direction.
Use	• When the Original Glass is replaced. • When the CCD Unit is with a new one.
Adjustment Specification	 4040F3C524DA • Adjust so that width B on the sample copy made falls within the following range. • It is required that Registration (FD) of Printer be adjusted so as to meet the specifications. Specifications: 20 mm ± 1.0 mm Setting Range: -24 to +72 (1 mm = 24 dot)
Adjustment Instructions	If width B of the output copy falls outside the specified range and if width B is 19 mm or less: decrease the setting value. if width B is 21 mm or greater: increase the setting value.
Setting/ Procedure	*1.* Position the Test Chart correctly so that the original reference point is aligned with the scale. *2.* Press the Start key to make a copy. *3.* Check point B on the image of the copy. *4.* If width B on the copy falls outside the specified range, enter the Adjust mode. *5.* Touch [Scanner] → [Registration] → [FD] in that order. *6.* Press the Clear key and enter the value from the 10-Key Pad. *7.* Make adjustments until the specifications are met.

C. Zoom (CD)

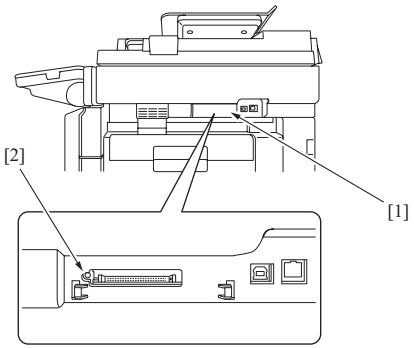
Functions	• To adjust the zoom ratio in the main scan direction for the Scanner Section
Use	• When the CCD Unit is with a new one.
Adjustment Specification	 4040F3C525DA • Measure C width on the test chart and on the sample copy, and adjust the gap to be within the following specification. • It is required that Registration (CD) of Printer be adjusted so as to meet the specifications. Specifications: ± 2.0 mm Setting Range: 0.990 to 1.010 (in 0.001 mm increments)
Adjustment Instructions	If width C on the sample copy made is wider than that on the test chart, decrease the setting value. If width C on the sample copy made is narrower than that on the test chart, increase the setting value.
Setting/ Procedure	*1.* Call the Adjust Mode to the screen. *2.* Touch [Scanner] → [Zoom] in that order. *3.* Position the test Chart correctly so that the original reference point is aligned with the scale. *4.* Touch [Test Print] to make a copy. *5.* Check the C width on the image of the copy. *6.* If width C on the sample copy made falls outside the specified range, touch CD: [Copy]. *7.* Press the Clear key and enter the value from the 10-Key Pad. *8.* Touch [Test Print] again to make a copy. *9.* Make adjustments until the specifications are met.

D. Zoom (FD)

Functions	• To adjust the zoom ratio in the sub scan direction for the Scanner Section
Use	• When the CCD Unit is with a new one.
Adjustment Specification	 4040F3C526DA • Measure D width on the test chart and on the sample copy, and adjust the gap to be within the following specification. • It is required that Registration (FD) of Printer be adjusted so as to meet the specifications. Specifications: ± 2.0 mm Setting Range: 0.990 to 1.010 (in 0.001 mm increments)
Adjustment Instructions	If width D on the sample copy made is wider than that on the test chart, decrease the setting value. If width D on the sample copy made is narrower than that on the test chart, increase the setting value.
Setting/ Procedure	*1.* Call the Adjust Mode to the screen. *2.* Touch [Scanner] → [Zoom] in that order. *3.* Position the test Chart correctly so that the original reference point is aligned with the scale. *4.* Touch [Test Print] to make a copy. *5.* Check the D width on the image of the copy. *6.* If width D on the sample copy made falls outside the specified range, touch FD: [Copy]. *7.* Press the Clear key and enter the value from the 10-Key Pad. *8.* Touch [Test Print] again to make a copy. *9.* Make adjustments until the specifications are met.

14. Initial Mode

14.1 Initial Mode Function Setting Procedure



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1. Remove the Compact Flash Cover [1].
2. Press the Warm Restart switch [2].

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3. When "●" appears at the center on the left-hand side of the screen, enter "3" from the 10-Key Pad.
4. Enter the 8-digit service code and touch [END]. (Default value: 00000000)

NOTE

- **When [END] is touched after a wrong service code has been entered, the Basic screen reappears.**
- **At the fourth access after entries of three wrong access codes, [END] is not available on the screen. It is therefore necessary to turn OFF and ON the Main Power Switch.**
- **If you forget the service code, it becomes necessary to replace the RAMS Board with a new one. Take necessary steps not to forget the service code.**
- **The RAMS Board is not available as a replacement part. If it requires replacement, contact Office Printing Support Division by way of CSES.**

5. Select a function.

14.1.1 Exiting

- Touch [Exit].

14.2 Initial Mode Function Tree

Initial Mode	Ref. page
Total Clear *2	P.225
Touch Panel Adjustment	P.226
Marketing Area	P.226
Image Data Clear	P.226
Clear FAX Setting *2	P.227
Date/Time Setting *1	P.227
Trouble Reset	P.227

*1: For details, see FK-503 Service Manual.
*2: If enhance security mode is set ON, menu is not shown.

14.3 Settings in the Initial Mode

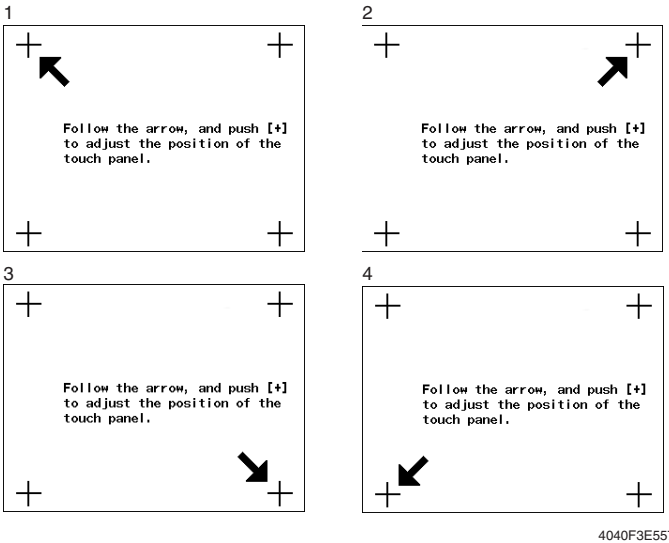
NOTE

- **Be sure to turn the main power switch OFF and ON after the Initial mode has been completed.**

14.3.1 Total Clear

Functions	• To clear all data. * If enhance security mode is set ON, menu is not shown.
Use	The following settings are cleared. • Fax-related setting information • Bulletin board setting information • Transmission/reception log information • Image data • Network setting information • Destination information • Soft switch information • Management-by-account setting information • User authentication setting information • Account/user counter • Remote maintenance setting information • FW download setting information • Copy setting information (zoom ratio, paper size, erase width, paper source detailed information, copy job program, bypass free size registration, etc.) • CSRC setting information
Setting/ Procedure	*1.* Touch [Total Clear] from the Initial mode screen. *2.* Select [Yes] and touch [Enter] to start the clearing sequence. *3.* When the message indicating completion of the clearing sequence appears, touch [OK].

14.3.2 Touch Panel Adjustment

Functions	• To adjust the position of the Touch Panel display
Use	• Make this adjustment if the Touch Panel is slow to respond to a pressing action. • When the control panel is replaced.
Adjustment Procedure	*1.* Touch [Touch Panel Adjustment] from the Initial mode screen. *2.* Following the arrow mark, touch the four points (+) sequentially on the screen using a pen. **NOTE** **• Be sure to touch the very center of each point.** **• Use care not to damage the screen surface with the tip of the pen.**  4040F3E557DA

14.3.3 Marketing Area

Functions	• To specify the marketing region.
Use	• When the marketing area is changed. • Fixed zoom ratios shown on the screen, the default values for Total Clear, and related items are changed according to the setting.
Setting/ Procedure	*1.* Touch [Marketing Area] from the Initial mode screen. *2.* Select the appropriate marketing area and touch [END]. Japan U.S. Europe Others

14.3.4 Image Data Clear

Functions Use	• To clear all image data stored on the memory of the MFBS Board/MFBS2 Board.
Setting/ Procedure	*1.* Touch [Image Data Clear] from the Initial mode screen. *2.* Select [Yes] and touch [Enter].

14.3.5 Clear FAX Setting

Functions	• To clear all fax settings.
Use	• To clear all settings of the local machine, remote machine, communication control, and soft switches. **NOTE** • **When mounting or removing HDD with Vender 2 being selected for Meter Count Mode, Clear FAX Setting needs to be conducted.**
Setting/ Procedure	See P.27 of the FK-503 service manual.

14.3.6 Date/Time Setting

Functions	• To specify the date and time.
Use	
Setting/ Procedure	• Touch [Date/Time Setting] from the Initial mode screen. • Enter the data from the 10-Key Pad and touch [END].

14.3.7 Trouble Reset

Functions	• To clear all malfunctions, including fusing errors (C3XXX).
Use	• To reset fusing-related malfunctions. • Malfunctions relating to units other than fusing can be reset by turning OFF and ON the Main Power Switch and opening and closing the side cover.
Setting/ Procedure	• Touching [Trouble Reset] on the Initial mode screen will reset the malfunctions.

15. Mechanical adjustment

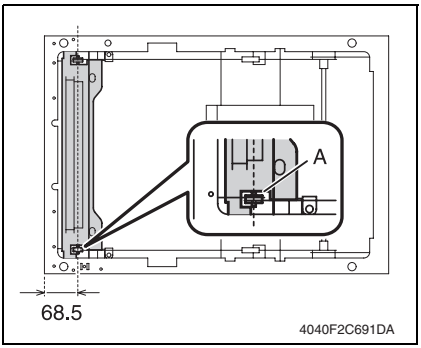
15.1 Mechanical adjustment of the scanner section

15.1.1 Scanner Position Adjustment

Make this adjustment after any of the following procedures has been performed:

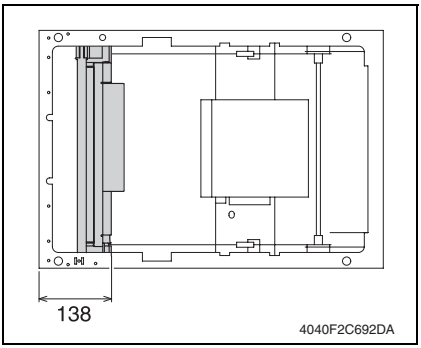
- **After the Scanner Drive Cables have been replaced.**
- **When the Scanner has been removed.**

1. Remove the IR Upper Left Cover.
See P.50
2. Remove the Front Holding Bracket.
See P.50
3. Remove the Original Glass.
See P.50
4. Remove the Exposure Unit.
See P.79



5. Move the Mirror Unit to the position shown on the left.

- Distance of part A from the IR left side surface: 68.5 mm



6. Wind the cables on the Exposure Unit.
7. Mount the Exposure Unit at the location shown on the left.

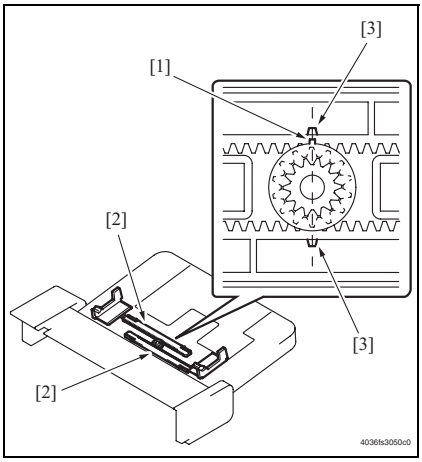
- Distance of the right side surface of the Exposure Unit from the IR left side surface: 138 mm

15.2 Mechanical adjustment of the bypass tray section

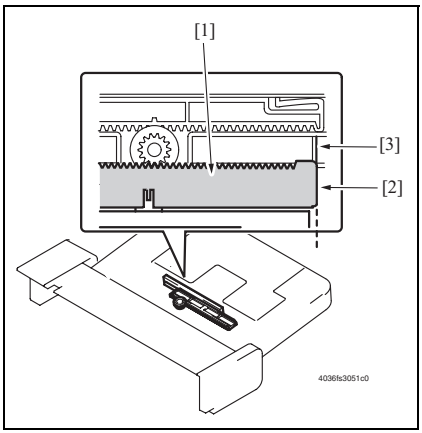
15.2.1 Adjustment of the Bypass Paper Size Unit

This adjustment must be made in the following case:

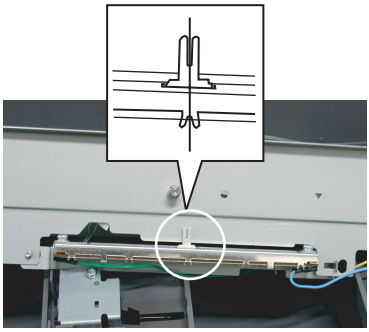
- **The Bypass Paper Size Unit has been removed.**



1. Install the gear so that the protrusion of the gear [1] and two marks [3] on two Bypass Guide Rack Gears [2] are aligned in a straight line.



2. Install the Bypass Unit Cover so that part A (edge) [2] of the Rack Gear [1] for the Bypass Paper Size Unit and part B [3] of the Bypass Unit Cover are aligned in a straight line.

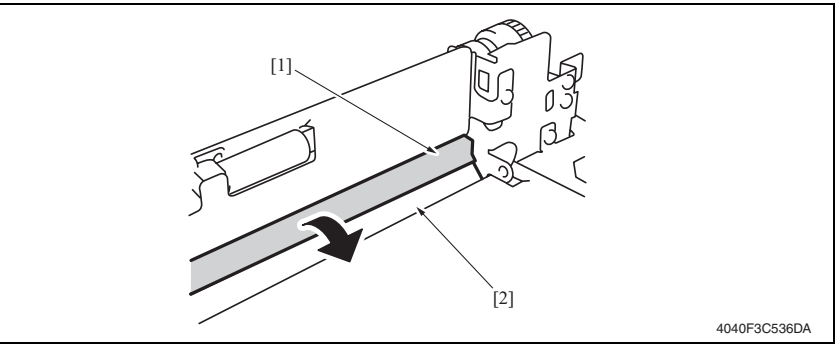


3. When the Bypass Paper Size Unit base is mounted, align the lever position of the Bypass Paper Size Unit with the tab at the center in a straight line.

4. After the Bypass Paper Size Unit base has been mounted, check that the lever of the Bypass Paper Size Unit moves smoothly in a manner operatively connected to the Bypass Guide.
5. Select [Function] from the Tech. Rep. mode and run [FD].
See P.172

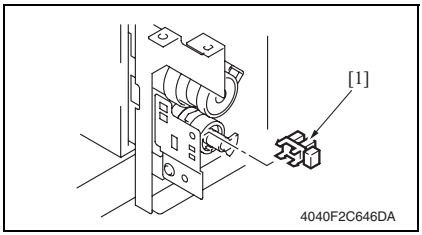
15.2.2 Manual Bypass Unit Installation Check

1. Remove the Rear Right Cover.
See P.51
2. Remove the Lower Right Rear Cover.
See P.50
3. Remove the Front Manual Bypass Cover.
See P.56
4. Remove the Rear Manual Bypass Cover.
See P.56
5. Check the Tray 2 Paper Feed Guide [1] and Manual Bypass Guide [2] for correct operation.

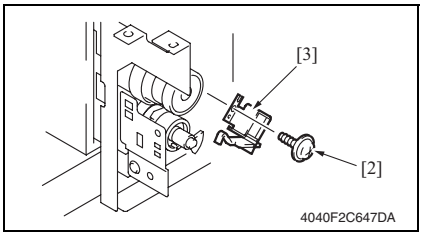


NOTE
- **Pull open the Tray 2 Paper Fed Door in the direction of the arrow and check that it opens smoothly without binding.**
- **If the door binds, perform the installation procedures again for the Tray 2 Feed Roll Assy and Manual Bypass Unit.**

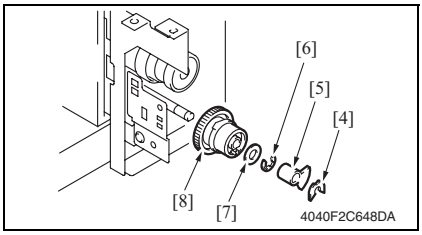
15.2.3 Adjustment of the Manual Bypass Take-up Mechanical Clutch



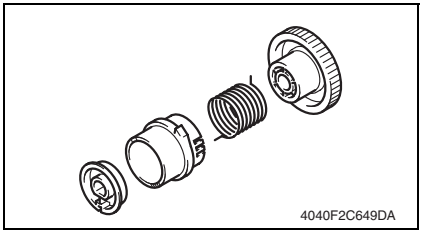
1. Remove the Manual Bypass Unit. See P.72
2. Remove the Manual Feed Tray Lift-up Sensor (PC29) [1].



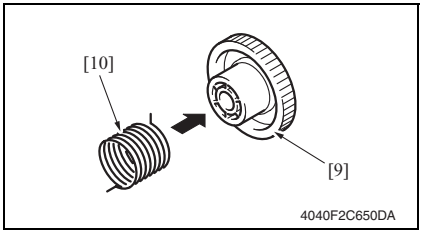
3. Remove the screw [2] and the Manual Paper Feed Pick-up Solenoid (SL3) [3].



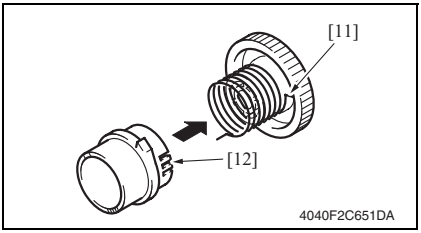
4. Remove the C-clip [4], actuator [5], C-ring [6], and washer [7]. Then, remove the manual bypass take-up mechanical clutch [8].



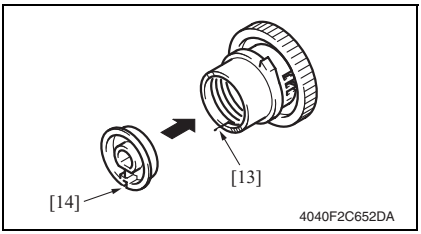
5. Disassemble the Manual Bypass Take-up Mechanical Clutch.



6. Mount the torque limiter [10] to the gear [9].

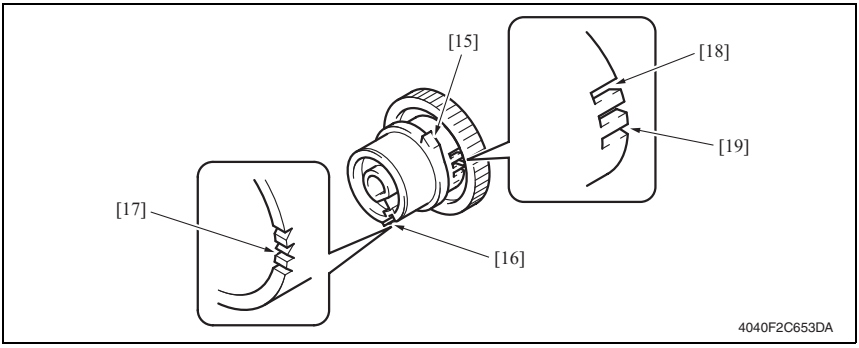


7. Fit hook 1 of the torque limiter [11] into stopper B of the coupling [12].



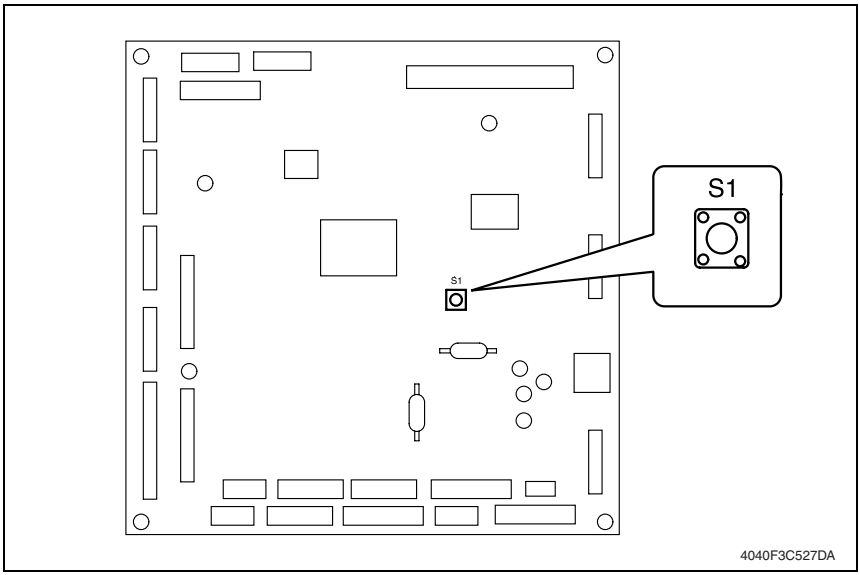
8. Fit hook 2 of the torque limiter [13] in a slit in the collar [14].

9. Holding the tab [15] of the coupling, rotate the gear several turns in the direction of the arrow so that hook 2 is located at the center of portion P [17] of the coupling. If hook 2 [16] cannot be brought to the center, fit hook 1 of the torque limiter in stopper A [18] or stopper C [19] of the coupling; then turn the gear again as necessary. Bring hook 2 [16] into a point nearest the center of portion P [17].



16. Functions of switches and parts on PWBs

16.1 Test Print Switch (S1)



Symbol	Name	Description
S1	Test Print Switch	Produces the test pattern for Function F12.

16.1.1 Procedure

1. Remove the Upper Rear Cover.
See P.51
2. Remove the Rear Cover.
See P.52

3. Remove five screws [1] and the Mechanical Control Board Cover [2].
4. Press S1 to start the feed operation.
5. Press S1 a second time to stop the feed operation.

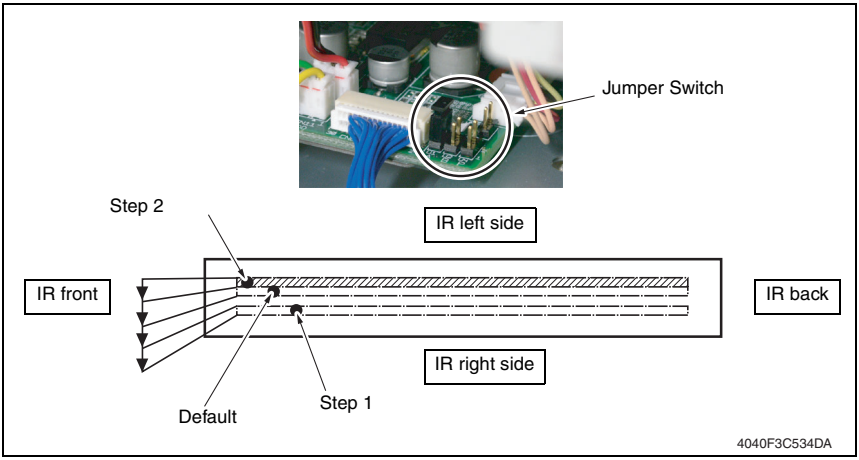
16.2 Read white reference position adjustment

16.2.1 Jumper switch setting

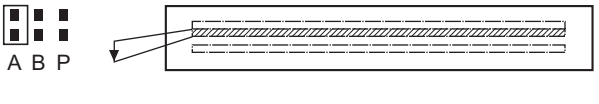
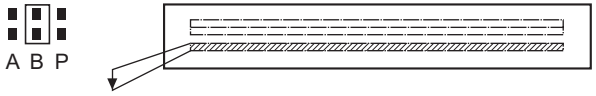
- If fine black lines occur on the copy, adjust the position of the read white reference position of the Shading Sheet by using jumper switches.

NOTE

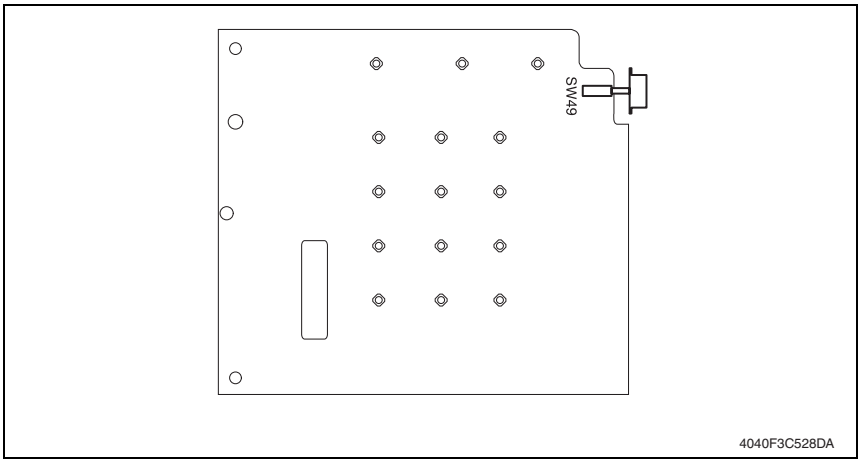
- **NEVER make any settings other than the following for the jumper switch.**



1. Turn OFF the Main Power Switch.
2. Remove the Upper Rear Cover.
See P.51
3. Make the appropriate settings of the jumper switches on the BCRS Board.

Scanning Position	Jumper Switch Setting
Default scan position	 4040F3C537DA
Step 1 scan position	 4040F3C538DA
Step 2 scan position	 4040F3C539DA

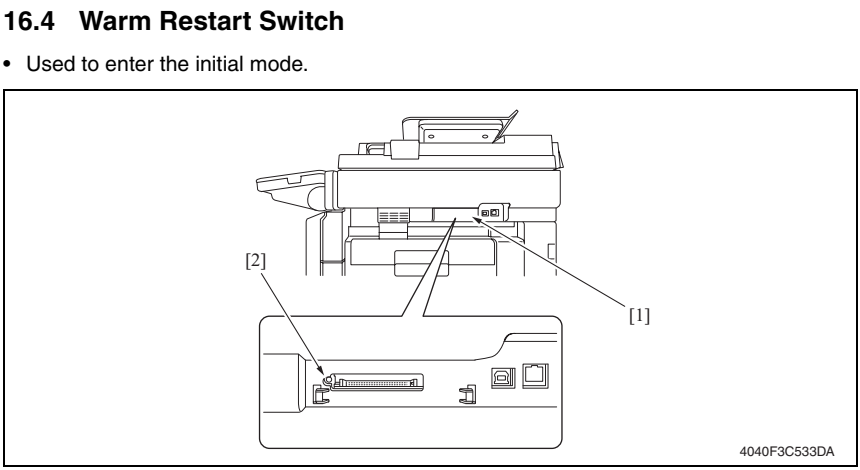
16.3 Sub Power Switch (SW49)



Symbol	Name	Description
SW49	Sub Power Switch	Turning OFF the Sub Power switch sets the machine in the same state as in the Sleep mode, in which the control panel gives no indication. No copy can be made with the Sub Power switch turned OFF.

16.4 Warm Restart Switch

- Used to enter the initial mode.



16.4.1 Procedure

1. Remove the Compact Flash Cover [1].
2. Press the Warm Restart switch [2].

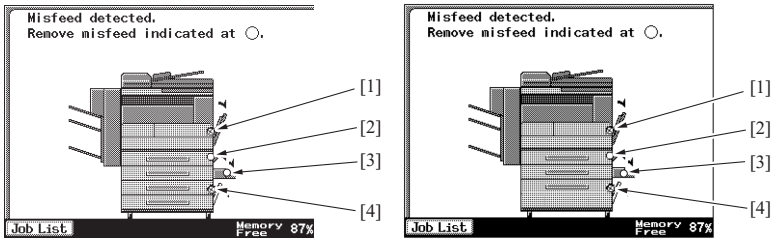
Blank Page

TROUBLESHOOTING

17. Jam Display

17.1 Misfeed Display

- When a paper misfeed occurs, the misfeed message, misfeed location, and paper location are displayed on the Touch Panel of the machine.



4040F4E509DA

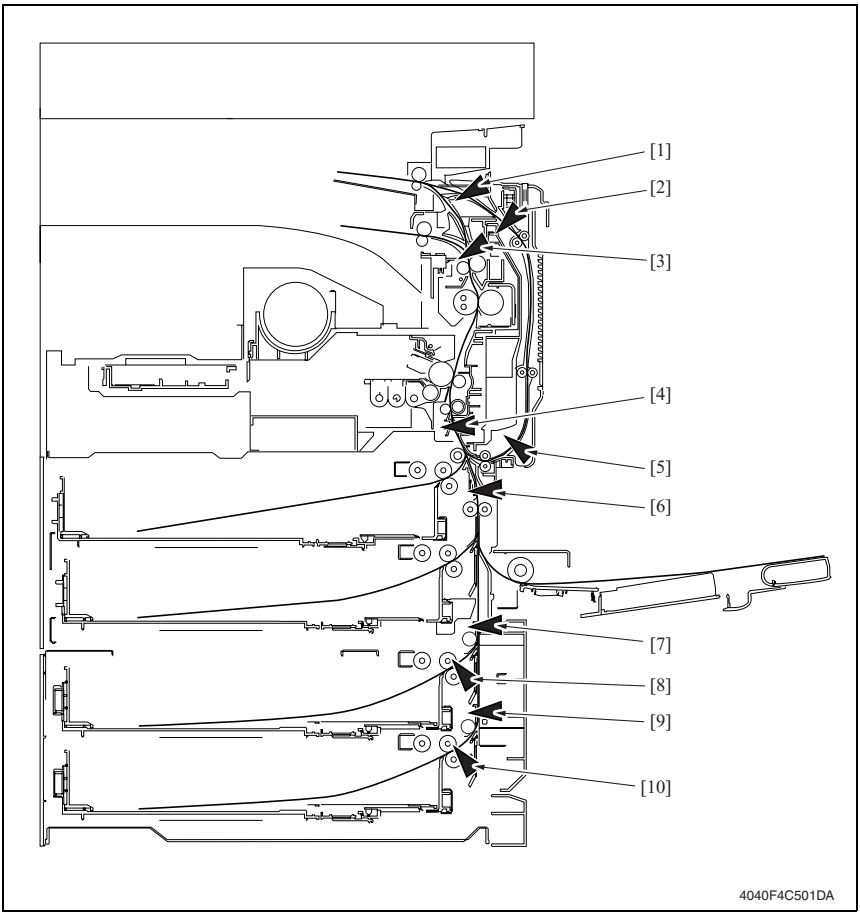
Display	Misfeed Location	Misfeed Processing Location	Action
[1]	Tray 1 take-up section	Right Lower Door	P.241
	Image Transfer section	Right Door	P.242
	Fusing/Paper Exit section	Right Door	P.243
	Duplex Unit transport section	Duplex Unit Right Door	P.244
	Duplex Unit take-up section	Duplex Unit Right Door	P.245
[2]	Tray 2 take-up/Vertical Transport section	Right Lower Door	P.246
[3]	Manual Bypass take-up section	Manual Bypass Slide Board	P.247
[4]	Tray 3 take-up section	Paper Feed Unit Right Door	P.248
	Tray 4 take-up section	Paper Feed Unit Right Door	P.249
	LCT take-up section	LCT Right Door	P.250

17.1.1 Misfeed Display Resetting Procedure

- **Open the corresponding door, clear the sheet of paper misfeed, and close the door.**

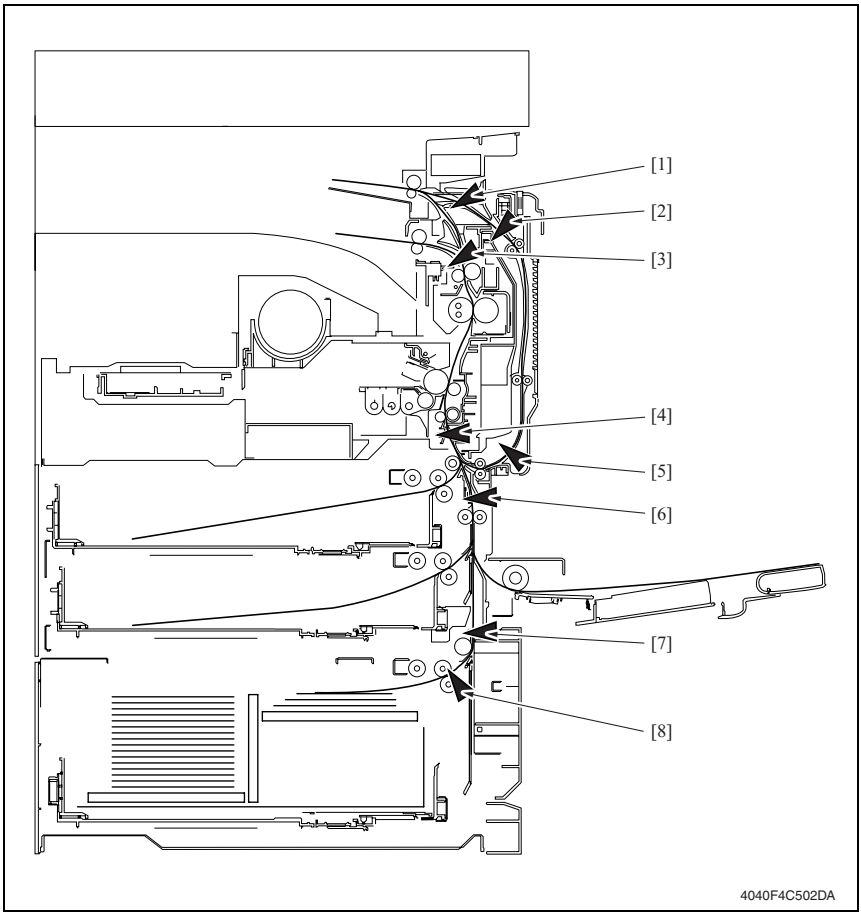
17.2 Sensor layout

17.2.1 System Mounted with PC-108/PC-206



[1]	Switch Back Unit Sensor	PC26	[6]	Vertical Conveyance Sensor	PC2
[2]	Duplex Unit Upper Transport Sensor	PC24	[7]	Tray3 Vertical Conveyance Sensor	PC117-PF
[3]	Paper Exit Sensor	PC4	[8]	Tray3 Paper Take-Up Sensor	PC116-PF
[4]	Synchronizing Roller Sensor	PC1	[9]	Tray4 Vertical Conveyance Sensor	PC126-PF
[5]	Duplex Unit Lower Transport Sensor	PC25	[10]	Tray4 Paper Take-Up Sensor	PC125-PF

17.2.2 System Mounted with PC-407



[1]	Switch Back Unit Sensor	PC26	[5]	Duplex Unit Lower Transport Sensor	PC25
[2]	Duplex Unit Upper Transport Sensor	PC24	[6]	Vertical Conveyance Sensor	PC2
[3]	Paper Exit Sensor	PC4	[7]	Vertical Conveyance Sensor	PC2-LCT
[4]	Synchronizing Roller Sensor	PC1	[8]	Paper Feed Sensor	PC1-LCT

17.3 Solution

17.3.1 Initial Check Items

- When a paper misfeed occurs, first make checks of the following initial check items.

Check Item	Action
Does paper meet product specifications?	Change paper.
Is paper curled, wavy, or damp.	Change paper. Instruct user in correct paper storage.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean or change the paper path.
Are the Paper Separator Fingers dirty, deformed, or worn?	Clean or change the defective Paper Separator 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 paper?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

17.3.2 Misfeed at Tray 1 take-up section

A. Detection Timing

Type	Description
Detection of misfeed at Tray 1 take-up section	The leading edge of the paper does not block the Synchronizing Roller Sensor (PC1) even after the set period of time has elapsed after the 1st Drawer Paper Feed Clutch (CL3) has been energized.
Size error detection	The Synchronizing Roller Sensor (PC1) is not unblocked even after the set period of time has elapsed after the sensor has been blocked by the paper. The Synchronizing Roller Sensor (PC1) is unblocked before the set period of time.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC1) 1st Drawer Paper Feed Clutch (CL3)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1 I/O check	PWB-A PJ11A-5 (ON)	M-8
3	CL3 operation check	PWB-A PJ22A-14 (ON)	D-7
4	Change PWB-A	-	-

17.3.3 Misfeed at Image Transfer section

A. Detection Timing

Type	Description
Detection of misfeed at Image Transfer section	The Paper Exit Sensor (PC4) is not blocked even after the set period of time has elapsed after the Synchronizing Roller Clutch (CL1) is set to OFF.
	The Synchronizing Roller Sensor (PC1) is not blocked even after the set period of time has elapsed after the sensor has been unblocked by the paper.
Detection of paper left in Image Transfer section	The Synchronizing Roller Sensor (PC1) is blocked when the Main 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	
Synchronizing Roller Sensor (PC1) Paper Exit Sensor (PC4) Synchronizing Roller Clutch (CL1)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1 I/O check	PWB-A PJ11A-5 (ON)	M-8
3	PC4 I/O check	PWB-A PJ18A-11 (ON)	M-12
4	CL1 operation check	PWB-A PJ11A-2 (ON)	M-9
5	Change PWB-A	-	-

17.3.4 Misfeed at Fusing/Paper Exit section

A. Detection Timing

Type	Description
Detection of misfeed at Fusing/Paper Exit section	The Paper Exit Sensor (PC4) is not unblocked even after the set period of time has elapsed after the Synchronizing Roller Sensor (PC1) has been blocked by the paper.
	The Switch Back Unit Sensor (PC26) is not unblocked even after the set period of time has elapsed after the Paper Exit Sensor (PC4) has been unblocked by the paper.
Detection of paper left in Fusing/Paper Exit section	The Paper Exit Sensor (PC4) is blocked when the Main 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	
Synchronizing Roller Sensor (PC1) Paper Exit Sensor (PC4) Switch Back Unit Sensor (PC26)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1 I/O check	PWB-A PJ11A-5 (ON)	M-8
3	PC4 I/O check	PWB-A PJ18A-11 (ON)	M-12
4	PC26 I/O check	PWB-A PJ19A-9 (ON)	M-5
5	Change PWB-A	-	-

17.3.5 Misfeed at Switch Back Unit/Duplex Unit transport section

A. Detection Timing

Type	Description
Detection of misfeed at Switch Back Unit/Duplex Unit transport section	The Switch Back Unit Sensor (PC26) is not blocked even after the set period of time has elapsed after the Paper Exit Sensor (PC4) has been unblocked by the paper.
	The Duplex Unit Upper Transport Sensor (PC24) is not blocked even after the set period of time has elapsed after the Switch Back Unit Sensor (PC26) is blocked by the paper.
	The Switch Back Unit Sensor (PC26) is not blocked even after the set period of time has elapsed after the Duplex Unit Upper Transport Sensor (PC24) is blocked by the paper.
Detection of paper left in Switch Back Unit/Duplex Unit transport section	The Switch Back Unit Sensor (PC26) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Duplex Unit Upper Transport Sensor (PC24) is blocked when the Main 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	
Paper Exit Sensor (PC4) Switch Back Unit Sensor (PC26) Duplex Unit Upper Transport Sensor (PC24)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 I/O check	PWB-A PJ18A-11 (ON)	M-12
3	PC26 I/O check	PWB-A PJ19A-9 (ON)	M-5
4	PC24 I/O check	PWB-A PJ20A-5 (ON)	M-16
5	PC25 I/O check	PWB-A PJ20A-8 (ON)	M-16
6	Change PWB-A	-	-

17.3.6 Misfeed at Duplex Unit take-up section

A. Detection Timing

Type	Description
Detection of misfeed at Duplex Unit take-up section	The Synchronizing Roller Sensor (PC1) is not blocked even after the set period of time has elapsed after the Duplex Unit Lower Transport Sensor (PC25) has been blocked by the paper.
Detection of paper left in Duplex Unit take-up section	The Duplex Unit Lower Transport Sensor (PC25) is blocked when the Main 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	
Synchronizing Roller Sensor (PC1) Duplex Unit Lower Transport Sensor (PC25)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1 I/O check	PWB-A PJ11A-5 (ON)	M-8
3	PC25 I/O check	PWB-A PJ20A-8 (ON)	M-16
4	Change PWB-A	-	-

17.3.7 Misfeed at Tray 2 take-up/Vertical Transport section

A. Detection Timing

Type	Description
Detection of misfeed at Tray 2 take-up/Vertical Transport section	The leading edge of the paper does not block the Vertical Conveyance Sensor (PC2) even after the set period of time has elapsed after the 2nd Drawer Paper Feed Clutch (CL4) has been energized.
	The Synchronizing Roller Sensor (PC1) is not blocked even after the set period of time has elapsed after the leading edge of the paper has blocked the Vertical Conveyance Sensor (PC2).
Detection of paper left in Tray 2 take-up/Vertical Transport section	The Vertical Conveyance Sensor (PC2) is blocked when the Main 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	
Synchronizing Roller Sensor (PC1) Vertical Conveyance Sensor (PC2) 2nd Drawer Paper Feed Clutch (CL4)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1 I/O check	PWB-A PJ11A-5 (ON)	M-8
3	PC2 I/O check	PWB-A PJ22A-9 (ON)	D-7
4	CL4 operation check	PWB-A PJ21A-10 (ON)	D-10
5	Change PWB-A	-	-

17.3.8 Misfeed at Manual Bypass take-up section

A. Detection Timing

Type	Description
Detection of misfeed at Manual Bypass take-up section	The leading edge of the paper does not block the Vertical Conveyance Sensor (PC2) even after the set period of time has elapsed after the Bypass Paper Feed Clutch (CL5) has been energized.
Detection of paper left in Manual Bypass take-up section	The Vertical Conveyance Sensor (PC2) is blocked when the Main 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	
Vertical Conveyance Sensor (PC2) Bypass Paper Feed Clutch (CL5)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC2 I/O check	PWB-A PJ22A-9 (ON)	D-7
3	CL5 operation check	PWB-A PJ13A-14 (ON)	M-11
4	Change PWB-A	-	-

17.3.9 Misfeed at Tray 3 take-up/Vertical Transport section (PC-206)

A. Detection Timing

Type	Description
Detection of misfeed at Tray 3 take-up/Vertical Transport section	The leading edge of the paper does not block the Tray3 Vertical Conveyance Sensor (PC117-PF) even after the set period of time has elapsed after the Tray3 Paper Feed Motor (M122-PF) has been energized.
	The Vertical Conveyance Sensor (PC2) is not blocked even after the set period of time has elapsed after the Tray3 Vertical Conveyance Sensor (PC117-PF) is blocked by the paper.
	The Tray3 Vertical Conveyance Sensor (PC117-PF) is not unblocked even after the set period of time has elapsed after the Tray3 Vertical Conveyance Sensor (PC117-PF) has been blocked by the paper.
Detection of paper left in Tray 3 take-up/Vertical Transport section	The Tray3 Vertical Conveyance Sensor (PC117-PF) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Tray3 Paper Take-Up Sensor (PC116-PF) is blocked when the Main 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	
Tray3 Paper Take-Up Sensor (PC116-PF) Tray3 Vertical Conveyance Sensor (PC117-PF) Vertical Conveyance Sensor (PC2) Tray3 Paper Feed Motor (M122-PF)	Main Control Board (PWB-C2 PF)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC116-PF I/O check	See P.24 of the PC-108/PC-206 service manual.	
3	PC117-PF I/O check		
4	PC2 I/O check		
5	M122-PF operation check		
6	Change PWB-C2 PF	-	-

17.3.10 Misfeed at Tray 4 take-up/Vertical Transport section (PC-206)

A. Detection Timing

Type	Description
Detection of misfeed at Tray 4 take-up/Vertical Transport section	The leading edge of the paper does not block the Tray4 Vertical Conveyance Sensor (PC126-PF) even after the set period of time has elapsed after the Tray4 Paper Feed Motor (M123-PF) has been energized.
	The Tray3 Vertical Conveyance Sensor (PC117-PF) is not blocked even after the set period of time has elapsed after the Tray4 Vertical Conveyance Sensor (PC126-PF) is blocked by the paper.
	The Tray4 Vertical Conveyance Sensor (PC126-PF) is not unblocked even after the set period of time has elapsed after the Tray4 Vertical Conveyance Sensor (PC126-PF) has been blocked by the paper.
Detection of paper left in Tray 4 take-up/Vertical Transport section	The Tray4 Vertical Conveyance Sensor (PC126-PF) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Tray4 Paper Take-Up Sensor (PC125-PF) is blocked when the Main 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	
Tray4 Paper Take-Up Sensor (PC125-PF) Tray4 Vertical Conveyance Sensor (PC126-PF) Tray3 Vertical Conveyance Sensor (PC117-PF) Tray4 Paper Feed Motor (M123-PF)	Main Control Board (PWB-C2 PF)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC125-PF I/O check	See P.25 of the PC-108/PC-206 service manual.	
3	PC126-PF I/O check		
4	PC117-PF I/O check		
5	M123-PF operation check		
6	Change PWB-C2 PF	-	-

17.3.11 Misfeed at LCT take-up/Vertical Transport section (PC-407)

A. Detection Timing

Type	Description
Detection of misfeed at LCT take-up/Vertical Transport section	The leading edge of the paper does not block the Paper Feed Sensor (PC1-LCT) or Vertical Conveyance Sensor (PC2-LCT) even after the set period of time has elapsed after the Paper Feed Motor (M1-LCT) has been energized.
	The Vertical Conveyance Sensor (PC2) is not blocked even after the set period of time has elapsed after the Vertical Conveyance Sensor (PC2-LCT) is blocked by the paper.
	The Paper Feed Sensor (PC1-LCT) is not unblocked even after the set period of time has elapsed after the Paper Feed Sensor (PC1-LCT) has been blocked by the paper.
	The Vertical Conveyance Sensor (PC2-LCT) is not unblocked even after the set period of time has elapsed after the Vertical Conveyance Sensor (PC2-LCT) has been blocked by the paper.
Detection of paper left in LCT take-up/Vertical Transport section	The Vertical Conveyance Sensor (PC2-LCT) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Paper Feed Sensor (PC1-LCT) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

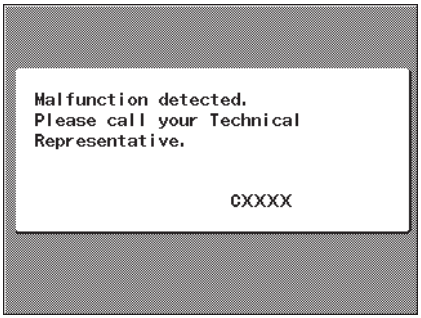
Relevant Electrical Parts	
Paper Feed Sensor (PC1-LCT) Vertical Conveyance Sensor (PC2-LCT) Vertical Conveyance Sensor (PC2) Paper Feed Motor (M1-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC1-LCT I/O check	See P.28 of the PC-407 service manual.	
3	PC2-LCT I/O check		
4	PC2 I/O check		
5	M1-LCT operation check		
6	Change PWB-C1 LCT	-	-

18. Malfunction code

18.1 Trouble code

- The machine's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code and maintenance call mark on the Touch Panel.



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18.1.1 Trouble code list

- For the details of the malfunction codes of the options, see the Service Manual for the corresponding option.

Code	Item	Description	Rank
C0001	LCT Communication Failure	See P.29 of the PC-407 service manual.	B
C0202	Tray 1 Elevator Failure	• The Lift-Up Sensor is not unblocked even after the set period of time has elapsed after the paper lift up operation for the drawer has begun.	B
C0204	Tray 2 Elevator Failure		B
C0206	Tray 3 Elevator Failure		B
C0208	Tray 4 Elevator Failure		B
C0209	LCT Elevator Motor Failure	See P.29 of the PC-407 service manual.	B
C0210	LCT Lift Failure	See P.29 of the PC-407 service manual.	B
C0211	Bypass Lifting Motion Failure	• The Bypass Lift Sensor (PC29) is not blocked or unblocked even after the set period of time has elapsed after the Bypass Pick-Up Solenoid (SL3) is energized after the manual feed paper take-up operation has begun.	B
C0212	LCT Ejection Failure	See P.29 of the PC-407 service manual.	B
C0213	LCT Shift Gate Malfunction	See P.29 of the PC-407 service manual.	B
C0214	LCT Shifting Failure	See P.29 of the PC-407 service manual.	B
C0215	LCT Shift Motor Malfunction	See P.29 of the PC-407 service manual.	B
C0701	Manual Paper Size Detection Adjustment Failure	• The control value of the Manual Paper Size Detection Unit does not fall within the specified range when an adjustment is made of manual paper size detection.	B
C1080	Exit Option Communication Failure	• The connection status of a finishing option is changed after the copier has been turned on.	B
C1183	Elevator Motor Ascent/Descent Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B

Code	Item	Description	Rank
C1190	Aligning Plate 1 Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C1191	Aligning Plate 2 Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11A0	Paper-Lifter Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11A1	Exit Roller Pressure/Retraction Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11A2	Saddle Exit Roller Pressure/ Retraction Failure	See P.41 of the SD-507 service manual.	B
C11A3	Shutter Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11A4	Saddle Exit Motor Failure	See P.41 of the SD-507 service manual.	B
C11A5	Saddle In & Out Guide Motor Failure	See P.41 of the SD-507 service manual.	B
C11A6	Saddle Layable Guide Motor Drive Failure	See P.41 of the SD-507 service manual.	B
C11B0	Staple Unit CD Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11B2	Staple Drive Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11B5	Saddle Staple 1 Drive Failure	See P.41 of the SD-507 service manual.	B
C11B6	Saddle Staple 2 Drive Failure	See P.41 of the SD-507 service manual.	B
C11C0	Punch Cam Motor Unit Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
C11D0	Crease Motor Drive Failure	See P.41 of the SD-507 service manual.	B
C2211	IU Motor Failure	• The IU Motor Lock signal remains set to H for a set period of time while the IU Motor is turning. • The IU Motor Lock signal remains set to L for a set period of time while the IU Motor remains stopped.	B
C2351	Toner Suction Fan Motor Failure	• The Toner Suction Fan Motor Lock signal remains set to H for a set period of time while the Toner Suction Fan Motor is turning. • The Toner Suction Fan Motor Lock signal remains set to L for a set period of time while the Toner Suction Fan Motor remains stopped.	C
C2431	IU Fuse Blowing Failure (*1)	• The fuse is not blown even after the lapse of a predetermined period of time.	B
C2557	ATDC Sensor Failure	• The scanning value of the ATDC Sensor is less than 7 % while the IU Motor is turning. • The scanning value of the ATDC Sensor is more than 19 % while the IU Motor is turning.	B
C255C	ATDC Adjustment Failure	• The adjustment of the ATDC control voltage could not be completed in the set period of time when function F8 is run. • The ATDC control voltage was not within the range of 5.39 V to 8.15 V when function F8 is run.	B

Code	Item	Description	Rank
C2654	EEPROM Failure	• An EEPROM where no initial data is written is detected.	B
C2702	Abnormal Image Transfer Voltage	• The image transfer voltage exceeds 100 V for the set period of time while the IU Motor remains stopped.	B
C3451	Fusing Warm-Up Failure (Main)	• The Fusing Roller Thermistor does not detect the required temperature within 30 sec. after a warmup cycle has begun; therefore, the copier does not complete the warm-up cycle. • The temperature of the Fusing Rollers does not reach the required level even after the set period of time has elapsed during a warm-up cycle.	A
C3452	Fusing Warm-Up Failure (Sub)	• The Fusing Roller Sub Thermistor does not detect the required temperature within 30 sec. after a warm-up cycle has begun; therefore, the copier does not complete the warm-up cycle. • The temperature of the Fusing Rollers does not reach the required level even after the set period of time has elapsed during a warm-up cycle.	A
C3751	High Fuser Temperature Failure (Main)	• The Fusing Roller Thermistor and Fusing Roller Sub Thermistor are detected to be at a temperature above 240 °C when the Main Power Switch is set to ON.	A
C3752	High Fuser Temperature Failure (Sub)		A
C3851	Low Fuser Temperature Failure (Main)	• The Fusing Roller Thermistor and Fusing Roller Sub Thermistor are detected to be at a temperature below 105 °C during standby. • The Fusing Roller Thermistor and Fusing Roller Sub Thermistor are detected to be at a temperature below 105 °C during printing.	A
C3852	Low Fuser Temperature Failure (Sub)		A
C4001	Main body Communication Failure	• Communications with the Mechanical Control Board and the MFBS Board/MFBS2 Board fail.	B
C4002	HSYNC Detection Failure	• No SOS falling edges are detected within the set period of time after laser emission began while the Polygon Motor is turning. • No SOS falling edges are detected while VIA remains ON.	B
C4101	Polygon Motor Failure	• The Polygon Motor Lock signal could not be detected within the set period of time after the Polygon Motor is energized. (Faulty start detection) • No First Lock signals are detected during the 1-second period that starts 1 second after a First Lock signal. (Faulty lock signal detection) • The Polygon Motor Lock signal could not be detected after the set period of time has elapsed while the Polygon Motor is turning. (Out-of-timing lock detection) • The Polygon Motor Lock signal is set to ON for longer than the set period of time while the Polygon Motor remains stopped. (Abnormal lock detection)	B

Code	Item	Description	Rank
C4721	Main Body G/A Communication Failure	• Communications with the gate array for expansion I/O (the IC mounted on the Mechanical Control Board) fail.	B
C5102	Main Motor Failure	• The Transport Motor Lock signal remains set to H for a set period of time while the Transport Motor is turning.	B
C5351	Power Supply Cooling Fan Motor Failure	• The Power Supply Cooling Fan Motor Lock signal remains set to H for a set period of time while the Power Supply Cooling Fan Motor is turning. • The Power Supply Cooling Fan Motor Lock signal remains set to L for a set period of time while the Power Supply Cooling Fan Motor remains stopped.	B
C5352	Cooling Fan Motor Failure	• The Cooling Fan Motor Lock signal remains set to H for a set period of time while the Cooling Fan Motor is turning. • The Cooling Fan Motor Lock signal remains set to L for a set period of time while the Cooling Fan Motor remains stopped.	B
C5353	IU Cooling Fan Motor Failure	• The IU Cooling Fan Motor Lock signal remains set to H for a set period of time while the IU Cooling Fan Motor is turning. • The IU Cooling Fan Motor Lock signal remains set to L for a set period of time while the IU Cooling Fan Motor remains stopped.	B
C7001	Engine connection error	• The system fails in checking initial engine connection when the Power Switch is turned ON. • The system succeeded in checking initial connection when the Power Switch was turned ON; then it fails in rechecking initial connection through the execution of a software reset when a communications error occurs during operation.	C
C8301	ADF Fan Motor Failure	See P.31 of the DF-620 service manual.	C
C9701	ADF Document Size Failure Adjustment	See P.32 of the DF-620 service manual.	B
CA052	MIO Device Failure	• The MIO device does not operate properly.	C
CC153	Flash ROM Failure	• The Flash ROM data was determined to be faulty when the unit was turned on.	B
CC155	Exit Option Flash ROM Failure	See P.41 of the FS-530/PU-501/OT-602 service manual.	B
CD004	HDD error	• When error occurs during deletion of HDD data.	C

*1: Not supported by this machine

18.2 How to reset

- Different malfunction resetting procedures apply depending on the rank of the trouble code.

* List of Malfunction Resetting Procedures

Trouble Code Rank	Resetting Procedures
Rank A	• Trouble Reset For details, see Adjustment/Setting.
Rank B	• Opening/Closing the front door
Rank C	• Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.

18.3 Solution

18.3.1 C0202: Tray 1 Elevator Failure

18.3.2 C0204: Tray 2 Elevator Failure

18.3.3 C0206: Tray 3 Elevator Failure

18.3.4 C0208: Tray 4 Elevator Failure

Relevant Electrical Parts	
Tray1 Paper Lift Motor (M7) Tray2 Paper Lift Motor (M8) Tray3 Lift Motor (M124-PF) Tray4 Lift Motor (M125-PF) Tray1 Paper Lift Sensor (PC6) Tray2 Paper Lift Sensor (PC12) Tray3 Lift Sensor (PC114-PF) Tray4 Lift Sensor (PC123-PF)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1) Main Control Board (PWB-C2 PF)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the motor and sensor connectors for proper connection, and correct as necessary.	-	-
2	Check the connector of each motor for proper drive coupling, and correct as necessary.	-	-
3	Check the PU1 connector for proper connection and correct as necessary.	-	-
4	PC6 I/O check	PWB-A PJ15A-11 (ON)	D-17
5	PC12 I/O check	PWB-A PJ22A-6 (ON)	D-6
6	PC114-PF I/O check	See P.27 of the PC-108/PC-206 service manual.	
7	PC123-PF I/O check		
8	M7 operation check	-	D-23
9	M8 operation check	-	D-19
10	M124-PF operation check	See P.27 of the PC-108/PC-206 service manual.	
11	M125-PF operation check		
12	Change PWB-A	-	-
13	Change PWB-C2 PF	-	-
14	Change PU1	-	-

18.3.5 C0211: Bypass Lifting Motion Failure

Relevant Electrical Parts	
Bypass Pick-Up Solenoid (SL3) Bypass Lift Sensor (PC29)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the SL3 connector for proper connection and correct as necessary.	-	-
2	Check cam position.	-	-
3	PC29 I/O check	PWB-A PJ12A-11 (ON)	M-14
4	SL3 operation check	PWB-A PJ12A-5 (ON)	M-13
5	Change PWB-A	-	-

18.3.6 C0701: Manual Paper Size Detection Adjustment Failure

Relevant Electrical Parts	
Bypass Paper Size Detection Unit (VR1)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the VR1 connector for proper connection and correct as necessary.	-	-
2	Readjust the VR1.	-	-
3	Replace VR1	-	-
4	Change PWB-A	-	-

18.3.7 C1080: Exit Option Communication Failure

Relevant Electrical Parts	
Main Control Board (PWB-A FN)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check the PWB-A FN and the PWB-A for proper connection, and correct as necessary.	-	-
3	Change PWB-A FN	-	-
4	Change PWB-A	-	-

18.3.8 C2211: IU Motor Failure

Relevant Electrical Parts	
IU Motor (M2)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M2 connector for proper connection and correct as necessary.	-	-
2	Check the M2 for proper drive coupling, and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M2 operation check	PWB-A PJ28A-11 (REM)	M-4
5	Change PWB-A	-	-
6	Change PU1	-	-

18.3.9 C2351: Toner Suction Fan Motor Failure

Relevant Electrical Parts	
Toner Suction Fan Motor (M11)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M11 connector for proper connection and correct as necessary.	-	-
2	Check the fan for possible overload, and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M11 operation check	PWB-A PJ5A-13 (REM)	D-14
5	Change PWB-A	-	-
6	Change PU1	-	-

18.3.10 C2557: ATDC Sensor Failure

18.3.11 C255C: ATDC Adjustment Failure

Relevant Electrical Parts	
ATDC Sensor (UN2)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the UN2 connector for proper connection and correct as necessary.	-	-
2	Remove the Developing Unit from the IU, and then replace UN2.	-	-
3	Run F8.	-	-
4	Change PWB-A	-	-
5	Change PU1	-	-

18.3.12 C2654: EEPROM Failure

Relevant Electrical Parts	
Mechanical Control Board (PWB-A)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Disconnect and then connect the power cord. Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check the EEPROM on the Mechanical Control Board for proper connection, and correct as necessary.	-	-
3	Change PWB-A	-	-
4	Change EEPROM	-	-

18.3.13 C2702: Abnormal Image Transfer Voltage

Relevant Electrical Parts	
Transfer Roller	High Voltage Unit (HV1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the installation of the Transfer Roller.	-	-
2	Change HV1	-	-

18.3.14 C3451: Fusing Warm-Up Failure (Main)

18.3.15 C3452: Fusing Warm-Up Failure (Sub)

18.3.16 C3751: High Fuser Temperature Failure (Main)

18.3.17 C3752: High Fuser Temperature Failure (Sub)

Relevant Electrical Parts	
Fusing Roller Heater Lamp (H1) Fusing Roller Sub Heater Lamp (H2) Fusing Roller Thermistor (TH1) Fusing Roller Sub Thermistor (TH2)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check that the H1 comes on when the Main Power Switch is set to ON, and correct or replace as necessary.	-	-
2	Check that the H2 comes on when the Main Power Switch is set to ON, and correct or replace as necessary.	-	-
3	Check the installation of the TH1 and the TH2, and correct or clean as necessary.	-	-
4	Check the operation of the TH1. Remove CN80 (4P), and then check that the resistance across CN80-2 and -3 on the Thermistor is infinity.	-	-
5	Check the operation of the TH2. Remove CN81 (4P), and then check that the resistance across CN81-2 and -3 on the Thermistor is infinity.	-	-
6	Check the continuity of the H1. Correct or replace as necessary.	-	-
7	Check the continuity of the H2. Correct or replace as necessary.	-	-
8	Change PU1	-	-
9	Change PWB-A	-	-

18.3.18 C3851: Low Fuser Temperature Failure (Main)

18.3.19 C3852: Low Fuser Temperature Failure (Sub)

Relevant Electrical Parts	
Fusing Roller Heater Lamp (H1) Fusing Roller Sub Heater Lamp (H2) Fusing Roller Thermistor (TH1) Fusing Roller Sub Thermistor (TH2)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check that the H1 comes on when the Right-Side Door is opened, then closed, and correct or replace as necessary.	-	-
2	Check that the H2 comes on when the Right-Side Door is opened, then closed, and correct or replace as necessary.	-	-
3	Check the installation of the TH1 and the TH2, and correct or clean as necessary.	-	-
4	Check the operation of the TH1. Remove CN80 (4P), and then check that the resistance across CN80-2 and -3 on the Thermistor is infinity.	-	-
5	Check the operation of the TH2. Remove CN81 (4P), and then check that the resistance across CN81-2 and -3 on the Thermistor is infinity.	-	-
6	Check the continuity of the H1. Correct or replace as necessary.	-	-
7	Check the continuity of the H2. Correct or replace as necessary.	-	-
8	Change PU1	-	-
9	Change PWB-A	-	-

18.3.20 C4001: Main Body Communication Failure

Relevant Electrical Parts	
MFBS Board (MFBS)/MFBS Board (MFBS2)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the MFBS/MFBS2 connector for proper connection, and correct as necessary.	-	-
2	Check the PWB-A connector for proper connection, and correct as necessary.	-	-
3	Check the flat cable between MFBS/MFBS2 and PWB-A for proper connection, and correct as necessary.	-	-
4	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
5	Change MFBS/MFBS2	-	-
6	Change PWB-A	-	-

18.3.21 C4002: HSYNC Detection Failure

Relevant Electrical Parts	
PH Unit (PH)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check the PH and the PWB-A connectors for proper connection, and correct as necessary.	-	-
3	Change PH	-	-
4	Change PWB-A	-	-

18.3.22 C4101: Polygon Motor Failure

Relevant Electrical Parts	
PH Unit (PH)	MFBS Board (MFBS)/MFBS Board (MFBS2)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the PH connector for proper connection, and correct as necessary.	-	-
2	Change PH	-	-
3	Change PWB-A	-	-

18.3.23 C4721: Main Body G/A Communication Failure

Relevant Electrical Parts	
Mechanical Control Board (PWB-A)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check each control board and the PWB-A for proper connection, and correct as necessary.	-	-
3	Change PWB-A	-	-

18.3.24 C5102: Main Motor Failure

Relevant Electrical Parts	
Main Motor (M1)	Mechanical Control Board (PWB-A) Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M1 connector for proper connection, and correct as necessary.	-	-
2	Check the M1 for proper drive coupling, and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M1 operation check	PWB-A PJ28A-4 (REM)	M-4
5	Change PWB-A	-	-
6	Change PU1	-	-

18.3.25 C5351: Power Supply Cooling Fan Motor Failure

Relevant Electrical Parts	
Power Supply Cooling Fan Motor (M4)	Power Supply Unit (PU1)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M4 connectors for proper connection, and correct as necessary.	-	-
2	Check the fan for possible overload, and correct as necessary.	-	-
3	M4 operation check	PWB-A PJ33A-1 (REM)	D-5
4	Change PU1	-	-

18.3.26 C5352: Cooling Fan Motor Failure

Relevant Electrical Parts	
Cooling Fan Motor (M5)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M5 connectors for proper connection, and correct as necessary.	-	-
2	Check the fan for possible overload, and correct as necessary.	-	-
3	M5 operation check	PWB-A PJ11A-6 (REM)	M-8
4	Change PWB-A	-	-

18.3.27 C5353: IU Cooling Fan Motor Failure

Relevant Electrical Parts	
IU Cooling Fan Motor (M6)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M6 connectors for proper connection, and correct as necessary.	-	-
2	Check the fan for possible overload, and correct as necessary.	-	-
3	M6 operation check	PWB-A PJ15A-1 (REM)	D-16
4	Change PWB-A	-	-

18.3.28 C7001: Engine connection error

Relevant Electrical Parts	
BCRS Board (BCRS)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the connection between Mechanical Control Board and BCRS Board.	-	-
2	Reset the malfunction and turn OFF and ON the Power Switch.	-	-
3	Change BCRS.	-	-
4	Change PWB-A	-	-

18.3.29 CA052: MIO Device Failure

Relevant Electrical Parts	
BCRS Board (BCRS)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check the BCRS connectors for proper connection, and correct as necessary.	-	-
3	Change BCRS	-	-

18.3.30 CC153: Flash ROM Failure

Relevant Electrical Parts	
Mechanical Control Board (PWB-A)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	The firmware data is overwritten.	-	-
3	Change PWB-A	-	-

18.3.31 CD004: HDD error

Relevant Electrical Parts	
Hard Disk (HD-504)	MFBS Board (MFBS)/MFBS Board (MFBS2)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Check theHard Disk connector for proper connection and correct as necessary.	-	-
3	Reinstall the Hard Disk.	-	-
4	Change Hard Disk	-	-
5	Change MFBS/MFBS2.	-	-

19. Power supply trouble

19.1 Machine is not Energized at All (PU1 Operation Check)

Relevant Electrical Parts	
Main Power Switch (S1) Power Supply Unit (PU1)	Mechanical Control Board (PWB-A) MFBS Board (MFBS)/MFBS Board (MFBS2)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is a voltage being applied to the electrical outlet?	-	NO	Provide a power supply.
2	Is the wiring to terminal S1 correct?	W-22	NO	Rewire
3	Is there continuity across the fuse (F101) on PU1?	-	NO	Change the fuse.
4	Is there continuity across the fuse (F103) on PU1?	-	NO	Change the fuse.
5	Is the wiring between the MFBS Board/ MFBS2 Board and Mechanical Control Board correct?	-	NO	Rewire
6	Is the wiring between the Mechanical Control Board and Power Supply Unit correct?	-	NO	Rewire
7	Is DC 5 V being output from PJ8A-2 on the PWB-A?	-	NO	Change PWB-A
			YES	Change PU1

19.2 Only the Power Supply Cooling Fan Motor turns

Relevant Electrical Parts	
Power Supply Unit (PU1) Control Panel (UN1)	Mechanical Control Board (PWB-A)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is DC 4.5 V being output from PJ8A-3 on the PWB-A?	-	NO	Change PWB-A
2	Is DC 5 V being output from PJ9PU1-1 on PU1?	-	NO	Change PU1
			YES	Change UN1

19.3 The Start key (LED) on the control panel blinks orange

Relevant Electrical Parts	
Total Counter	Control Panel (UN1)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is the Total Counter connector connected?	-	NO	Connect
2	Is the machine in the Initial mode?	-	YES	Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.

20. Image quality problem

20.1 How to identify problematic part

- This chapter is divided into two parts: “Initial Check Items” and “Troubleshooting Procedure by a Particular Image Quality Problem.”
- When an image quality problem occurs, first go through the “Initial Check Items” and, if the cause is yet to be identified, go to “Troubleshooting Procedure by a Particular Image Quality Problem.”

20.2 Initial Check Items

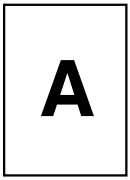
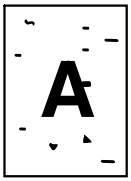
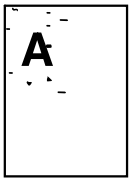
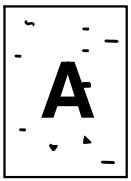
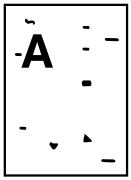
20.2.1 Initial Check Items 1

- Determine if the failure is attributable to a basic cause or causes.

Section	Step	Check Item	Result	Action
Paper	1	Recommended paper is used.	NO	Instruct user.
	2	Paper is damp.	YES	Replace paper. Instruct user on proper paper storage.
Original	3	Original not flat.	YES	Correct
	4	Faint original (light pencil, etc.)	YES	Instruct user.
	5	Highly transparent original (OHP transparencies, etc.)	YES	Instruct user.
	6	Dirty or scratched Original Glass.	YES	Clean or Replace.
PM parts	7	PM parts relating to image formation have reached the end of cleaning/replacement cycles.	YES	Clean or Replace.
Adjustment items	8	There are settings that can be readjusted to remedy the image failure.	YES	Readjust.

20.2.2 Initial Check Items 2

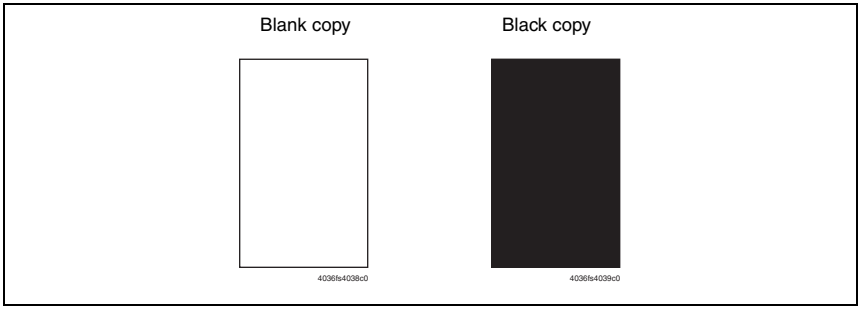
- Determine if the failure is attributable to the Scanner system or the Printer system.

<table>
<tr><th>Check Item</th><th>Result</th><th>Cause</th></tr>
<tr><td rowspan="2">Make copies at different zoom ratios.
  </td><td>Full size
 
Reduction
  </td><td>Scanner system</td></tr>
<tr><td>Full size
 
Reduction
  </td><td>Printer system</td></tr>
</table>

20.3 Solution

20.3.1 Scanner System: Blank copy or black copy

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	PWBs and Connection Cables	Connectors are securely connected with no bent pins and no breaks in the connection cables.	NO	Reconnect. Replace the connection cable.
2	Exposure Unit	The Exposure Lamp comes on.	NO	Change Exposure Lamp. Change Exposure Unit.
3	Inverter Board	Connectors on the Inverter Board are connected properly.	NO	Reconnect.
4		The problem has been eliminated after performing step 3.	NO	Change Inverter Board.
5	BCRS Board	Connectors on the BCRS Board are connected properly.	NO	Reconnect.
6		The problem has been eliminated after performing step 5.	NO	Change BCRS Board.
7	MFBS Board/ MFBS2 Board	Connectors on the MFBS Board/MFBS2 Board are connected properly.	NO	Reconnect.
8		The problem has been eliminated after performing step 7.	NO	Change MFBS Board/ MFBS2 Board.
9	CCD Unit	Connectors on the CCD Unit Board are connected properly.	NO	Reconnect.
10		The problem has been eliminated after performing step 9.	NO	Change CCD Unit.

20.3.2 Scanner System: Low image density or rough image

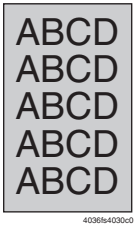
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Shading Sheet	Shading sheet is dirty.	YES	Clean.
2	Mirrors/Lens/ Original Glass	Mirrors, lens and/or Original Glass are dirty.	YES	Clean.
3	Exposure Lamp	Exposure Lamp is dirty.	YES	Clean. Change Exposure Lamp.
4	PWBs and Connection Cables	Connectors are securely connected with no bent pins and no breaks in the connection cables.	NO	Reconnect. Replace the connection cable.
5	MFBS Board/ MFBS2 Board	Connectors on the MFBS Board/MFBS2 Board are connected properly.	NO	Reconnect.
6		The problem has been eliminated after performing step 5.	NO	Change MFBS Board/ MFBS2 Board.
7	CCD Unit	Connectors on the CCD Unit Board are connected properly.	NO	Reconnect.
8		The problem has been eliminated after performing step 7.	NO	Change CCD Unit.

20.3.3 Scanner System: Foggy background

A. Typical Faulty Images

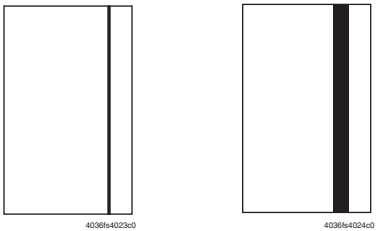


B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	-	Sunlight or any other extraneous light enters the machine.	YES	Protect the copier from extraneous light.
2	Original	Original is damaged or dirty.	YES	Change original.
3	Original Cover	Original Pad is dirty.	YES	Clean.
4		Original Cover does not lie flat.	YES	Replace Original Cover if it is deformed or the hinges are broken.
5	Shading Sheet	Shading sheet is dirty.	YES	Clean.
6	Mirrors/Lens/ Original Glass/ Reflectors	Mirrors, lens, Original Glass and/or reflectors are dirty.	YES	Clean.
7	Exposure Lamp	Exposure Lamp is dirty.	YES	Clean. Change Exposure Lamp.
8	PWBs and Connection Cables	Connectors are securely connected with no bent pins and no breaks in the connection cables.	NO	Reconnect. Replace the connection cable.
9	MFBS Board/ MFBS2 Board	Connectors on the MFBS Board/MFBS2 Board are connected properly.	NO	Reconnect.
10		The problem has been eliminated after performing step 9.	NO	Change MFBS Board/ MFBS2 Board.
11	CCD Unit	Connectors on the CCD Unit Board are connected properly.	NO	Reconnect.
12		The problem has been eliminated after performing step 11.	NO	Change CCD Unit.

20.3.4 Scanner System: Black streaks or bands

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Original	Original is damaged or dirty.	YES	Change original.
2	Original Cover	Original Pad is dirty.	YES	Clean.
3		Original Cover does not lie flat.	YES	Replace Original Cover if it is deformed or the hinges are broken.
4	Shading Sheet	Shading sheet is dirty.	YES	Clean.
5	Mirrors/Lens/ Original Glass/ Reflectors	Mirrors, lens, Original Glass and/or reflectors are dirty.	YES	Clean.
6	Exposure Lamp	Exposure Lamp is dirty.	YES	Clean. Change Exposure Lamp.
7	BCRS Board	The problem has been eliminated after performing step 6.	NO	Change the Jumper Switch Setting on the BCRS Board. P.234
8	PWBs and Connection Cables	Connectors are securely connected with no bent pins and no breaks in the connection cables.	NO	Reconnect. Replace the connection cable.
9	MFBS Board/ MFBS2 Board	Connectors on the MFBS Board/MFBS2 Board are connected properly.	NO	Reconnect.
10		The problem has been eliminated after performing step 9.	NO	Change MFBS Board/ MFBS2 Board.
11	CCD Unit	Connectors on the CCD Unit Board are connected properly.	NO	Reconnect.
12		The problem has been eliminated after performing step 11.	NO	Change CCD Unit.

20.3.5 Scanner System: Black spots

A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Original	Original is damaged or dirty.	YES	Change original.
2	Original Cover	Original Pad is dirty.	YES	Clean.
3	Original Glass	Original Glass is dirty.	YES	Clean.
4	-	The problem has been eliminated after performing step 3.	NO	Change Exposure Unit. Change CCD Unit.

20.3.6 Scanner System: White streaks or bands

A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Original	Original is damaged or dirty.	YES	Change original.
2	Original Cover	Original Pad is dirty.	YES	Clean.
3		Original Cover does not lie flat.	YES	Replace Original Cover if it is deformed or the hinges are broken.
4	Shading Sheet	Shading sheet is dirty.	YES	Clean.
5	Mirrors/Lens/ Original Glass/ Reflectors	Mirrors, lens, Original Glass and/or reflectors are dirty.	YES	Clean.
6	Exposure Lamp	Exposure Lamp is dirty.	YES	Clean. Change Exposure Lamp.
7	BCRS Board	The problem has been eliminated after performing step 6.	NO	Change the Jumper Switch Setting on the BCRS Board. P.234
8		The white lines or bands are blurry or opaque.	YES	Change Exposure Unit. Change CCD Unit.

20.3.7 Scanner System: Uneven pitch

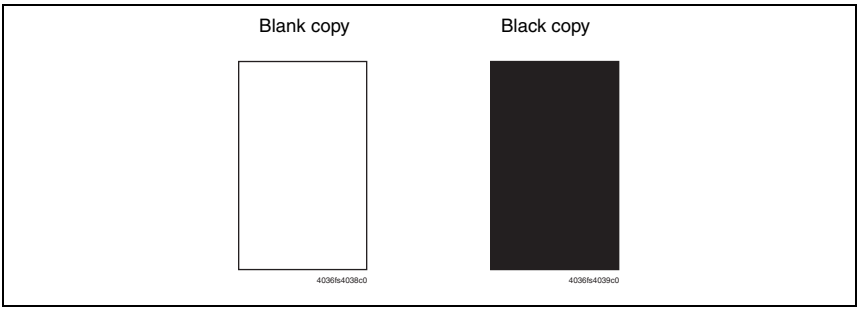
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Scanner Motor	Scanner Motor drive is being transmitted.	NO	Correct or change drive coupling mechanism.
2	Exposure Lamp	Exposure Lamp harness is not hooked.	NO	Correct.
3	Scanner Drive Cable	Scanner Drive Cable is taut.	NO	Correct the wiring or replace the cable.
4	Scanner Rails	Scanner Rails are scratched or dirty.	NO	Clean or Change.
5	PWBs and Connection Cables	Connectors are securely connected with no bent pins and no breaks in the connection cables.	NO	Reconnect. Replace the connection cable.
6	MFBS Board/ MFBS2 Board	Connectors on the MFBS Board/MFBS2 Board are connected properly.	NO	Reconnect.
7		The problem has been eliminated after performing step 6.	NO	Change MFBS Board/ MFBS2 Board.
8	CCD Unit	Connectors on the CCD Unit Board are connected properly.	NO	Reconnect.
9		The problem has been eliminated after performing step 8.	NO	Change CCD Unit.

20.3.8 Printer System: Blank copy or black copy

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Imaging Unit	Developing Unit drive is being transmitted.	NO	Correct or change drive coupling mechanism.
2		Image transfer current contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
3		Developing bias contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
4	PH Unit	PH Shutter (shutter in the path of the laser beam from the PH Unit to the Photo Conductor) opens and closes properly.	NO	Correct.
5	PWBs	Connectors are securely connected with no bent pins on the Mechanical Control Board or PH Unit.	NO	Correct.
6	-	The problem has been eliminated after performing step 5.	NO	Change Photo Conductor Unit. Change PH Unit. Change High Voltage Unit. Change Mechanical Control Board.

20.3.9 Printer System: Low image density or rough image

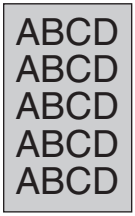
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Imaging Unit	Image transfer current contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
2		Developing bias contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
3	Tech. Rep. Mode → Image Density	Select Tech. Rep. Mode → [Tech. Rep. Choice] → [Printer] → [Image Density]. The image problem can be corrected by selecting an Image Density setting toward the + end.	YES	Make setting again.
4	Tech. Rep. Mode → Grid Voltage Adjustment	Select Tech. Rep. Mode → [Tech. Rep. Choice] → [Printer] → [Grid Voltage Adjustment]. The image problem can be corrected by selecting an VG Adjust setting toward the + end.	YES	Make setting again.
5	-	The problem has been eliminated after performing step 4.	NO	Change Photo Conductor Unit. Change PH Unit. Change High Voltage Unit. Change Mechanical Control Board.

20.3.10 Printer System: Foggy background

A. Typical Faulty Images

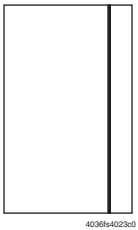


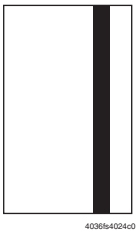
B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	-	Sunlight or any other extraneous light enters the machine.	YES	Protect the copier from extraneous light.
2	Imaging Unit	Photo Conductor is dirty.	YES	Change Photo Conductor Unit.
3		Comb Electrode contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
4		Grid voltage contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
5		Charge Neutralizing Sheet contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
6	Erase Lamp	Erase Lamp is dirty.	YES	Clean.
7		Is there continuity across the Erase Lamp?	NO	Change Erase Lamp.
8	Tech. Rep. Mode → Image Density	Select Tech. Rep. Mode → [Tech. Rep. Choice] → [Printer] → [Image Density]. The image problem can be corrected by selecting an Image Density setting toward the - end.	YES	Make setting again.
9	Tech. Rep. Mode → Grid Voltage Adjustment	Select Tech. Rep. Mode → [Tech. Rep. Choice] → [Printer] → [Grid Voltage Adjustment]. The image problem can be corrected by selecting an VG Adjust setting toward the - end.	YES	Make setting again.
10	-	The problem has been eliminated after performing step 9.	NO	Change Photo Conductor Unit. Change Developing Unit. Change PH Unit. Change High Voltage Unit. Change Mechanical Control Board.

20.3.11 Printer System: Black streaks or bands

A. Typical Faulty Images





B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Paper Path	Toner is on the paper path.	YES	Clean.
2	Imaging Unit	Photo Conductor is dirty.	YES	Change Photo Conductor Unit.
3	Fusing Unit	Fusing Rollers are dirty or scratched.	YES	Change Photo Conductor Unit.
4	-	The problem has been eliminated after performing step 3.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

20.3.12 Printer System: Black spots

A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Paper Path	Toner is on the paper path.	YES	Clean.
2	Imaging Unit	Photo Conductor is dirty.	YES	Change Photo Conductor Unit.
3	Fusing Unit	Fusing Rollers are dirty or scratched.	YES	Change Fusing Unit.
4	Imaging Unit	Comb Electrode contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
5		Grid voltage contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
6		Charge Neutralizing Sheet contact terminal is dirty or deformed.	YES	Clean. Change Photo Conductor Unit.
7	Erase Lamp	Erase Lamp is dirty.	YES	Clean.
8		Is there continuity across the Erase Lamp?	NO	Change Erase Lamp.
9	-	The problem has been eliminated after performing step 8.	NO	Change Photo Conductor Unit. Change Developing Unit. Change High Voltage Unit. Change Mechanical Control Board.

20.3.13 Printer System: White streaks or bands

A. Typical Faulty Images


4036fs4021c0

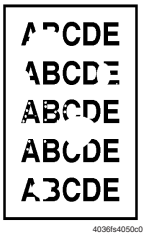

4036fs4022c0

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Transfer Roller	Transfer Roller is dented or scratched.	YES	Change Transfer Roller Unit.
2	Imaging Unit	Photo Conductor is dirty.	YES	Change Photo Conductor Unit.
3	Fusing Unit	Fusing Rollers are dirty or scratched.	YES	Change Fusing Unit.
4	PH Unit	Window glass of the PH Unit is dirty.	YES	Clean.
5	-	The problem has been eliminated after performing step 4.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

20.3.14 Printer System: Void areas

A. Typical Faulty Images

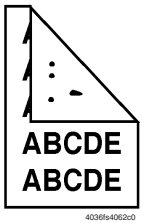


B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Imaging Unit	Photo Conductor is dirty.	YES	Change Photo Conductor Unit.
2	Transfer Roller	Transfer Roller is dented or scratched.	NO	Change Transfer Roller Unit.
3	Fusing Unit	Fusing Rollers are scratched or deformed.	YES	Change Fusing Unit.
4	-	The problem has been eliminated after performing step 3.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

20.3.15 Printer System: Smears on back of paper

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Paper Path	Toner is on the paper path.	YES	Clean.
2	Transfer Roller	Transfer Roller is dirty.	YES	Change Transfer Roller Unit.
3	Fusing Unit	Fusing Roller is dirty.	YES	Change Fusing Unit.

20.3.16 Printer System: Uneven image density

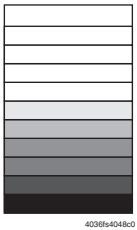
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Transfer Roller	Transfer Roller is dirty or deformed.	YES	Change Transfer Roller Unit.
2	-	The problem has been eliminated after performing step 1.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

20.3.17 Printer System: Gradation reproduction failure

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Transfer Roller	Transfer Roller is dirty or deformed.	YES	Change Transfer Roller Unit.
2	-	The problem has been eliminated after performing step 1.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

20.3.18 Printer System: Uneven pitch

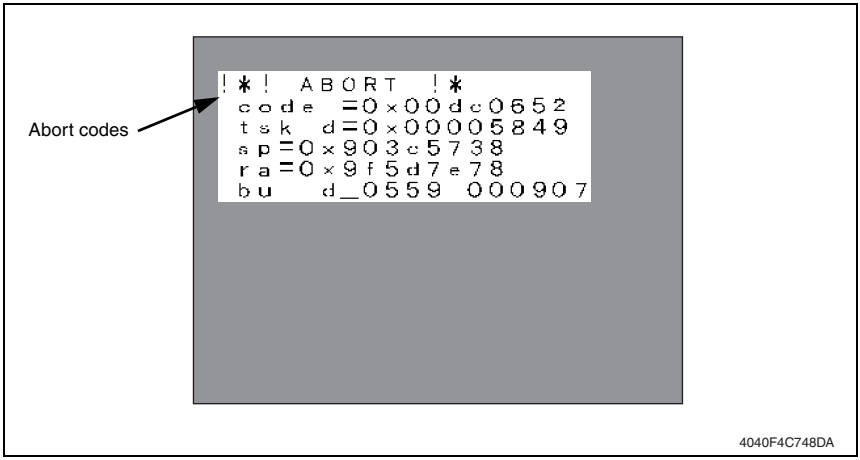
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Imaging Unit	Developing Unit drive is being transmitted.	NO	Correct or change drive coupling mechanism.
2	Developing Section	Photo Conductor and Transfer Roller drive is being transmitted.	NO	Correct or change drive coupling mechanism.
3	Transport Section	Synchronizing Rollers Unit drive is being transmitted.	NO	Correct or change drive coupling mechanism.
4	Fusing Section	Fusing Unit drive is being transmitted.	NO	Correct or change drive coupling mechanism.
5	Imaging Unit	Ds Collar is dirty.	YES	Clean.
6	PH Unit	PH Unit is securely installed.	YES	Correct.
7	-	The problem has been eliminated after performing step 6.	NO	Change Photo Conductor Unit. Change Developing Unit. Change Mechanical Control Board.

21. Abort codes

- The copier displays an abort code on the Touch Panel as it becomes unable to process tasks properly through its software control.



21.1 List of Abort Codes

- When the system program is aborted, the copier attempts to restart it automatically. If it fails to restart the program, check the electrical component, unit, option, and connection relating to the specific type of the abort condition.

Description	Code	Relevant Electrical Components, Units, and Options
OS processing system failure	0x00000000 to 0x000fffff	MFBS Board/MFBS2 Board
Device control system failure	0x00100000 to 0x001fffff	MFBS Board/MFBS2 Board, FAX Board, Memory Board*, FS-530, JS-502, MT-502, SD-507
Copy control system failure	0x00200000 to 0x002fffff	MFBS Board/MFBS2 Board
Operation system failure	0x00300000 to 0x003fffff	MFBS Board/MFBS2 Board, Touch Panel, Panel Board
Conversion processing system failure	0x00500000 to 0x005fffff	MFBS Board/MFBS2 Board
Encoding processing system failure	0x00600000 to 0x006fffff	MFBS Board/MFBS2 Board, Memory Board*
File control system failure	0x00700000 to 0x007fffff	MFBS Board/MFBS2 Board, Memory Board*
G3 protocol processing system failure	0x00800000 to 0x008fffff	MFBS Board/MFBS2 Board, FAX Board, Memory Board*
G3 device control system failure	0x00900000 to 0x009fffff	MFBS Board/MFBS2 Board, FAX Board, Memory Board*
Scanner control system failure	0x00c00000 to 0x00c0ffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board, DF-620
Scanner control system failure	0x00c10000 to 0x00c2ffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board, DF-620

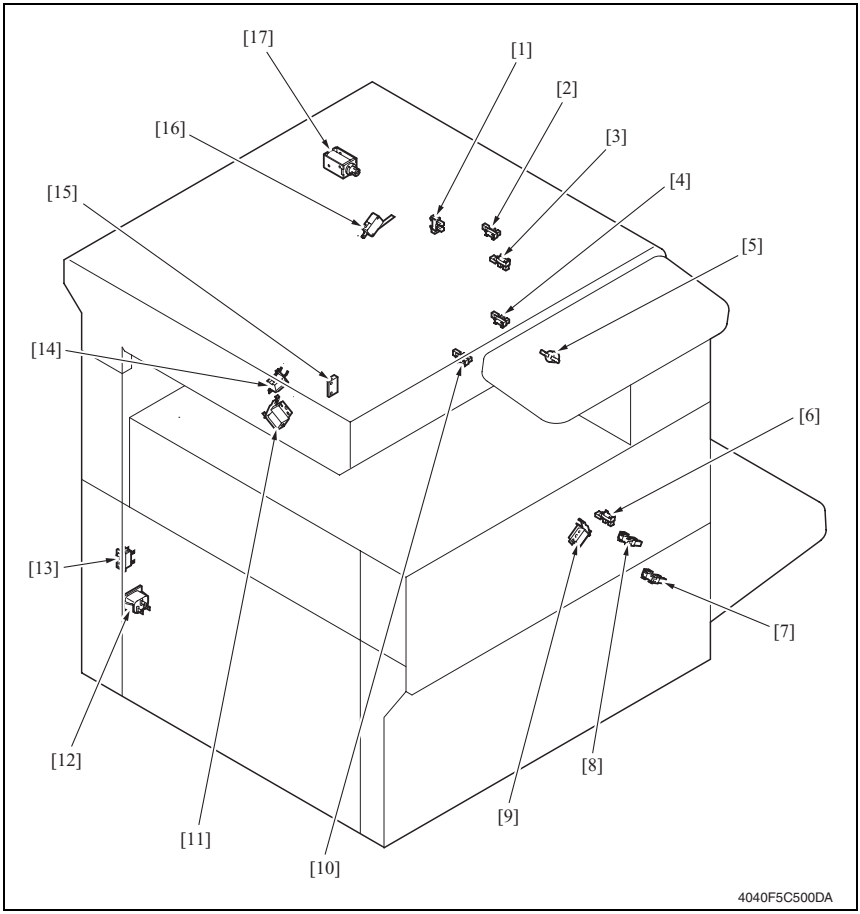
Description	Code	Relevant Electrical Components, Units, and Options
Scanner control system failure	0x00c30000 to 0x00c4ffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board, DF-620
Scanner control system failure	0x00c50000 to 0x00c5ffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board, DF-620
Scanner device control system failure	0x00d00000 to 0x00d3ffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board
Scanner device control system failure	0x00d80000 to 0x00dbffff	MFBS Board/MFBS2 Board, BCRS Board, Inverter Board, DF-620
Scanner device control system failure	0x00dc0000 to 0x00dfffff	MFBS Board/MFBS2 Board, Scanner Home Sensor, Scanner drive system, BCRS Board
Printer sequence system failure	0x00e00000 to 0x00e000ff	MFBS Board/MFBS2 Board, Memory Board*
Printer sequence system failure	0x00e00100 to 0x00e001ff	MFBS Board/MFBS2 Board, Memory Board*
Printer sequence system failure	0x00e00200 to 0x00e002ff	MFBS Board/MFBS2 Board, Memory Board*
Printer sequence system failure	0x00e00300 to 0x00e003ff	MFBS Board/MFBS2 Board, Memory Board*
Printer sequence system failure	0x00e00400 to 0x00e004ff	MFBS Board/MFBS2 Board, Memory Board*
Printer system failure	0x00f00000 to 0x00f0ffff	MFBS Board/MFBS2 Board, Memory Board*
EP-NET sequence system failure (U.S.A. and Canada only)	0x00f10000 to 0x00f1ffff	MFBS Board/MFBS2 Board
Counter sequence system failure	0x00f20000 to 0x00f2ffff	MFBS Board/MFBS2 Board
Other failures	0x01100000 to 0x011000ff	MFBS Board/MFBS2 Board
Copy sequence system failure	0x01100100 to 0x011001ff	MFBS Board/MFBS2 Board
Function sequence system failure	0x01100400 to 0x011004ff	MFBS Board/MFBS2 Board
Scan to FTP transmission control failure	0x01100500 to 0x011005ff	MFBS Board/MFBS2 Board, Memory Board*
Network control system failure	0x01100700 to 0x011007ff	MFBS Board/MFBS2 Board, Memory Board*
OS message processing system failure	0x02000000 to 0x020fffff	MFBS Board/MFBS2 Board, Memory Board*
Network processing system failure	0x03000000 to 0x030fffff	MFBS Board/MFBS2 Board, Memory Board*

*: Attached to Network Scan Kit, Internet Fax & Network Scan Kit and Printer Controller, Expansion Memory.

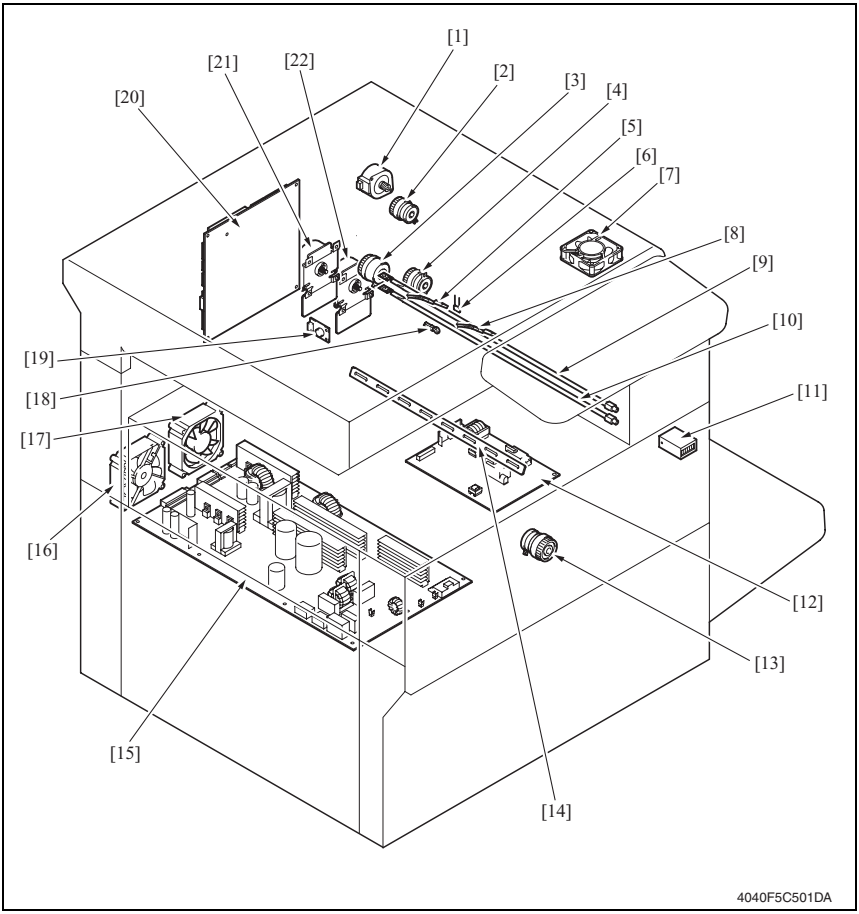
APPENDIX

22. Parts layout drawing

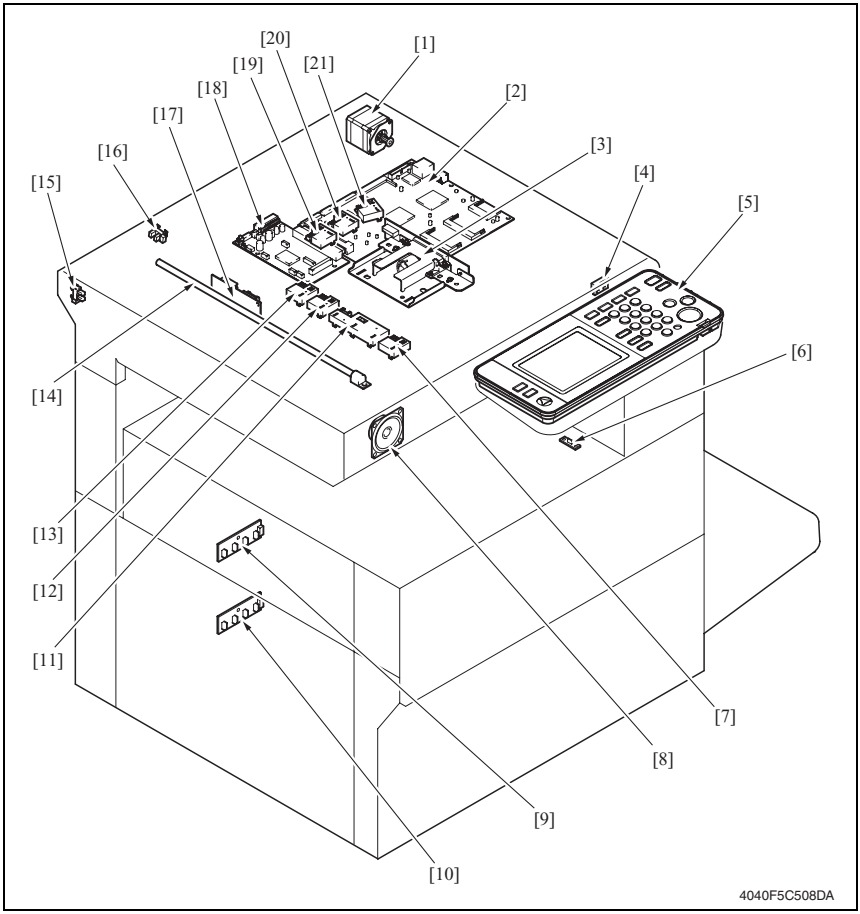
22.1 Main body



[1] Duplex Unit Door Sensor (PC23)
[2] Switch Back Unit Sensor (PC26)
[3] Duplex Unit Upper Transport Sensor (PC24)
[4] Paper Exit Sensor (PC4)
[5] Fusing Roller Thermostat (TS1)
[6] Bypass Lift Sensor (PC29)
[7] Right Lower Door Sensor (PC3)
[8] Bypass Paper Empty Sensor (PC18)
[9] Bypass Pick-Up Solenoid (SL3)
[10] Duplex Unit Lower Transport Sensor (PC25)
[11] Sub Hopper Solenoid (SL1)
[12] AC Power Source
[13] Main Power Switch (S1)
[14] Main Hopper Solenoid (SL2)
[15] Sub Hopper Empty Switch (S4)
[16] Right Side Door Interlock Switch 1 (S2)
[17] Switchback Solenoid (SL4)



[1] Switchback Motor (M3)
[2] Duplex Unit Transport Clutch 1 (CL6)
[3] Synchronizing Roller Clutch (CL1)
[4] Duplex Unit Transport Clutch 2 (CL7)
[5] Fusing Roller Sub Thermistor (TH2)
[6] High Voltage Register (R2)
[7] Fusing Unit Cooling Fan Motor (M10)
[8] Fusing Roller Thermistor (TH1)
[9] Fusing Roller Sub Heater Lamp (H2)
[10] Fusing Roller Heater Lamp (H1)
[11] Total Counter (CNT1)
[12] High Voltage Unit (HV1)
[13] Bypass Paper Feed Clutch (CL5)
[14] Erase Lamp (LA1)
[15] Power Supply Unit (PU1)
[16] Power Supply Cooling Fan Motor (M4)
[17] Toner Suction Fan Motor (M11)
[18] Drum Thermistor (TH4)
[19] Temperature/humidity Sensor (TH3)
[20] Mechanical Control Board (PWB-A)
[21] Main Motor (M1)
[22] IU Motor (M2)



[1] Scanner Motor (M12)

[2] MFBS Board (MFBS) /MFBS2 Board (MFBS2)

[3] CCD Board (CCD)

[4] Size Reset Switch (SW201)

[5] Control Panel (UN1)

[6] Pre-Transfer Guide Plate Register (R3)

[7] Original Size Sensor 3 (PC203) (Option)

[8] Speaker (SP1)

[9] FD Paper Size Board 1 (PWB-I1)

[10] FD Paper Size Board 2 (PWB-I2)

[11] Original Size Sensor 2 (PC202)

[12] Original Size Sensor 1 (PC201)

[13] Original Size Sensor 7 (PC207)

[14] Exposure Lamp (LA2)

[15] Scanner Home Sensor (PC208)

[16] Original Cover Angle Sensor (PC209)

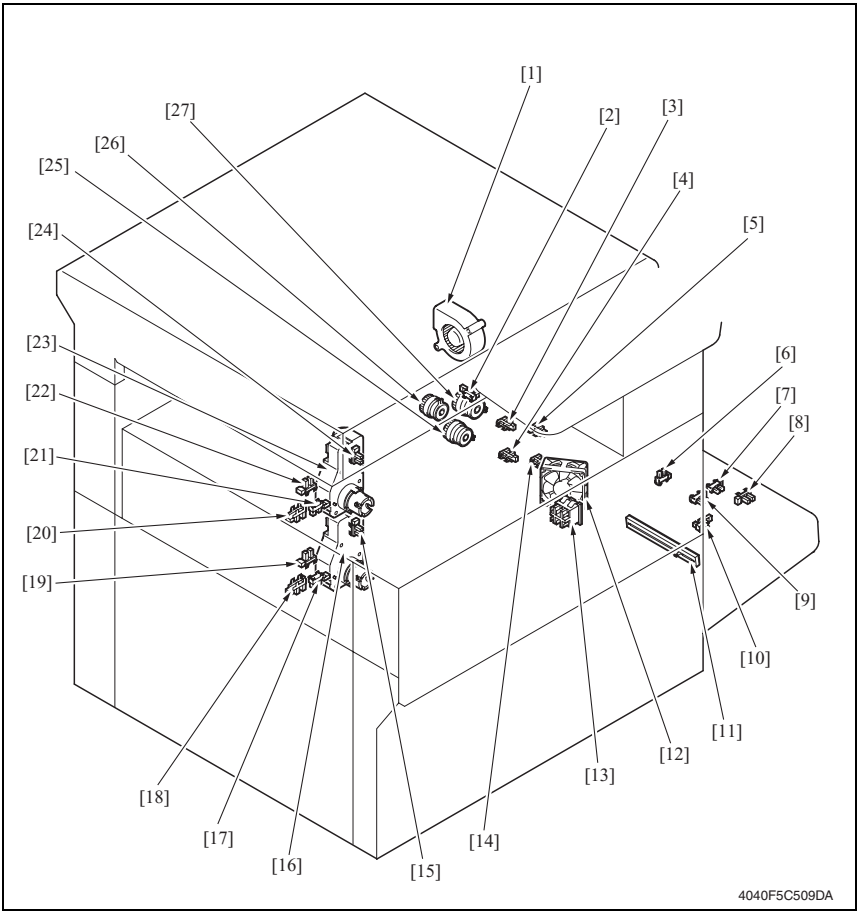
[17] Inverter Board (INV)

[18] BCRS Board (BCRS)

[19] Original Size Sensor 4 (PC204)

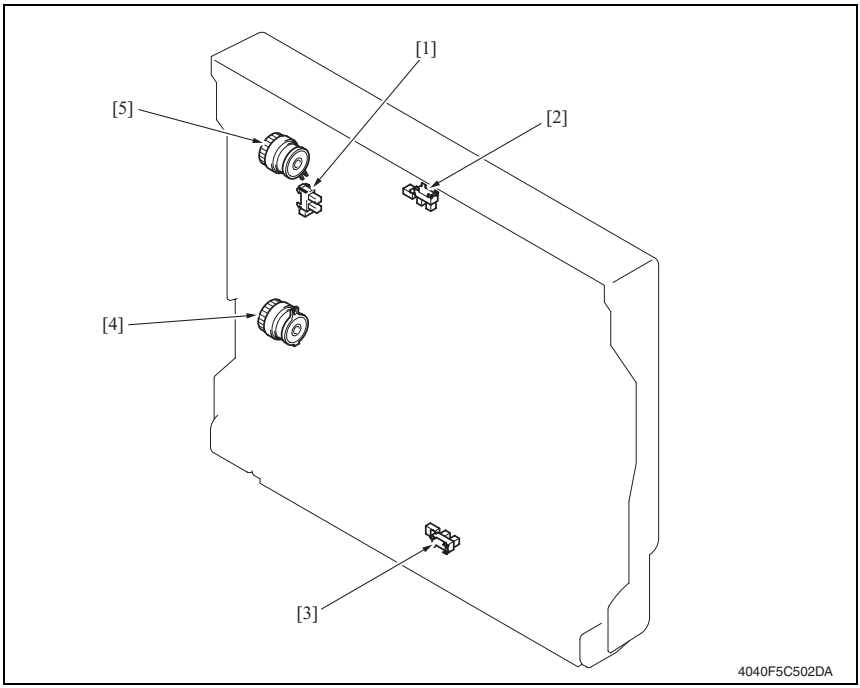
[20] Original Size Sensor 5 (PC205) (Option)

[21] Original Size Sensor 6 (PC206) (Option)



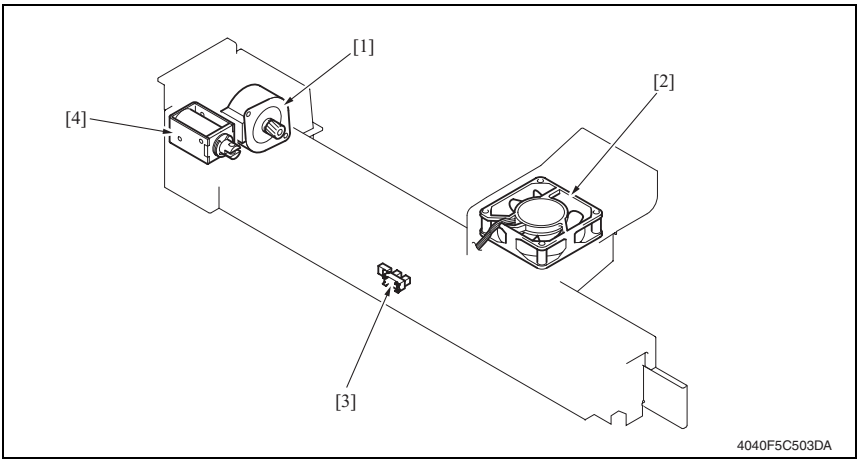
[1] Cooling Fan Motor (M5)
[2] Synchronizing Roller Sensor (PC1)
[3] Tray1 Paper Lift Sensor (PC6)
[4] Tray2 Paper Lift Sensor (PC12)
[5] Tray1 Paper Empty Sensor (PC9)
[6] Front Door Sensor (PC5)
[7] Bypass FD Paper Size Sensor/4 (PC22)
[8] Bypass FD Paper Size Sensor/2 (PC20)
[9] Bypass FD Paper Size Sensor/3 (PC21)
[10] Bypass FD Paper Size Sensor/1 (PC19)
[11] Bypass Paper Size Detection Unit (VR1)
[12] IU Cooling Fan Motor (M6)
[13] Right Side Door Interlock Switch 2 (S3)
[14] Tray2 Paper Empty Sensor (PC15)
[15] Tray2 Paper Near-Empty Sensor (PC14)
[16] Tray2 Paper Lift Motor (M8)
[17] Tray2 CD Paper Size Sensor 2 (PC16)
[18] Tray2 CD Paper Size Sensor 1 (PC17)
[19] Tray2 Set Sensor (PC13)
[20] Tray1 CD Paper Size Sensor 1 (PC11)
[21] Tray1 CD Paper Size Sensor 2 (PC10)
[22] Tray1 Set Sensor (PC7)
[23] Tray1 Paper Lift Motor (M7)
[24] Tray1 Paper Near-Empty Sensor (PC8)
[25] 2nd Drawer Paper Feed Clutch (CL4)
[26] 1st Drawer Paper Feed Clutch (CL3)
[27] Vertical Conveyance Clutch (CL2)

22.2 Duplex Unit



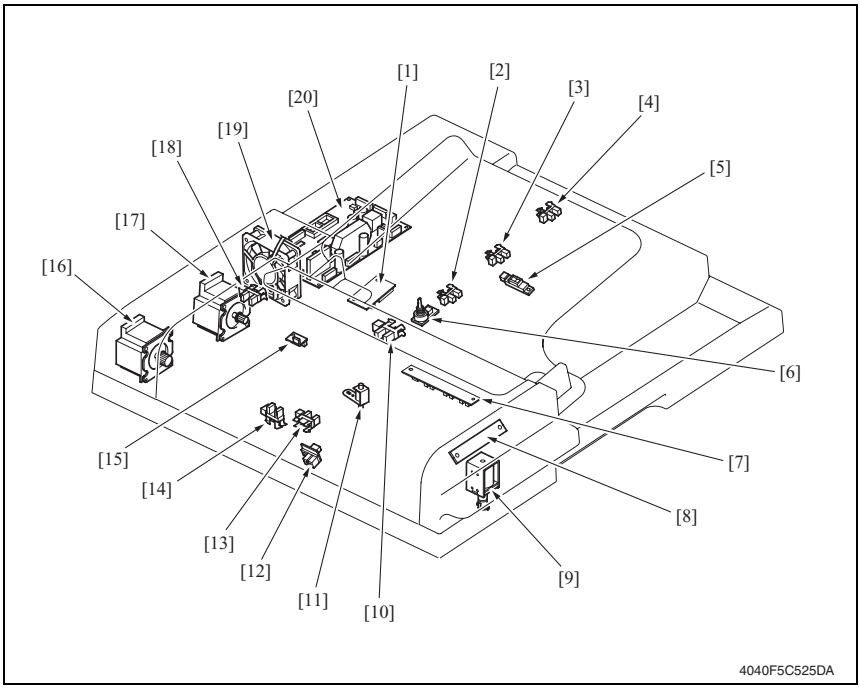
[1] Duplex Unit Door Sensor (PC23)
[2] Duplex Unit Upper Transport Sensor (PC24)
[3] Duplex Unit Lower Transport Sensor (PC25)
[4] Duplex Unit Transport Clutch 2 (CL7)
[5] Duplex Unit Transport Clutch 1 (CL6)

22.3 Switch Back Unit



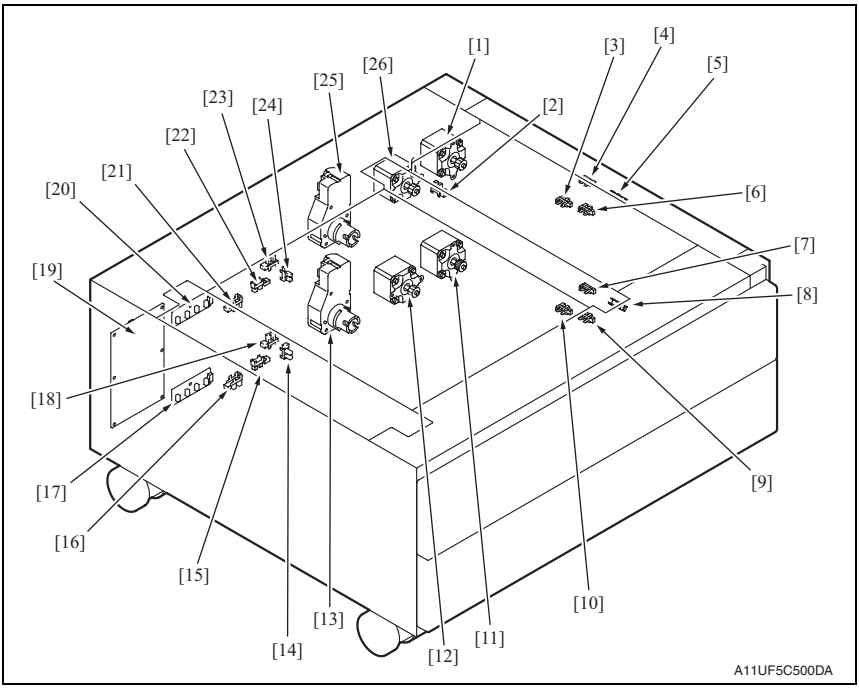
[1] Switchback Motor (M3)
[2] Fusing Unit Cooling Fan Motor (M10)
[3] Switch Back Unit Sensor (PC26)
[4] Switchback Solenoid (SL4)

22.4 DF-620



[1] Interface Board (PWA-TRAY)
[2] FD Paper Size Detection Sensor 1 (PC1-ADF)
[3] FD Paper Size Detection Sensor 3 (PC3-ADF)
[4] FD Paper Size Detection Sensor 4 (PC4-ADF)
[5] FD Paper Size Detection Sensor 2 (PC2-ADF)
[6] Variable Resistor (PBA-VR)
[7] Mix Document Size Detection Board (PBA-SIZE)
[8] Print Lamp Board (PBA-LED)
[9] Exit Roller Retraction Solenoid (SL1-ADF)
[10] Empty Sensor (PC5-ADF)
[11] Stamp Solenoid (SL2-ADF)
[12] Original Detection Sensor (PC8-ADF)
[13] Exit/Turnover Sensor (PC10-ADF)
[14] Registration Sensor (PC9-ADF)
[15] Separator Sensor (PC6-ADF)
[16] Transport Motor (M2-ADF)
[17] Paper Feed Motor (M1-ADF)
[18] Upper Door Open/Close Sensor (PC7-ADF)
[19] Cooling Fan Motor (M3-ADF)
[20] Main Control Board (PBA-CONT)

22.5 PC-108/PC-206 (Option)



[1] Tray3 Vertical Conveyance Motor (M120-PF)

[2] Door Sensor (PC111-PF)

[3] Tray3 Lift Sensor (PC114-PF)

[4] Tray3 Vertical Conveyance Sensor (PC117-PF)

[5] Tray3 Paper Take-Up Sensor (PC116-PF)

[6] Tray3 Paper Empty Sensor (PC115-PF)

[7] Tray4 Vertical Conveyance Sensor (PC126-PF)

[8] Tray4 Paper Take-Up Sensor (PC125-PF)

[9] Tray4 Paper Empty Sensor (PC124-PF)

[10] Tray4 Lift Sensor (PC123-PF)

[11] Tray4 Vertical Conveyance Motor (M121-PF)

[12] Tray4 Paper Feed Motor (M123-PF)

[13] Tray4 Lift Motor (M125-PF)

[14] Tray4 Paper Near-Empty Sensor (PC122-PF)

[15] Tray4 CD Paper Size Sensor 2 (PC128-PF)

[16] Tray4 CD Paper Size Sensor 1 (PC127-PF)

[17] Tray4 FD Paper Size Detection Board (PWB-I4 PF)

[18] Tray4 Set Sensor (PC121-PF)

[19] Main Control Board (PWB-C2 PF)

[20] Tray3 FD Paper Size Detection Board (PWB-I3 PF)

[21] Tray3 CD Paper Size Sensor 1 (PC118-PF)

[22] Tray3 CD Paper Size Sensor 2 (PC119-PF)

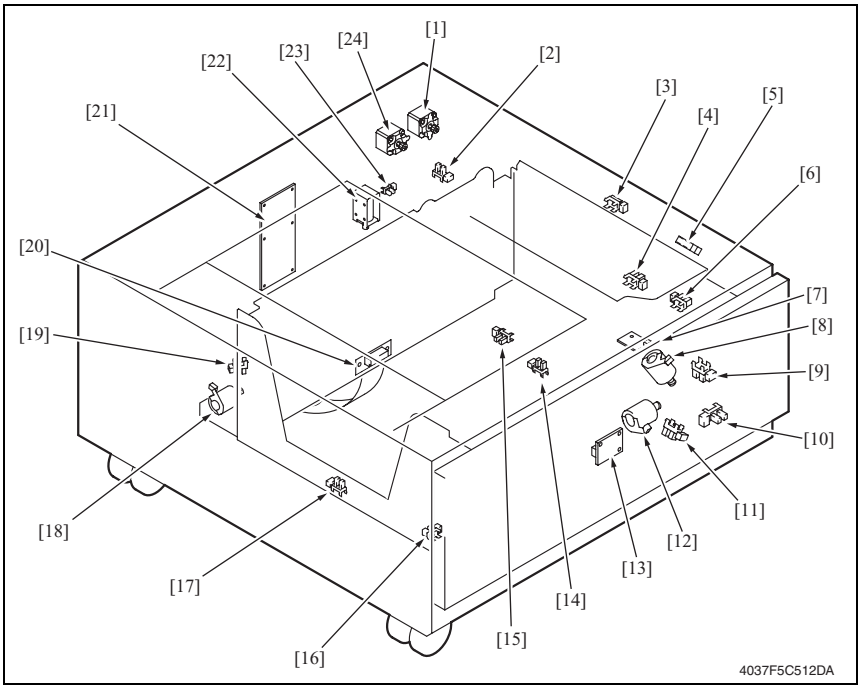
[23] Tray3 Set Sensor (PC112-PF)

[24] Tray3 Paper Near-Empty Sensor (PC113-PF)

[25] Tray3 Lift Motor (M124-PF)

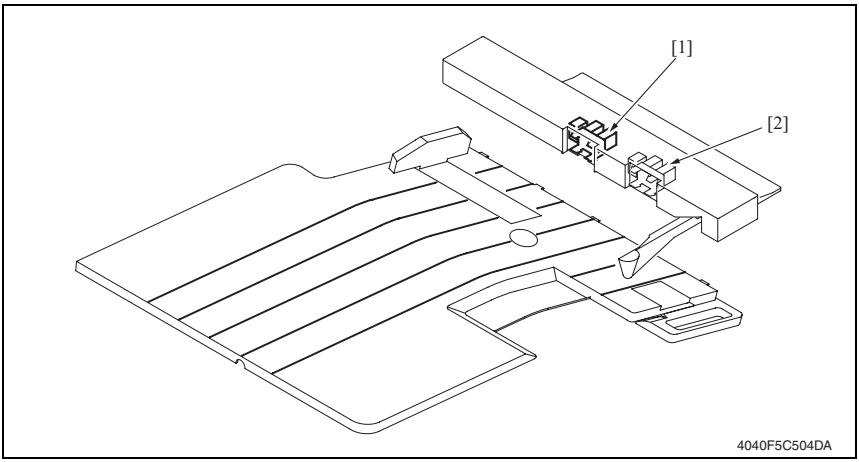
[26] Tray3 Paper Feed Motor (M122-PF)

22.6 PC-407 (Option)



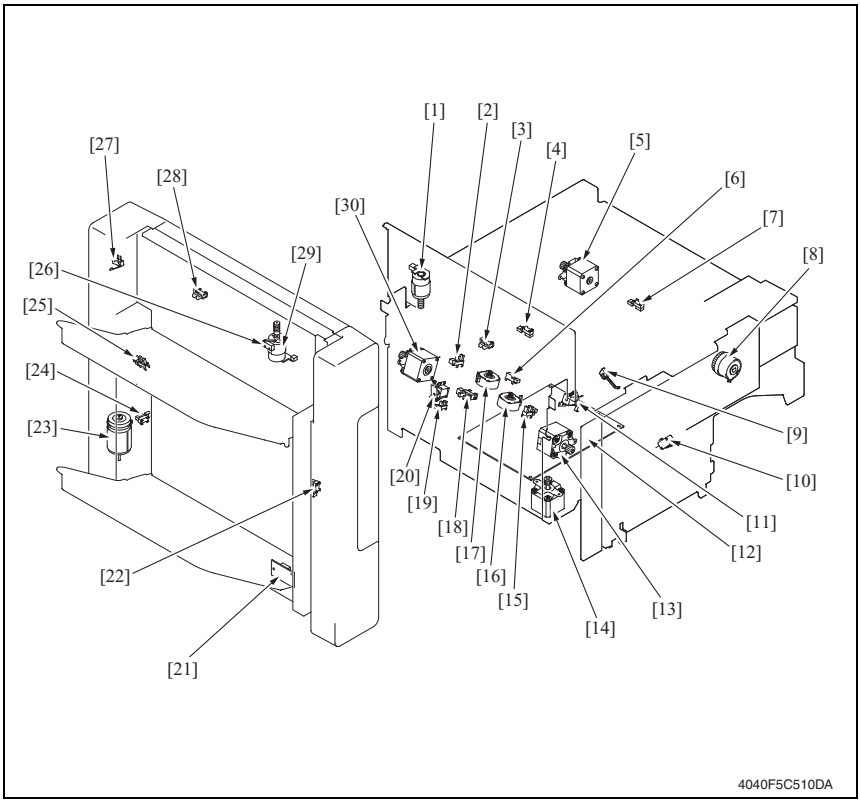
[1] Vertical Conveyance Motor (M2-LCT)
[2] Right Lower Door Sensor (PC5-LCT)
[3] Vertical Conveyance Sensor (PC2-LCT)
[4] Tray Upper Limit Sensor (PC4-LCT)
[5] Paper Feed Sensor (PC1-LCT)
[6] Upper Paper Empty Sensor (PC3-LCT)
[7] Paper Empty Board (PWB-E LCT)
[8] Elevator Motor (M5-LCT)
[9] Elevator Motor Pulse Sensor (PC10-LCT)
[10] Lower Limit Sensor (PC7-LCT)
[11] Shift Motor Pulse Sensor (PC8-LCT)
[12] Shift Motor (M4-LCT)
[13] Paper Descent Key (UN1-LCT)
[14] Shifter Return Position Sensor (PC11-LCT)
[15] Tray Lower Position Sensor (PC13-LCT)
[16] Shift Tray Paper Empty Sensor (PC9-LCT)
[17] Shifter Home Position Sensor (PC12-LCT)
[18] Shift Gate Motor (M3-LCT)
[19] Shift Gate Home Position Sensor (PC14-LCT)
[20] Interface Board (PWB-H LCT)
[21] Main Control Board (PWB-C1 LCT)
[22] Tray Lock Solenoid (SL1-LCT)
[23] Tray Set Sensor (PC6-LCT)
[24] Paper Feed Motor (M1-LCT)

22.7 JS-502 (Option)



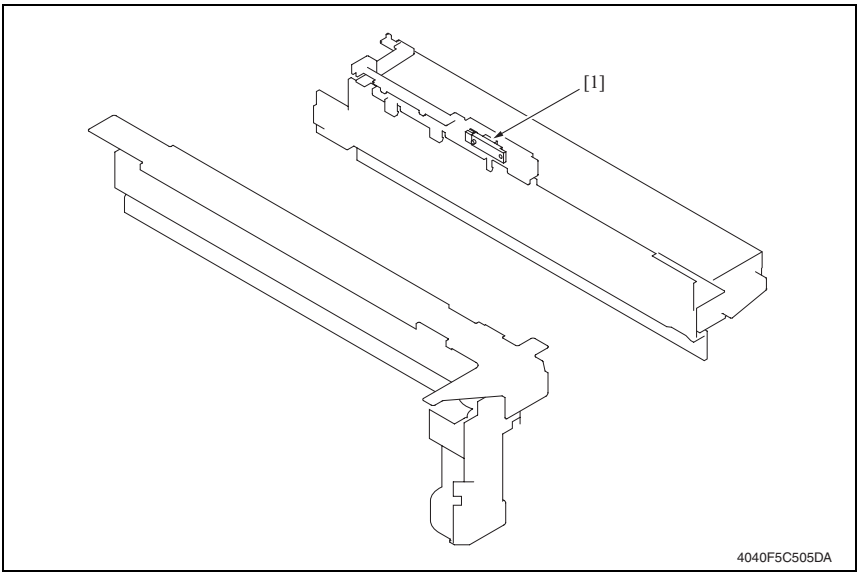
[1] Paper Full Detection Sensor (PC1-JOB) [2] —

22.8 FS-530 (Option)



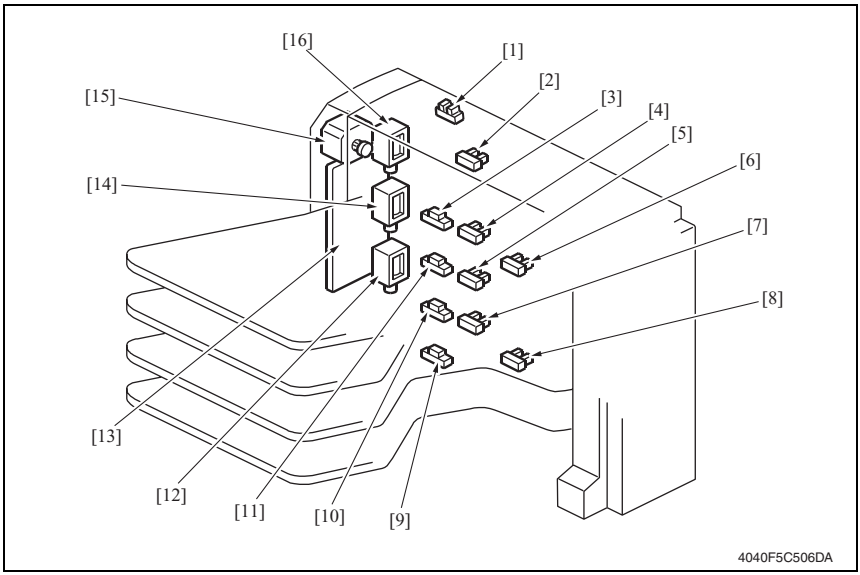
[1] Exit Open/Close Motor (M6-FN)
[2] Alignment Home Position Sensor 1 (PC6-FN)
[3] Exit Roller Home Position Sensor (PC12-FN)
[4] Transport Sensor (PC5-FN)
[5] Entrance Motor (M3-FN)
[6] Storage Tray Detecting Sensor (PC8-FN)
[7] Entrance Sensor (PC4-FN)
[8] Registration Clutch (CL1-FN)
[9] Transport Jam Detection Switch (S4-FN)
[10] Front Cover Detection Switch (S1-FN)
[11] Storage Paddle Solenoid (SL1-FN)
[12] Main Control Board (PWB-A FN)
[13] Exit Motor (M1-FN)
[14] Stapling Unit Moving Motor (M7-FN)
[15] Alignment Home Position Sensor 2 (PC7-FN)
[16] Alignment Motor 2 (M5-FN)
[17] Alignment Motor 1 (M4-FN)
[18] Exit Paddle Home Position Sensor (PC11-FN)
[19] Staple Home Position Sensor (PC10-FN)
[20] Exit Paddle Solenoid (SL2-FN)
[21] Elevator Board (PWB-B FN)
[22] Elevator Tray Home Position Sensor (PC3-FN)
[23] Elevator Motor (M11-FN)
[24] Elevator Tray Lower Limit Sensor (PC14-FN)
[25] Top Face Detection Sensor (PC15-FN)
[26] Shutter Detection Switch (S2-FN)
[27] Elevator Tray Upper/Lower Limit Switch (S3-FN)
[28] Shutter Home Position Sensor (PC16-FN)
[29] Shutter Opening Motor (M12-FN)
[30] Transport Motor (M2-FN)

22.9 PU-501 (Option)



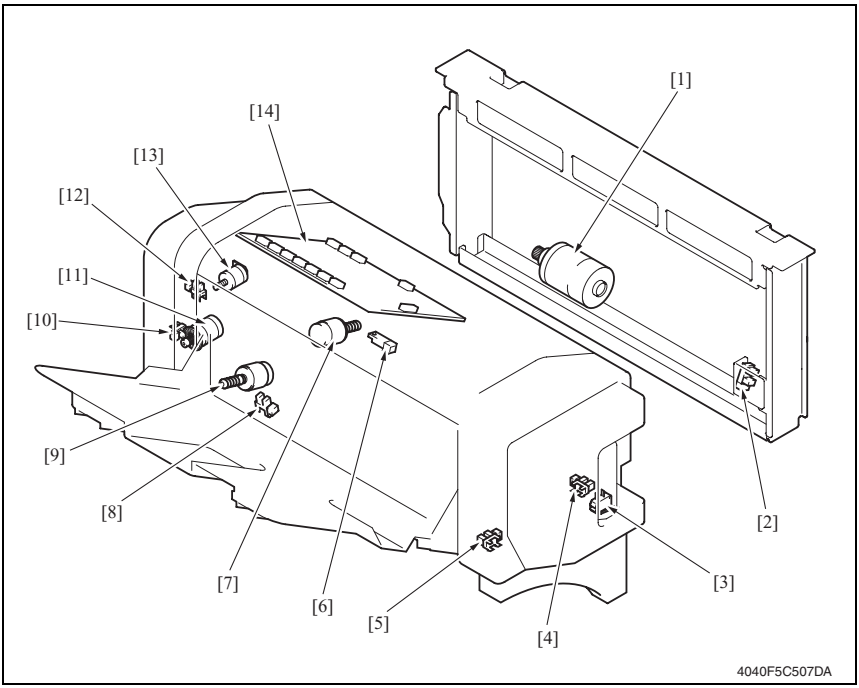
[1] Punch Trash Full (PC1-PK)

22.10 MT-502 (Option)



[1] Cover Open/Close Sensor (PC11-MK)
[2] Paper Full Detection Sensor 4 (PC8-MK)
[3] Paper Detection Sensor 4 (PC4-MK)
[4] Paper Full Detection Sensor 3 (PC7-MK)
[5] Paper Full Detection Sensor 2 (PC6-MK)
[6] Upper Transport Sensor (PC9-MK)
[7] Paper Full Detection Sensor 1 (PC5-MK)
[8] Lower Transport Sensor (PC10-MK)
[9] Paper Detection Sensor 1 (PC1-MK)
[10] Paper Detection Sensor 2 (PC2-MK)
[11] Paper Detection Sensor 3 (PC3-MK)
[12] Bin Entrance Switching Solenoid 1 (SL1-MK)
[13] Main Control Board (PWB-A MK)
[14] Bin Entrance Switching Solenoid 2 (SL2-MK)
[15] Transport Motor (M1-MK)
[16] Bin Entrance Switching Solenoid 3 (SL3-MK)

22.11 SD-507 (Option)



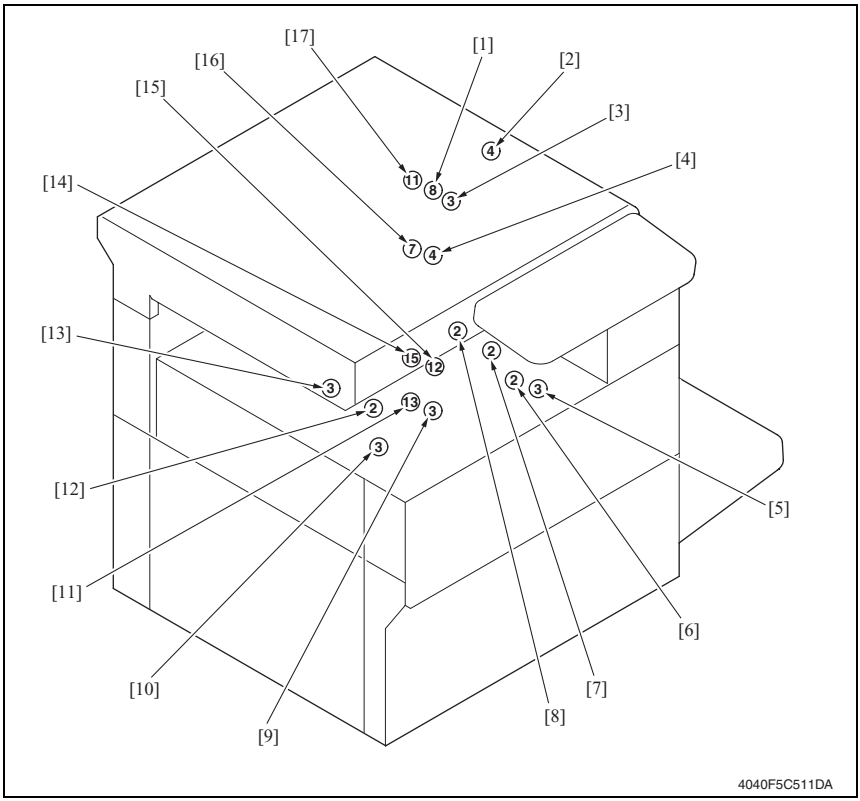
[1] Crease Motor (M10-SK)
[2] Crease Roller Home Position Sensor (PC22-SK)
[3] Saddle Interlock Switch (S4-SK)
[4] Layable Guide Home Sensor (PC26-SK)
[5] In & Out Guide Home Sensor (PC23-SK)
[6] Saddle Exit Sensor (PC20-SK)
[7] Layable Guide Motor (M14-SK)
[8] Saddle Tray Empty Sensor (PC21-SK)
[9] In & Out Guide Motor (M13-SK)
[10] Transport Pulse Sensor (PC25-SK)
[11] Saddle Exit Motor (M8-SK)
[12] Saddle Exit Roller Home Position Sensor (PC18-SK)
[13] Saddle Exit Open/Close Motor (M9-SK)
[14] Main Control Board (PWB-C SK)

23. Connector layout drawing

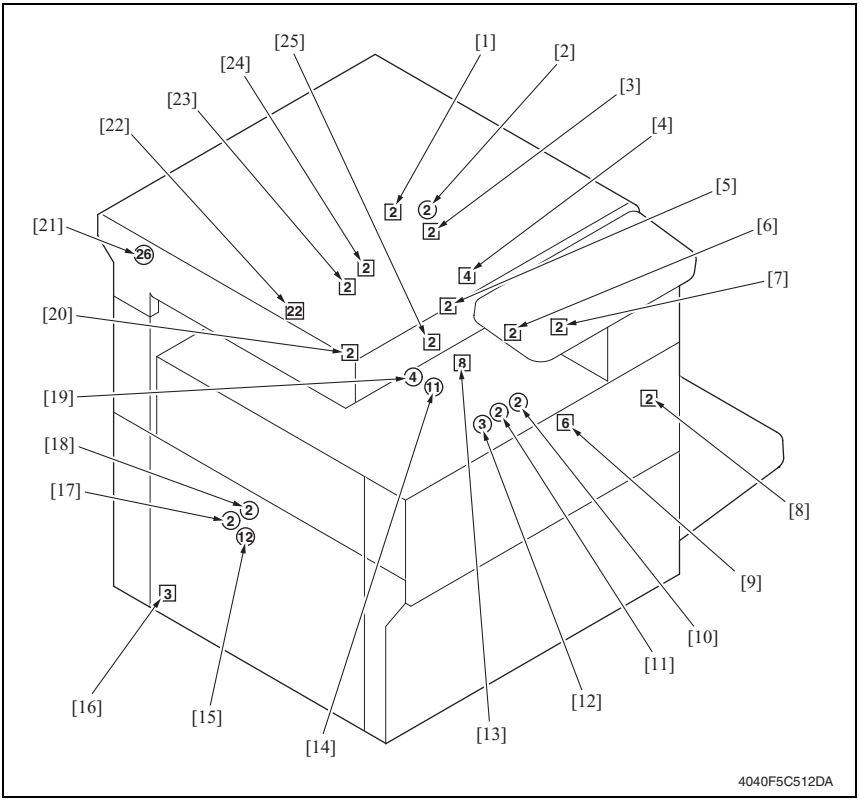
Description

Number of Pin → ① Possible to confirm by removing external cover.

→ 1 Not possible to confirm by removing external cover.



No.	CN No.	Location	No.	CN No.	Location
[1]	CN13	L-18 to 19	[10]	CN2	F-14
[2]	CN25	F-15	[11]	CN31	K-13
[3]	CN44	L-11	[12]	CN5	U-17
[4]	CN81	M-12	[13]	CN43	F-16
[5]	CN42	L-8	[14]	CN12	K-15 to 16
[6]	CN45	L-9	[15]	CN28	F-6
[7]	CN82	L-8	[16]	CN17	L-12
[8]	CN4	T-17	[17]	CN14	L-5 to 6
[9]	CN30	L-9			

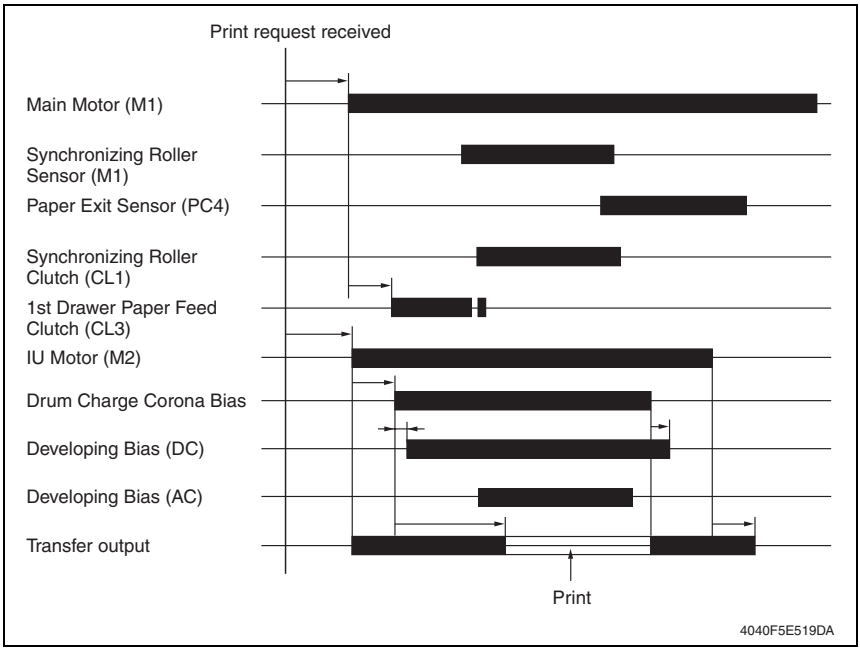


No.	CN No.	Location	No.	CN No.	Location
[1]	CN53	F-15	[14]	CN32	L-10
[2]	CN55	M-5	[15]	CN18	L-7
[3]	CN50	L-15	[16]	CN1	V-22
[4]	CN80	M-12	[17]	CN20	F-8
[5]	CN51	L-14	[18]	CN19	L-6
[6]	CN46	E-10	[19]	CN27	F-10
[7]	CN48	E-10	[20]	CN52	E-11
[8]	CN24	F-15	[21]	CN10	D-2 to 3
[9]	CN26	F-16 to 17	[22]	CN11	D-12 to 13
[10]	CN49	M-11	[23]	CN70	E-11
[11]	CN54	M-13	[24]	CN23	E-11
[12]	CN71	M-13	[25]	CN47	F-7
[13]	CN15	F-14			

24. Timing chart

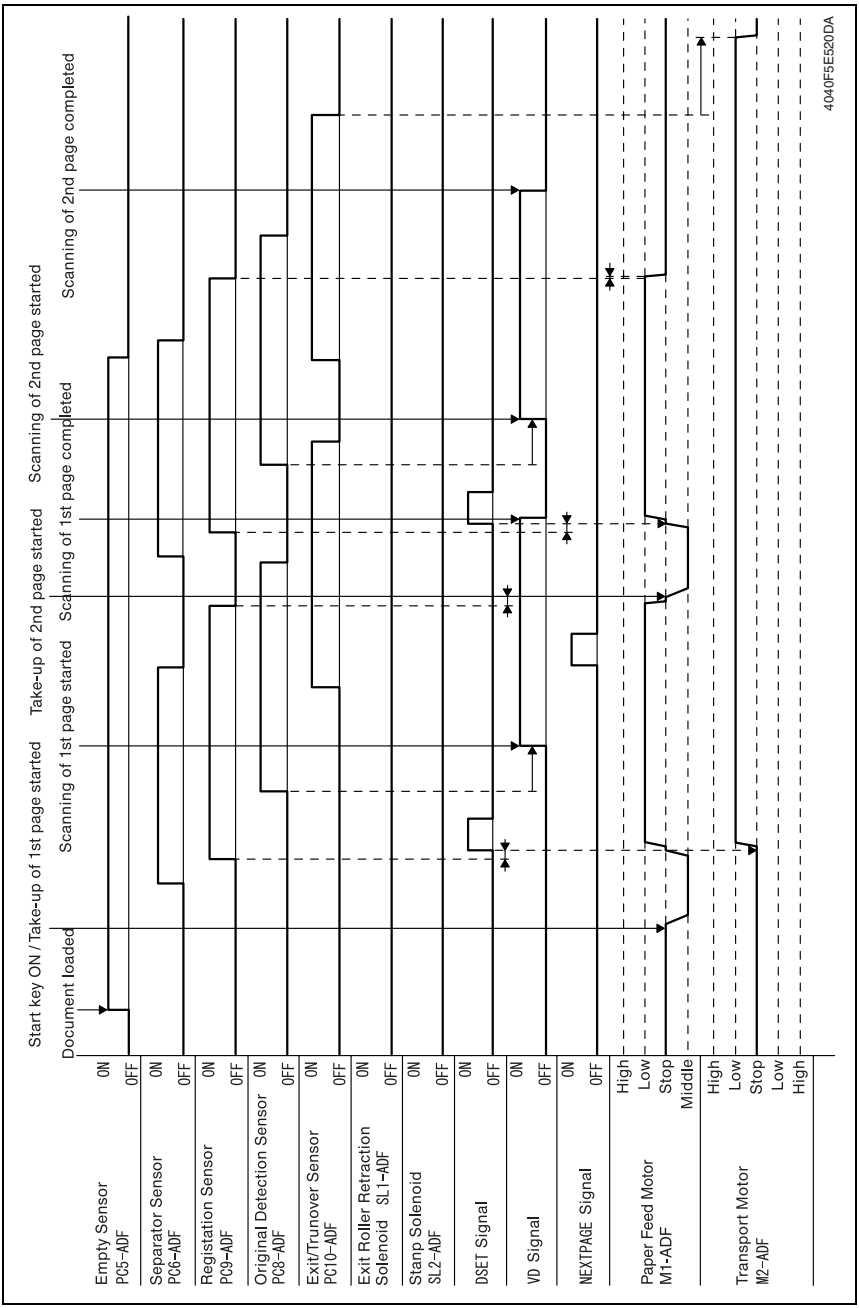
24.1 Main body

A4 1-page printing, paper fed from Tray 1

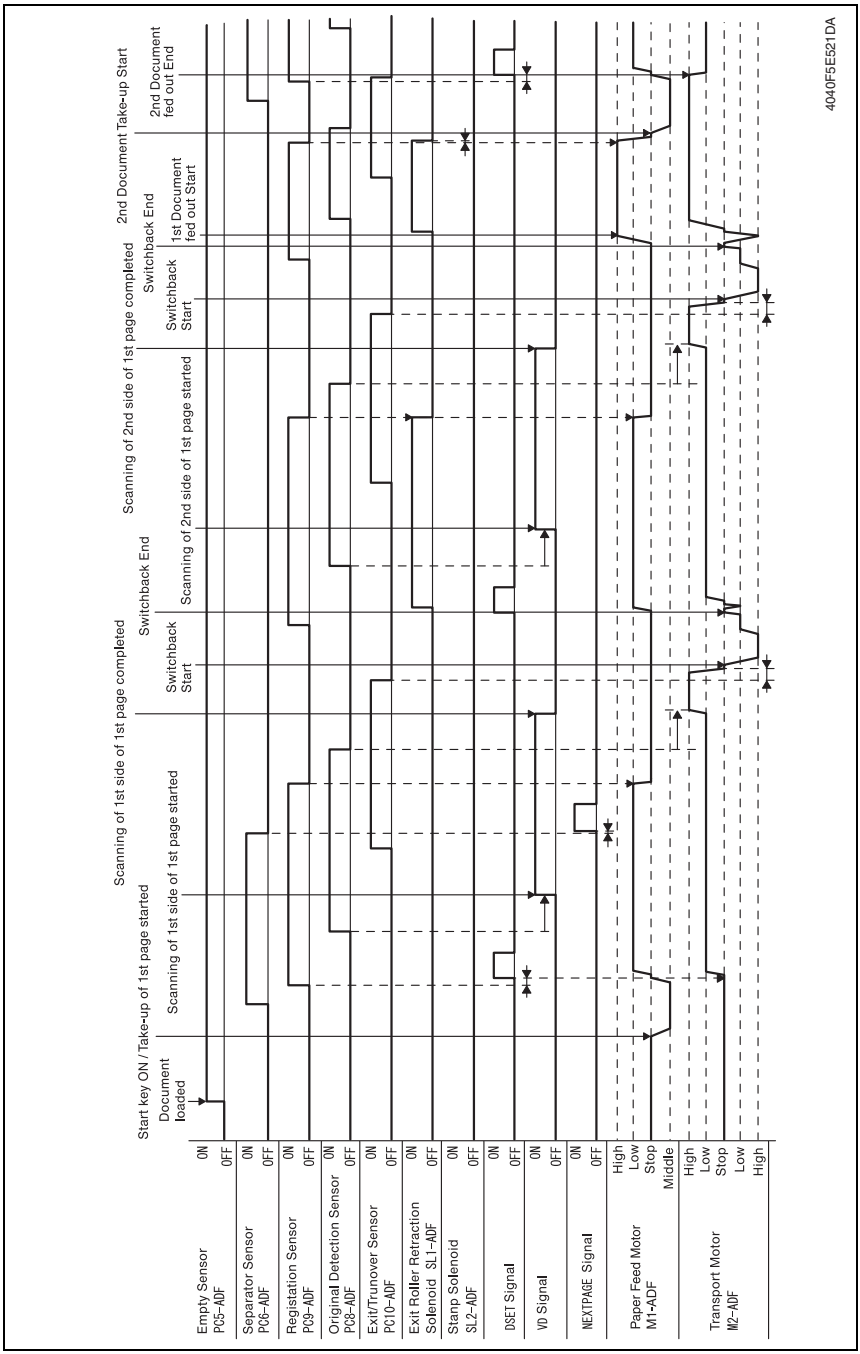


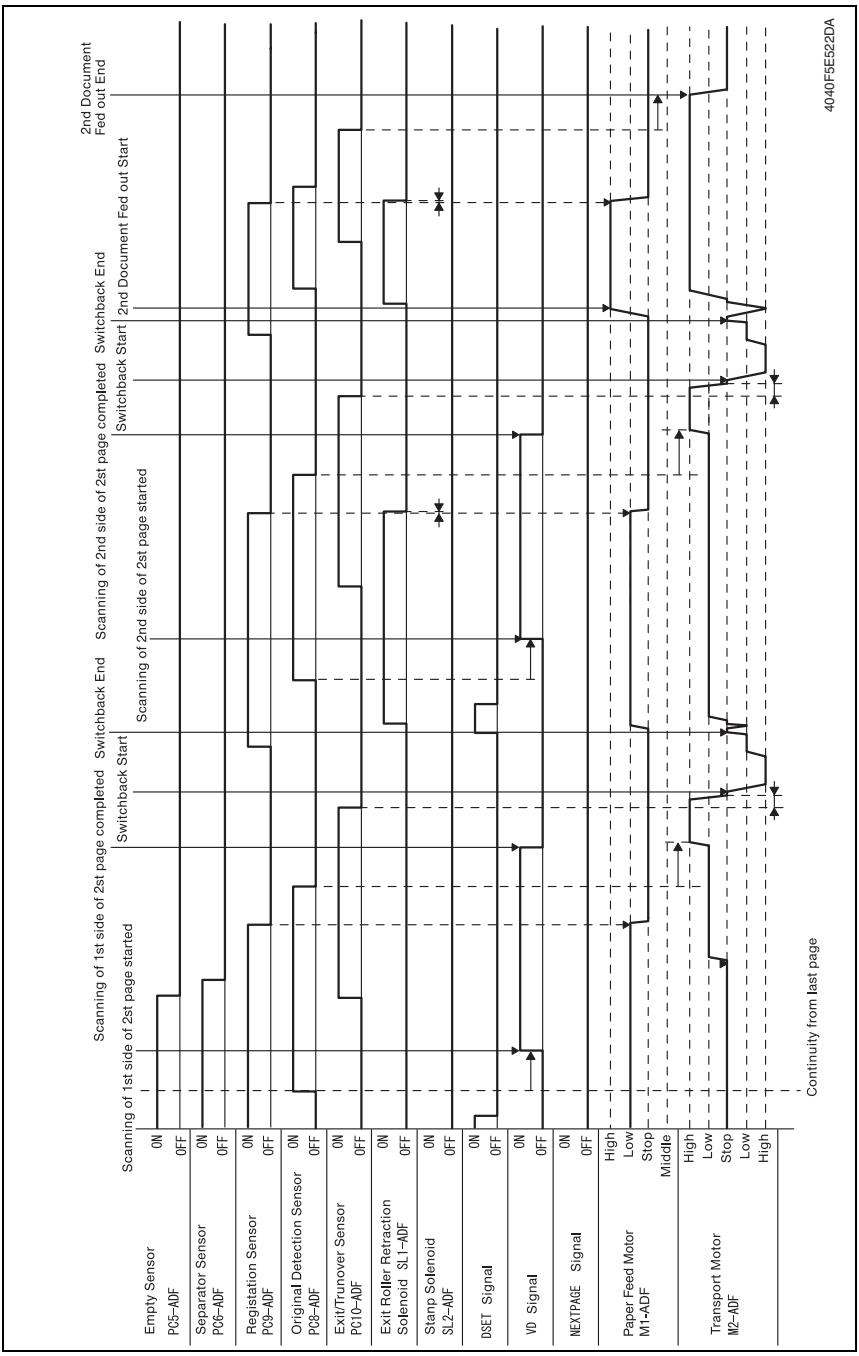
24.2 DF-620

24.2.1 1-Sided Mode (A4 two sheets feeding)

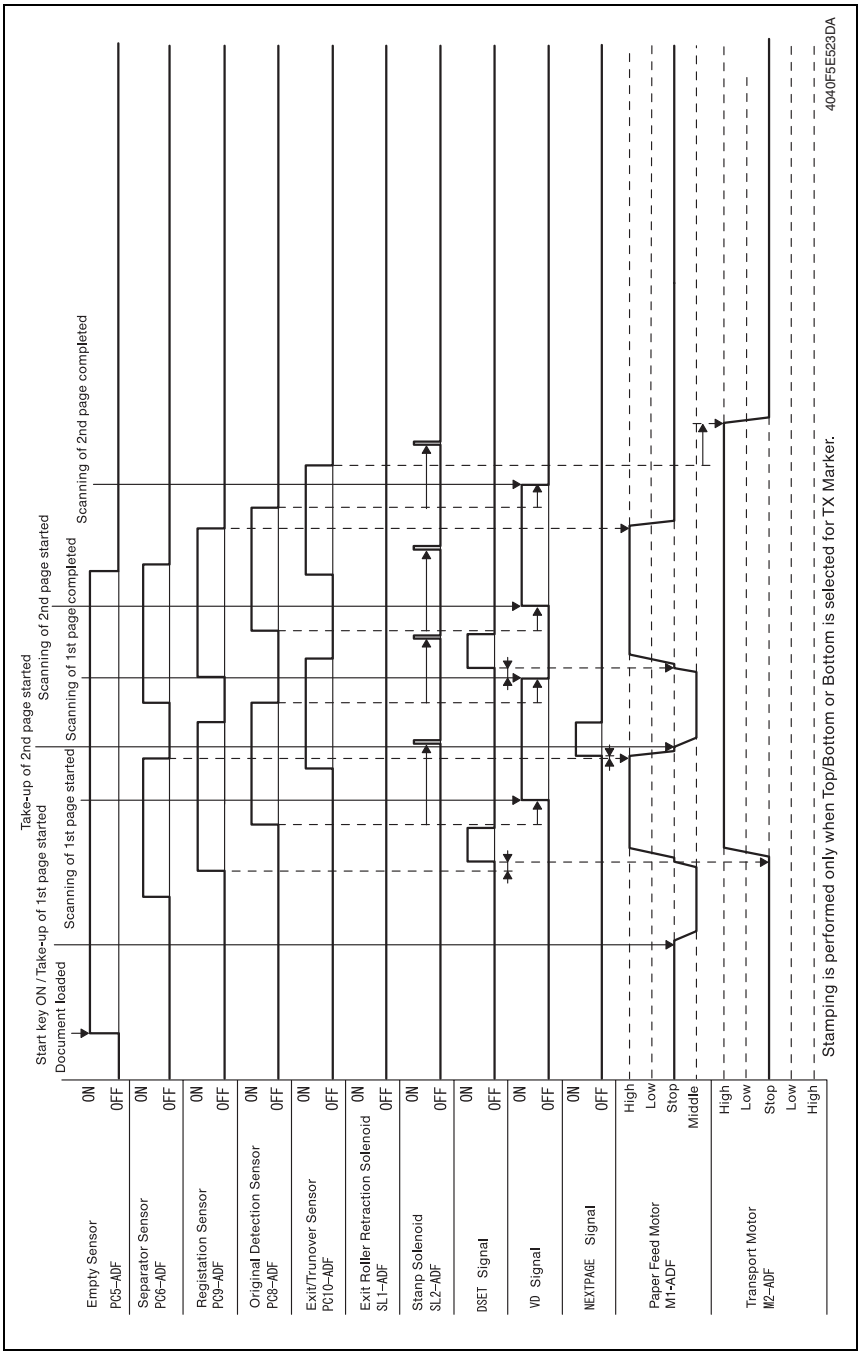


24.2.2 2-Sided Mode (A4 two sheets feeding)

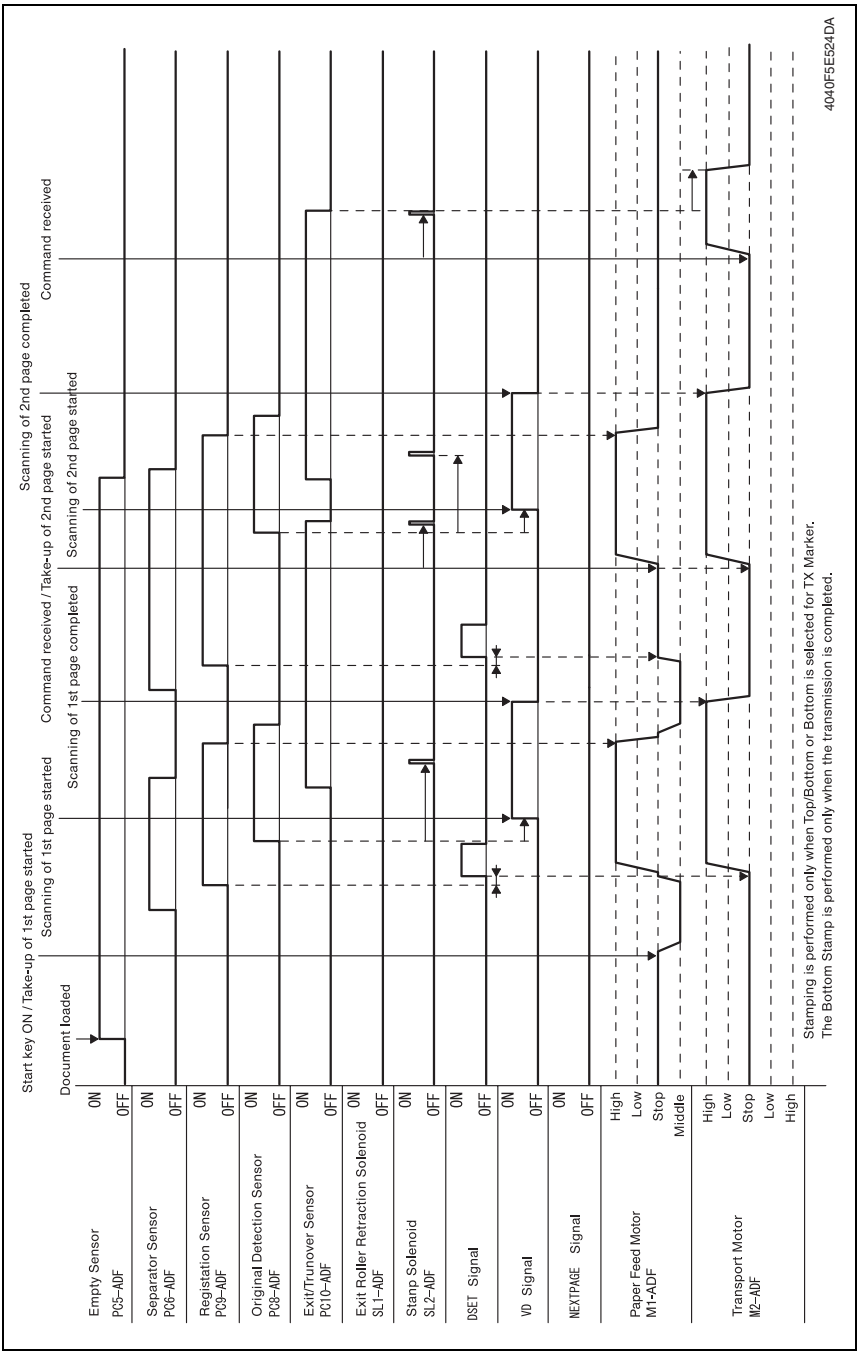



Scanning of 1st side of 2st page started
Switchback Start
Switchback End
Scanning of 2nd side of 2st page started
Scanning of 2nd side of 2st page completed
Switchback Start
Switchback End
2nd Document Fed out Start
2nd Document Fed out End
Empty Sensor PD5-ADF
Separator Sensor PD8-ADF
Registation Sensor PD9-ADF
Original Detection Sensor PD8-ADF
Exit/Trunover Sensor PD10-ADF
Exit Roller Retraction Solenoid SL1-ADF
Stanp Solenoid SL2-ADF
DSET Signal
VD Signal
NEXTPAGE Signal
Paper Feed Motor M1-ADF
Transport Motor M2-ADF
ON
OFF
High
Low
Stop
Middle
Continuity from last page
4040F5E522DA

24.2.3 Fax Fine mode (A4 two sheets feeding)



24.2.4 Fax real-time transmission mode (A4 two sheets feeding)



KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

Duplex Unit/ Switchback Unit

2008.12

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
  A number within ▲1 represents the number of times the revision has been made.

NOTE

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2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

Duplex Unit/Switchback Unit

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

Troubleshooting

OUTLINE

1. Product specifications

A. Type

(1) Duplex Unit

Name	Duplex Unit
Type	Switchback and Circulating Duplex Unit
Installation	Mounted on the right side door of main unit
Document Alignment	Center

B. Paper type

(1) Duplex Unit

Paper Type	Plain paper	56 g/m^2 to 90 g/m^2 (15 to 24 lb)
Paper Size	A5S to A3, 5 $^1/_2$ × 8 $^1/_2$S to 12 $^1/_4$ × 18	

C. Machine specifications

(1) Duplex Unit

Power Requirements	DC 24 V ± 10 % (supplied from the main unit)
	DC 5 V ± 5 % (supplied from the main unit)
Dimensions *1	89 mm (W) x 419 mm (D) x 358 mm (H) 3.5 inch (W) x 16.5 inch (D) x 14 inch (H)
Weight *1	Approx. 2.2 kg (4.75 lb)

*1: Values given only for reference when the Duplex Unit is demounted from the machine, since it is standard on the machine

D. Operating environment

- Conforms to the operating environment of the main body.

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

2. Other

2.1 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

⚠ CAUTION

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**

2.2 Disassembly/Assembly/Cleaning list

2.2.1 Disassembly/Assembly list

No	Section	Part name	Ref. page
1	Exterior parts	Duplex Unit Right Cover	P.4
2		Switch Back Unit Fan Motor Cover	P.5
3		Switch Back Unit Right Cover	P.5

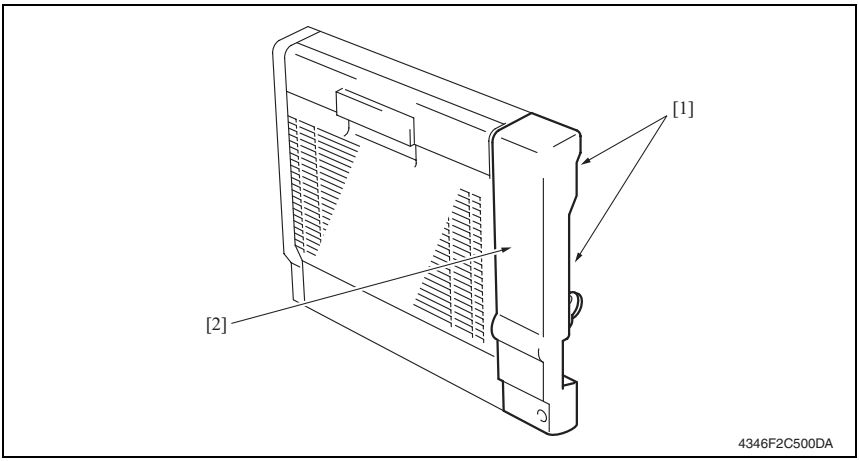
2.2.2 Cleaning parts list

No	Section	Part name	Ref. page
1	Transport section	Duplex Unit Transport Roller/Roll 1, 2	P.5
2		Duplex Unit Transport Roller/Roll 3	P.5
3		Switch Back Unit Transport Roller/Roll	P.6
4	Ventilation Section	Duplex Unit Ventilation Section	P.6

2.3 Disassembly/Assembly procedure

2.3.1 Duplex Unit

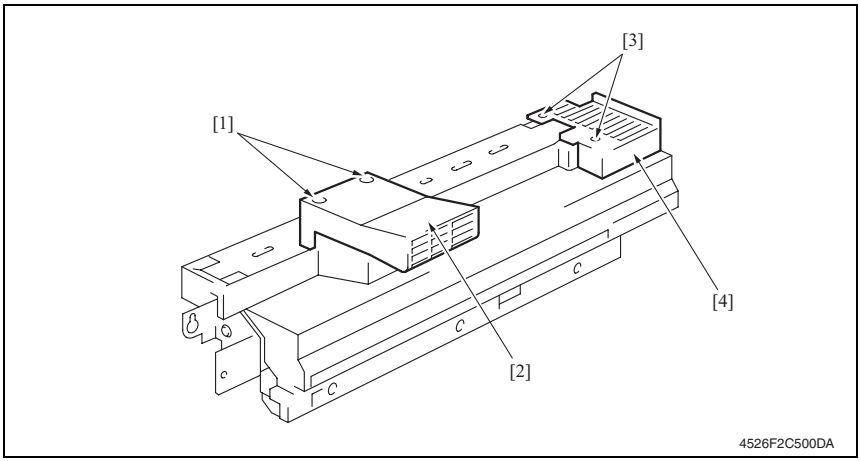
A. Right Cover



1. Remove two screws [1] and Right Cover [2].

2.3.2 Switch Back Unit

A. Fan Motor Cover/Right Cover



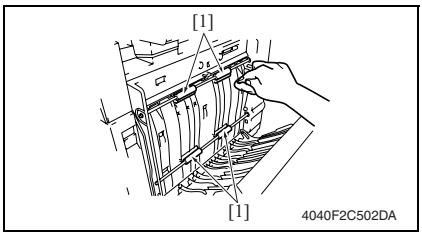
1. Remove two screws [1] and Fan Motor Cover [2].
2. Remove two screws [3] and Right Cover [4].

2.4 Cleaning procedure

NOTE

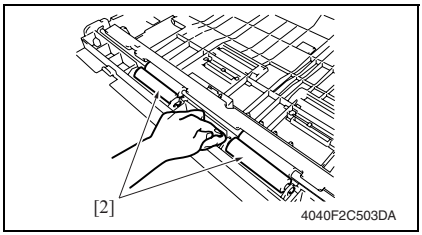
- **The alcohol described in the cleaning procedure represents the isopropyl alcohol.**

2.4.1 Cleaning of the Duplex Unit Transport Roller/Roll 1 and 2



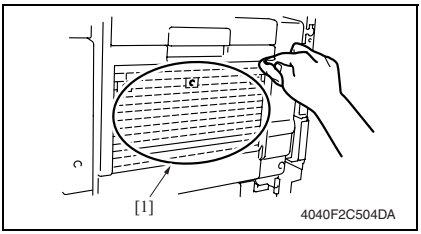
1. Open the Duplex Unit Door.
2. Using a soft cloth dampened with alcohol, wipe the Duplex Unit Transport Rollers/Rolls 1 and 2 [1] clean of dirt.

2.4.2 Cleaning of the Duplex Unit Transport Roller/Roll 3

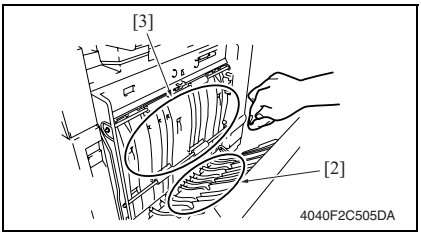


1. Remove the Duplex Unit.
2. Using a soft cloth dampened with alcohol, wipe the Duplex Unit Transport Rollers/Rolls 3 [2] clean of dirt.

2.4.3 Cleaning of the Duplex Unit Ventilation Section

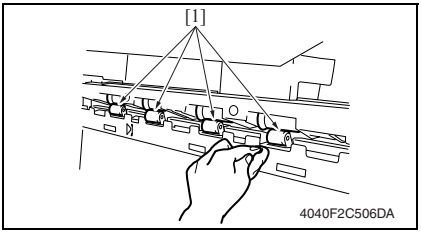


1. Using a soft cloth dampened with alcohol, wipe the outside of the Duplex Unit Ventilation Section [1] clean of dirt.



2. Open the Duplex Unit Door [2].
3. Using a soft cloth dampened with alcohol, wipe the inside of the Duplex Unit Ventilation Section [3] clean of dirt.

2.4.4 Cleaning of the Switch Back Unit Transport Roller/Roll



1. Using a soft cloth dampened with alcohol, wipe the Switch Back Unit Transport Rollers/Rolls [1] clean of dirt.

ADJUSTMENT/SETTING

3. 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 " ".

Advance Checks
Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION
- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

4. I/O Check

4.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main unit in the standby state (including a misfeed, malfunction, and closure failure condition).

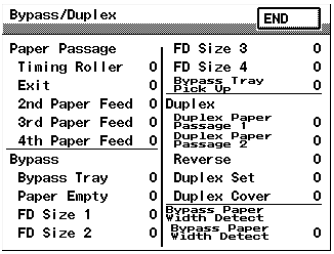
<Procedure>

1. Call the Tech. Rep. Mode to the screen.
   See P.154 of the main body service manual.
2. Touch the [I/O Check].
3. Touch the [Printer].
4. Touch the [Bypass/Duplex].

4.2 I/O check list

4.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main unit.



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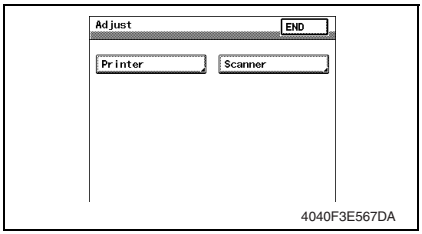
4.2.2 I/O check list

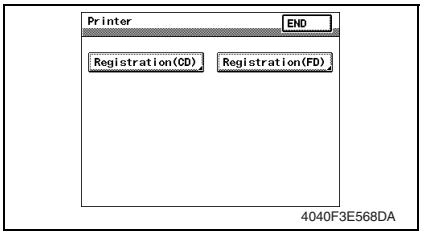
Symbol	Panel display	Part/Signal name	Operation characteristics/Panel display	
			1	0
PC24	Duplex Paper Passage 1	Duplex Unit Upper Transport Sensor	Paper present	Paper not present
PC25	Duplex Paper Passage 2	Duplex Unit Lower Transport Sensor	Paper present	Paper not present
PC26	Revers	Switch Back Unit Sensor	Paper present	Paper not present
-	Duplex Set	Duplex Unit Set signal	Not set	Set
PC23	Duplex Cover	Duplex Unit Door Sensor	Open	Close

5. Adjustment

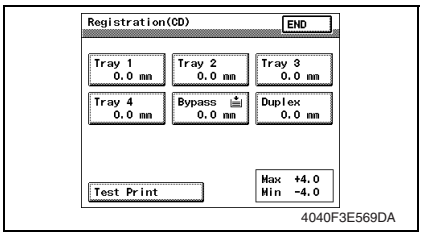
5.1 Adjusting the paper reference position



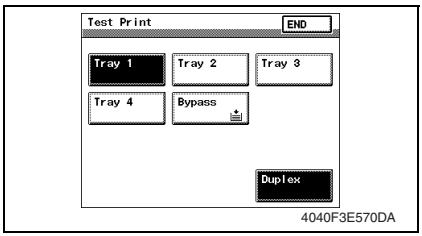
1. Display Adjust Mode.
See P.217 of the main body service manual.
2. Touch the [Printer].



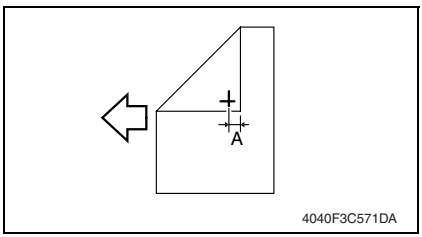
3. Touch the [Registration (CD)].



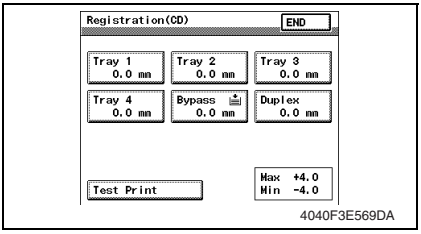
4. Touch the [Test Print].



5. Touch the [Duplex].
6. Press the Start key.



7. Measure the width of printed reference line A
Specification: 10 mm ± 3.0 mm
8. If width A falls within the specified range, finish the adjustment procedure.
If outside the specified range, perform the adjustment below.



9. Touch [END] to display the Registration (CD) screen.
10. Touch the [Duplex].
11. Press the Clear key and use the 10-Key Pad to set the value.

- If width A is wider than the specified range: Enter a negative value.
- If width A is narrower than the specified range: Enter a positive value.

Adjustment range: + 4.0 max. and -4.0 min.

Use the * key to switch between + and -.

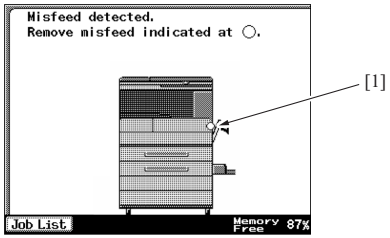
12. Produce another test print and check for width A.

Troubleshooting

6. Jam Display

6.1 Misfeed display

- When misfeed occurs, message, misfeed location “Blinking” and paper location “Lighting” are displayed on the Touch Panel of the main unit.



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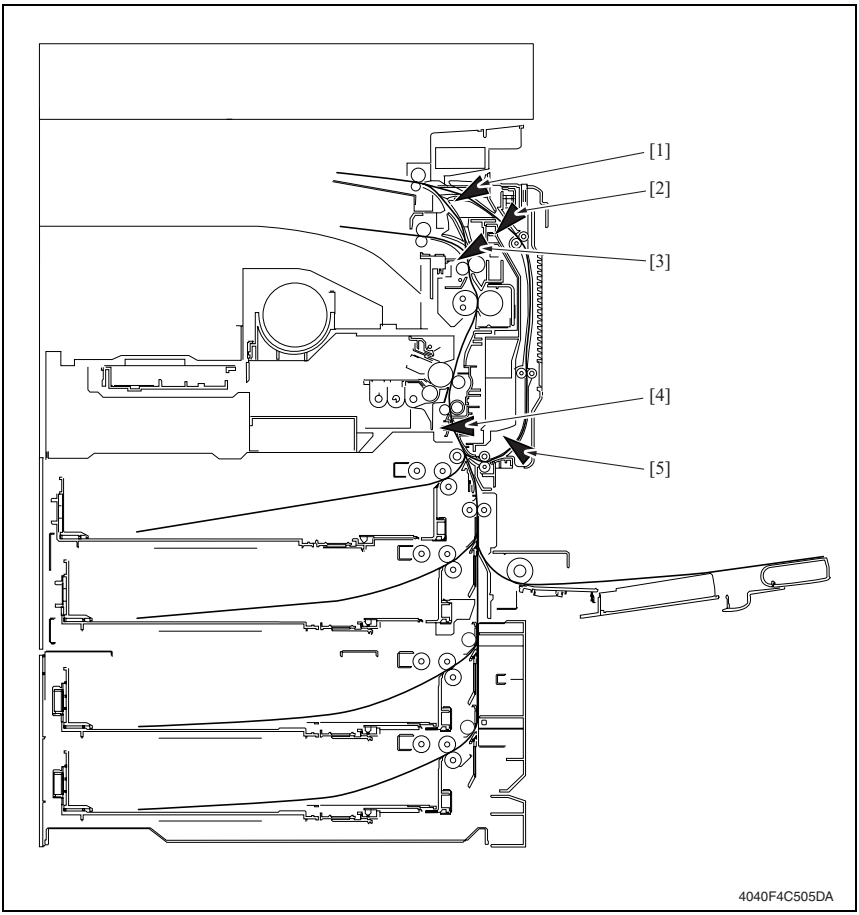
Display	Misfeed location	Misfeed access location	Action
[1]	Duplex Unit Take-Up Section Misfeed Turnover Unit/Duplex Unit Transport Section Misfeed	Duplex Unit Door	P.13

6.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

6.2 Sensor layout



[1]	Switch Back Unit Sensor	PC26	[4]	Synchronizing Roller Sensor	PC1
[2]	Duplex Unit Upper Transport Sensor	PC24	[5]	Duplex Unit Lower Transport Sensor	PC25
[3]	Paper Exit Sensor	PC4			

6.3 Solution

6.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper. Instruct the user on the correct paper storage procedures.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are the Paper Separator Fingers dirty, deformed, or worn?	Clean or replace the defective Paper Separator Finger.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

6.3.2 Duplex Unit Take-Up Section Misfeed

A. Detection Timing

Type	Description
Duplex Unit Take-Up Section misfeed detection	The Synchronizing Roller Sensor (PC1) is not blocked even after the set period of time has elapsed after the Duplex Unit Lower Transport Sensor (PC25) is blocked by the paper.
Detection of paper remaining in the Duplex Unit Take-Up Section	The Duplex Unit Lower Transport Sensor (PC25) is blocked when the Main 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	
Synchronizing Roller Sensor (PC1) Duplex Unit Lower Transport Sensor (PC25)	Mechanical Control Board (PWB-A)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial checks	-	-
2	PC1 sensor check	PWB-A PJ11A-5 (ON)	M-8
3	PC25 sensor check	PWB-A PJ22A-14 (ON)	D-7
4	Replace PWB-A.	-	-

6.3.3 Turnover Unit/Duplex Unit Transport Section Misfeed

A. Detection Timing

Type	Description
Turnover Unit/ Duplex Unit Transport Section misfeed detection	The Switch Back Unit Sensor (PC26) is not blocked even after the set period of time has elapsed after the Paper Exit Sensor (PC4) is unblocked by the paper.
	The Duplex Unit Upper Transport Sensor (PC24) is not blocked even after the set period of time has elapsed after the Switch Back Unit Sensor (PC26) is blocked by the paper.
	The Switch Back Unit Sensor (PC26) is not blocked even after the set period of time has elapsed after the Duplex Unit Upper Transport Sensor (PC24) is blocked by the paper.
Detection of paper remaining in the Turnover Unit/ Duplex Unit Transport Section	The Switch Back Unit Sensor (PC26) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Duplex Unit Upper Transport Sensor (PC24) is blocked when the Main 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	
Paper Exit Sensor (PC4) Switch Back Unit Sensor (PC26) Duplex Unit Upper Transport Sensor (PC24)	Mechanical Control Board (PWB-A)

Step	Operations	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial checks	-	-
2	PC4 sensor check	PWB-A PJ18A-11 (ON)	M-12
3	PC26 sensor check	PWB-A PJ19A-9 (ON)	M-5
4	PC24 sensor check	PWB-A PJ20A-5 (ON)	M-16
5	Replace PWB-A.	-	-

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

bizhub

362/282/222

Standard Controller

2008.12

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
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2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

Standard Controller

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OUTLINE

1. Controller specifications

A. Type

Type	Built-in type controller	
Power Requirements	Shared with main unit	
CPU	RM5231	
Program ROM	32 MB	
RAM	192 MB	
HDD	40 GB (Option)	
Host Interface	Standard: Ethernet (100BASE-TX/10BASE-T), USB 1.1/2.0 Option: IEEE1284	
Frame type	Ethernet 802.2 Ethernet 802.3 Ethernet II Ethernet SNAP	
Supported protocols	TCP/IP IPX/SPX NetBEUI AppleTalk (EtherTalk)	
Print speed	bizhub 362	36 pages/minute (Letter)
	bizhub 282	28 pages/minute (Letter)
	bizhub 222	22 pages/minute (Letter)
Fast print time	bizhub 362	4.8 seconds or less (Letter)
	bizhub 282 bizhub 222	5.3 seconds or less (Letter)
Printer language	PCL5e emulation PCL6 (XL 2.1) emulation PostScript 3 emulation	
Operating Environmental Requirements	Temperature 10 to 30 °C Humidity 15 to 85% RH	
Resolution	Data processing	600 x 600 dpi
	Printing	600 x 600 dpi
Compatible Paper Size	Max. standard paper size	
Fonts	PCL: Latin 80 fonts, Postscript 3 emulation: Latin 136 fonts	

B. Supporting client specifications

PC		IBM PC and its compatible
OS	Server	Windows NT 4.0, Windows 2000 (Service Pack 4 or later), Windows Server 2003, or Windows Server 2008
	Client	Windows 2000, Windows XP, Windows Vista, or Windows NT 4.0 Mac OS 9.2 or later, Mac OS X 10.2, Mac OS X 10.3, Mac OS X 10.4, Mac OS X 10.5
Printer driver		PCL6: • Windows 2000 (Service Pack 4 or later), Windows XP (Service Pack 2 or later), or Windows Server 2003 printer driver • Windows NT 4.0 (Service Pack 6a) printer driver • Windows Vista, Windows Vista x64 printer driver • Windows Server 2008, Windows Server 2008 x64 printer driver PS3: • Windows NT 4.0 printer driver • Windows 2000, Windows XP (Home/Professional), Windows Server 2003 printer driver • Windows XP Professional x64, Windows Server 2003 x64 printer driver • Windows Vista, Windows Vista x64 printer driver • Windows Server 2008, Windows Server 2008 x64 printer driver • Mac OS 9.2 PPD file • Mac OS X 10.2 printer driver • Mac OS X 10.3/10.4 printer driver • Mac OS X 10.5 printer driver
Utility		PageScope Web Connection Web browser: Windows NT 4.0 Microsoft Internet Explorer 4 or later recommended Netscape Navigator 4.73 or 7.0 Windows 2000 Microsoft Internet Explorer 5 or later recommended Netscape Navigator 7.0 Windows XP/Server 2003 Microsoft Internet Explorer 6 or later recommended Netscape Navigator 7.0 Windows Vista/Server 2008 Microsoft Internet Explorer 7 or later Netscape Navigator 7.0 * If using Microsoft Internet Explorer 5.5, use Service Pack 1 or later.

MAINTENANCE

2. Firmware upgrade

2.1 Preparations for Firmware rewriting

2.1.1 Service environment

- Drive which enables writing/reading of Compact flash
- Compact flash (with 32 MB or more)

2.1.2 Writing into the Compact flash

- Copy the firmware files using the computer.

NOTE

- **The copying operation should be performed on the files contained in the folder, instead of the folder.**
- **Copy only those files to be upgraded to the compact flash.**
- **If wrong firmware is copied, no screen display is given and thus no firmware can be downloaded.**

2.1.3 Checking ROM version

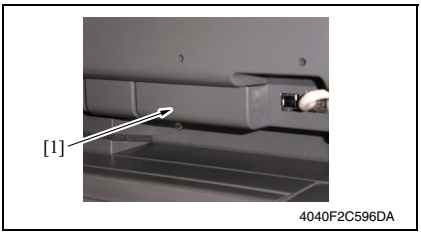
- Before attempting to upgrade the firmware, check the current ROM version.
  See P.210 of the main body service manual.

2.2 Firmware rewriting

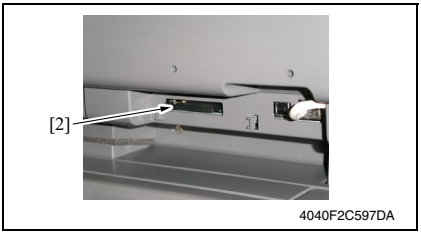
NOTE

- **NEVER attempt to remove or insert the compact flash with the machine power turned ON.**

2.2.1 MSC



1. Turn OFF the main power switch.
2. Remove the Compact flash Cover [1].



3. Insert the compact flash card [2], in which only the MSC upgrading files have been written, into the slot.

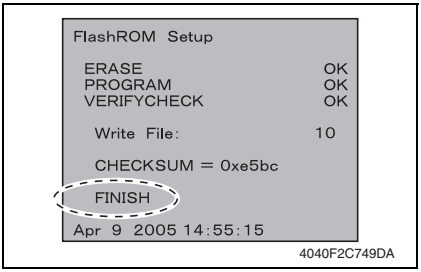
NOTE

- **Make sure that this compact flash card contains only the upgrading firmware of the MSC, and not that of the engine or Finisher.**

NOTE

- **Be sure to turn ON the sub power switch first before turning ON the main power switch.**

4. Turn ON the main power switch.

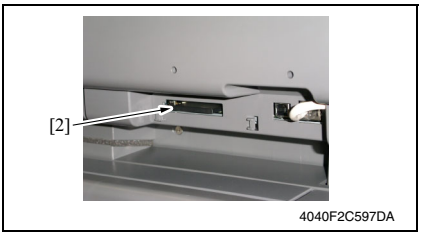


5. The firmware upgrading sequence will start.

6. When the upgrading sequence is completed, which is notified by the message “FINISH” appearing on the screen, turn OFF the main power switch.

NOTE

- **NEVER turn OFF the main power switch until the message “FINISH” appears on the screen.**



7. Remove the Compact flash card [2] from the slot.

8. Turn ON the main power switch.

9. Call the Tech. Rep. Mode to the screen.
See P.154 of the main body service manual.

10. Select [ROM Version].

11. Make sure if the version of Firmware is updated.

TROUBLESHOOTING

3. Troubleshooting procedures

3.1 Unable to print

No.	Symptom	Probable cause	Action
1	The message “No printers are connected” or “Print error” appears.	The printer driver selected for printing is not compatible with the printer controller.	Check the printer name selected.
		The network cable or USB cable is disconnected.	Check that the cable is connected properly.
		An error has occurred in this machine.	Check this machine’s control panel.
		Available memory space is not sufficient.	Perform a test print to check whether printing is possible.
2	A postscript error appears.	Available computer memory space is not sufficient.	Perform a test print to check whether printing is possible.
		There is an error in the application software settings.	Refer to the user’s manual of the application software to check the settings.
		The file printing settings are incorrect.	Change the settings and try to print again.
3	The machine does not start printing although the print job was completed on the computer.	The printer driver selected for printing is not compatible with the printer controller.	Check the printer name selected.
		The network cable or USB cable is disconnected.	Check that the cable is connected properly.
		An error has occurred in this machine.	Check this machine’s control panel.
		A print job is queued in this machine, delaying printing.	Check the job order on the Active Jobs list of the machine’s control panel.
		“Save in User Box” was selected for the print job.	Check if the print job is stored on the Box screen of this machine’s control panel.
		“Secure Print” was selected for the print job.	Check if the print job is held on the Secure Print screen of this machine’s control panel.
		If the account track settings have been applied, an unregistered account name (or password) may have been entered.	Enter the correct account name (or password).
		If the authentication settings have been applied, an unregistered user name (or password) may have been entered.	Enter the correct user name (or password).
		Available computer memory space is not sufficient.	Perform a test print to check whether printing is possible.
		The connection of this machine to the network is not yet established (while connecting to a network).	Consult with the network administrator.

3.2 Unable to specify desired settings or unable to print as specified

No.	Symptom	Probable cause	Action
1	A printer driver setting cannot be selected.	Some functions cannot be combined.	Do not try to select settings that are not available.
2	The “Conflicts” message with “Unable to Select” or “Function Canceled” appears.	An incorrect combination of functions has been specified.	Check the settings and specify the functions correctly.
3	Printing is not performed as specified.	Incorrect settings are specified.	Check each setting in the printer driver.
		A combination of functions, although possible in the printer driver, is not possible with this machine.	
		The paper size, orientation, and other settings specified in the application have priority over those specified in the printer driver.	Enter the correct settings in the application.
4	The watermark cannot be printed.	The watermark is not correctly set.	Check the watermark settings.
		The watermark density is set to a level that is too low.	Check the density settings.
		Watermarks cannot be printed in graphics applications.	No watermark can be printed in this case.
5	The staple function cannot be specified.	Stapling is not possible if “Paper Type” is set to “Thick” or “Transparency”.	Check each setting in the printer driver.
		The staple function requires optional finisher.	Install the required optional finisher and enable it using the printer driver.
6	Stapling cannot be performed.	Number of pages that can be stapled: Up to 50 pages of Letter A4S or smaller plain paper.	Print by specify the number of pages per set for the number of pages that can be stapled.
		Number of pages that can be center-stapled: Up to 15 pages of plain paper.	
		Stapling is not possible if the document contains pages of different sizes.	Check the document.
7	The stapling position is not as expected.	The orientation setting is not correct.	Check the stapling position in the printer driver setup dialog box.
8	The hole punch function cannot be specified.	Hole punching cannot be specified if “Booklet”, “Transparency”, “Thick2”, “Thick3”, or “Envelope” is selected.	Check each setting in the printer driver.
		For the hole punch function, the punch unit must be installed on optional finisher.	Install the required optional finisher and enable it using the printer driver.

No.	Symptom	Probable cause	Action
9	The pages are not punched.	Printed pages may be fed out without being punched if the paper is loaded into the paper source with an incorrect orientation.	Check the orientation setting.
10	The hole punch position is not as expected.	The orientation setting is not correct.	Check the punch position on the Layout tab of the printer driver setup dialog box.
11	The form is not printed properly.	Available computer memory space is not sufficient.	Simplify the form to reduce the data size.
12	The image is not printed properly.	Available computer memory space is not sufficient.	Simplify the image to reduce the data size.
13	Paper is not fed from the specified paper source.	Paper will not be fed from the specified paper source if that paper source is loaded with paper of a different size or orientation.	Load the paper source with paper of the appropriate size and orientation.
14	The numbering function is not performed.	The “Collate” (for Windows) or “Collated” (for Mac OS X) check box is selected on the print setup dialog box.	Clear the “Collate” (for Windows) or “Collated” (for Mac OS X) check box.
15	Proof and Print is no be performed.		

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

FK-503

2008.12

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  to the left of the revised section.
  A number within represents the number of times the revision has been made.

- To indicate clearly a section revised, show  in the lower outside section of the corresponding page.
  A number within 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.

Date	Service manual Ver.	Revision mark	Descriptions of revision
2008/12	1.0	—	Issue of the first edition

CONTENTS

FK-503

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

OUTLINE

1. Product specifications

A. Type

Memory Capacity	32MB	
Communication mode	G3/ECM	
Scanning resolution (main line x feed line)	8 x 3.85 line/mm 8 x 7.7 line/mm 8 x 15.4 line/mm 16 x 15.4 line/mm	
Data speed	G3 / ECM: 2.4 Kbps - 33.6 Kbps	
Transmission time	G3 / ECM: Image signal - 2 sec approx. (V.34 JBIG)	
Coding method	MH / MR / MMR / JBIG	
Applicable network	G3/ECM	Phone line, FAX communication network, dedicated line
Options	Stamp Unit SP-501 Fax Multi Line ML-502	

B. Functions

Function		bizhub 362, 282, 222
Speed	High speed scanning	O (0.55 sec/Letter fine)
	High speed printout	O bizhub 362 36 ppm/A4 bizhub 282 28 ppm/A4 bizhub 222 22 ppm/A4
	ECM mode	O (2 sec approx./Std document)
	High speed half tone	O
Resolution	Super fine mode	O
	Half tone transmission	O
	Auto retransmission after error	O (ECM)
	Full automatic exposure control	O
	Manual brightness control	O (Only for copy)
	Smoothing	O
	Mixed mode (Text + Photo)	O
Operability	One-touch dialing	O (540 destinations)
	Abbreviated dialing	-
	One-touch program dialing	O (30)
	Auto re-dialing	O
	Transmission Booking	O (200)
	Broadcast Destination	O (300)
	Origination Selecting	O (8 types)
	LCD display	O (320 x 240)
	Operation	O (Analog touch panel)
	Disable copy function	-
	Select auto-mode screen	O (Copy/Fax automatic switch)
Utility functions	Automatic selection of print paper size	O
	Password communication	O
	Multi polling	-
	Polling at regular times	-
	Nonstorage transmission	O
	Priority transmission	O
	Insert destination	O
	Message printing	-
	Automatic pause for PSTN number	O
	Display communication result	O
	Record TSI information	O
	ID display/record	O (Received date and time record)
	Power Source saving mode	O
	Switch document reading length (1m/4m)	-
	ADF 2 sided transmission	O

Function		bizhub 362, 282, 222
Report functions	Activity report (TX/RX)	O
	Transmission report	O (with document merge)
	Incompleted transmission report	O (with document merge)
	Serial broadcast report	O (with document merge)
▲	Account list	O
	One-Touch list	O
	Fax program list	O
	Bulletin Board list	O
▲	Confidential list	O
▲	Forwarding list	-
	Setting list	O
Memory functions	Multi access	O
	Transmission Booking Document Number	O (200)
	Retransmission	O (Destination changeable)
	Document retransmission	O
	Reception by memory	O
	Transmission Manage ment Docu-ment Number	O (200)
	Batch Tx	O (30 destinations)
	Memory polling transmis sion	O
	Confidential transmission Confidential print	O (F code)
	Serial broadcast	O (300 destinations)
	Relay broadcast	O (F code)
	Memory full control	O (Separate Tx)
	Quick memory transmission	O
	File backup	O (12H)
	Rotated Rx	O
	Selective polling	O
System Configuration	Relay transmission	-
	Extra telephone	O (PB forwarding reception possible)* *PSTN (Port 1 only)
▲	Account track mode	O (1,000 sections)
	Chain dialing	O
	Multi-port	O (G3 multi-option)
	Hard disk	-
	Inch/mm conversion	O
	Memory	O (32MB)
▲ Mutual Connectivity	ITU-T G4	-
	ITU-T G3/ECM	O
	Facsimile communication network	O (G3)
Maintenance	Self diagnostics	O
	Counter per application	O
	Adjust touch panel resistration	O

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MAINTENANCE

2. Other

2.1 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.**

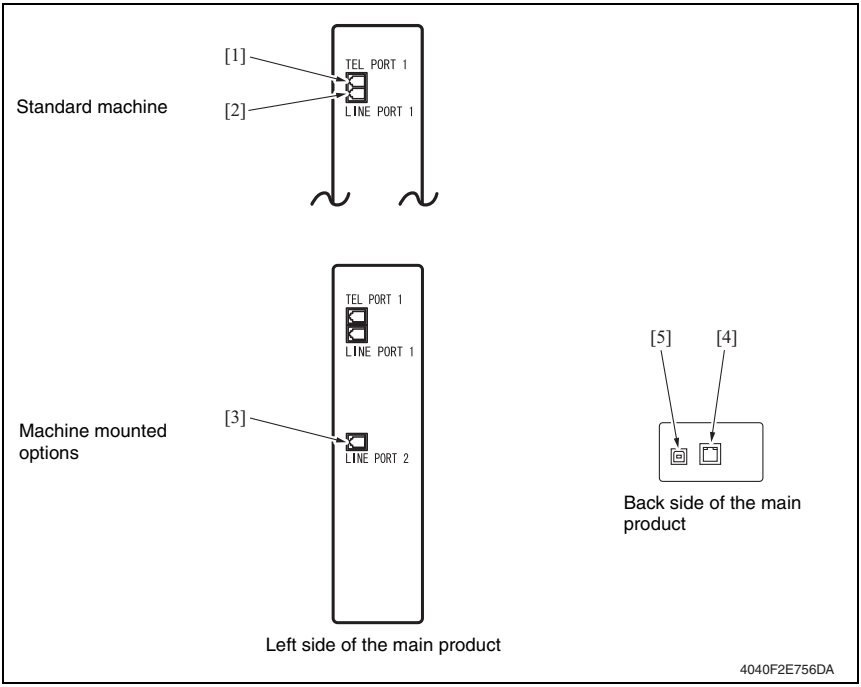
D. Removal of PWBs

⚠ CAUTION

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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. Connection

- Connect cables from the phone line and other devices with the system as shown below.

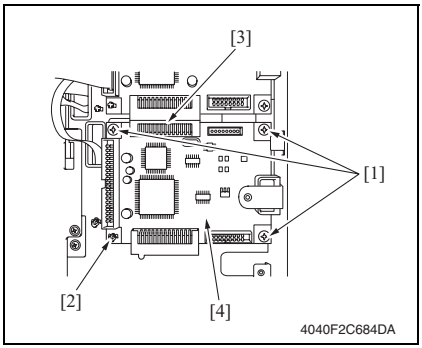


No.	Name	Connect to		Remark
[1]	TEL PORT1	Extra telephone set	Standard	
[2]	LINE PORT1	Phone line (PORT1)	Standard	
[3]	LINE PORT2	Phone line (PORT2)	Option	Option (G3 Multi-port)
[4]	LAN	LAN (PC print option)	Standard	Used in the Scanner & iFAX function and printer function (printer function only for USB)
[5]	USB	Printer Controller	Standard	

4. Disassembly/Reassembly

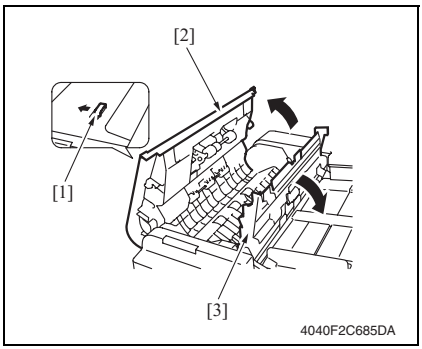
4.1 FAX Board (with G3 Multi Port option)

1. Remove the Upper Rear Cover.
See P.51 of the main body service manual.
2. Remove the Rear Cover.
See P.52 of the main body service manual.

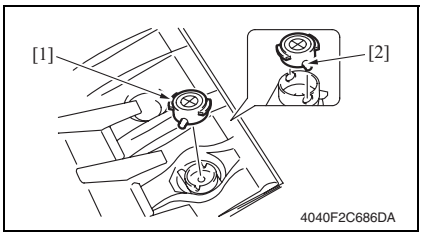


3. Remove three screws [1].
4. Unlock the card spacer [2].
5. Sliding the Fax Board [4] downward, disconnect the connector [3] and then remove the Fax Board [4].

4.2 Spare TX Marker Stamp 2



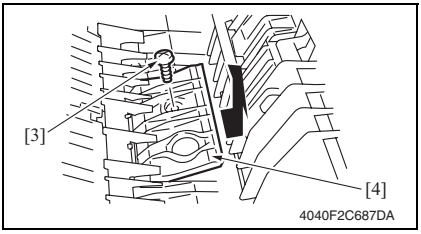
1. Unlock the Top Door of the Automatic Document Feeder [1].
2. Open the Top Door [2].
3. Open the Processing Guide [3].



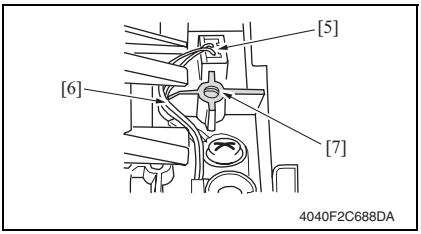
4. Using tweezers, pick up and remove the stamp (ink portion) [1].

NOTE

- **At reinstallation, align the round protrusion [2] on the stamp with a slit in the TX Marker Stamp 2.**



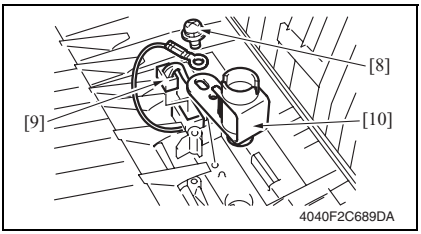
5. Remove the screw [3] and the Guide Plate [4].



6. Disconnect the connector [5] and remove the hookup harness [6].

NOTE

- **At reinstallation, use care not to allow the hookup harness to ride over the rib [7].**



7. Remove the screw [8], disconnect the connector [9], and remove TX Marker Stamp 2 [10].

NOTE

- **Make sure that this step is performed only after the stamp (ink portion) has been removed.**

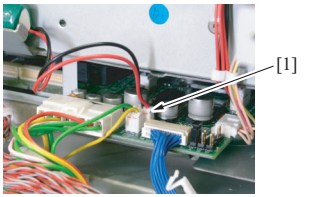
4.3 Ni-MH battery Replacement

1. Check on the screen that the memory capacity still available for use reads 100%.

NOTE

- **If the memory capacity does not read 100%, let the machine output contents of the memory or wait until the machine completes transmission.**

2. Turn OFF the Main Power Switch.
3. Remove the Upper Rear Cover.
See P.51 of the main body service manual.



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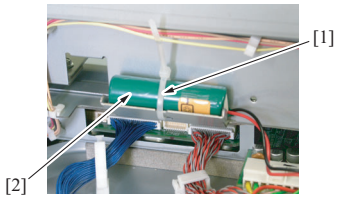
4. Unplug one connectors (CN10) [1] of the MFB3 Board.



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5. Tie band [1] is cut with nippers, and the Ni-MH battery [2] is replace.

6. Turn ON the Main Power Switch.

NOTE

- **After the Ni-MH battery has been replaced with a new one, be sure to turn ON the Main Power Switch.**
- **Discard the used battery in accordance with the corresponding local regulations and NEVER discard it or let it discharge on the user's premises.**

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ADJUSTMENT/SETTING

5. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

6. Utility/Counter Mode

6.1 Utility/Counter Mode function tree

- The function tree is shown to comply with the format displayed on the screen.

NOTE

- **The following function tree shows only the fax-related functions.**

Utility/Counter					Ref. page
User Setting	User's Choice	5/6	Output Tray Settings		P.15
		6/6	Default Screen	Default LCD Screen	P.15
				Default FAX Screen	P.15
	FAX *1	One-Touch			P.16
		Index			P.16
		FAX Program			P.16
		Domain Name			P.16
		Bulletin			P.16
		Conf. Box			P.16
User Management	Line Monitor Sound				P.17
	Memory RX ON/OFF				P.17
	POP3 RX				P.17
Admin. Management	Admin. 1	Initial Setting	Date & Time Setting	Date & Time Setting	P.18
			Language for Communication		P.18
			Self-Telephone # information		P.18
			TSI Registration		P.18
			Self-ID		P.19
		Admin. Set	Restrict One-Touch Editing		P.19
			Activity Report E-Mail TX		P.19
		TX Settings	Quality/Mode	Default Quality	P.19
				Default Density	P.19
				Communication Mode	P.20
			Comm. Menu	TX	P.20
				TSI	P.20
				Rotation TX	P.20
				2-Sided TX	P.20
		RX Settings	Memory RX Timer Setting	Memory RX Time	P.21
				Memory Lock Pass-word	P.21
			Confidential RX User Box Delete		P.21

Utility/Counter					Ref. page
		FAX Setting	RX Functions	Reception Mode	P.21
				Number of RX Call Rings	P.21
			Password Communication	Communication Password	P.22
		Print Lists	Setting List		P.22
		Report Settings	TX Report		P.22
			Activity Report		P.22
		Document Management	TX Document	TX Forwarding	P.23
			RX Document	F-CODE	P.23
				Port	P.23
				All Other Documents	P.23
	Admin. 2	Network Settings	Network Setting 2	SIP-FAX Settings *1	P.24
Reports *1	TX Report				P.24
	RX Report				P.24
	One-Touch List				P.25
	Program List				P.25
	Bulletin List				P.25
	Confidential List				P.25

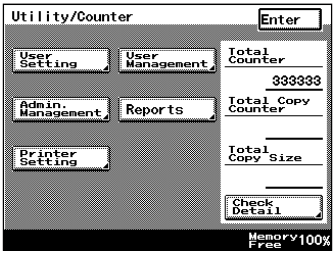
NOTE

- **Keys displayed on screens are different depending on the setting.**
- ***1: If enhance security is set ON, different screen is shown.**

6.2 Utility/Counter Mode function setting procedure

6.2.1 Procedure

1. Press the Utility/Counter key.
2. The Utility/Counter mode screen will appear.



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6.2.2 Exiting

- Touch the [Enter] key.

6.2.3 Changing the setting value in Utility Mode functions

- Use the +/- key to enter or change the setting value.
- Use the 10-Key Pad to enter the setting value. (To change the setting value, first press the Clear key before making an entry.)

6.3 Settings in the User Setting

NOTE
- **Only the fax-related functions will be described for User Setting.**

6.3.1 User's Choice 5/6

A. Output Tray Settings
(1) Faxes/Prints

Functions	• To set the output bin in each of different applications when a finishing option is mounted. • Different contents of display are given depending on the type of option mounted.
Use	• When changing the finishing tray during reception of fax or computer printouts.
Setting/ Procedure	<Port 1> • The default setting is "1". "1" 2 (3) <Port 2> • The default setting is "1". "1" 2 (3) <Faxes/Prints> • The default setting is "1". "1" 2 (3)

6.3.2 User's Choice 6/6

A. Default Screen
(1) Default LCD Screen

Functions	• To set the default screen that is preferentially selected upon auto clear or similar event.
Use	• When changing the default screen that is preferentially selected upon auto clear or similar event.
Setting/ Procedure	• The default setting is "Copy". "Copy" FAX Scanner FAX/Copy Auto

(2) Default FAX Screen

Functions	• To set the default screen that is preferentially selected when the fax is selected.
Use	• When changing the default screen that is preferentially selected when the fax is selected.
Setting/ Procedure	• The default setting is "One-Touch". "One-Touch" Search Direct Input Index

6.3.3 FAX

NOTE

- **It is shown on [Admin. 1] when security mode is set ON.**

A. One-Touch

Functions Use	• To store a destination in a one-touch dial key or change or delete one that has previously been stored as one-touch dial.
Setting/ Procedure	• Up to a total of 540 different destinations can be stored, each screen containing 15. *1.* Touch the [One-Touch]. *2.* Select the specific key, in which a destination is to be stored or for which a previously stored destination is to be modified or deleted. *3.* Make the necessary settings.

B. Index

Functions Use	• To group one-touch dials into different index keys.
Setting/ Procedure	• There are a total of 36 index keys.

C. FAX Program

Functions Use	• To store functions to be used during communications together with the destination information. • It is necessary to store in advance the one-touch dial or abbreviated dial before storing this function.
Setting/ Procedure	• Up to 30 programs can be set.

D. Domain Name

Functions	• To set part of the address in advance as address input support.
Use	• When it is required that address input be made swiftly
Setting/ Procedure	*1.* Touch the [Domain Name]. *2.* Touch the key, for which Domain Name is to be stored or modified. *3.* Type the characters (up to 64 en-size characters) and touch [Enter].

E. Bulletin

Functions Use	• To make settings necessary for setting up a bulletin board.
Setting/ Procedure	*1.* Touch the [Bulletin]. *2.* Touch the number of the bulletin board to be stored, or modified or deleted. *3.* Make the necessary settings.

F. Conf. Box

Functions Use	• To register a private box, in which a fax message with an F-CODE is to be stored.
Setting/ Procedure	*1.* Touch the [Conf. Box]. *2.* Select the specific key, in which a private box is to be set or in which previously stored private box information is to be modified or the private box itself is to be deleted. *3.* Make the necessary settings.

6.4 Settings in the User Management

6.4.1 Line Monitor Sound

Functions Use	• To set the volume of the line monitor sound that can be heard from the monitor speaker during fax transmission.
Setting/ Procedure	• The default setting is “3”. 0 (mute) to 5

6.4.2 Memory RX ON/OFF

Functions Use	• To allow the machine to produce a print temporarily even in the off mode. • A print control password is necessary to print data.
Setting/ Procedure	*1.* Touch the [Memory RX ON/OFF]. *2.* Type the 4-digit password (default value: 1111) and touch [Enter]. *3.* Touch the [Lock OFF]. *4.* To halt the print cycle, touch [Lock ON] and then [Enter] while the print cycle is being run. *5.* Touch [Temporarily Print] to resume the print cycle.

6.4.3 POP3 RX

Functions Use	• To check reception from the POP3 server.
Setting/ Procedure	*1.* Touch the [POP3 RX].

6.5 Settings in the Admin. Management

- The Admin. Management will be available by entering the administrator password (8 digits) set by the Admin. Set. (The administrator password is initially set to “12345678”)

6.5.1 Admin. 1

A. Initial Setting

(1) Date & Time Setting

<Date & Time Setting>

Functions	• To set time and date for the fax machine.
Use	• When setting or changing the time and date set for the fax machine.
Setting/ Procedure	• Enter the day, month, and year, and time-of-day from the 10-Key Pad. • Touch [Enter] to start the clock.

(2) Language for Communication

Functions	• To set the language used with the fax machine.
Use	• To change the language used with the fax machine.
Setting/ Procedure	• The default setting is “English”. Japanese “English”

(3) Self-Telephone # information

Functions Use	• To register information required for fax communication, including the telephone number of the local fax machine, whether or not a PBX is available, and the type of line.
Setting/ Procedure	*1.* Touch the [PBX Connection Mode]. *2.* Touch [Self-telephone #] and enter the telephone number. *3.* Touch the [PBX Connection Mode]. [Extension]: If a connection is made via the PBX to the ordinary fixed line [Outside]: If a connection is made directly to the ordinary fixed line * If [Extension] is selected, enter the Outside Line Access Code. *4.* Touch the [Dial Method]. [DP20]: 20 pps pulse dialing line [DP10]: 10 pps pulse dialing line [PB]: Tone dialing line

(4) TSI Registration

Functions	• To set the name (of the sending party) to be notified to the recipient.
Use	• When changing the name (of the sending party) to be notified to the recipient.
Setting/ Procedure	• Up to eight different names can be registered. *1.* Touch the [TSI Registration]. *2.* Select the number, for which the sending party is to be registered. *3.* Enter the name of the sending party and touch [Enter].

(5) Self-ID

Functions	• To register the name, telephone number, and other information of the local machine as an ID.
Use	• When the ID is to be printed on journals and displayed on the panel of the fax machine on the receiving end.
Setting/ Procedure	*1.* Touch the [Self-ID]. *2.* Enter the local machine ID (up to 12 en-size characters) and touch [Enter].

B. Admin. Set

(1) Restrict One-Touch Editing

Functions	• To restrict the user from registering or modifying one-touch dials.
Use	
Setting/ Procedure	• The default setting is “OFF”. ON “OFF” **NOTE** • **Selecting Authentication device (PageACSES) or Vender 2 for Meter Count Mode will change the display to “ON”.**

(2) Activity Report E-Mail TX

Functions	• To register e-mail addresses where activity reports are to be sent.
Use	• To receive activity report’s data from registered e-mail addresses and organize it with CSV file format.
Setting/ Procedure	*1.* Touch the [Activity Report E-Mail TX]. *2.* Register e-mail addresses. *3.* Touch the [Enter].

C. TX Settings

(1) Quality/Mode

<Default Quality>

Functions	• To set the default image quality selected during transmission.
Use	• To change the default image quality selected during transmission.
Setting/ Procedure	• The default setting is “Standard”. “Standard” Fine SuperFine Text/Photo GSR Super GSR

<Default Density>

Functions	• To set the default image density selected during transmission.
Use	• To change the default image density selected during transmission.
Setting/ Procedure	• The default setting is “Std.” • Setting range: 5 steps Light to Std. to Dark

<Communication Mode>

Functions	• To set the communication mode established during transmission.
Use	• To change the communication mode established during transmission.
Setting/ Procedure	<FAX> G3-1 G3-2 <Internet FAX> Internet FAX IP-TX IP Relay <PC> E-Mail Scanner

(2) Comm. Menu

<TX>

Functions	• To set the type of transmission to be made.
Use	• To change the type of transmission to be made.
Setting/ Procedure	• The default setting is “Memory TX”. “Memory TX” Quick Scan TX

<TSI>

Functions	• To set where the name of the sending party is to be printed on the transmitted text, and select the specific name to be printed.
Use	• When having the name of the sending party printed on the transmitted text.
Setting/ Procedure	<TX Time Information> Inside Body Text Outside Body Text OFF <TSI Selection> • To select the specific name of the sending party to be printed.

<Rotation TX>

Functions	• To select whether to turn ON or OFF rotation transmission.
Use	• When rotation transmission is to be made
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

<2-Sided TX>

Functions	• To set the file margin of the original for 2-sided transmission.
Use	• When changing the file margin of the original for 2-sided transmission.
Setting/ Procedure	• The default setting is “OFF”. 2-Sided TX: ON “OFF” Original Bind Direction: Left Bind Top Bind “Auto”

D. RX Settings

(1) Memory RX Timer Setting

<Memory Lock Time>

Functions	• To set the time of day and the day of the week, at which printing of the received fax is to be started or stopped.
Use	• When a received fax is to be printed at a specific time specified without allowing it to be printed on the spot
Setting/ Procedure	*1.* Touch the [Memory RX Timer Setting]. *2.* Touch the [Memory RX Time]. *3.* Make the necessary settings and touch [Enter]. * Touch [OFF] if no settings are to be made.

<Memory Lock Password>

Functions	• To set a password used for printing a fax received at a time not specified.
Use	
Setting/ Procedure	• The default setting is “0000”. *1.* Touch the [Memory RX Time Setting]. *2.* Touch the [Memory Lock Password]. *3.* Touch [Password], then enter the password and touch [Enter]. *4.* Touch [Confirm New Password], then enter the password a second time and touch [Enter].

(2) Confidential RX User Box Delete

Functions	• To delete a private box that has previously been registered.
Use	• When deleting a private box.
Setting/ Procedure	*1.* Touch the [Confidential RX User Box Delete]. *2.* Select the private box to be deleted. *3.* Touch the [Yes].

E. FAX Setting

(1) RX Functions

<Reception Mode>

Functions	• To set the reception mode of faxes.
Use	• When changing the reception mode of faxes.
Setting/ Procedure	• The default setting is “Auto”. “Auto” Manual

<Numbers of RX Call Rings>

Functions	• To set the number of call rings heard before automatic reception is activated.
Use	• When changing the number of call rings heard before automatic reception is activated
Setting/ Procedure	• The default setting is “1x”. 1 to 20 * Setting range when the optional handset is mounted: 0 to 20 rings

(2) Password Communication

<Communication Password>

Functions	• To allow a fax to be received only when there is a match in the password that has previously been registered on the transmitter and receiver ends.
Use	• When using password reception
Setting/ Procedure	• The default setting is “00”. “00” (Disabled) 01 to 99 (Enabled)

F. Print Lists

(1) Setting List

Functions	• To print information concerning the initial settings of the machine.
Use	
Setting/ Procedure	*1.* Touch the [Print Lists]. *2.* Touch the [Setting List]. *3.* The setting list is printed.

G. Report Settings

(1) TX Report

Functions	• To set the mode of output of the report used for confirming results of transmission.
Use	• When changing the mode of output of the report used for confirming results of transmission • Setting is made individually for a single destination and two or more destinations.
Setting/ Procedure	<Single Dest> ON “If TX Fails” OFF **NOTE** • **Selecting Authentication device (PageACSES) or Vender 2 for Meter Count Mode will change the display to “OFF”.** <Broadcasting> ON “If TX Fails” OFF

(2) Activity Report

Functions	• To select whether or not to print the activity report for every 50 transactions automatically.
Use	• When printing the activity report for every 50 transactions automatically.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF **NOTE** • **Selecting Authentication device (PageACSES) or Vender 2 for Meter Count Mode will change the display to “OFF”.**

H. Document Management

(1) TX Document

<TX Forwarding>

Functions	• To set to forward received text to a destination that has been set by the administrator.
Use	• When forwarding received text to a destination that has been set by the administrator
Setting/ Procedure	*1.* Touch the [Document Management]. *2.* Touch the [TX Document]. *3.* Touch the [TX Forwarding]. *4.* Specify the destination to which the received fax is to be forwarded and touch [Enter]. [One-Touch]: To specify the destination by the one-touch dial [Search]: To search through one-touch dials

(2) RX Document

<F-CODE>

Functions	• To set to receive text for every F-CODE
Use	• When setting to receive text for every F-CODE
Setting/ Procedure	*1.* Touch the [RX Document]. *2.* Touch the [F-CODE]. *3.* Select the specific key, in which the F-CODE is to be registered. *4.* Touch [F-CODE] and make the necessary settings. *5.* Touch [RX Doc. Settings], then select the desired processing type and touch [Enter]. * If [Forward] or [Print & Forward] is selected, set the forwarding destination.

<Port>

Functions	• To set how text received for each line is processed, whether it is to be printed, forwarded, etc.
Use	• When printing, forwarding, or otherwise processing text received for each line.
Setting/ Procedure	*1.* Touch the [RX Document]. *2.* Touch the [Port]. *3.* Select [G3-1] or [G3-2]. *4.* If [Yes] is selected for [Document Management], set how the received document is to be handled. *5.* Touch [RX Doc. Settings], then select the desired processing type and touch [Enter]. * If [Forward] or [Print & Forward] is selected, set the forwarding destination.

<All Other Documents>

Functions	• To set how text received from a line other than the port is processed.
Use	• When setting how text received from a line other than the port is processed.
Setting/ Procedure	*1.* Touch the [RX Document]. *2.* Touch the [All Other Documents]. *3.* Touch [RX Doc. Settings], then select the desired processing type and touch [Enter]. * If [Forward] or [Print & Forward] is selected, set the forwarding destination.

6.5.2 Admin. 2

A. Network Settings
(1) Network Setting 2
<SIP-FAX Settings>

Functions	• Not used.
Use	
Setting/ Procedure	

6.6 Settings in the Reports

NOTE
- **It is shown on [Print List] in [Admin. 1] when security mode is set ON.**
- **When selecting the Vender 2 for Meter Count Mode, it is shown on [Print List] in [Admin.1] and the print list key is not accepted.**
- **But it is acceptable when the key counter is inserted.**

6.6.1 TX Report

Functions	• To print the latest 50 transmission information.
Use	
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [TX Report]. *4.* A TX report will be printed.

6.6.2 RX Report

Functions	• To print the latest 50 reception information.
Use	
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [RX Report]. *4.* A RX report will be printed.

6.6.3 One-Touch List

Functions Use	• To print data registered to one-touch keys.
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [One-Touch List]. *4.* A One-Touch list will be printed.

6.6.4 Program List

Functions Use	• To print the contents of programs stored in one-touch keys.
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [Program List]. *4.* A program list will be printed.

6.6.5 Bulletin List

Functions Use	• To print a list of text stored in the bulletin board.
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [Bulletin List]. *4.* A bulletin list will be printed.

6.6.6 Confidential List

Functions Use	• To print the contents of the private box.
Setting/ Procedure	*1.* Press the Utility/Counter Key. *2.* Touch the [Reports]. *3.* Touch the [Confidential List]. *4.* A confidential list will be printed.

7. Initial Mode

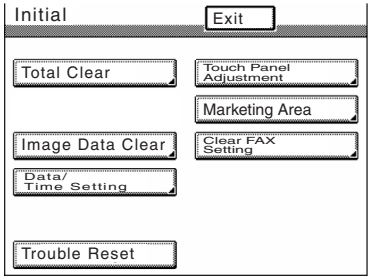
7.1 Initial Mode Function Setting Procedure

1. Press the Warm Restart switch, and "●" appears at the center on the left end of the screen.
2. Enter "3" from the 10-Key Pad.
3. Type the 8-digit service code and touch [Enter]. (Default value: 00000000)

NOTE

- **When [END] is touched after a wrong service code has been entered, the Basic screen reappears.**
- **At the fourth access after entries of three wrong access codes, [END] is not available on the screen. It is therefore necessary to turn OFF and ON the Main Power Switch.**
- **If you forget the service code, it becomes necessary to replace the RAMS Board with a new one. Take necessary steps not to forget the service code.**
- **The RAMS Board is not available as a replacement part. If it requires replacement, contact Office Printing Support Division by way of CSES.**

4. Select a function.



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7.1.1 Exiting

- Touch [Exit].

7.2 Initial Mode Function Tree

NOTE

- **Of the Initial mode functions, only those related to the fax machine will be described in the following.**
- ***1: If enhance security mode is set ON, menu is not shown.**

Initial Mode	Ref. page
Clear FAX Setting *1	P.27

7.3 Settings in the Initial Mode

7.3.1 Clear FAX Setting

Functions	• Clears the FAX-related settings. * If enhance security mode is set ON, menu is not shown.
Use	• Own Setting: To clear data relating to the local machine. • Destination: To clear data relating to destinations, including the telephone directory and one-touch dials. • Activity: To clear activity report information. • Soft Switch: To clear settings made with soft switches. **NOTE** • **When mounting or removing HDD with Vender 2 being selected for Meter Count Mode, Clear FAX Setting needs to be conducted.**
Setting/ Procedure	*1.* Touch the [Clear FAX Setting]. *2.* Select the item, in which the settings are to be cleared, and touch [END]. (Two or more items can be selected.) *3.* Select [Yes] and touch [Enter].

8. Maintenance Mode

8.1 Maintenance Mode Function Setting Procedure

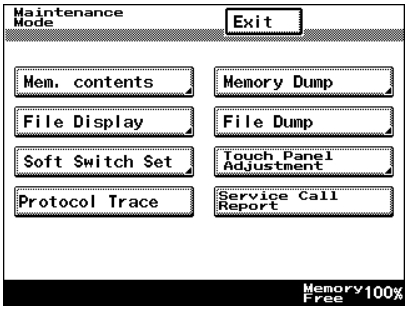
A. Procedure

1. Press the Utility/Counter key.
2. Touch [Check Detail].
3. Press the following keys in this order.
   Stop → 0 → 0 → Stop → 0 → 2
4. Touch [Maintenance Mode].
5. Type the 8-digit service code and touch [Enter]. (Default value: 00000000)

NOTE

- **When [END] is touched after a wrong service code has been entered, the Basic screen reappears.**
- **At the fourth access after entries of three wrong access codes, [END] is not available on the screen. It is therefore necessary to turn OFF and ON the Main Power Switch.**
- **If you forget the service code, it becomes necessary to replace the RAMS Board with a new one. Take necessary steps not to forget the service code.**
- **The RAMS Board is not available as a replacement part. If it requires replacement, contact Office Printing Support Division by way of CSES.**

6. The Maintenance Mode menu will appear.



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NOTE

- **To change the service code, see "Service Security Mode."**

B. Exiting

- Touch the [Exit] key.

NOTE

- **The Maintenance mode is not disclosed to users. After the job is completed, therefore, be sure to exit the mode by turning OFF and ON the Main Power Switch.**

8.2 Maintenance Mode function tree

NOTE

- **Of the Maintenance mode functions, only those related to the fax machine will be described in the following.**
- ***1: If enhance security mode is set ON, menu is not shown**

Maintenance Mode	Ref. page
Mem. contents *1	P.29
Memory Dump *1	P.29
File Display *1	P.30
File Dump *1	P.30
Soft Switch Set *1	P.30
Touch Panel Adjustment	P.30
Protocol Trace *1	P.31
Service Call Report *1	P.31

8.3 Settings in the Maintenance Mode

8.3.1 Mem. contents

Functions	• This displays the RAM data of MAIN-CPU on the LCD by specifying its absolute address which will be provided by our technical department.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Mem. contents]. *3.* Type the absolute address from the 10-Key Pad and [A] to [F] and touch [Enter]. *4.* Touch [↑] or [↓] to change the address to be displayed. *5.* Touch [Enter] twice.

8.3.2 Memory Dump

Functions	• This outputs a report on the RAM data of MAIN-CPU by specifying its absolute address which will be provided by our technical department.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Memory Dump]. *3.* Touch the [Address]. *4.* Type the absolute address from the 10-Key Pad and [A] to [F] and touch [Enter]. *5.* Touch the [Length]. *6.* Type the absolute address from the 10-Key Pad and [A] to [F] and touch [Enter]. *7.* Touch [Enter], and the memory dump sequence is started.

8.3.3 File Display

Functions	• This displays the RAM data of MAIN-CPU on the LCD by specifying its file name.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [File Display]. *3.* Type the file name from the 10-Key Pad or the keyboard on the screen and touch [Enter]. *4.* Touch [↑] or [↓] to change the address to be displayed. *5.* Touch the [Enter].

8.3.4 File Dump

Functions	• This outputs a report on the RAM data of MAIN-CPU by specifying its file name.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [File Dump]. *3.* Type the file name from the 10-Key Pad or the keyboard on the screen and touch [Enter]. *4.* Touch [↑] or [↓] to change the address to be displayed. *5.* Touch [Enter], and the file dump sequence is started.

8.3.5 Soft Switch Set

Functions	• This sets up the soft switches for maintenance.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Mode Select]. *3.* Enter the mode number (a 3-digit numeral) from the 10-Key Pad. *4.* Touch the [Bit Select]. *5.* Align the cursor using [←] or [→] and define the bit using 0 or 1 of the 10-Key Pad. (To set using hexadecimal numbers, touch [HEX Selection] and enter the data using the 10-Key Pad and A to F keys.) *6.* Touch [Enter] twice.

8.3.6 Touch Panel Adjustment

Functions	• To adjust the position of the Touch Panel.
Use	• When the Touch Panel is slow to respond when touched
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Touch Panel Adjustment]. *3.* Following the arrow, sequentially press four points (+) on the screen using a pen or similar object. NOTE • **Press the very center of each point.** • **Use care not to allow the tip of the pen to damage the surface of the screen.**

8.3.7 Protocol Trace

Functions	• To produce an output of a protocol trace.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Protocol Trace].

8.3.8 Service Call Report

Functions	• To produce an output of a service call report.
Use	* If enhance security mode is set ON, menu is not shown.
Setting/ Procedure	*1.* Call the Maintenance Mode to the screen. *2.* Touch the [Service Call Report].

9. Tech. Rep. Mode

9.1 Tech. Rep. Mode function setting procedure

NOTE

- **Ensure appropriate security for Service mode function setting procedures. They should NEVER be shown to any unauthorized person not involved with service jobs.**

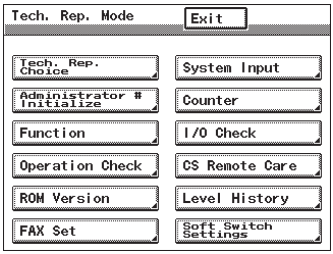
A. Procedure

1. Press the Utility/Counter key.
2. Touch [Check Detail].
3. Press the following keys in this order.
   Stop → 0 → 0 → Stop → 0 → 1
4. Enter the 8-digit service code and touch [END]. (Default value: 00000000)

NOTE

- **When [END] is touched after a wrong service code has been entered, the Basic screen reappears.**
- **At the fourth access after entries of three wrong access codes, [END] is not available on the screen. It is therefore necessary to turn OFF and ON the Main Power Switch.**
- **If you forget the service code, it becomes necessary to replace the RAMS Board with a new one. Take necessary steps not to forget the service code.**
- **The RAMS Board is not available as a replacement part. If it requires replacement, contact Office Printing Support Division by way of CSES.**

5. The Tech. Rep. Mode menu will appear.



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NOTE

- **To change the service code, see "Service Security Mode."**

B. Exiting

- Touch the [Exit] key.

C. Changing the Setting Value in Service Mode Functions

- Use the +/- key to enter or change the setting value.
- Use the 10-Key Pad to enter the setting value. (To change the setting value, first press the Clear key before making an entry.)

9.2 Tech. Rep. Mode function tree

NOTE

- **Of the Tech. rep. mode functions, only those related to the fax machine will be described in the following.**
- ***1: If enhance security mode is set ON, menu is not shown.**

<table>
<tr><th colspan="3">Tech. Rep. Mode</th><th>Ref. page</th></tr>
<tr><td>Tech. Rep. Choice</td><td colspan="2">Country Set</td><td>P.33</td></tr>
<tr><td>System Input</td><td colspan="2">Machine Configuration</td><td>P.34</td></tr>
<tr><td rowspan="2">Counter</td><td colspan="2">Application Counter</td><td>P.34</td></tr>
<tr><td colspan="2">Fax Comm. Error Counter</td><td>P.35</td></tr>
<tr><td>Function</td><td colspan="2">F7-2</td><td>P.35</td></tr>
<tr><td rowspan="11">FAX Set</td><td rowspan="8">Service Call Set</td><td>Maintenance Date/Toner Type</td><td>P.35</td></tr>
<tr><td>Service Destination</td><td>P.35</td></tr>
<tr><td>TX Condition</td><td>P.36</td></tr>
<tr><td>Transmission Method</td><td>P.36</td></tr>
<tr><td>Service FAX Number</td><td>P.36</td></tr>
<tr><td>Contact Number</td><td>P.37</td></tr>
<tr><td>User System Code</td><td>P.37</td></tr>
<tr><td colspan="2">Terminal TX</td><td>P.37</td></tr>
<tr><td colspan="2">Stamp</td><td>P.37</td></tr>
<tr><td colspan="2">SIP-FAX Function</td><td>P.37</td></tr>
<tr><td colspan="3">Soft Switch Settings *1</td><td>P.38</td></tr>
</table>

9.3 Settings in the Tech. Rep. Choice

9.3.1 Country Set

<table>
<tr><td>Functions</td><td rowspan="2">• To set the default value for each country for communications-related choice functions.
• The function becomes available on the screen to choose only for the machine that is to be marketed in Europe or Others and that is equipped with the optional fax function.</td></tr>
<tr><td>Use</td></tr>
<tr><td>Setting/ Procedure</td><td>• Select the applicable country.
<For Europe>
Germany France U.K. Italy Austria
Swiss Belgium Holland Spain Portugal
Denmark Norway Sweden Finland Czech
Hungary Poland

<For Others>
South Africa Australia Hong Kong Singapore New Zealand
Malaysia Argentina Korea Taiwan other 1
other 2</td></tr>
</table>

9.4 Settings in the System Input

9.4.1 Machine Configuration

Functions	• Displays the machine configuration status.
Use	• The machine configuration status is displayed as Yes or No.
Setting/ Procedure	*1.* Call the Tech. Rep. Mode to the screen. *2.* Touch [System Input] and [Machine Configuration], in that order.

9.5 Settings in the Counter

9.5.1 Checking the counter reading

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch [Check] and the specific counter key whose reading is to be checked.

9.5.2 Clearing readings of all counters at once

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch the [Counter Reset].
4. Touch the counter keys to be cleared and then touch [OK].

9.5.3 Clearing the reading of a specific counter

1. Call the Tech. Rep. Mode to the screen.
2. Touch the [Counter].
3. Touch the specific counter key to be cleared and press the Clear key.
If the reading of a wrong counter key has been cleared, press the Interrupt key to undo the clearing operation.

9.5.4 Application Counter

Functions	• To display or clear the readings of application counters.
Use	• Copy: Number of copies made • Printer: Number of printed pages produced via computer • List Print: Number of printed pages of lists • Fax Print: Number of printed pages received as fax and mail • Fax Transmission: Number of pages of fax transmitted • Mail Transmission: Number of pages transmitted by fax/scanner
Setting/ Procedure	Checking the counter reading P.34 Clearing the counter reading (all and a specific one) P.34

9.5.5 Fax Comm. Error Counter

Functions	• To display or clear the count of the number of errors occurred during fax transmission.
Use	• Transmission Error: Counts fax transmission errors • Receive Error: To count fax reception errors
Setting/ Procedure	Checking the counter reading P.34 Clearing the counter reading (all and a specific one) P.34

9.6 Settings in the Function

9.6.1 F7-2

Functions	• To automatically adjust the Original Size Detecting Sensor. (only for a FAX)
Use	• When the Original Size Detecting Sensor is replaced • When an optional sensor is mounted
Setting/ Procedure	1. From the Tech. Rep. mode menu, touch [Function] and [F7-2], in that order. 2. Place fives sheets of A3 paper, one on top of another, on the Original Glass and lower the Original Cover. 3. Press the Start key to let the machine start the adjustment procedure. 4. The adjustment procedure is automatically terminated as soon as the required adjustment has been made.

9.7 Settings in the FAX Set

9.7.1 Service Call Set

- When a set condition takes place, the status of the machine is automatically notified to the call center.

A. Maintenance Date/Toner Type

Functions Use	• To set the maintenance date and type of toner.
Setting/ Procedure	<Toner Type> • The default setting is “14k”. 5k “14k” <Maintenance Date> • Enter [Year], [Month], and [Day].

B. Service Destination

Functions Use	• To set the telephone number and communication mode.
Setting/ Procedure	1. Touch [Service Destination] and enter the telephone number of address (up to 64 digits can be entered). 2. Touch [Change Comm. Mode] and select the communication mode. [FAX]: G3-1, G3-2 [InternetFAX]: InternetFAX [PC]: E-Mail

C. TX Condition

(1) Prints

Functions Use	• Service call for exceeding specified number of papers.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

(2) Toner Empty

Functions Use	• Service call for empty toner.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

(3) Drum Life

Functions Use	• Service call for reaching life cycle of drum.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

(4) Malfunction

Functions Use	• To set whether or not to make a service call when a machine failure occurs.
Setting/ Procedure	• The default setting is “ON”. “ON” OFF

D. Transmission Method

Functions	• To set the transmission method.
Use	• When changing the transmission method
Setting/ Procedure	• The default setting is “Data”. Report “Data” E-Mail • Select [Report] for fax transmission, [Data] for data transmission, and [E-Mail] for e-mail transmission.

E. Service FAX Number

Functions Use	• Enters the Fax number on a report when a notification to the call center fails.
Setting/ Procedure	*1.* Touch [Service FAX Number] and enter the telephone number.

F. Contact Number

Functions Use	• Enters the information call number on a report when a notification to the call center fails.
Setting/ Procedure	*1.* Touch [Contact Number] and enter the telephone number.

G. User System Code

Functions Use	• Memo screen, on which to record user system identification information
Setting/ Procedure	*1.* Touch the [Fwd]. *2.* Touch [User System Code] and then enter the code.

9.7.2 Terminal TX

- Use prohibition

9.7.3 Stamp

Functions	• Used to indicate when the TX marker option is installed.
Use	• When the TX marker option is mounted
Setting/ Procedure	• The default setting is “YES”. “YES” NO

9.7.4 SIP-FAX Function

Functions Use Setting/ Procedure	• Not used.

10. Fax-related Adjustment Items

10.1 CD/FD Zoom Ratio Correction (Fax)

- Factory adjustment items

NOTE

- **This mode is for factory adjustment only and should NOT be used.**

11. Soft Switch Settings

11.1 Soft Switches Disclosed to Users (Screen Setting)

Utility/Counter					MODE	bit
User Setting *1	User's Choice	1/6	Mixed Original Detection		400	6
			Language Selection		433	7 to 2
			Measurement Unit Setting		426	4 to 3
			Machine Authentication PW Change *1		-	
		2/6	Default Setting Simplex/Duplex		402	7 to 5
			Auto Paper/Auto Zoom		402	4 to 3
			Priority Tray		408	7 to 4
			Special Paper Setting		-	
			Zoom Ratio for Combine Booklets		403	7
		3/6	Low Power Mode		405	7 to 0
			Sleep Mode		406	7 to 0
			LCD Back-Light OFF		407	7 to 0
			Auto Reset		404	7 to 0
			Auto Reset when Account is changed		403	0
		4/6	4in1 Copy Order		409	7 to 6
			Default Quality/Density Modes		409	5 to 1
			Default Copy Density Levels		410	7,6,3 to 0
			Print Density		411	7,2 to 0
			Default Finishing Mode		412	7 to 6,4,2 to 1
		5/6	Sort/Non-Sort Auto Change		412	3
			Output Tray Settings *1		413 419	7 to 4, 2 to 0 7 to 4, 2 to 0
			Auto Paper Select for Small Original		424	3
			Dehumidify Scanner *1		-	
			Crease/Center Staple *1		-	
		6/6	Default Screen	Default LCD Screen	402	1 to 0
				Default E-Mail Screen	018	5 to 4
			Default Device		402	2
			Image Quality (ADF)		-	
	E-mail Input *2 *3 *6	One-Touch			-	
		Index			-	
		E-Mail Program *2			-	
		Domain Name			-	
		Bulletin *1			-	
		Conf. Box *1			-	
	Store Overlay *1				-	

Utility/Counter					MODE	bit
User Management	Confirmation Beep				415	7 to 5
	Alarm Volume				415	4 to2
	Line Monitor Sound *1 *3				416	7 to 5
	Job Complete Beep				315	4 to 2
	Panel Cleaning				-	
	Dehumidify				-	
	Toner Supply				-	
	Memory RX ON/OFF *3				038	1
	POP3 RX *3				-	
Admin. Management	Admin.1	Initial Setting	Date & Time Setting	Date & Time Setting	-	
				Time Zone	354	7 to 2
				Day Light Saving Time	197	7
			Language for Communication *3		434	7 to 2
			Self-Telephone # information *1 *3		006	7 to 4
			TSI Registration *3		-	
			Self-ID *1 *3		-	
		Admin. Set	Administrator Code Input		-	
			Max. Copy Sets		-	
			Disable Sleep Mode		416	0
			Restrict One-Touch Editing *3 *5		-	
			Activity Report E-Mail TX *1		-	
		Call Remote Center *1			-	
		Account/ User Auth.	User Authentication ON/OFF		-	
			Allow Print without Authentication *1		452	0
			External Server Authentication *1	General Settings	-	
				Domain Setting	-	
			Machine Auth. Setting *1	User Registration	-	
			Account Track Setting *1	Account Data	-	
		TX Settings *3	Quality/Mode	Default Quality	001	7 to 4
				Default Density	001	3 to 1
				Communication Mode	009	7 to 5
			Comm. Menu	TX	000	1
				TSI	000	5,4
				Rotation TX	030	7
				2-Sided TX	031	5 to 4
			Retry *2	Number of auto retrys *2	005	7 to 4
				Auto-retry Interval *2	042	7 to 4

Utility/Counter					MODE	bit
		RX Settings *3	Memory RX Time Setting	Memory Lock Time	038	1,0
				Memory Lock Password		
			Confidential RX User Box Delete *1		-	
		FAX Setting *1 *3	RX Functions	Reception Mode	-	
				Numbers of RX Call Rings	019	7 to 3
			Password Communication	Communication Password	000	2
		Print Lists *3	Setting List		-	
		Report Settings *3	TX Report		002	6,5
			Activity Report		002	7
		Document Management *3	TX Document		-	
			RX Document		-	
	Admin. 2	Network Setting	Network Setting 1	Basic Settings	-	
				DNS Settings	361	0
				Machine Name	-	
				SMTP Settings	-	
				POP3 Settings	-	
				Priority Compress Level	-	
				Scanner Settings	-	
				LDAP Setting	466	6,5 to3
				Frame Type Set	467	7 to 5
				IP Filtering	466	2,1
			Network Setting 2	IP Relay Settings *1	-	
				SIP-FAX Settings *1 *3	477	4
				Prefix/Suffix Settings	-	
		Printer Setting	Timeout		455 456	7 to 0 1 to 0
			No Matching Paper in Tray Setting		452	6
		Software SW			-	
		Ping			-	

Utility/Counter				MODE	bit
		Security Setting	Enhance Security *1	-	
			Unlock	-	
			SSL/TLS *5	466	0
Reports *3 *6	TX Report			-	
	RX Report			-	
	One-Touch List			-	
	Program List *3			-	
	Bulletin List *1 *3			-	
	Confidential List *1 *3			-	
Printer Setting	MFP Set	Proof Print Hold Time		031	2 to 1
		Overwrite A4 ←→ Letter		452	7
		Document Hold Time		432	7 to 0
		PostScript Error Report		453	7
	Default Set	Basic	Tray	441	7 to 4
			Paper Size	440	5 to 1
			Original Direction	441	3 to 2
			Print Method	441	1 to 0
			# of Sets	442 443	7 to 0 1 to 0
		Font	Font #	444	7 to 1
			Symbol Set	445	7 to 2
			Number Lines	446	7 to 0
			Font Size	447 448 449 450 451	7 7 to 0 3 to 0 7 to 0 5 to 0
			CR/LF Mapping	452	5 to 4
	PDL Set			440	7 to 6
	Test Print			-	

NOTE

- **Keys displayed on screens are different depending on the setting.**
- ***1: Become available on the screen if a corresponding option is mounted or depending on the setting made.**
- ***2: Key names are different if the Fax Kit FK-503 is mounted.**
- ***3: For more details, see the FK-503 manual.**
- ***4: If HD-504 is mounted, [Memory Management] is changed to [HDD Management].**
- ***5: If enhance security mode is set ON, menu is not shown.**
- ***6: If enhance security is set ON, different screen is shown.**
- **If HD-504 is not mounted, [User's Choice] is directly shown.**

11.2 List of Defaults

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
000	30	30	TX Marker, TSI, Password, Memory TX *
001	14	14	FAX quality, Density, Dest. Insert *
002	A8	A8	Report *
003	63	63	Line monitor, Report of broadcast transmissions *
004	16	16	Memory time *
005	10	20	# of redialing *
006	32	32	DP speed, PB switch, PSTN Port auto selection
007	B9	B5	Print range reduction, division *
008	00	00	Select print paper *
009	1A	1A	Communication mode *
010	20	20	(Undefined)
011	31	31	DP speed, PB switch *
012	40	40	# key on one-touch screen
013	35	35	Auto-mode screen, Automatically switch destinations, Operation when INBOX forward failed
014	01	01	Redialing interval *
015	00	00	(Undefined)
016	40	40	RX Time Stamp, Extra telephone
017	C0	C0	Select initial value of TSI *
018	01	01	Destination displaying screen, Full-dial sending, Broadcast transmission*
019	08	08	Ringer detection counts (PSTN 1) *
020	40	40	Display reports
021	08	08	Display symbol rate
022	02	02	FAX memory nearly full capacity
023	F8	F8	Set merge for report image, E-mail error retransmission
024	81	81	Display forward function button, Display caller ID, No receiving by other users *
025	7F	7F	Various service calls
026	DE	DE	Service call, Remote maintenance
027	24	24	Display ID, Display button, Secured comm., F code
028	63	63	Remote print protocol, # of remote multi-copies
029	00	00	(Undefined)
030	B1	B0	Rotate TX, Rotate print, 2in1 RX, Print paper selection restriction *
031	A0	A0	Merge for multi-sheet report image,Marge for output format of report image, Proof print document hold time *
032	35	21	Switch Metric/Inch for FAX TX reading range
033	14	14	2-sided TX, Draft printing mode and level *
034	02	02	Cut print paper leading edge, Set special density, Overlapped printing
035	03	03	RX by memory
036	01	01	Secure Print document hold time, Receiving (remote copy) printing order *

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
037	F8	F8	Select FAX print paper cassette
038	0A	0A	Turn on print lamp for out-of print paper, Print stop/start *
039	00	00	(Undefined)
040	FA	FA	2-dim coding, T.6 coding, JBIG, V34JBIG
041	40	40	ECM mode
042	3F	3F	Redialing interval *
043	80	80	# of resending doc., Redialing non-answered call, No. of rings until TX
044	80	80	RTN sending error, Action against abnormal overseas communications, T4 timer
045	D4	D4	(Undefined)
046	00	00	(Undefined)
047	88	88	V34 fallback tolerance
048	C6	C6	Set up MODEM standard
049	0D	0D	Transmission speed upper limit (TX)
050	0D	0D	Transmission speed upper limit (RX)
051	20	20	Declare RX print paper size
052	00	00	(Undefined)
053	C8	C8	Action taken towards F code reception error document
054	7A	7A	History control of V.34 auto dialing, Demodulation method
055	02	02	(Undefined)
056	0C	0C	Modem power-saving, Select sending time of ANSam
057	19	19	Time that ANSam TX starts after line is blocked
058 | 069	3C | 00	3C | 00	(Undefined)
070	14	14	(Undefined)
071	00	00	(Undefined)
072	00	00	(Undefined)
073	0A	0A	(Undefined)
074	14	14	(Undefined)
075	0A	0A	(Undefined)
076	14	14	(Undefined)
077	60	60	Hook monitoring counts
078	00	00	(Undefined)
079	02	02	(Undefined)
080	23	6E	Estimated time of line connection (PSTN1)
081	00	00	(Undefined)
082	04	24	Detect busy tone, Detect line disconnection (inverted polarity) (PSTN1)
083	50	50	Hook monitoring cycle, Hook detection voltage (PSTN1)
084	14	28	PB sending lever (PSTN1)
085	90	C0	TX level (PSTN1)

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
086	40	40	RX attenuator (PSTN1)
087	90	90	Detect continuous ringer, Ringer detection frequency (PSTN1)
088	C0	C0	Process to be carried out when 2nd dialing tone timeout is detected, 1300 Hz reception sensitivity switching (PSTN1)
089	00	00	TX method, Prefix # (PSTN1) *
090	00	00	(Undefined)
091	00	00	(Undefined)
092	70	70	Sending echo protection tone, switch carrier frequency (PSTN1)
093	48	40	CED, Receive command echo (PSTN1)
094	0C	0C	AGC lock (PSTN1)
095	20	20	Digital TX/RX cable equalizer (PSTN1)
096	14	14	CI signal sending time (PSTN1)
097	14	14	TCF/NTCF sending level down, V.34 symbol rate (PSTN1)
098	46	46	CM signal sending start time, EQM threshold value (PSTN1)
099	88	88	Symbol speed threshold value (PSTN1)
110	23	23	Estimated time of line connection (PSTN2)
111	00	00	(Undefined)
112	28	28	Detect busy tone, Detect line disconnection (inverted polarity) (PSTN2)
113	59	59	(Undefined)
114	14	1C	PB sending lever (PSTN2)
115	90	90	TX level (PSTN2)
116	40	40	RX attenuator (PSTN2)
117	90	90	Detect continuous ringer, Ringer detection frequency (PSTN2)
118	C0	C0	Process to be carried out when 2nd dialing tone timeout is detected, 1300 Hz reception sensitivity switching (PSTN2)
119	00	00	TX method, Prefix # (PSTN2) *
120	00	00	(Undefined)
121	00	00	(Undefined)
122	70	70	Sending echo protection tone, switch carrier frequency (PSTN2)
123	48	48	CED, Receive command echo (PSTN2)
124	0C	0C	AGC lock (PSTN2)
125	20	20	Digital TX/RX cable equalizer (PSTN2)
126	14	14	CI signal sending time (PSTN2)
127	14	14	TCF/NTCF sending level down, V33/V29 sending level down, V.34 symbol rate (PSTN2)
128	46	46	CM signal sending start time, EQM threshold value (PSTN2)
129	88	88	Symbol speed threshold value (PSTN1)
130 | 189	00 | 00	00 | 00	(Undefined)
190	00	00	Restrict SF/SSF comm.
191	00	00	(Undefined)

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
192	C0	C0	Order of displaying year to date
193 | 196	33 | 32	33 | 32	(Undefined)
197	C0	C1	Daylight saving time *
198	D0	D0	TX forwarding *
199	00	00	(Undefined)
200	04	04	Destination machine confirmation transmission
201	53	53	Special characters when transmitting data, confirming unit of the other party
202 | 211	00 | 02	00 | 02	(Undefined)
212	40	00	DP make rate (PSTN1)
213 | 231	42 | 05	42 | 02	(Undefined)
232	40	00	DP make rate (PSTN2)
233 | 248	42 | 51	42 | 51	(Undefined)
249	08	08	Ringer detection counts (PSTN2)
250 | 287	00 | FF	00 | FF	(Undefined)
288	FF	FF	Insert dummy data before PIX
289 | 299	FF | 00	FF | 00	(Undefined)
300	00	00	REV soft switch for maintenance
301	00	00	REV soft switch for maintenance
302	00	00	REV soft switch for maintenance
303	00	00	REV soft switch for maintenance
304	00	00	REV soft switch for maintenance
305	00	00	REV soft switch for maintenance
306	00	00	Junk FAX RX denial
307	00	00	Copy function use
308 | 309	00 | 00	00 | 00	(Undefined)
310	00	00	Increase sound level *
311	00	00	Invert screen, Display next screen for Enlarge Display *
312	03	03	Key repeat start time *
313	01	01	Key repeat interval *
314	03	03	Display reservation completion screen *

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
315	4C	4C	Select buzzer ring pattern (JBMS), sound level of buzzer JBMS, normal completion sound (JBMS corresponding)
316 | 319	00 | 00	00 | 00	(Undefined)
320	F0	F0	Cassette-specified printing (G3-1)
321	F0	F0	Cassette-specified printing (G3-2)
322	F0	F0	Cassette-specified printing (Network)
323	F0	F0	Cassette-specified printing (Reports)
324 | 349	00 | 00	00 | 00	(Undefined)
350	A8	A8	Network, Internet fax capability of receiver *
351	18	18	Network, Gateway transmission *
352	D0	D0	Network, Notification of result *
353	88	80	Network, Text insertion, Header printing
354	38	60	Network, Time zone setting
355	20	20	Network, Switch 10M/100M, Switch Full-duplex/Half-duplex
356	40	40	Network, SMTP transmission timeout *
357	40	40	Network, SMTP receive timeout *
358	20	20	Network, POP3 receiving timeout *
359	00	00	Network, # of E-mail TX re-trials
360	80	80	Network, Coding method *
361	78	78	DNS function *
362	8A	8A	Network, calling interval
363	20	20	Network, Image quality of text document
364	00	00	(Undefined)
365	04	04	Network, FTP timeout
366	08	08	Network, Network maintenance window display *
367	20	20	Network, Time of DNS inquiry timeout *
368	C2	C2	Network, Report CVS output *
369	00	00	Network, PING timeout
370	FF	FF	Network, Additional # of E-mail TX re-trials
371	40	40	Network, Interval of retrials to be set for additional # of E-mail TX re-trials *
372	0F	0F	Network, Transmission interval of size-divided E-mail file data *
373	08	08	Network, Full mode function *
374	40	40	Network, NOTIFY setting
375	00	00	(Undefined)
376	00	00	(Undefined)
377	00	00	(Undefined)
378	00	00	(Undefined)
379	10	10	Edit data when forwarding received documents

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
380	00	00	(N/W) APOP authentication, SMTP authentication *
381	80	80	(N/W) IP Relay function *
382	40	40	(N/W) IP Relay result timeout processing, default *
383	20	20	Specify IP Scanner versions
384 | 399	00 | C0	00 | C0	(Undefined)
400	01	01	Copy, Set up memory recall, Priority doc. mixed mode, Language code *
401	00	00	(Undefined)
402	01	01	Priority doc. mode, Priority copy mode, Automatic function priority mode, Priority application *
403	01	01	Draft print zoom ratio, Auto-reset by user *
404	01	01	Auto-reset time *
405	0F	0F	Pre-heat time *
406	01	01	Auto-Power source off time *
407	01	01	LCD back light (Off time) *
408	00	00	Default feeder (Print paper) *
409	08	08	4-in-1 print Order, Density Priority, Original Image Type *
410	54	54	AE density level, Priority manual density level *
411	00	00	Sign bit, Adjust print density *
412	08	08	Priority Sort Mode, Priority Stapling Mode, Priority Punch Mode, Intelligent Sorting, # of holes to punch *
413	04	04	Specify output bin *
414	A0	A0	Reserve memory copy
415	6C	6C	Beep Volume, Alarm Volume *
416	60	60	Set sound vol. (monitor), Orientation change, No auto-Power source off *
417	63	63	Set max # of copies *
418	58	58	Imaging unit life stop, near life stop
419	40	40	Specify output bin *
420	00	00	Auto panel reset confirmation time *
421	21	42	Marketing area, PageScope Web Connection
422	08	08	Total Counter, Size Counter, Copy Kit Counter
423	4E	4C	Copy, key counter, vendor mode, Doc. size OP *
424	18	18	Metric/inch mix, Copy mode, Small doc. *
425	00	00	Copy, Adjust quality mode
426	50	00	Movement finisher bin *
427	00	00	Country type for default setting, separator table selection
428	00	00	[Prefix/Suffix Settings] key displayed or not displayed **NOTE** • **Phase2.0 and onward**
429	00	04	Copy, Auto reset of panel for ADF *

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
430	00	00	Set up multi job, HDD consistency check at startup
431	00	00	(Undefined)
432	05	05	PC printer, Over-memory wait time *
433	04	04	Specify language code (Display-use) *
434	04	04	Specify language code (Machine-use) *
435	04	04	Specify language code (Network-use) *
436 | 437	00 | 00	00 | 00	(Undefined)
438	00	00	Type of Management Device, ID key when using the Management Device 2, Vender type, Report output invalid when Vender is connected, Switches the message when power is not ON
439	00	00	Authentication method, Time for canceling authentication, Setting the Copy function used, Setting the PC print function used, Canceling authentication when job is complete
440	12	04	PC printer, PDL set, paper size *
441	80	80	PC printer, paper tray, paper orientation, print method *
442	01	01	PC printer, # of copies (Scalable) (Least significant 8 bits) *
443	00	00	PC printer, # of copies (Scalable) (Most significant 2 bits) *
444	00	00	PC printer, font # *
445	74	4C	PC printer, symbol set *
446	3C	40	PC printer, # of lines *
447	00	00	PC printer, Unit of font size
448	30	30	PC printer, Font size (Scalable) (Least significant 8 bits) *
449	00	00	PC printer, Font size (Scalable) (Most significant 8 bits) *
450	E8	E8	PC printer, Font size (Bitmap) (Least significant 8 bits) *
451	03	03	PC printer, Font size (Bitmap) (Most significant 6 bits) *
452	00	00	PC printer, Switch A4/letter, Map CR/LF *
453	00	00	Set PostScript error print, Forcible image trimming *
454	00	00	Parallel setting
455	2C	2C	PC printer, Timeout set (Least significant 8 bits) *
456	01	01	PC printer, Timeout set (Least significant 2 bits)
457 | 462	00 | 00	00 | 00	(Undefined)
463	00	00	To enable or disable LDAP search when full dial input is prohibited; to enable or disable use of commas in mail address input; to enable or disable addition of prefix/suffix **NOTE** • **Phase2.0 and onward**
464	8C	8C	PC printer, RAW port number set (Least significant 8 bits)
465	23	23	PC printer, RAW port number set (Most significant 8 bits)
466	00	00	Set LDAP, SSL/TLS with HTTP
467	00	00	PC printer, frame type set *

MODE	HEX (For U.S.)	HEX (For Europe)	Remark
468	0F	0F	Set up FTP server passive for downloading firmware
469	00	00	Access lock, overwrite data, select method of classified document, password regulation
470	00	00	Set export extension, simple format, IT Series Agent *
471	00	00	Set user's list screen display, default *
472	00	00	Banner paper setting
473	00	00	Set priority Job List screen *
474	00	00	(Undefined)
475	00	00	TCP/IP prohibited, FTP Client prohibited
476	00	00	Scan to SMB prohibited, G3 Fax prohibited, Scan to HDD prohibited, Scan to E-mail prohibited, IFAX prohibited, IP relay prohibited, IP address FAX prohibited
477	00	00	Set one-touch scanning, fax registration restriction and destination display~~, SIP-FAX registration~~ *
478	80	00	Display delete key, Set default input method for Chinese language
479	00	00	Set up extension scan authentication, set up FAX/SCAN authentication
480	00	00	Specify display of default domain name, ActiveDirectory default domain No.
481 | 511	00 | 00	00 | 00	(Undefined)
512	80	80	Detect dial tone (PSTN1)
513 | 767	64 | 14	64 | 14	(Undefined)
768	0D	0D	DCS-TCF interval in V.17 and V.27tar (PSTN1)
769	09	09	DCS-TCF interval in V.29 (PSTN1)
770	22	C8	CFR-PIX interval (PSTN1)
771	23	23	T1 timer for auto-TX (PSTN1)
772	23	23	T1 timer for auto-RX (PSTN1)
773	23	23	T1 timer for manual TX (PSTN1)
774	23	23	T1 timer for manual RX (PSTN1)
775	23	23	T1 timer for auto-TX of polling (PSTN1)
776	23	23	T1 timer for manual TX of polling (PSTN1)
777	07	08	PIX-Post command interval (PSTN1)
778 | 829	00 | 00	00 | 00	(Undefined)
831	C0	C0	Send DIS (digital identification signal) in 4 Bytes

11.3 List of Soft Switches

NOTE

- **If no bit settings are given in the soft switch list that follows, the factory settings for those particular bits are fixed and should never be changed.**

: Default settings of U.S.

: Default settings of Europe

: Default settings are common

MODE	Factory setting bit	
000	Bit: 7 6 5 4 3 2 1 0 0 0 1 1 0 0 0 0	HEX:30

Bit	Feature	Logic		Description	
		0	1		
7	Specifies whether TX markers are return to ON or OFF after completing operations. <*>	**OFF**	Yes		
6	Select position of TX markers. <*>	**Top & bottom of doc.**	bottom of doc.		
5	Specifies whether printing TSI on transmitted document is returned to ON or OFF after completing operations. *	No	**Yes**		
4	Select position of TSI. *	Outside doc.	**Outside doc.**		
3	Specifies whether confirming communication password at TX is returned to ON or OFF after completing operations. <*>	**No**	Yes		
2	Confirm communication password at RX. <*>	**No**	Yes		
1	Specifies which TX method is returned to ON, memory-stored TX or nonstorage TX, after completing operations. *	**Memory-stored**	Non-stored	Memory-stored TX includes quick memory TX.	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
001	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 0 0	HEX:14

Bit	Feature	Logic		Description	
		0	1		
7	Specify which image quality is returned to be assigned after completing operations. *	Bit 7-4:	0000	Not available	
6			**0001**	**Standard**	
5			0010	Fine	
4			0011	Not available	
			0100	Superfine	
			0101	GSR	
			0110	Not available	
			0111	Super GSR	
			1000	Text + photo	
			Others	Not available	
3	Specify which density is returned to be assigned after FAX communication. *	Bit 3-1:	000	Much lighter	
2			001	Lighter	
1			**010**	**Normal**	
			011	Darker	
			100	Much darker	
			Others	Not available	
0	Specify whether to insert a destination name on document to send. <*>	**No**	Yes		

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
002	Bit: 7 6 5 4 3 2 1 0 1 0 1 0 1 0 0 0	HEX:A8

Bit	Feature	Logic		Description	
		0	1		
7	Print communication activity report automatically for every 50 activities. *	No	**Yes**	"No" means manual print.	
6	Select when a result report should be printed. *	Bit 6-5: 00		No print	Specifies result reports for TX, incomplete TX, or broadcasting TX.
5		**01**		**Print for incomplete TX**	
		10		Always print	
		11		Not available	
3	Print memory clear report.	No	**Yes**		
2	Log management of broadcast transmissions. <*>	**All together**	Individual		

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
003	Bit: 7 6 5 4 3 2 1 0 0 1 1 1 0 0 1 1	HEX:63

Bit	Feature	Logic		Description	
		0	1		
7	Result report of broadcast transmissions *	Bit 7to 6: 00		No print	
6		**01**		**Output for incomplete TX**	
		10		Always print	
		11		Not available	
5	Monitor line. (PSTN1)	No	**Yes**		

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
004	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 1 0	HEX:16

Bit	Feature	Logic		Description
		0	1	
3 2 1	Selects holding time of incompleted TX document in memory. <*>	Bit 3-0:	0000	IC memory device Delete file from memory immediately (No redialing function.
0			0001	10 min
			0010	20 min
			0011	30 min
			0100	40 min
			0101	50 min
			0110	**1 hr**
			0111	2 hr
			1000	4 hr
			1001	8 hr
			1010	12 hr
			1011	24 hr
			1100	72 hr
			Others	Not available

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
005	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 0 0 0	HEX:10

Bit	Feature	Logic		Description	
		0	1		
7	Select number of redialing 1. (Number of auto redialing at 1st stage)	Bit 7-4:	0000	0	Specifies the number of redialing with the interval specified by “Select redialing interval 1 (MODE 042 Bit 7-4).”
6			0001	1	
5			0010	2	
4			0011	3	
			0100	4	
			0101	5	
			0110	6	
			0111	7	
			1000	8	
			1001	9	
			1010	10	
			1011	11	
			1100	12	
			1101	13	
			1110	14	
			1111	15	
3	Select number of redialing 2. (Number of auto redialing at the 2nd stage)	Bit 3-0:	0000	0	Once redialing set by “Select number of redialing 1 (MODE 005 Bit 7-4)”, the system redials the number of times specified by this soft switch. Redialing interval follows “Select redialing interval 2 (MODE 042 Bit 3-0)” at the first time and then follows “Select redialing interval 1 (MODE 042 Bit 7-4)” from the second time.
2			0001	1	
1			0010	2	
0			0011	3	
			0100	4	
			0101	5	
			0110	6	
			0111	7	
			1000	8	
			1001	9	
			1010	10	
			1011	11	
			1100	12	
			1101	13	
			1110	14	
			1111	15	

NOTE

- **If the first stage has been set [0000], the system proceeds to the second stage after 10 minutes without carrying out the first stage.**
- **If the first and the second stages have been set [0000], the auto redialing process will not be is carried out.**

MODE	Factory setting bit	
006	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 0 1 0	HEX:32

Bit	Feature	Logic		Description	
		0	1		
7	Select dial line speed (DP speed). (PSTN1) *	Bit 7-6:	**00**	**10 pps**	This is valid only when "Switch PB/DP (MODE 006 Bit5)" sets DP. 16 pps is unavailable to users.
6			01	20 pps	
			10	16 pps	
			11	Not available	
5	Select a line type (tone or pulse) for calling (Switch PB/DP). (PSTN1) *	DP	**PB**	DP : pulse PB : tone	
4	Select standard phone line connected with the system (Extension / External line connection). (PSTN1) *	Extension connection	**External line connection**		
1	Select PSTN port automatically: Specify how to dial standard phone lines. <**>	No	**Yes**	• When the system has 2 PSTN lines and one of them is used, you can use the other line by selecting "Yes." If you have only 1 PSTN line or wish to use 2 lines for the extension and the external lines separately, select "No."	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting The feature with [**] (Bit 1) is available only in a system with a multi-port option.**
- **For PSTN2, see mode 011.**

MODE	Factory setting bit	
007	Bit: 7 6 5 4 3 2 1 0 1 0 1 1 0 1 0 1	HEX:B9 (For U.S.) HEX:B5 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7 6 5	Select upper limit of cut-off length after printing: When a received document is longer than the print paper and if the excess length is shorter than that specified here, it is cut off. If it is longer than that value specified with these bits, it is split into multiple pages. This feature is enabled when the following 2 conditions are satisfied: • When printing a received document • When bit 1 of this mode is 1 <*>	Bit 7-5:	000	0 mm	If the excess length is longer than specified here: <For reduction> • If Bit 1 is set to 0, it is reduced when fitting within the reduction percent range specified with Bits 4 to 2. <For division> • If Bit 1 is set to 0, it is divided when not fitting within the reduction ratio range specified with Bits 4 to 2. • If Bit 1 is set to 1, the excess length portion is divided.
			001	8 mm	
			010	12 mm	
			011	14 mm	
			100	18 mm	
			101	**20 mm**	
			110	24 mm	
			111	Not available	
4 3 2	Select upper limit of reduction ratio of received document: When a received document is longer that the print paper, it will be reduced to fit the paper with the upper limit specified with these bits. This feature is enabled when the following 2 conditions are satisfied: • When printing a received document • When bit 1 of this mode is 0 Example: The reduction is 100 to 90% when “90%” is specified. <*>	Bit 4-2:	000	100 %	Reduction will not be done if a received document is still longer than the paper for a specified reduction.
			001	95 %	
			010	90 %	
			011	**85 %**	
			100	80 %	
			101	**65 %**	
			110	60 %	
			111	Not available	

Bit	Feature	Logic		Description
		0	1	
1	Select cut off/reduction of received document: This bit specifies cutting off or reducing a received document that is longer than the print paper. (This feature is enabled when printing a received document.) <*> If the document will not fit within a printable range at the maximum reduction ratio specified here, the excess length portion is divided.	**Reduction**	Cut off	This bit determines that the received document will be cut off with “Select upper limit of cut off length after printing (MODE 007 Bit 7 to 5)” or reduced with “Select upper limit of reduction ratio of received document (MODE 007 Bit 4 to 2).”
0	Printing specification of received document.	First page.	**All pages.**	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
008	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Where to detect print papers. (Valid only when printing a received document) <*>	**From print paper**	From cassette	"From print paper" detects print papers from actual print papers while "From cassette" indicates print papers with a cassette size or the last information on print papers regardless of actual print papers.	
6 5 4 3	Select size of print paper for received document. (Valid only when printing a received document) <*>	Bit 6-3:	**0000**	**Std method 1**	"Std method" determines an appropriate print paper for the length and the width of a print image. Method 1: Same width and no reduction. Method 2: Same width and minimum margin. Method 3: No reduction without considering width of paper. Method 4: Minimum margin without considering width of paper. "No wider width" will not take printer paper wider than the print image. No Wider Width 1: Same width and no reduction. Width 2: Same width and minimum margin. Width 3: No reduction without considering width of paper. Width 4: Minimum margin without considering width of paper. "Same width only" selects paper with the same width as the print image. Note. • Margin means the non-printed area. • Methods 2 to 4 are unavailable to users.
			0001	Std method 2	
			0010	Std method 3	
			0011	Std method 4	
			0100	No wider width 1	
			0101	No wider width 2	
			0110	No wider width 3	
			0111	No wider width 4	
			1000	Same width only	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
009	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 1 0 1 0	HEX:1A

Bit	Feature	Logic		Description	
		0	1		
7	Select default display of communication mode: Specifies what to display at first as communication mode. *	Bit 7-5:	000	G3-1	Returns “Communication mode” to its default after each operation. This soft switch is unavailable in some systems: This soft switch is unavailable in some systems: • With single port (including pseudo-multi port) G3 type: all are unavailable • With multi port PSTN+PSTN: G3-1, G3-2 available • “Mail” can be used when the FAX is equipped with Network Application Option.
6			001	~~SIP-FAX~~ Not available	
5			010	PC Scanner	
			011	G3-2	
			100	Mail (I-FAX)	
			101	Scan to E-mail	
			110	IP Address FAX	
			111	IP Relay	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. This applies only to systems with multi port. *: Screen setting**

MODE	Factory setting bit	
011	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 0 0 1	HEX:31

Bit	Feature	Logic		Description	
		0	1		
7	Select dial line speed (DP speed). (PSTN2) *	Bit 7-6:	**00**	**10 pps**	• This is valid only when "Switch PB/DP (MODE 011 Bit5)" sets DP. • 16 pps is unavailable to users.
6			01	20pps	
			10	16 pps	
			11	Not available	
5	Select a line type (tone or pulse) for calling. (Switch PB/DP). (PSTN2) *	DP	**PB**	• DP : pulse • PB : tone	
4	Select standard phone line connected with the system (Extension / External line connection). (PSTN2) *	Extension connection	**External line connection**		
1	Display illustrations.	Bit 1-0:	00	Not display	
0			**01**	**Display (Animation)**	
			10	Display (Still picture)	
			11	Not available	

NOTE

- **The features with (*) are settable by users. This applies only to system with multi-port option. *: Screen setting**

MODE	Factory setting bit	
012	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description
		0	1	
6	Select function of # key on one-touch screen.	Full dialing number	**One-touch number**	
0	Accumulated sheets: Change the number of accumulated sheets.	**Can be changed.**	Changes not allowed.	• Change items "Facsimile Print", "Copy Print", "Report Print", "Send Facsimile", "PC Print", and "Send E-mail" on the "Number of sheets" tab. • The accumulated sheets can be changed in the maintenance mode even if this bit is set to "Changes not allowed".

MODE	Factory setting bit	
013	Bit: 7 6 5 4 3 2 1 0 0 0 1 1 0 1 0 1	HEX:35

Bit	Feature	Logic		Description		
		0	1			
7 6 5	Select numbers of fax one-touches and of copy programs on auto-mode screen.			One-touch	Print program	
		Bit 7-5: 000		5	0	
			001	**4**	**1**	
		010		3	2	
		011		2	3	
		100		1	4	
		101		0	5	
		Others		Not available		
4 3	Determine the input of numbers of copies or of FAX destinations on auto-mode screen.	Bit 4-3: 00		1 digit	Regards these digits as an input of number of copies.	
		01		2 digit		
		10		**3 digit**		
		Others		Not available		
2	Automatically switch destinations	No	**Yes**	You can register main addresses and 2ndary addresses with onetouch. You can send to 2ndary addresses when communication with main addresses is abnormal. (Scanner Unit SU-501 must be installed.)		
0	Select operation when INBOX forward failed.	Destroy document immediately	**Destroy document after printing**	Specify the action to be taken when INBOX forwarding has failed. (Failed means communications cannot be delivered. Communications means communication via FAX and E-mail.)		

MODE	Factory setting bit	
014	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description
		0	1	
7	Select redialing interval for resending document.	Bit 7-5:	**000**	**10ïb**
6			001	30 sec
5			010	60 sec
			011	120 sec
			100	180 sec
			Others	Not available
1	Broadcast transmission setting confirmation window. <*>	Bit 1-0:	00	Not display
0			**01**	**Confirms settings at broadcast transmission**
			10	Confirms settings (single destination/all destinations)
			11	Not available

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
016	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description
		0	1	
6	Use of extra telephone. <*>	No	**Yes**	
5	Mail mode: Print date & time received <*>	**No**	Yes	
4	Mail mode: Position of print date & time received <*>	**Inside doc.**	Outside doc.	This is valid only when “(MODE 016 Bit5)” sets Yes.
1	RX Time Stamp: Print date & time received <*>	**No**	Yes	
0	RX Time Stamp: Position of print date & time received <*>	**Inside doc.**	Outside doc.	This is valid only when “(MODE 016 Bit1)” sets Yes.

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
017	Bit: 7 6 5 4 3 2 1 0 1 1 0 0 0 0 0 0	HEX:C0

Bit	Feature	Logic		Description
		0	1	
3	Select initial value of TSI name *	Bit 3-0:	**0000**	**TSI 1**
2			0001	TSI 2
1			0010	TSI 3
0			0011	TSI 4
			0100	TSI 5
			0101	TSI 6
			0110	TSI 7
			0111	TSI 8
			Others	Not available

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
018	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:01

Bit	Feature	Logic		Description
		0	1	
5	Select destination screen: Displays screen of destination when document is loaded in FAX mode. *	Bit 5-4:	**00**	**One-touch 1st screen**
4			01	Name screen
			10	Dial number screen
			11	Index screen
3	Specify full-dial sending	**Allowed**	Not allowed	
2	Specify broadcast transmission	**Allowed**	Not allowed	Specify whether or not to allow broadcast transmission.
1	Extra telephone communication mode	**Allowed**	Not allowed	0: Allow to start communication after calling 1: Not allow operation during calling

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
019	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Specify the ringing count of auto receiving call (PSTN1) *	Bit 7-3: 00000		0	Specify the ringing count till the main product starts receiving a call.
6		**00001**		**1**	
5					
4		10100		20	
3		Others		Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**
- **Some machines cannot receive calls.**
  Care must be taken when you set the ringing count to 10 or more.
- **For PSTN2, refer to MODE 249.**

MODE	Factory setting bit	
020	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description
		0	1	
7	Displays # of reports.	**No**	Yes	“Yes” displays # of pages on phone line in addition to ordinary # of papers.
6	Trace protocol.	No	**Yes**	“Yes” prints result of protocol trace after completing communication. If next communication is proceeded before this printing, information on previous communication protocol will be deleted.
5	Display number of error lines/transmission speed.	**No**	Yes	“Yes” displays # of error lines/transmission speed on panel and outputs port for auto checking.
4	Select monitor interval for line.	**Phase A**	All phases	Specifies interval for monitoring phone lines for G3 communication.
3	Display error codes. (Panel, report)	**No**	Yes	“Yes” displays error codes (6 digit) on panel and in report.

MODE	Factory setting bit	
021	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
4	Call hold guard timer	Bit 4-3: 00		1 hr	
3		**01**		**10 hr**	
		10		24 hr	
		11		72 hr	
2	Display symbol rate.	**No**	Yes	Symbol rates are 2400/2743/2800/3000/3200/3429. Rate of 2743 is not actually used.	
1	Observe EQM: Check modem & line statuses	**No**	Yes	Do not change the set value.	
0	Observe probing information: Check modem & line statuses	**No**	Yes	Do not change the set value.	

MODE	Factory setting bit	
022	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 0	HEX:02

Bit	Feature	Logic		Description
		0	1	
2	FAX memory nearly full to its capacity.	**256 KB**	512 KB	“Memory nearly full” means that unused memory becomes less than a specified capacity. This soft switch specifies threshold capacity.
1	Restrict parameters of memory stored TX.	No	**Yes**	If “Yes” is selected, then all relay transmissions will proceed with A4 size when function of remote side is unknown (not learned/full dialing). For learned destination without size of 16×15.4, TX will be done with 8×7.7.

MODE	Factory setting bit	
023	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 1 0 0 0	HEX:F8

Bit	Feature	Logic		Description
		0	1	
7	Select number of errors in redialing terminal of data type.	Bit 7-4: 0000		0
6		0001		1
5		0010		2
4		0011		3
		0100		4
		0101		5
		0110		6
		0111		7
		1000		8
		1001		9
		1010		10
		1011		11
		1100		12
		1101		13
		1110		14
		1111		**15**
3	Set margins for report image. <*>	No	**Yes**	Specifies whether to carry out merge process for report of image with merge.
0	Select memory over transmission mode.	**Transmission continued**	Transmission disconnected	Specifies whether stored pages will be transmitted if memory is full while scanning documents.

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
024	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 1	HEX:81

Bit	Feature	Logic		Description
		0	1	
5	Display Administrator/ User passwords.	**Yes**	No	
4	Display forwarding function button.	**No**	Yes	If the machine becomes unable to produce an output of a fax message received due to a fault on the engine side with this function set to "Yes," a "Forward" button will appear on the screen to allow the user to transfer the fax message to another machine.
3	Select alarm buzzer pattern.	**Pattern 0**	Pattern 1	Pattern 0: Peep Poop Peep Poop Peep Poop Pattern 1: Peep Peep Peep
2	Select ID display order when receiving.	Bit 2-1:	**00**	**Expansion IDT → TSI**
1			01	TSI
			Others	Not available
0	Receive by other user.	No	**Yes**	

MODE	Factory setting bit	
025	Bit: 7 6 5 4 3 2 1 0 0 1 1 1 1 1 1 1	HEX:7F

Bit	Feature	Logic		Description
		0	1	
6	Service call for printer option failure.	No	**Yes**	Specifies whether to make a service call for PC printer unit option failure. *1
5	Service call for printer failure.	No	**Yes**	Specifies whether to make a service call for printer failure. *1
4	Service call for scanner failure.	No	**Yes**	Specifies whether to make a service call for exceeding specified # of papers. *1
1	Service call for reaching near empty cycles of toner.	No	**Yes**	Set whether to make a service call for reaching near empty or empty cycles of toner. *2
0	Service call for reaching life times of drum.	No	**Yes**	Set whether to make a service call for reaching near life time or life times of drum. *2

NOTE

***1: This is valid only when "Allow service call? (MODE 026 Bit 6)" is set to "Yes."**

***2: This is valid only when MODE 026 Bit 3 is set to "Yes", and MODE 026 Bit 1 is set to "Yes."**

***3: This is valid only when MODE 026 Bit 2 is set to "Yes", and MODE 026 Bit 1 is set to "Yes."**

MODE	Factory setting bit	
026	Bit: 7 6 5 4 3 2 1 0 1 1 0 1 1 1 1 0	HEX:DE

Bit	Feature	Logic		Description
		0	1	
7	Allow remote maintenance.	No	**Yes**	
6	Allow service calls. (E-mail maintenance) (Network function)	No	**Yes**	Unused.
4	Print incomplete TX of service call for notifying consumables.	No	**Yes**	
3	Service call for empty toner.	No	**Yes**	*1
2	Service call for reaching life times of drum.	No	**Yes**	*2
1	Notify out-of-consumables.	No	**Yes**	

NOTE

***1: This is valid only when MODE 366 Bit7 is set to "Yes", and MODE 025 Bit 1 is set to "Yes", and MODE 026 Bit 1 is set to "Yes."**

***2: This is valid only when MODE 366 Bit7 is set to "Yes", and MODE 025 Bit 0 is set to "Yes", and MODE 026 Bit 1 is set to "Yes."**

MODE	Factory setting bit	
027	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 1 0 0	HEX:24

Bit	Feature	Logic		Description
		0	1	
7 6	Select ID display order: Specifies priority order of destination ID for printing report/ displaying on screen.	Bit 7-6:	**00**	**Pattern 1: 1→2→3→4→5→6**
		01		Pattern 2: 4→5→6→1→2→3
		01		Pattern 3: 4→5→1→2→3→6
		11		
				1: Name registered in one-touch button 2: Destination # registered in one-touch button 3: Phone # of destination dialed 4: Destination phone # by TSI 5: Extended ID 6: Standard ID (# of TSI/CIG)
5	Display anti-dew button.	No	**Yes**	
4	Process drum dry button.	**No**	Yes	
3	Secure comm. with N-method.	**No**	Yes	
2	F code function.	No	**Yes**	Need for G3 communications.
1	Assign non-reduction TX for 2in1 scan.	**No**	Yes	Specifies whether 2in1 TX will be sent by A4 always or by appropriate size to receiver's capability.

MODE	Factory setting bit	
028	Bit: 7 6 5 4 3 2 1 0 0 1 1 0 0 0 1 1	HEX:63

Bit	Feature	Logic		Description	
		0	1		
7	Select remote print protocol.	**F CODE**	N method	Fixed to "0", valid at TX	
6 5	Select restricted number of prints of remote multi copy.	Bit 6-0: 0000000		Not available (Same as 1 copy)	
4		0000001		1 copy	
3		|			
2		**1100011**		**99 copies**	
1 0				Not available (Same as 99 copies)	

MODE	Factory setting bit	
030	Bit: 7 6 5 4 3 2 1 0 1 0 1 1 0 0 0 0	HEX: B1 (For U.S.) HEX: B0 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Rotation TX *	No	**Yes**		
6	Rotate print of FAX RX. <*>	Bit 6-5: 00		No rotate print	"Sort" means "alternate sort" here.
5			**01**	**Rotate print (without sort)**	
			10	Rotate print (with sort)	
			11	Not available	
4	Receive 2in1 page. (Valid for RX print) <*>	No	**Yes**		
3	Restrict print paper selection: Specifies unselectable print paper (including orientation) for FAX.	Bit 3-2:	**00**	**No B5S, A5S, and postcard**	
2			01	No A5S and postcard	
			10	No postcard	
			11	Not available	
1	Assign mixed mm/inch papers. (Priority Set) (Valid for RX print)	Bit 1-0:	**00**	**Select mm only**	
0			**01**	**Select inch only**	
			10	Select both	
			11	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
031	Bit: 7 6 5 4 3 2 1 0 1 0 1 0 0 0 0 0	HEX:A0

Bit	Feature	Logic		Description	
		0	1		
7	Margin process for multiple copies of report with image merge.	No	**Yes**	Valid when “Set margins for report image? (MODE 23 Bit 3)” is set to “Yes.”	
6	Assign output format for image margin report.	**Same as regular report**	Always A5 forma	1: Always output with A5 format regardless of the set status of paper. This is valid when a cassette has A4 C papers.	
5	Margin layout for 2-sided TX *	Bit 5-4: 00		Top margin	
4		01		Standard book	
		10		**Automatic**	
		11		Not available	
2	Proof Print document hold time of PC print *	Bit 2-1:	**00**	**No**	Set the time to hold documents for the Proof Print function.
1		01		20 min	
		10		30 min	
		11		Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
032	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 1	HEX:35 (For U.S.) HEX:21 (For Europe)

Bit	Feature	Logic		Description
		0	1	
4	Select metric/inch for FAX TX	**mm**	**inch**	
3	Set zoom ratio for reducing ledger/letter.	**64.7 %**	77.2 %	
2	Toggle metric and inch when specifying reading area.	**mm**	**inch**	

MODE	Factory setting bit	
033	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 0 0	HEX:14

Bit	Feature	Logic		Description	
		0	1		
6	Initial setting of 2-sided TX	**No 2-sided-TX mode**	2-sided TX mode		
5	Select draft printing mode.	Bit 5-4: 00		No draft mode	"Toner saving mode" follows # of skipped pixels (Bit Nos. 3 to 2). "High resolution saving mode" in which each pixel's size will be reduced, follows # of skipped pixels (Bit Nos. 3 to 2) for only at points of transition between white-black along the direction of main scanning.
4		**01**		**Toner saving mode**	
		10		High resolution saving mode	
		11		Not available	
3	Select draft printing level.	Bit 3-2: 00		No skipping	Specifies skipped printing level for copy, RX, and report printing.
2		**01**		**Skip 1/4 pixel**	
		10		Skip 2/4 pixel	
		11		Skip 3/4 pixel	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
034	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 0	HEX:02

Bit	Feature	Logic		Description	
		0	1		
7	Select cut-off length at leading edge of printing paper.	Bit 7-4:	**0000**	**0 mm**	Valid only at RX printing.
6			0001	2 mm	
5			0010	4 mm	
4			0011	6 mm	
			0100	8 mm	
			0101	10 mm	
			0110	12 mm	
			0111	14 mm	
			1000	16 mm	
			1001	18 mm	
			1010	20 mm	
			1011	22 mm	
			1100	24 mm	
			1101	26 mm	
			1110	28 mm	
			1111	30 mm	
3	Set special density.	**No**	Yes		
1	Overlap printing.	No	**Yes**	Valid only at RX printing. Overlapped print is fixed to 4 mm regardless of line density.	

MODE	Factory setting bit	
035	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 1	HEX:03

Bit	Feature	Logic		Description
		0	1	
1	RX by memory when reaching I/C lifetime.	No	**Yes**	
0	RX by memory when reaching toner empty.	No	**Yes**	

MODE	Factory setting bit	
036	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description
		0	1	
7	Secure Print document hold time <*>	Bit 7-3:	**00000**	**Not delete**
6			00001	1 hr
5			00010	2 hr
4			00011	3 hr
3			|	|
			11000	24 hr
			Others	Not available
0	Specify RX (remote copy) print order.	Start printing after receiving first page.	**Start printing after receiving all pages.**	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
037	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 1 0 0 0	HEX:F8

Bit	Feature	Logic		Description
		0	1	
7	Select FAX paper cassette (1st cassette). <*>	No	**Yes**	
6	Select FAX paper cassette (2nd cassette). <*>	No	**Yes**	
5	Select FAX paper cassette (3rd cassette). <*>	No	**Yes**	
4	Select FAX paper cassette (4th cassette). <*>	No	**Yes**	
2	Select FAX paper cassette (Bypath). <*>	**No**	Yes	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
038	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 1 0	HEX:0A

Bit	Feature	Logic		Description	
		0	1		
7	Turn on print lamp when out-of-paper.	**On when all cassettes are out of paper**	On when at least one cassette is out of paper		
3	Print restart timer after stopping.	Bit 3-2:	00	3 min	
2			01	5 min	
			10	**10 min**	
			11	20 min	
1	Manual setting of print stop/start. *	Stop	**Start**		
0	Print stop/start timer. *	**Does not function**	Function		

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
040	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 1 0 1 0	HEX:FA

Bit	Feature	Logic		Description
		0	1	
7	2-dim coding at TX. (Valid for G3 communication)	No	**Yes**	"No": MH "Yes": MH + MR
6	T.6 coding. (Valid for G3 communication)	No	**Yes**	"Yes": MH + MR + MMR Valid only when "2-dim coding? (MODE 040 Bit 7)" is set to "Yes."
5	JBIG communication. (Valid for ECM communication)	No	**Yes**	
4	Third party's JBIG (ITU-T) communication. (Valid for ECM communication)	No	**Yes**	Valid only when "JBIG communication? (MODE 040 Bit 5)" is set to "Yes."
3	Proprietary JBIG (ITU-T) communication. (Valid for ECM communication)	No	**Yes**	Valid only when "JBIG communication? (MODE 040 Bit 5)" is set to "Yes."
1	JBIG capability at V.34 communication. (G3)	No	**Yes**	Valid only when "JBIG communication? (MODE 040 Bit 5)" is set to "Yes."

MODE	Factory setting bit	
041	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description
		0	1	
6	ECM mode	No	**Yes**	“No”: G3 “Yes”: G3 + ECM

MODE	Factory setting bit	
042	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 1 0 1 0	HEX:3F

Bit	Feature	Logic		Description
		0	1	
7	Select redialing interval 1.	Bit 7-4:	0000	Not available
6			0001	1 min
5			0010	2 min
4			**0011**	**3 min**
			0100	4 min
			0101	5 min
			0110	6 min
			0111	7 min
			1000	8 min
			1001	9 min
			1010	10 min
			1011	11 min
			1100	12 min
			1101	13 min
			1110	14 min
			1111	15 min
3	Select redialing interval 2.	Bit 3-0:	0000	Not available
2			0001	1 min
1			0010	2 min
0			0011	3 min
			0100	4 min
			0101	5 min
			0110	6 min
			0111	7 min
			1000	8 min
			1001	9 min
			1010	10 min
			1011	11 min
			1100	12 min
			1101	13 min
			1110	14ï min
			1111	**15 min**

MODE	Factory setting bit	
043	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:80

Bit	Feature	Logic		Description	
		0	1		
7	# of resending document.	Bit 7-6: 00		0	
6		01		1	
		10		**2**	
		11		3	
4	Redialing when line is connected but no answer.	**No**	Yes		
3	Auto-answering call frequency.	**Not limitation (1 to 9)**	limitation (2 to 4)	Number of times for automatic reception calls.	
2	TCI/CSI registration screen.	**User**	Service mode	telephone number setting.	

MODE	Factory setting bit	
044	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:80

Bit	Feature	Logic		Description
		0	1	
7	Select threshold value for RTN sending error trace.	32 lines or more	**64 lines or more**	Specifies # of error lines as reference of sending RTN: • "32 lines or more": MCF if error lines are 0 - 31, RTN if error lines are 32 or more • "64 lines or more": MCF if error lines are 0 - 31, RTP if error lines are 32 to 63, RTN if error lines are 64 or more
6	Process TCF sending specially.	**No**	Yes	
4	Select T4 timer (Action against line delay).	**3 sec**	4.5 sec	
3	Take an action for communication error from overseas (Action against LMCD-OFF).	**Yes**	No	• Select "No" unless bad line is experienced.
2	Take an action for communication error from overseas (Action for fall back).	**Yes**	No	• Select "No" unless bad line is experienced.
1	Process RTN RX failure.	**discard as error**	not as error	Changes high-speed signal sending timing: 0: DCF/TCF 80 ms, CFR/PIX 450 ms. 1: DCF/TCF 250 ms, CFR/PIX 600 ms.
0	Retrain V. 34 control channel.	**Yes (discard as error)**	No (not as error)	

MODE	Factory setting bit	
047	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 1 0 0 0	HEX:88

Bit	Feature	Logic		Description	
		0	1		
7	Select V. 34 fall back tolerance. (TX)	Bit 7-5: 000		0	
6		001		1	
5		010		2	
		011		3	
		100		**4**	
		Others		Not available	
4	Select V. 34 fall back tolerance. (RX)	Bit 4-2: 000		0	
3		001		1	
2		**010**		**2**	
		011		3	
		100		4	
		Others		Not available	

MODE	Factory setting bit	
048	Bit: 7 6 5 4 3 2 1 0 1 1 0 0 0 1 1 0	HEX:C6

Bit	Feature	Logic		Description	
		0	1		
7	Select V.34/V.33/V.17 capabilities.	Bit 7-6: 00		No capability above 9600 bps	Sets MODEM's function
6		01		V.33	
		10		V.17 & V.33	
		11		**V.17 & V.33 & V.34**	
2	Allow V.34.	No	**Yes**	Should be same as "V.8 (MODE 48 Bit 1)"	
1	Allow V. 8.	No	**Yes**	Should be same as "V.8 (MODE 48 Bit 2)"	
0	Allow V.34 communication for extensions.	**V.34**	V.17	If bits 7-6 are other than V.34, or bit 2 or bit 1 is set to "No", the setting is ignored.	

MODE	Factory setting bit	
049	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 0 1	HEX:0D

Bit	Feature	Logic		Description	
		0	1		
4	Select upper limit of transmission speed. (TX)	Bit 4-0:	00000	2400 bps	• Need to disable "V.34 capability (MODE 048 Bit 2)" by setting "No" for 2400 bps. • 16.8 kbps or faster are valid only when "Allow V.34. (MODE 048 Bit 2)" is enabled (Yes).
3			00001	4800 bps	
2			00010	7200 bps	
1			00011	9600 bps	
0			00100	12.0 kbps	
			00101	14.4 kbps	
			00110	16.8 kbps	
			00111	19.2 kbps	
			01000	21.6 kbps	
			01001	24.0 kbps	
			01010	26.4 kbps	
			01011	28.8 kbps	
			01100	31.2 kbps	
			01101	**33.6 kbps**	
			Others	Not available	

MODE	Factory setting bit	
050	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 0 1	HEX:0D

Bit	Feature	Logic		Description	
		0	1		
4	Select upper limit of transmission speed. (RX)	Bit 4-0:	00000	2400 bps	• Need to disable "V.34 capability (MODE 048 Bit 2)" by setting "No" for 2400 bps. • 16.8 kbps or faster is valid only when "Allow V.34 (MODE 048 Bit 2)" is enabled (Yes).
3			00001	4800 bps	
2			00010	7200 bps	
1			00011	9600 bps	
0			00100	12.0 kbps	
			00101	14.4 kbps	
			00110	16.8 kbps	
			00111	19.2 kbps	
			01000	21.6 kbps	
			01001	24.0 kbps	
			01010	26.4 kbps	
			01011	28.8 kbps	
			01100	31.2 kbps	
			01101	**33.6 kbps**	
			Others	Not available	

MODE	Factory setting bit	
051	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description	
		0	1		
7	Declare size of print paper for received document.	Bit 7-5: 000		Not available	Specifies declaration value of printing function for RX. "Auto" selects max size of paper, max size of loaded cassette, or max size of the last paper. "Auto including rotation" is equivalent to A4S (Letter R) set even A4 (Letter) is selected by MODE 008 Bit 7.
6		**001**		**Auto**	
5		010		A4/Letter	
		011		B4/Legal	
		100		A3/11×17	
		101		Auto including rotation	
		Others		Not available	

MODE	Factory setting bit	
053	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 1 0 0 0	HEX:C8

Bit	Feature	Logic		Description
		0	1	
6	Select received document operation when F code receiving has failed.	Do not destroy	**Destroy**	

MODE	Factory setting bit	
054	Bit: 7 6 5 4 3 2 1 0 0 1 1 1 1 0 1 0	HEX:7A

Bit	Feature	Logic		Description	
		0	1		
7	Time to be detected as no sound.	Bit 7-4: 0000		Not available	
6		0001		1 sec	
5		|			
4		**1111**		**7 sec**	
		|			
		1010		10 sec	
		Others		Not available	
3	Control history of V.34 auto dialing.	No	**Yes**	Valid only when a receiver system has V.34 modulation.	
2	Modulation method for V.34 manual, nonstorage TX.	**V.17**	V.34		
1	Modulation method for V.34 polling TX document.	V.17	**V.34**		
0	Modulation method for V.34 manual RX.	**V.17**	V.34		

MODE	Factory setting bit	
056	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 0 0	HEX:0C

Bit	Feature	Logic		Description	
		0	1		
3	Modem power-saving mode (sleep)	No power-saving mode	**Power-saving mode**		
2	Select sending time of ANSam.	Bit 2-0: 000		2.0 sec	
1		001		2.5 sec	
0		010		3.0 sec	
		011		3.5 sec	
		100		**4.0 sec**	
		101		5.0 sec	
		110		6.0 sec	
		111		Not available	

MODE	Factory setting bit	
057	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 0 0	HEX:19

Bit	Feature	Logic		Description	
		0	1		
7	Select the time from when line is blocked to when ANSam TX starts.	Bit 7-0:			Specify the time from when line is blocked to when ANSam TX starts.
6			00000000	Not available	
5			00000001	100 msec	
4			I		
3			**00011001**	**2500 msec**	
2			I		
1			11111111	25500 msec	
0					

MODE	Factory setting bit	
077	Bit: 7 6 5 4 3 2 1 0 0 1 1 0 0 0 0 0	HEX:60

Bit	Feature	Logic		Description	
		0	1		
4	# of times of hooking monitoring during ringing	Bit 4-3:	**00**	**3**	
3			01	5	
			10	8	
			11	12	

MODE	Factory setting bit	
080 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23 (For U.S.) HEX:6E (For Europe)
110 (PSTN2)		HEX:23 (For U.S.) HEX:23 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Select time expected for line connection	Bit 7-0:		
6		00000000		0 sec
5		00000001		0.5 sec
4				
3		00100011		17.5 sec
2				
		01101110		55 sec
1		01111000		60 sec
0		Others		Not available

MODE	Factory setting bit	
082 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 1 1 0 0	HEX:04
112 (PSTN2)		HEX:28

Bit	Feature	Logic		Description
		0	1	
5	Detect busy tone.	No	Yes	
3	Detect line disconnection. (inverted polarity)	No	Yes	

MODE	Factory setting bit	
083 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 0 0 0	HEX:50

Bit	Feature	Logic		Description	
		0	1		
7	Monitoring cycle of hooking	Bit 7-6: 00		12 msec	
6		**01**		**24 msec**	
		10		36 msec	
		11		48 msec	
5	Select upper limit of detecting as hooking (Adjustment of voltage detected as hooking)	Bit 5-3: 000		8 V	
4		001		11 V	
3		**010**		**14 V**	
		011		19 V	
		100		25 V	
		101		31 V	
		110		36 V	
		111		42 V	
2	Select lower limit of detecting as hooking (Adjustment of voltage detected as hooking)	Bit 2-0:	**000**	**3 V**	
1			001	5 V	
0			010	8 V	
			011	11 V	
			100	14 V	
			101	17 V	
			110	19 V	
			111	22 V	

NOTE

- **The upper limit (Bit 5 to 3) must be higher than the lower limit (Bit 2 to 0).**

MODE	Factory setting bit	
084 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 1 1 0 0	HEX:14 (For U.S.) HEX:28 (For Europe)
114 (PSTN2)		HEX:14 (For U.S.) HEX:1C (For Europe)

Bit	Feature	Logic		Description	
		0	1		
5	Select PB sending level.	Bit 5-2:	0000	-1 dBm	
4			0001	-2 dBm	
3			0010	-3 dBm	
2			0011	-4 dBm	
			0100	-5 dBm	
			0101	**-6 dBm**	
			0110	-7 dBm	
			0111	-8 dBm	
			1000	-9 dBm	
			1001	-10 dBm	
			1010	**-11 dBm**	
			1011	-12 dBm	
			1100	-13 dBm	
			1101	-14 dBm	
			1110	-15 dBm	
			1111	-16 dBm	

MODE	Factory setting bit	
085 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 1 0 0 1 0 0 0 0	HEX:90 (For U.S.) HEX:C0 (For Europe)
115 (PSTN2)		HEX:90 (For U.S.) HEX:90 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Select TX level.	Bit 7-4:	1000	-9 dBm	Specifies TX levels other than PB.
6			**1001**	**-10 dBm**	
5			1010	-11 dBm	
4			1011	-12 dBm	
			1100	**-13 dBm**	
			1101	-14 dBm	
			1110	-15 dBm	
			1110	-16 dBm	
			Others	Not available	

MODE	Factory setting bit	
086 (PSTN1) 116 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description	
		0	1		
7 6	Select RX attenuator.	Bit 7-6: 00		0 dB (-48 dBm)	• Signals controlled by this soft switch are 1300 Hz detection, PB tone detection, V29 & V27ter, V21 signal detection, and all tonal signal. • Numbers within parentheses represent the minimum receiving sensitivity.
		01		**5 dB (-43 dBm)**	
		10		10 dB (-38 dBm)	
		11		15 dB (-33 dBm)	

MODE	Factory setting bit	
087 (PSTN1) 117 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:90

Bit	Feature	Logic		Description	
		0	1		
7	Select detection time of continuous ringer.	Bit 7-6: 00		No detection	
6		01		1.8 sec	
		10		**3.0 sec**	
		11		10 sec	
5	Select frequency for ringer detection.	Bit 5-3: 000		10 to 27.5 Hz	
4		001		10 to 75 Hz	
3		**010**		**10 to 90 Hz**	
		011		10 to 200 Hz	
		Others		Not available	

MODE	Factory setting bit	
088 (PSTN1) 118 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 1 1 0 0 0 0 0 0	HEX:C0

Bit	Feature	Logic		Description
		0	1	
6	Select process mode at detection time out of 2nd dial tone.	Keeps same operation as before detection even after time out	**Generates TX error at time out**	
3	1300 Hz detection.	**-28 dBm**	-36 dBm	

MODE	Factory setting bit	
089 (PSTN1) 119 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Select TX method.	**Insert pause after prefix for external lines**	Insert pause after 1st dial		
6	Select method of detecting dial prefix for external lines.	**Dial # search method**	Pause search method		
5	Select prefix # for external lines. *	Bit 5-2:	**0000**	**0**	Valid only when “Select method of detecting dial prefix for external lines (MODE 089 Bit6)” is set to “Dial # search method.”
4			0001	1	
3			0010	2	
2			0011	3	
			0100	4	
			0101	5	
			0110	6	
			0111	7	
			1000	8	
			1001	9	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
092 (PSTN1) 122 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 1 1 1 0 0 0 0	HEX:70

Bit	Feature	Logic		Description	
		0	1		
7	Send V.29 echo protection tone.	**No**	Yes		
6	Send V.17 echo protection tone.	No	**Yes**		
5	Send V.33 echo protection tone.	No	**Yes**		
4	Select V.17 and V.33 carrier frequency.	Bit 4-3: 00		1800 Hz	
3		01		1700 Hz	
		10		**1800 + 1700 Hz**	
		11		Not available	

MODE	Factory setting bit	
093 (PSTN1)	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 1 0 0 0	HEX:48 (For U.S.) HEX:40 (For Europe)
123 (PSTN2)		HEX:48 (For U.S.) HEX:48 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Select timing for starting CED sending.	Bit 7-6: 00		0 msec	Specifies time interval from line connection to starting sending CED. (7-sec is provided for the second dial.)
6			**01**	**2000 msec**	
		10		2500 msec	
		11		7 sec	
5	Select CED frequency.	Bit 5-4:	**00**	**2100 Hz**	Specifies frequency to carry CED or N/A selection.
4		01		1080 Hz	
		10		1300 Hz	
		11		Not available	
3	Process CED echo.	**No**	**Yes**	Specifies whether to process CED echo at the intervals of 500 ms between CED and initial identification.	
2	Process incoming command echo.	**No**	Yes	Specifies whether to process incoming echo at the intervals of 500 ms between when receiving an initial identification and when sending the incoming command.	
1	Control channel data rate.	Bit 1-0:	**00**	**1200 bps**	
0		01		Non 1200 bps	
		10		2400 bps	
		11		Non 2400 bps	

MODE	Factory setting bit	
094 (PSTN1) 124 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 0 0	HEX:0C

Bit	Feature	Logic		Description
		0	1	
3	Lock AGC in V.33 mode.	No	**Yes**	
2	Lock AGC in V.17 mode.	No	**Yes**	
1	Lock AGC in V.29 mode.	**No**	Yes	
0	Lock AGC in V.27ter mode.	**No**	Yes	

MODE	Factory setting bit	
095 (PSTN1) 125 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description	
		0	1		
7	Adjust digital TX cable equalizer.	Bit 7-6:	**00**	**0 dB**	
6			01	4 dB	
			10	8 dB	
			11	12 dB	
5	Adjust digital RX cable equalizer.	Bit 5-4:	00	0 dB	For V.29, actual value will be the sum of 4 dB and the specified value.
4			01	4 dB	
			10	**8 dB**	
			11	12 dB	

MODE	Factory setting bit	
096 (PSTN1) 126 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 0 0	HEX:14

Bit	Feature	Logic		Description	
		0	1		
5	Select time for CI signal sending ON.	Bit 5-4:	00	0.5 sec	Use this soft switch for error in V8 sequence.
4			**01**	**1.0 sec**	
			10	1.5 sec	
			11	2.0 sec	
3	Select time for CI signal sending OFF.	Bit 3-1:	000	0.4 sec	Use this soft switch for error in V8 sequence.
2			001	0.8 sec	
1			**010**	**1.0 sec**	
			011	1.2 sec	
			100	1.6 sec	
			101	2.0 sec	
			Others	Not available	

MODE	Factory setting bit	
097 (PSTN1) 127 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 1 0 0	HEX:14

Bit	Feature	Logic		Description	
		0	1		
7	Attenuate TCF/NTCF sending level.	**No**	Yes 3 dB drops.	Specifies whether to attenuate sending level of TCF and NTCF. For V33/V29, level of attenuation is determined by MODE 085 Bit 7 to 4 and MODE 097 Bit 6. Otherwise, level of attenuation is determined by MODE 085 Bit 7 to 4.	
6	Attenuate V33/V29 sending level.	**No**	Yes 3 dB drops.	Specifies whether to attenuate sending level of V17/V33/V29. Level of attenuation is determined by MODE 085 Bit 7 to 4 and MODE 097 Bit 6.	
4	Select V.34 symbol rate.	Bit 4-2:	000	2400 Sym/S	
3			001	Not available	
2			010	2800 Sym/S	
			011	3000 Sym/S	
			100	3200 Sym/S	
			101	**3429 Sym/S**	
			Others	Not available	

MODE	Factory setting bit	
098 (PSTN1) 128 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 1 1 0	HEX:46

Bit	Feature	Logic		Description	
		0	1		
7	Select starting time of sending CM signal.	Bit 3-6: 00		0 sec	Use this soft switch for error in V8 sequence.
6		**01**		**1 sec**	
		10		2 sec	
		11		3 sec	
3	Select EQM threshold value.	Bit 3-0: 0000		-6	
2		0001		-5	
1		0010		-4	
0		0011		-3	
		0100		-2	
		0101		-1	
		0110		**0**	
		0111		1	
		1000		2	
		1001		3	
		1010		4	
		1011		5	
		1100		6	
		Others		Not available	

MODE	Factory setting bit	
099 (PSTN1) 129 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 1 0 0 0	HEX:88

Bit	Feature	Logic		Description	
		0	1		
7	Select threshold value 1 for symbol speed.	Bit 7-4:	0000	-8	Specifies range of tolerance for V. 34 line characteristic distortion.
6			0001	-7	
5			0010	-6	
4			0011	-5	
			0100	-4	
			0101	-3	
			0110	-2	
			0111	-1	
			1000	**0**	
			1001	1	
			1010	2	
			1011	3	
			1100	4	
			1101	5	
			1110	6	
			1111	7	
3	Select threshold value 2 for symbol speed.	Bit 3-0:	0000	-8	Specifies minimum tolerance level of S/N ratio in V.34.
2			0001	-7	
1			0010	-6	
0			0011	-5	
			0100	-4	
			0101	-3	
			0110	-2	
			0111	-1	
			1000	**0**	
			1001	1	
			1010	2	
			1011	3	
			1100	4	
			1101	5	
			1110	6	
			1111	7	

MODE	Factory setting bit	
114 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 1 1 0 0	HEX:14 (For U.S.) HEX:1C (For Europe)

Bit	Feature	Logic		Description
		0	1	
5	Select PB sending level.	Bit 5-2: 0000		-1 dBm
4		0001		-2 dBm
3		0010		-3 dBm
2		0011		-4 dBm
		0100		-5 dBm
		0101		**-6 dBm**
		0110		-7 dBm
		0111		**-8 dBm**
		1000		-9 dBm
		1001		-10 dBm
		1010		-11 dBm
		1011		-12 dBm
		1100		-13 dBm
		1101		-14 dBm
		1110		-15 dBm
		1111		-16 dBm

MODE	Factory setting bit	
190	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Restrict SF/SSF communication (TX).	**No**	Yes	For risk management according to new recommendation of G3 high resolution transmission
6	Restrict SF/SSF communication (RX from other company's system).	**No**	Yes	For risk management according to new recommendation of G3 high resolution transmission

MODE	Factory setting bit	
192	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:C0

Bit	Feature	Logic		Description	
		0	1		
7	Select order of displaying year to date. (Corresponding to each region)	Bit 7-6: 00		Year-Month-Date	Order of displaying date in OPE display
6		01		Not available	
		10		Date-month-year	
		11		**Month-date-year**	

MODE	Factory setting bit	
197	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:C0 (For U.S.) HEX:C1 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Daylight saving function	Not available	**Available**		
6	Display ON/OFF switch of Daylight saving	OFF	**ON**		
3	Daylight saving pattern	Bit 3-0:	**0000**	**Pattern 1**	For the details of patterns 1 to 6, see NOTE below.
2			**0001**	**Pattern 2**	
1			0010	Pattern 3	
0			0011	Pattern 4	
			0100	Pattern 5	
			0101	Pattern 6	
			0111	Pattern 7	
			1000	Pattern 8	
			1001	Pattern 9	
			1010	Pattern 10	
			1011	Pattern 11	
			Others	Not available	

NOTE

	Start Time	End Time
Pattern 1	2:00 am on 1st Sunday, April	2:00 am on last Sunday, October
Pattern 2	2:00 am on last Sunday, March	2:00 am on last Sunday, October
Pattern 3	2:00 am on last Friday, April	2:00 am on last Thursday, September
Pattern 4	2:00 am on last Sunday, March	2:00 am on last Sunday, September
Pattern 5	2:00 am on 1st Sunday, September	2:00 am on last Sunday, April
Pattern 6	2:00 am on last Sunday, October	2:00 am on last Sunday, March
Pattern 7	2:00 am on last Sunday, October	2:00 am on last Sunday, February

	Start Time	End Time
Pattern 8	2:00 am on last Sunday, November	2:00 am on last Sunday, February
Pattern 9	2:00 am, April 1	2:00 am on last Sunday, October
Pattern 10	2:00 am, April 1	2:00 am, October 1
Pattern 11	<Until 2006> 2:00 am on 1st Sunday, April	2:00 am on last Sunday, October
	<After 2007> 2:00 am on 2nd Sunday, March	2:00 am on 1st Sunday, November
Pattern 11	(Until 2006) 2:00 am on 1st Sunday, April (From 2007) 2:00 am on 2nd Sunday, March	2:00 am on last Sunday, October 2:00 am on first Sunday, November

MODE	Factory setting bit	
198	Bit: 7 6 5 4 3 2 1 0 1 1 0 1 0 0 0 0	HEX:D0

Bit	Feature	Logic		Description	
		0	1		
7	TX forwarding to administrator <*>	Not forwarded	**Forwarded**	Specifies whether a received document is forwarded to a destination specified by the administrator.	
6	TX forwarding of scanner function to administrator <*>	Not forwarded	**Forwarded**	Enabled when setting Mode 198 Bit 7 to "1". If you set this to "0", and perform serial broadcast transmission including to destinations other than for scanner transmission, scanner transmission documents are forwarded to the administrator.	
5	Result report TX forwarding to administrator	Bit 5-4: 00		Not output	Enabled when setting Mode 198 Bit 7 to "1".
4		**01**		**Output for incomplete TX**	
		10		Always output	
		11		Not available	

NOTE

- **(*1): Bit 7 of mode 198 is enabled only when "1 (forwarded)" is specified.**

MODE	Factory setting bit	
200	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 0	HEX: 04

Bit	Feature	Logic		Description	
		0	1		
4	Destination machine confirmation transmission function	**Not confirm/ send**	Confirm/ send		
3 2 1 0	CSI comparison digit quantity for destination machine confirmation transmission	Bit 3-0:	0001	1 digit	Specify the CSI comparison digit quantity when selecting “Confirm/send” in Bit 4.
			0010	2 digits	
			0011	3 digits	
			0100	**4 digits**	
			0101	5 digits	
			0110	6 digits	
			0111	7 digits	
			1000	8 digits	
			1001	9 digits	
			1010	10 digits	
			Others	Not available	

MODE	Factory setting bit	
201	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 0 1 1	HEX:53

Bit	Feature	Logic 0	Logic 1	Description	
7	Special characters when transmitting data, confirming unit of the other party	Bit7-0:	01000001	A	Specifies the special character at the end of the dial number when transmitting data, confirming unit of the other party. Lower-case letters become valid by setting upper-case letters.
6					
4			01000011	G	
3			01001000	Not available	
2			01001001	I	
1					
0			01011010	O	
			01010000	Not available	
			01010001	Q	
			01010011	**S**	
			01010100	Not available	
			01010101	U	
			01011010	Z	
			01100001	a	
			01100111	g	
			01101000	Not available	
			01101001	i	
			01101111	o	
			01110000	Not available	
			01110001	q	
			01110011	s	
			01110100	Not available	
			01110101	u	
			01111010	z	
			Others	Not available	

MODE	Factory setting bit	
212 (PSTN1) 232 (PSTN2)	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:40 (For U.S.) HEX:00 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Select DP make rate.	Bit 7-6:	**00**	**33 %**	Specify the DP signal make ratio.
6			**01**	**40 %**	
			Others	Not available	

MODE	Factory setting bit	
249	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Specify the ringing count of auto receiving call (PSTN2) <*>	Bit 7-3:	00000	0	Specify the PSTN2 ringing detection count. The ringing count is the number of rings until the machine automatically starts receiving a call.
6			**00001**	**1**	
5					
4			10100	20	
3			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**
- **Some machines cannot receive calls.**
  Care must be taken when you set the ringing count to 10 or more.
- **For PSTN1, refer to MODE 019.**

MODE	Factory setting bit	
288	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 1 1 1 1	HEX:FF

Bit	Feature	Logic		Description	
		0	1		
7 6 5 4 3 2 1 0	Insert dummy data before PIX.	Bit 7-0: 00H		Add 200 ms	• Changes not allowed. • Specify period to transmit dummy data before transmitting PIX. • Add the period specified here to the first flag (EMC) and FILL (G3) of the image signal.
		01H		Add 300 ms (200 ms + 100 ms)	
		07H		Add 900 ms (200 ms +700 ms)	
		FFH		**Add 200 ms**	
		Others		Not available	

MODE	Factory setting bit	
306	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
7	Junk FAX RX denial	**Not deny**	Deny	Accept only FAX (G3) RX from the address specified at [F code (bulletin board/confidential/forward)] and deny other RX.

MODE	Factory setting bit	
307	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
7	Specify whether to allow use of the copy function <*>	**Allow**	Not allow	This setting makes copy keys disabled and copy functions not accessible.

MODE	Factory setting bit	
310	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Increase of sound level *	**Normal sound level mode**	Increased sound level mode	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
311	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Invert screen *	**Normal**	Inverted	
6	Displaying next screen when using Enlarge Display <*>	**Wait for specification**	Display upper-left screen	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
312	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 1	HEX:03

Bit	Feature	Logic		Description	
		0	1		
7	Key repeat start time *	Bit 7-0:	00000000	Not available	
6			00000001	1×100 ms	
5			|		
4			**00000011**	**3×100 ms**	
3			|		
2			11111111	255×100 ms	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
313	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
7	Key repeat interval *	Bit 7-0:	00000000	Not available	
6			**00000001**	**1×100 ms**	
5			|		
4			11111111	255×100 ms	
3					
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
314	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 1	HEX:03

Bit	Feature	Logic		Description	
		0	1		
7	Display time of reservation completion screen *	Bit 7-0:	00000000	Not closed	
6			00000001	1 sec	
5			|		
4			**00000011**	**3 sec**	
3			|		
2			11111111	255 sec	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
315	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 1 1 0 0	HEX:4C

Bit	Feature	Logic		Description	
		0	1		
7	Select buzzer ring pattern (JBMS). *	**Normal**	JBMS-corresponding	Specify whether to set the buzzer ring pattern to normal pattern or JBMS-corresponding patern	
6	Sound level of buzzer *	Bit 6-5: 00		Low	
5		**01**		**Normal**	
		10		High	
		11		Not available	
4	Normal completion sound	Bit 4-2: 000		0	Set the sound volume. 0 to 56 (6 steps adjustment) (0 setting is no sound)
3					
2		**011**		**3**	
1					
0		101		5	
		Others		Not available	

MODE	Factory setting bit	
320	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 0 0 0 0	HEX:F0

Bit	Feature	Logic		Description
		0	1	
7	Cassette-specified printing (G3-1: Tray 1)	Cannot print	**Can print**	When Mode 320 Bit 0 “Cassette selection per reception port” is enabled, specify the paper tray (including Bypass Tray) for printing if receiving by G3-1.
6	Cassette-specified printing (G3-1: Tray 2)	Cannot print	**Can print**	
5	Cassette-specified printing (G3-1: Tray 3)	Cannot print	**Can print**	
4	Cassette-specified printing (G3-1: Tray 4)	Cannot print	**Can print**	
3	Cassette-specified printing (G3-1: Bypass Tray)	**Cannot print**	Can print	
0	Cassette selection per reception port	**Disable**	Enable	Specify a cassette for printing received documents per communication line.

MODE	Factory setting bit	
321	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 0 0 0 0	HEX:F0

Bit	Feature	Logic		Description
		0	1	
7	Cassette-specified printing (G3-2: Tray 1)	Cannot print	**Can print**	When Mode 320 Bit 0 “Cassette selection per reception port” is enabled, specify the paper tray (including Bypass Tray) for printing if receiving by G3-2.
6	Cassette-specified printing (G3-2: Tray 2)	Cannot print	**Can print**	
5	Cassette-specified printing (G3-2: Tray 3)	Cannot print	**Can print**	
4	Cassette-specified printing (G3-2: Tray 4)	Cannot print	**Can print**	
3	Cassette-specified printing (G3-2: Bypass Tray)	**Cannot print**	Can print	

MODE	Factory setting bit	
322	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 0 0 0 0	HEX:F0

Bit	Feature	Logic		Description
		0	1	
7	Cassette-specified printing (Network: Tray 1)	Cannot print	**Can print**	When Mode 320 Bit 0 “Cassette selection per reception port” is enabled, specify the paper tray (including Bypass Tray) for printing if receiving by Network.
6	Cassette-specified printing (Network: Tray 2)	Cannot print	**Can print**	
5	Cassette-specified printing (Network: Tray 3)	Cannot print	**Can print**	
4	Cassette-specified printing (Network: Tray 4)	Cannot print	**Can print**	
3	Cassette-specified printing (Network: Bypass Tray)	**Cannot print**	Can print	

MODE	Factory setting bit	
323	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 0 0 0 0	HEX:F0

Bit	Feature	Logic		Description
		0	1	
7	Cassette-specified printing (Reports: Tray 1)	Cannot print	**Can print**	When Mode 320 Bit 0 “Cassette selection per reception port” is enabled, specify the paper tray (including Bypass Tray) for printing if receiving by Reports.
6	Cassette-specified printing (Reports: Tray 2)	Cannot print	**Can print**	
5	Cassette-specified printing (Reports: Tray 3)	Cannot print	**Can print**	
4	Cassette-specified printing (Reports: Tray 4)	Cannot print	**Can print**	
3	Cassette-specified printing (Reports: Bypass Tray)	**Cannot print**	Can print	

MODE	Factory setting bit	
350	Bit: 7 6 5 4 3 2 1 0 1 0 1 0 1 0 0 0	HEX:A8

Bit	Feature	Logic		Description	
		0	1		
6	POP3 before SMTP <*>	**No**	Yes		
5	Maximum width of document to be transmitted when the fax capability of the receiver is set to [Advanced] (Network function) *	Bit 5-4: 00		A4/Letter	Default value of maximum width of document to be transmitted when the fax capability of the receiver is set to [Advanced]
4			01	B4/Legal	
			10	**A3/11×17**	
			11	Not available	
3	Maximum resolution to be used when the fax capability of the receiver is set to [Advanced] (Network function) *	Bit 3-2: 00		200×200 dpi	Default value of maximum resolution to be used when the fax capability of the receiver is set to [Advanced]
2			01	400×400 dpi	
			10	**600×600 dpi**	
			11	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
351	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 0 0 0	HEX:18

Bit	Feature	Logic		Description	
		0	1		
7	Gateway transmission (Network function) *	**Not allowed**	Allowed	Specify allowed or not allowed for sending E-mail using gateway communications. If “Not allowed”, SMTP reception is executed, however gateway transmission is not executed, and received data is printed.	
6 5	Outgoing port for gateway transmission (Network function) **	Bit 6-5:	**00**	**G3-1**	Specify an outgoing port for FAX transfer (FAX transfer of received E-mail file) through gateway transmission. (valid for G3 multi-port only) [See note.]
			11	G3-2	
			Others	Not available	
3	Gateway TSI <*>	Normally not add	**Normally add**	Direct FAX, IP Relay	
2	Disable SMTP reception	**Enable**	Disable	Specify allowed or not allowed for SMTP reception. (for Internet FAX (IP-TX), Network FAX, ~~SIP-FAX,~~ Internet FAX (IP Relay) reception)	
1	TSI information for SMTP reception <*>	**Machine name priority**	IP address priority	Specify whether to describe the machine name (or IP address if none) of the TSI in Subject or prioritize the IP address when forwarding documents received by IP address FAX. This setting is applied also for the priority order of display of destination name information of the RX Activity Report for IP address fax reception and IP Relay reception.	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting The feature with [**] is available only in a system with a multi-port option.**
- **For G3-1 and G3-2, see “Select PSTN port automatically (MODE 006 Bit 1)”.**

MODE	Factory setting bit	
352	Bit: 7 6 5 4 3 2 1 0 1 1 0 1 0 0 0 0	HEX:D0

Bit	Feature	Logic		Description
		0	1	
7	Notification of result (Network function) *	No	**Yes**	Specify whether a communication error message is returned to the sender when a communication error occurs with code E6xxxx when E-mail is received.
6	Position for adding Gateway TSI <*>	Outside of document	**Inside of document**	Specify where to add the TSI when forwarding through Gateway transmission (Direct FAX, IP Relay).
5	Specify whether to add TSI when forwarding <*>	**Not add**	Add	Specify whether to add TSI when forwarding received documents.
4	Position for adding TSI when forwarding <*>	Outside of document	**Inside of document**	Select where to add the TSI when forwarding received documents.

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
353	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 1 0 0 0	HEX:88 (For U.S.) HEX:80 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Text insertion into document to send (Network function) *	No	**Yes**	Specify whether to insert a preset text message at the head of a stored document image to be transmitted by E-mail. (not available for Scan to E-mail)
6	Header printing on received document (Network function) *	**No**	Yes	Specify whether to print a header on documents received via E-mail.
4	Insert arbitrary text message *	**No**	Yes	
3	Display arbitrary text message screen	**No**	**Yes**	

NOTE

- **The features with (*) are settable by users. *: Screen setting**
- **Predetermined text: Image data (TIFF-F format) has been attached to the E-mail.**

MODE	Factory setting bit	
354	Bit: 7 6 5 4 3 2 1 0 1 0 1 0 1 0 0 0	HEX:38 (For U.S.) HEX:60 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Time zone settings: Set time zone for the date field of transmitted E-mail header (Network function) *	Bit 7-2:	000000	GMT-12:00	
6			000001	GMT-11:30	
			001110	GMT-5:00	
5			|		
4			**011000**	**GMT**	
3			|		
2			101010	GMT+09:00	
			|		
			101111	GMT+11:30	
			110000	GMT+12:00	
			110001	GMT+12:30	
			110010	GMT+13:00	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
355	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description	
		0	1		
7 6	Switch 10M and 100M: Select communication rate of LAN adapter (Network function) *	Bit7-6:	**00**	**Auto-negotiation**	• Auto-negotiation: Determine the communication rate by identifying 10BASE-T or 100BASE-TX. • Set to 100M: Connection is set to 100BASE-TX. • Set to 10M: Connection is set to 10BASE-T. Valid after the power is turned off and on. (Will not communicate when "Set to 100M" or "Set to 10M" is chosen and the communication rate is not correct for the communication line. Check and specify the correct communication rate for the line.)
			01	Set to 100M	
			10	Set to 10M	
			11	Not available	
5	Switch full-duplex and half-duplex: Select packet transmit/ receive when connecting to switching hub. (Network function) *	Full Duplex	**Half Duplex**	This switch is valid when MODE 355 Bit 7 to 6 is set to "Set to 100M" or "Set to 10M". • Full-duplex: Packets can be sent and received simultaneously. • Half-duplex: Packets can be sent or received separately. Valid after the main power switch is turned off and on.	
4	Automatically obtain IP address (DHCP) *	**No**	Yes		

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
356	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:F40

Bit	Feature	Logic		Description	
		0	1		
7	SMTP transmission time-out (Network function) <*>	Bit 7-4:	0000	Not available	Set time waiting for a response to mail commands from the destination scanner or the SMTP server in scanner transmission or E-mail transmission. Effective after the main power switch is turned off and on.
6			0001	30 sec	
5			0010	60 sec	
4			0011	90 sec	
			0100	**120 sec**	
			0101	150 sec	
			0110	180 sec	
			0111	210 sec	
			1000	240 sec	
			1001	270 sec	
			1010	300 sec	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
357	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description	
		0	1		
7	SMTP transmission time-out (Network function) <*>	Bit 7-4:	0000	Not available	Specify time waiting for command from SMTP client. Valid after the mai powerswitch is turned off and on.
6			0001	30 sec	
5			0010	60 sec	
4			0011	90 sec	
			0100	**120 sec**	
			0101	150 sec	
			0110	180 sec	
			0111	210 sec	
			1000	240 sec	
			1001	270 sec	
			1010	300 sec	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
358	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description	
		0	1		
7	POP3 receive timeout (Network function) <*>	Bit 7-4:	0000	Not available	Set time waiting for a response to mail commands from the POP3 server in E-mail transmission. Effective after the power is turned off and on.
6			0001	30 sec	
5			**0010**	**60 sec**	
4			0011	90 sec	
			0100	120 sec	
			0101	150 sec	
			0110	180 sec	
			0111	210 sec	
			1000	240 sec	
			1001	270 sec	
			1010	300 sec	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
359	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Number of times for retransmission when transmitting received data (Network function)	**Normal**	Additional retry	Specify whether or not to set additional retries for documents that are routed. This setting takes effect only when either of e-mail transmission, IP Scanner, or IP Address FAX is selected as the communication mode for document routing.	
6	Scanner mode: Coding method (TIFF) when [Advanced] is specified.	Bit 6-4:	**000**	**MH**	
5			001	MR	
4			010	MMR	
			011	JBIG	
			Others	Not available	
0	Forced priority transmission (Network function)	**OFF**	ON	Specify whether to forcibly perform priority transmission for awaiting documents.	

MODE	Factory setting bit	
360	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:80

Bit	Feature	Logic		Description	
		0	1		
7	E-mail reception (Network function)	Prohibited	**Permitted**	Select either [Prohibited] or [Permitted] for E-mail reception (SMTP/POP3).	
6	Coding method for the receiver Internet fax capability (Network function, Mail mode) *	Bit 6-4:	**000**	**MH**	
5			001	MR	
4			010	MMR	
			011	JBIG	
			Others	Not available	
3	Coding method for PDF *	Bit 3-2:	**00**	**MH**	For Scan to E-mail TX
2			01	Not available (MR)	
			10	MMR	
			11	Not available (JBIG)	
1	Image data file format *	Bit 1-0:	**00**	**TIFF**	For Scan to E-mail TX
0			01	PDF	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
361	Bit: 7 6 5 4 3 2 1 0 0 1 1 1 1 0 0 0	HEX:78

Bit	Feature	Logic		Description
		0	1	
0	DNS function *	**Not available**	Available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
362	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 1 0	HEX: 8A

Bit	Feature	Logic		Description	
		0	1		
5	Calling interval during network communication	Bit 5-1:	00000	Not available	• This setting is available for network communication and reduces only the interval from when the communication complete to when the next communication starts. For re-dial interval or document re-sending interval, apply FAX specification. • Communication modes that apply the calling interval during network communication • PC (mail), PC (scanner), PC (FTP), PC (SMB), PC (HDD), IP address FAX, Internet FAX, IP relay (sending order)
4			00001	1sec	
3			00010	2sec	
2			00011	3sec	
1			00100	4sec	
			00101	**5sec**	
			00110	6sec	
			00111	7sec	
			01000	8sec	
			01001	9sec	
			01010	10sec	
			Others	Not available	

MODE	Factory setting bit	
363	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description
		0	1	
6	SMTP expansion prohibited (Network function)	**Permitted**	Prohibited	Select either “Permitted” or “Prohibited” for SMTP expansion protocol. • Valid after the power is turned off and on.
5	Specify From address for DSN report transmission (Network function)	Address specified	**Address not specified**	Chain mail can be prevented by specifying an address for DSN report on some systems.

MODE	Factory setting bit	
365	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 0	HEX:04

Bit	Feature	Logic		Description	
		0	1		
7	FTP timeout (Network function)	Bit 7-0:	00000001	30 sec	Specify the period until timeout during no request by FTP command after FTP login is established. Timeout results in FTP logout forcibly.
6			00000010	60 sec	
5			00000011	90 sec	
4			**00000100**	**120 sec**	
3			00000101	150 sec	
2			00000110	180 sec	
1			00000111	210 sec	
0			00001000	240 sec	
			00001001	270 sec	
			00001010	300 sec	
			Others	Not available	

MODE	Factory setting bit	
366	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description
		0	1	
7	Whether or not to display the E-mail maintenance screen (Network function)	**Not display**	Display	Unused.
6	Priority address input screen for preset scan <*>	**IP address input screen**	Domain name input screen	
4	Limit the number of characters to be used for E-mail file name	**No**	Yes	
3	Number of digits of the year of a file name	Last 2 digits	**4 digits**	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
367	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 0 0	HEX:20

Bit	Feature	Logic		Description	
		0	1		
7	DNS inquiry timeout <*>	Bit7-3:	00001	20 sec	
6			00010	40 sec	
5			00011	80 sec	
4			**00100**	**160 sec**	
3			00101	320 sec	
			00110	640 sec	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
368	Bit: 7 6 5 4 3 2 1 0 1 1 0 0 0 0 1 0	HEX:C2

Bit	Feature	Logic		Description
		0	1	
7	Communication management report CVS output	Not output	**Output**	
6	Use a password for both administrator and network *	No	**Yes**	• No: Password is used for network only. • Yes: Password is used for both network and administrator (machine)
5	JBIG prohibited when transmitting TIFF file	**Prohibited**	Permitted	Specifies whether or not to permit JBIG encoding when transmitting TIFF format by network function. (JBIG not displayed when prohibited)
4	JBIG prohibited when receiving TIFF file	**Prohibited**	Permitted	Specifies whether or not to receive JBIG when receiving E-mails. (Error occurs if E-mail is received when prohibited)
1	Communication log (TX) for scanner transmission	Not print	**Print**	
0	Result of communication sent from a network fax	**Not print**	Print	

NOTE

- **The features with (*) are settable by users.**

MODE	Factory setting bit	
369	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
2	PING timeout	Bit2-0:	**000**	**5 sec**
1			001	10 sec
0			010	15 sec
			011	20 sec
			100	25 sec
			101	30 sec
			Others	Not available

MODE	Factory setting bit	
370	Bit: 7 6 5 4 3 2 1 0 1 1 1 1 1 1 1 1	HEX:FF

Bit	Feature	Logic		Description	
		0	1		
7	Number of times for additional retransmission (Network function)	Bit 7-0: 00000000		0	Specify additional retrial times after retrying the number of times specified by the user. "0" indicates no additional retrial. Retrial operations will end after retrying E-mail transmissions the current number of times specified by the user.
6			00000001	1	
5			I		
4			**11111111**	**255**	
3					
2					
1					
0					

MODE	Factory setting bit	
371	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description	
		0	1		
7	Intervals between additional retransmissions (Network function)	Bit 7-5: 000		10 min	
6			001	15 min	
5			**010**	**20 min**	
			011	25 min	
			100	30 min	
			Others	Not available	
4	SMTP server switching	**OFF**	ON	Register two SMTP servers and specify whether or not to switch at the time of TX error.	
1	Binary Division *	**OFF**	ON		
0	Page Division *	**OFF**	ON		

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
372	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 1 1	HEX:0F

Bit	Feature	Logic		Description	
		0	1		
7	Specify transmission interval of sizedivided E-mail file data <*>	Bit 7-0:	00000101	5 sec	
6			00001010	10 sec	
5			**00001111**	**15 sec**	
4			00011110	30 sec	
3			00111100	60 sec	
2			01011010	90 sec	
1			01111000	120 sec	
0			10010110	150 sec	
			10110100	180 sec	
			11010010	210 sec	
			11110000	240 sec	
			00000000	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
373	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Full-mode function <*>	**Not available**	Available		
6	Output of MDN/DSN text	**No**	Yes		
3 2 1 0	Wait time for MDN response	Bit3-0: 0000		0 min	When sending an Internet FAX including a result notification request (MDN request), sets the time to wait for the result notification (MDN) to be returned from the machine receiving the request. Set this to 0 min when immediately outputting a TX Report.
			0001	5 min	
			0010	10 min	
			0011	15 min	
			0100	20 min	
			0101	30 min	
			0110	40 min	
			0111	50 min	
			1000	**1 hr**	
			1001	2 hr	
			1010	3 hr	
			1011	4 hr	
			1100	5 hr	
			1101	6 hr	
			1110	7 hr	
			1111	8 hr	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
374	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description
		0	1	
7	NOTIFY (SUCCESS)	**Not send**	Send	Used when the mail server processed normally.
6	NOTIFY (FAILURE)	Not send	**Send**	Used when the mail server detected an error.
5	NOTIFY (DELAY)	**Not send**	Send	Used when the mail server cannot process immediately after receiving mail file.
4	Response to MDN request when receiving SMTP data	**Response**	No response	

MODE	Factory setting bit	
379	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 0 0 0	HEX:10

Bit	Feature	Logic		Description	
		0	1		
3	Specify position for cutting off data when forwarding received documents	Bit3-2:	**00**	**Center**	Specify position for cutting off data for the main scan size from the original size to sending size when forwarding received documents.
2			01	Left side	
			10	Not available	
			11	Right side	
1	Specify image editing when forwarding	Bit1-0:	**00**	**Edit to regular size and forward**	Specify whether to set the main scan width of received data to regular width or leave the stored data width as is when forwarding received documents.
0			01	Forward stored data as is	
			Others	Not available	

MODE	Factory setting bit	
380	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Enable APOP authentication function <*>	**Not enable**	Enable	Specify whether to enable the APOP function.
6	Enable SMTP authentication function <*>	**Not enable**	Enable	Specify whether to enable the SMTP authentication function. (*1)
5	SMTP authentication: Allow CRAMMD5 authentication function <*>	**Allowed**	Not allowed	Specify whether to enable the CRAM-MD5 authentication function for SMTP authentication. (*2)
4	SMTP authentication: Allow LOGIN authentication function <*>	**Allowed**	Not allowed	Specify whether to enable the LOGIN authentication function for SMTP authentication. (*2)
3	SMTP authentication: Allow PLAIN authentication function <*>	**Allowed**	Not allowed	Specify whether to enable the PLAIN authentication function for SMTP authentication. (*2)
2	Separate SMTP authentication ID/password and POP3 information <*>	**Not separate**	Separate	Specify whether to share the SMTP authentication ID/password with POP3 information.

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

(*1) The SMTP authentication function is valid under the following conditions.

- **MODE 380 Bit 6 is set to "1".**
- **When the SMTP authentication user name and SMTP authentication password share the POP3 user name and POP3 password, MODE 380 Bit 2 is set to "0". When the SMTP authentication user name and SMTP authentication password do not share the POP3 user name and POP3 password, MODE 380 Bit 2 is set to "1", and "SMTP AUTH User Name" and "SMTP AUTH Password" are set in Network Settings.**
- **MODE 380 Bit 5, 4, or 3 is set to "0".**

(*2) When all mail authentication functions are validated (MODE 380 Bits 5, 4, and 3 all are set to "0"), they are prioritized in the order "CRAM-MD5 authentication (Bit 5)" → "LOGIN authentication (Bit 4)" → "PLAIN authentication (Bit 3)" .

MODE	Factory setting bit	
381	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:80

Bit	Feature	Logic		Description	
		0	1		
7	Use IP Relay function	Disable	**Enable**	Select whether to enable the IP Relay function. Valid after power is turned off and on.	
2	Set transmission coding method for IP Relay transmission <*>	Bit2-0:	**000**	**MH**	Specify default coding method for capability of other party when sending by IP Relay (instructing machine)
1			001	MR	
0			010	MMR	
			011	JBIG	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
382	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description	
		0	1		
7	IP Relay Process result timeout <*>	**Communication error**	Communication completed	Specify the communication result when a timeout occurs by IP Relay result waiting (instruction machine).	
6	IP Relay Set result timeout <*>	Bit 6-3:	0000	0 min	Specify the period of a timeout of IP Relay result waiting (instruction machine).
5			0001	5 min	
4			0010	10 min	
3			0011	15 min	
			0100	20 min	
			0101	30 min	
			0110	40 min	
			0111	50 min	
			1000	**1 hr**	
			1001	2 hr	
			1010	3 hr	
			1011	4 hr	
			1100	5 hr	
			1101	6 hr	
			1110	7 hr	
			1111	8 hr	
2	Set default relay station for IP Relay *	Bit 2-0:	**000**	**Relay station 1**	Set the default relay instruction machine for IP Relay (instruction machine).
1			001	Relay station 2	
0			010	Relay station 3	
			011	Relay station 4	
			100	Relay station 5	
			101	Relay station 6	
			110	Relay station 7	
			111	Relay station 8	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
383	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Specify IP Scanner versions that are allowed to be used	**Use IP Scanner earlier than Ver.1.55**	Use IP Scanner Ver.1.55 or later	Specify whether or not to use IP Scanner with Ver.1.55 or later

MODE	Factory setting bit	
400	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
6	Set priority doc mixed mode. (Copy) *	**No**	Yes	Selects priority doc mixed mode when Power source is ON and panel reset key is ON.	
5		Bit 5-0: 000000		apanese	
4		**000001**		**English**	
3		Others		Not available	
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
402	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
7	Select priority doc mode. (Copy) *	**1 sided**	2 sided		
6	Select priority print mode. (Copy) *	Bit 6-5:	**00**	**1 sided**	
5			01	2 sided	
			Others	Not available	
4	Select automatic function priority mode (Copy) *	Bit 4-3:	**00**	**APS**	APS: Auto Paper Selection. AMS: Auto Magnification Selection.
3			01	AMS	
			10	Not available	
			11	Manual	
2	Select priority order of device *	**Copy**	Printer		
1	Select priority application. (after auto clear and panel reset) *	Bit 1-0:	00	FAX	Sets the initial status screen (Copy, FAX, Auto or scanner)
0			**01**	**Copy**	
			10	Auto	
			11	Scanner	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
403	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description
		0	1	
7	Select draft print zoom ratio. (Copy) *	**Recommended magnification**	Same magnification	Set ratios for 2-in-1 page, 4-in-1 page, Booklet creation, or image repeat.
6	Set Auto Size (AMS) for tray selection <*>	**Not set AMS**	Set AMS	Specify whether to automatically set AMS for selecting a paper feed source when Auto Paper (APS) is set.
0	Auto-clear by user. (Copy) *	No	**Yes**	Selects whether to reset the touch panel when pressing ID key.

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
404	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
7	Select auto-clear time. *	Bit 7-0:	00000000	No reset	Select whether to carry out auto-clear if there is no operation for a certain time, after copy or operation.
6			**00000001**	**1 min**	For every 1 min
5			I		
4			11110000	240 min	
3			11111111	30 sec	
2			Others	Not available	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
405	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 1 1	HEX:0F

Bit	Feature	Logic		Description	
		0	1		
7	Select pre-heating time. *	Bit 7-0:	00000001	1 min	For every 1 min
6			I		Select whether to carry out auto-clear if there is no operation for certain time, after copy or operation.
5			00000101	5 min	
			I		
4			**00001111**	**15 min**	
			I		
3			11110000	240 min	
2			Others	Not available	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
406	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
7	Select sleep off time. *	Bit 7-0:	00000000	OFF	For every 1 min Select whether to carry out “auto power-source off” if there is no operation for certain time, after copy or operation. Also, select its time. “Auto Power source off” is not carried out if “Select auto Power source off (MODE 416 Bit 0)” is set to “No.”
6			**00000001**	**1 min**	
5					
4			00011110	30 min	
3					
2			00111100	60 min	
1					
0			11110000	240 min	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
407	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
7	Select touch panel off time. *	Bit 7-0:	00000000	OFF	For every 1 min Select whether to carry out “auto panel off” if no operation is executed for certain time after operation.
6			**00000001**	**1 min**	
5					
4			11110000	240 min	
3			Others	Not available	
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
408	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Select feeder tray. (Paper) (Copy) *	Bit 7-4:	**0000**	**1 tray**	Selects the priority feeder tray used when APS (auto paper select mode) or manual mode is selected.
6			0001	2 tray	
5			0010	3 tray	
4			0011	4 tray	
			1100	LCT	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
409	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Select priority order of 4-in-1 page (Copy) *	Bit 7-6:	**00**	**Pattern 1**	Pattern 1  Pattern 2 
6			01	Pattern 2	
			Others	Not available	
5	Select priority exposure level. (Copy) *	**AE**	Manual	Density	
4	Select priority doc level. (Copy) *	Bit 4-1:	0000	Text/Photo	"Photo mode" is unavailable if MODE 409 Bit No. 5 is set "AE (Auto)."
3			**0100**	**Text**	
2			1000	Photo	
1			1100	Dot Matrix	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
410	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 0 1 0 0	HEX:54

Bit	Feature	Logic 0	Logic 1	Description	
7	Select AE print density level. (Copy) *	Bit7-6: 00		Darker	Specifies level of auto density.
6		**01**		**Normal**	
		10		Not available	
		11		Lighter	
4	Light original adjustment, (Copy: ADF only) *	Darker Copy	**Lighter Copy**	Darker Copy: Scans originals in the density as specified. (The density is the same as that in IR scanning.) Lighter Copy:Scans originals in the density lighter than specified.	
3	Select priority manual density level. (Copy) *	Bit3-0: 0000		EXP1	Selects manual density level at mode initialization or level when auto density is switched to manual density: EXP1 (Lighter) | EXP5 (Normal) | EXP9 (Darker)
2		0001		EXP2	
1		0010		EXP3	
0		0011		EXP4	
		0100		**EXP5**	
		0101		EXP6	
		0110		EXP7	
		0111		EXP8	
		1000		EXP9	
		Others		Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
411	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic 0	Logic 1	Description	
7	Select symbol bit. (Copy)	**+**	-	Selects direction (+/-) of print density adjustment by MODE 411 Bit 2 to 0.	
2	Adjust print density. (Copy) *	Bit 2-0:	**000**	**0**	Selects print density by adjusting development bias.
1			|		
			011	3	
0			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
412	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Select auto sort mode. (Copy) *	Bit 7-6:	**00**	**Sort off mode**	Specifies mode of paper ejection when ejector option is attached.
6			01	Sort on mode	
			10	Not available	
			11	Grouping mode	
5	Prohibit shifting. (Copy)	**No**	Yes		
4	Select auto punch mode. (Copy) *	**No**	Yes	Settable with other functions of MODE 412 Bit Nos. 7-6.	
3	Select sort on/off auto switch. (Copy) *	No	**Yes**	Determines whether to switch “sort on → sort off” or “sort off → sort on” according to # of documents or the operation.	
2	Select priority in staple mode.	Bit 2-1:	**00**	**No**	
1			01	Corner staple	
			10	2-point staple	
			11	Center staple	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
413	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 0	HEX:04

Bit	Feature	Logic		Description	
		0	1		
7	Select FAX (G3-1) output bin. *	Bit 7-6:	**00**	**First tray output**	• Specify a tray to where FAX (G3-1) document is delivered to when the finisher has been attached. • "Additional bin output" is valid only when the additional bin is attached.
6		01		Second tray output	
		10		Additional bin output	
		11		Not available	
5	Select PC print output bin. *	Bit 5-4:	**00**	**First tray output**	• Specify a tray to where PC print is printed out when the finisher is attached. • "Additional bin output" is valid only when the additional bin is attached.
4		01		Second tray output	
		10		Additional bin output	
		11		Not available	
2	Select copy output bin. *	Bin 1	**Bin 2**	Specify a bin to where copied document is delivered to when the job separator has been attached.	
1	Select FAX (G3-1) output bin. *	**Bin 1**	Bin 2	Specify a bin to where faxed (G3-1) document is delivered when the job separator has been attached.	
0	Select PC print output bin. *	**Bin 1**	Bin 2	Specify a bin to where PC print is delivered to when the job separator has been attached.	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
414	Bit: 7 6 5 4 3 2 1 0 1 0 1 0 0 0 0 0	HEX:A0

Bit	Feature	Logic		Description	
		0	1		
7	Select image compression ratio for reserving into copy memory.	Bit7-4:	0101	0.5	Shows image compression ratio per copied document for reserving it into copy memory. Reserve necessary capacity of memory for deter-mined compression ratio before starting scanning.
6			0110	0.6	
5			0111	0.7	
4			1000	0.8	
			1001	0.9	
			1010	**1.0**	
			1011	1.1	
			1100	1.2	
			1101	1.3	
			Others	Not available	

MODE	Factory setting bit	
415	Bit: 7 6 5 4 3 2 1 0 0 1 1 0 1 1 0 0	HEX:6C

Bit	Feature	Logic		Description	
		0	1		
7	Select sound volume 1. (Buzzer) *	Bit 7-5:	000	0 (No sound)	6 stage adjustment of key buzzer
6			001	1	
5			010	2	
			011	**3**	
			100	4	
			101	5	
			Others	Not available	
4	Select sound volume 2. (Alarm) *	Bit 4-2:	000	0 (No sound)	6 stage adjustment for alarm
3			001	1	
2			010	2	
			011	**3**	
			100	4	
			101	5	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
416	Bit: 7 6 5 4 3 2 1 0 0 1 1 0 0 0 0 0	HEX:60

Bit	Feature	Logic		Description	
		0	1		
7	Select sound volume 3. (Monitor) *	Bit7-5: 000		0 (no tone)	6 stage adjustment of line monitor
6		001		1	
5		010		2	
		011		**3**	
		100		4	
		101		5	
		Others		Not available	
4	Direction alignment for images when the finisher is attached *	**No**	Yes	Specify the direction for image output when the finisher is attached.	
0	Disable sleep off. *	**Yes**	No	Specifies whether MODE 406 can be set to “No power source off.”	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
417	Bit: 7 6 5 4 3 2 1 0 0 1 1 0 0 0 1 1	HEX:63

Bit	Feature	Logic		Description	
		0	1		
7	Restrict # of papers. (Copy) *	**No**	Yes	Specifies whether to restrict # of copies.	
6	Selects # of papers to be restricted. (Copy) *	Bit6-0: 0000001		1	Specifies # of papers when MODE 417 Bit 7 is set to “Yes.”
5					
4		**1100011**		**99**	
3		Others		Not available	
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
418	Bit: 7 6 5 4 3 2 1 0 0 1 0 1 1 0 0 0	HEX:58

Bit	Feature	Logic 0	Logic 1	Description	
6	Document erase width. (available when copying with book scanner)	Bit 6-5: 00		0 mm	Specify width to erase (white masking) for BS scan on the following conditions. (1)Width from the frame of the detected document when in APS (auto print paper) mode or AMS (auto magnification/reduction) mode. (2)Width from the frame of the scanning area calculated with print paper size and magnification/reduction rate when in manual mode. • Does not function when reading ADF. • Common to FAX (E-mail)/copy functions.
5		01		1 mm	
			10	**2 mm**	
		11		3 mm	
4	Stop when the lifetime of imaging unit ends.	Stop	**Do not stop**	Specify operation (stop or not stop) when the lifetime of imaging unit ends.	
3	Display a message when the status of the imaging unit is “near life”.	Do not display	**Display**	Specify operation (display or not display) when the status of the imaging unit is “near life”.	
2	Prefix/Suffix function	Disable	**Enable**		

MODE	Factory setting bit	
419	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:40

Bit	Feature	Logic		Description	
		0	1		
7	Select a copy output bin. *	Bit7-6: 00		First tray output	• Specify a tray to where printed document is delivered to when the finisher is attached. • "Additional bin output" is valid only when the additional bin is attached.
6		**01**		**Second tray output**	
		10		Additional bin output	
		11		Not available	
5	Select a FAX (G3-2) output bin. *	Bit5-4:	**00**	**First tray output**	• Specify a tray to where FAX (G3-2) document is delivered to when the finisher has been attached. • "Additional bin output" is valid only when the additional bin is attached.
4		01		Second tray output	
		10		Additional bin output	
		11		Not available	
3	Select a FAX (network) output bin. *	Bit3-2:	**00**	**First tray output**	
2		01		Second tray output	
		10		Additional bin output	
		11		Not available	
1	Select FAX (G3-2) output bin. *	**Bin 1**	Bin 2	Specify a bin to where FAX (G3-2) document is delivered when the job separator has been attached.	
0	Select FAX (network) output bin. *	**Bin 1**	Bin 2	Specify a bin to where FAX (network) document is delivered when the job separator has been attached.	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
420	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Auto-clear confirmation time *	Bit 7-0:	**00000000**	**Function off**	10-second steps
6			00000001	10 sec	
5			00000010	20 sec	
4			I		
3			00011110	300 sec	
2			Others	Not available	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
421	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Marketing area	Bit 7-5: 000		Centimeters	Switches setting value for paper size and magnification.
6			001	**Inches**	
5			010	**Centimeters/ inches**	
			011	Other	
			Other	Not available	
3	PageScope Web Connection	Bit 3-0: 0000		Japanese	Selects the language to be displayed on PageScope Web Connection.
2			0001	**American English**	
1			0010	**British English**	
0			0011	German	
			0100	French	
			0101	Italian	
			0110	Danish	
			0111	Dutch	
			1000	Spanish	
			1001	Czech	

NOTE

- **The features with (*) are settable by users.**

MODE	Factory setting bit	
422	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 0	HEX:08

Bit	Feature	Logic		Description	
		0	1		
7	Total counter.	Bit 7-6:	**00**	**Mode 1 (std)**	Specifies a counting method of total counter.
6			01	Mode 2	
			10	Mode 3	
			Others	Not available	
5	Size counter.	Bit 5-3:	000	Do not count	Specifies sizes of papers to be counted by size counter.
4					
3			**001**	**A3, 11x17**	
			010	A3, B4, 11×17, Legal	
			011	A3, B4, FLS, 11×17, Legal, 11×14	
			100	A6	
			Others	Not available	
2	Copy Kit counter. (Copy)	Bit 2-1:	**00**	**Mode 1 (Do not count)**	Select whether to set counting or not for the Copy Counter and select whether to inhibit the initiation of a new copy cycle or not when the current value reaches the set value.
1			01	Mode 2 (Counted and permits copying even when the set value is reached.)	
			10	Mode 3 (Counted and inhibits copying when the set value is reached.)	
			11	Not available	

MODE	Factory setting bit	
423	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 1 1 0 0	HEX:4E (For U.S.) HEX:4C (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Plug-in counter mode. (Copy) *	**Paper count**	Copy count	Sets plug-in counter threshold value, and reads the counter.
6	Key counter. (Copy) *	Available (copying is prohibited.)	**Not available (copying is permitted.)**	Sets whether to use key counter.
3	Document size detection option *	Yes	**No**	Specifies whether document size sensors can be used in the inchcorresponding option.
0	Automatically adjust the transfer current of image	**Yes**	No	

MODE	Factory setting bit	
424	Bit: 7 6 5 4 3 2 1 0 0 0 0 1 0 0 0 0	HEX:10

Bit	Feature	Logic		Description
		0	1	
7	Metric and inch mixed modes. (Copy)	**Mixed**	Limited	Specifies whether to round off document sizes for the system specification in auto paper mode.
4	Restrict print mode. (Copy)	Yes	**No**	Specifies whether to disable “!2-Sided Copy” in priority copy mode.
3	Print small size document. (Copy) *	Copy disabled	**Copy enabled**	Specifies whether to generate a warning when a document smaller than that detectable by document size sensors is loaded.
2	Restrict function. (Copy)	**No**	Yes	Specifies whether to disable some of copy functions (application, doc copy).

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
425	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
6	Select FLS size. (Copy) *	Bit 6-4:	000	210×330	Specify size of FLS used with in the machine.
5			001	203×330	
4			010	216×330	
			011	220×330	
3	Adjust image quality mode. (Copy)	Bit 3-0:	0000		Specifies the density of image at printing. When any of Bit 3 to 0 is 1, [*] key is displayed.
2					
1			1000		
0			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
426	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:50 (For U.S.) HEX:00 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Movement finisher bin	Not available	Available	Specify whether to move the bin by one bin output position when a set period of time elapses after completing printing.	
6	Set mixed AMS sheets without printing *	No	Yes		
5		Bit 5-0:	010000		
4			Others	Not available	
3					
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
427	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic 0	Logic 1	Description	
7	Country type for default setting	Bit 7-2:	000001	Germany	This feature is applied to qualify FAX regulations specified by each country in Europe or etc., which is able to specify the regulations that satisfy the specification of every country.
6			000010	France	
5			000011	Britain	
4			000100	Italy	
3			000101	Austria	
2			000110	Switzerland	
			000111	Belgium	
			001000	The Netherlands	
			001001	Spain	
			001010	Portugal	
			001011	Denmark	
			001100	Norway	
			001101	Sweden	
			001110	Finland	
			001111	Czech Republic	
			010000	Hungary	
			010001	Poland	
			010010	South Africa	
			010011	Australia	
			010100	Hong Kong	
			010101	Singapore	
			010110	New Zealand	
			010111	Malaysia	
			011000	Argentina	
			011001	South Korea	
			011010	China or Taiwan	
			011011	Other1	
			011100	Other2	
1	Separator table selection	Bit 1-0:	00	Common table	The separator bias output is changed to respond to a void image of solid black occurring under low-temperature, low-humidity environment.
0			01	Dedicated table	

MODE	Factory setting bit	
428	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
4	To display or not to display the [Prefix/Suffix Settings] key	**Not displayed**	Displayed	[Displayed] must be set if bit 5 of Mode463 is to be set.

NOTE

- **Phase2.0 and onward**

MODE	Factory setting bit	
429	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00 (For U.S.) HEX:04 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Set drum dry when engine power is on	**Not execute**	Execute	Set whether to switch automatically to Photo mode when selecting OHP transparencies.
6	Correspond to OHP offset	**Not switch quality mode**	Switch quality mode	
5	Automatically reset values on the basic screen at completion of copying using the document feeder. <*>	**No**	Yes	
4	Set curl correction	Bit 4-3:	**00**	**Not control**
3			01	All-environment control
			10	Control for HH, LL environments
			11	Not available
2	Correspond to fluorescent lamp flickering	**Control**	**Not control**	
1	Setting of time that fan spin at full speed.	Bit 1-0:	**00**	**20 sec**
0			01	55 sec
			10	10 min
			11	Not available

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
430	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Impossible to set up multi job	**Possible**	Impossi-bility	Prevent multi job setting, even if the multi job is available structurally.
5	Check consistency with HDD file	**No**	Yes	Sets whether or not to check consis-tency with HDD when the main switch is ON.

MODE	Factory setting bit	
432	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 1	HEX:05

Bit	Feature	Logic		Description	
		0	1		
7	Wait time (M) at full memory of PC print (Set range: 0, 1 to 30 minutes (1-minute steps) PC print job is deleted when the wait time at full memory expires.	Bit7-0:	00000000	Immediately delete	This time setting is also used for PC-Fax memory over wait time.
6			00000001	1 min	
5			00000010	2 min	
4			|		
3			**00000101**	**5 min**	
2			|		
1			00011110	30 min	
0			Others	Not available	

MODE	Factory setting bit	
432	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 1	HEX:05

Bit	Feature	Logic		Description	
		0	1		
7	Wait time (M) at full memory of PC print (Set range: 0, 1 to 30 minutes (1-minute steps) PC print job is deleted when the wait time at full memory expires. *	Bit7-0:	00000000	Immediately delete	
6			00000001	1 min	
5			00000010	2 min	
4			↓		
3			**00000101**	**5 min**	
2			↓		
1			00011110	30 min	
0			Others	Not available	

MODE	Factory setting bit	
433	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:04

Bit	Feature	Logic		Description	
		0	1		
7	Language selected *	Bit 7-2:	000000	Japanese	Selects the language to be displayed on the touch panel and Page-Scope Web Connection.
6			**000001**	**English**	
5			000010	German	
4			000011	French	
3			000100	Italian	
2			000101	Spanish	
			000110	Chinese	
			000111	Korean	
			001000	Taiwanese	
			Other	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**
- **The * mark (Screen setting) does not apply to MODE 435 (Network-use).**

MODE	Factory setting bit	
434 (for machine) 435 (Communication)	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:04

Bit	Feature	Logic		Description	
		0	1		
7	Language selected *	Bit 7-2:	000000	Japanese	(Machine -use) Select the language for sender, reception, Activity report (TX/RX), etc. (Network-use) Select the language to use for e-mail transmission.
6			**000001**	**English**	
5			Other	Not available	
4					
3					
2					

MODE	Factory setting bit	
438	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Type of Management Device	Bit 7-5:	**001**	**Authentication device (PageACSES)**	Sets the type of the management device.
6			010	Management Device 1	
5			011	Management Device 2	
			100	Key Counter Only	
			101	Vender 1	
			110	Vender 2	
			111	Not available	
4	ID key when using the Management Device 2	**Does not use ID key (mode 1)**	Uses ID key (mode 2)	Sets whether or not to use ID key for log out when Management Device is mounted.	
3	Vender type	Bit 3-2	**00**	**Coin vender**	Sets the type of the Vender 2
2			01	Card keeper	
			10	Coin vender/ Card keeper	
			11	Not available	
1	Report output invalid when Vender is connected	**Key counter is necessary**	Opening of Administrators	Sets whether or not Key Counter is necessary for Report output when Vender 2 is connected.	
0	Switches the message when power is not ON	**Message 1**	Message 2	Selects one of the messages below to be displayed when power is not supplied to Vender 2. Message 1: “Please turn on Vender unit” Message 2: “Please wait”	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
439	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Authentication method	**Card kept**	Card touched	Sets the authentication method when Authentication device (PageACSES) is mounted.	
6	Time for canceling authentication	Bit 6-4:	**000**	**One minute**	Sets the period of time for canceling authentication when "Card touch method" is used for Authentication device (PageACSES).
5			001	Two minutes	
4			010	Three minutes	
			011	Four minutes	
			100	Five minutes	
			Other	Setting prohibited	
3	Setting the Copy function used	**ON**	OFF	Sets whether or not to control copy function with Authentication device, Management Device, and Vender.	
2	Setting the PC print function used	**ON**	OFF	Sets whether or not to control PC print function with Authentication device, Management Device, and Vender.	
1	Canceling authentication when job is complete	**OFF**	ON	Sets whether or not to cancel authentication when job is complete.	

MODE	Factory setting bit	
440	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 0 0	HEX:12 (For U.S.) HEX:04 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	PDL set of PC print *	Bit 7-6:	**00**	**Auto**
			01	PCL
6			10	PS
			11	Others
5	Paper size set of PC print *	Bit 5-1:	00000	A3
4			00001	B4
3			**00010**	**A4**
2			00011	B5
1			00100	A5
			00101	B6
			00110	A6
			00111	5 1/2 x 8 1/2
			01000	Exec.
			01001	**Letter**
			01010	11 x 17
			01011	FLS 1
			01100	FLS 2
			01101	FLS 3
			01110	FLS 4
			01111	Legal
			10000	11 x 14
			10001	Envelope B5
			10010	Envelope Com10
			10011	Envelope C5
			10100	Envelope DL
			10101	Envelope Monarch
			10110	J-POST (Hagaki)
			10111	Custom paper
			11000	K16
			11001	K8
			Others	Not available

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
441	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX: 80

Bit	Feature	Logic		Description
		0	1	
7	Select a paper feeder cassette to use when using PC printer function *	Bit 7-4:	0000	Tray 1
6			0001	Tray 2
5			0010	Tray 3
4			0011	Tray 4
			1000	**Auto**
			1010	Bypass
			1100	LCT
			Others	Not available
3	Select a paper orientation to set when using PC printer function *	Bit 3-2:	**00**	**Portrait**
2			01	Landscape
			Others	Not available
1	Select a print method to use when using PC printer function *	Bit 1-0:	**00**	**1-sided print**
0			01	2-sided print for short-edge binding
			10	2-sided print for long-edge binding
			11	Not available

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
442	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX: 01

Bit	Feature	Logic		Description
		0	1	
7	Select # (last 8 bits) of copies to print by PC printer *	Bit 7-0:	00000000	Not available
6			**00000001**	**1**
5			I	
4			11100111	999
3			I	
2			11111111	
1				
0				

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
443	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
1	Select # (first 2 bits) of copies to print by PC printer *	Bit 1-0:	00	1
0			|	
		11		999

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
444	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Select a font # to be set when using PC printer function *	Bit7-1:	0000000	Courier	Set font size when it is not specified for PCL printing.
6			0000001	CG Times	
5			0000010	CG Times Bold	
4			0000011	CG Times Italic	
3			0000100	CG Times Bold Italic	
2			0000101	CG Omega	
1			0000110	CG Omega Bold	
			0000111	CG Omega Italic	
			0001000	CG Omega Bold Italic	
			0001001	Coronet	
			0001010	Clarendon Condensed	
			0001011	Univers Medium	
			0001100	Univers Bold	
			0001101	Univers Medium Italic	
			0001110	Univers Bold Italic	
			0001111	Univers Condensed Medium	
			0010000	Univers Condensed Bold	
			0010001	Univers Condensed Medium Italic	
			0010010	Univers Condensed Bold Italic	
			0010011	Antique Olive	
			0010100	Antique Olive Bold	
			0010101	Antique Olive Italic	
			0010110	Garamond Antiqua	
			0010111	Garamond Halbfett	
			0011000	Garamond Kursiv	
			0011001	Garamond Kursiv Halbfett	
			0011010	Marigold	
			0011011	Albertus Medium	
			0011100	Albertus Extra Bold	
			0011101	Arial	
			0011110	Arial Bold	
			0011111	Arial Italic	
			0100000	Arial Bold Italic	
			0100001	Times New Roman	
			0100010	Times New Roman Bold	
			0100011	Times New Roman Italic	

Bit	Feature	Logic		Description	
		0	1		
1			0100100	Times New Roman Bold Italic	
			0100101	Helvetica	
			0100110	Helvetica Bold	
			0100111	Helvetica Oblique	
			0101000	Helvetica Bold Oblique	
			0101001	Helvetica Narrow	
			0101010	Helvetica Narrow Bold	
			0101011	Helvetica Narrow Oblique	
			0101100	Helvetica Narrow Bold Oblique	
			0101101	Palatino Roman	
			0101110	Palatino Bold	
			0101111	Palatino Italic	
			0110000	Palatino Bold Italic	
			0110001	ITC Avant Garde Gothic Book	
			0110010	ITC Avant Garde Gothic Demi	
			0110011	ITC Avant Garde Gothic Book Oblique	
			0110100	ITC Avant Garde Gothic Demi Oblique	
			0110101	ITC Bookman Light	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
445	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 1 1 0 0	HEX:74 (For U.S.) HEX:4C (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Symbol Set (PC print) *	Bit7-2:	000000	Desktop	Set font symbol set when it is not specified for PCL printing.
6			000001	ISO 4: United Kingdom	
5			000010	ISO 6: ASCII	
4			000011	ISO 11: Swedish	
3			000100	ISO 15: Italian	
2			000101	ISO 17: Spanish	
			000110	ISO 21: German	
			000111	ISO 60: Norwegian V1 ISO 60: Danish/Norw	
			001000	ISO 69: French	
			001001	ISO 8859/1 Latin1	
			001010	ISO 8859/2 Latin2	
			001011	ISO 8859/9 Latin5	
			001100	ISO 8859/10 Latin 6	
			001101	ISO 8859/15 Latin 9	
			001110	Legal	
			001111	Math-8	
			010000	MC Text	
			010001	Microsoft Publishing	
			010010	PC-775	
			010011	**PC-8, Code Page 437**	
			010100	PC-850 Multilingual	
			010101	PC-852 Latin 2	
			010110	PC-858 Multilingual	
			010111	PC-8 Turkish	
			011000	PC-8 Danish/Norw	
			011001	PC-1004	
			011010	PI Font	
			011011	PS Math	
			011100	PS Text	
			011101	**Roman-8**	
			011110	Windows 3.0 Latin 1	
			011111	Windows Baltic	
			100000	Windows 3.1 Latin 1	
			100001	Windows 3.1 Latin 2	

Bit	Feature	Logic		Description	
		0	1		
2		100010		Windows 3.1 Latin 5	
		100011		PC-866	
		Others		Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
446	Bit: 7 6 5 4 3 2 1 0 0 1 0 0 0 0 0 0	HEX:3C (For U.S.) HEX:40 (For Europe)

Bit	Feature	Logic		Description	
		0	1		
7	Number Lines (PC print) *	Bit 7-0: 00000100		4	Set number of lines when it is not specified for PCL printing.
6		00000101		5	
		00111100		**60**	
5					
4		**01000000**		**64**	
3		10000000		128	
2		Others		Not available	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
447	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
7	Select the unit of font size to use when using PC printer function *	**Pitch**	Point	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
448	Bit: 7 6 5 4 3 2 1 0 0 0 1 1 0 0 0 0	HEX:30

Bit	Feature	Logic		Description	
		0	1		
7	Select font size to use when using PC printer function (Scalable font size) (Last 8 bits) *	Bit 7-0:	00000000		Set font size when it is not specified for PCL printing. (Scalable font) Specify the font size together with Mode 449 bits 3-0. (Least significant 8 bits) Size cannot be set larger than 999.75 (3999).
6			00010000	4.00 (16)	
5			|		
4			**00110000**	**12.00 (48)**	
3			|		
2			11111111		
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
449	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
3	Select a font size to use when using PC printer function (Scalable font size) (First 8 bits) *	Bit 3-0:	**0000**		Set font size when it is not specified for PCL printing. (Scalable font) Specify the font size together with Mode 448 bits 7-0. (Most significant 4 bits) Size cannot be set larger than 999.75 (3999).
2			|		
1			1111	999.75 (3999)	
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
450	Bit: 7 6 5 4 3 2 1 0 1 1 1 0 1 0 0 0	HEX:E8

Bit	Feature	Logic		Description	
		0	1		
7	Select font size to use when using PC printer function (Bitmap font size) (Last 8 bits) *	Bit 7-0:	00000000		Set font size when it is not specified for PCL printing. (Bitmap font) Specify the font size together with Mode 451. (Least significant 8 bits) Size cannot be set larger than 99.00 (9900).
6			00101100	0.44 (44)	
5			|		
4			**11101000**	**10.00 (1000)**	
3			|		
2			10101100	99.00 (9900)	
1			|		
0			11111111		

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
451	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 1 1	HEX:03

Bit	Feature	Logic		Description	
		0	1		
5	Select font size to use when using PC printer function (Bitmap font size) (First 6 bits) *	Bit 5-0:	000000		Set font size when it is not specified for PCL printing. (Bitmap font) Specify the font size together with Mode 450. (Most significant 6 bits) Size cannot be set larger than 99.00 (9900).
4			**000011**	**10.00 (1000)**	
3			|		
2			100110	99.0 (9900)	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
452	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Change between A4 and Letter size for PC printing *	**No**	Yes		
6	Set paper tray fixed/ priority of PC print	**Priority**	Fixed		
5	CR/LF Mapping (PC print) * <*>	Bit 5-4:	**00**	**Not map**	Specify mapping for the line return control code.
4			01	Mode 1 CR->CRLF, LF=LF, FF=FF	
			10	Mode 2 CR=CR, LF->CRLF, FF->CRFF	
			11	Mode 3 CR->CRLF, LF->CRLF, FF->CRLF	
0	Allow printing without a department instruction of PC print * <*>	**Not available**	Allowed	Allow/not allow PC printing when there is not a department instruction.	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
453	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Set OFF or ON of PostScript error printing to apply when using PC printer function *	**OFF**	ON	Sets whether or not to print error information when PS print has an error.
6	Setting for blank page control	**OFF**	ON	Sets whether controller requests the system side to print on the blank page or not.
5	Set image trim volume	**4mm**	2mm	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
454	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Parallel setting	Bit 7-6:	**00**	**ECP**	Sets the method for parallel transmission. Parallel function (MODE428 Bit3) must be set to valid (1).
6			01	Compatible	
			10	Nibble	
			11	Not available	

MODE	Factory setting bit	
455	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 1 1 0 0	HEX:2C

Bit	Feature	Logic		Description	
		0	1		
7	Select timeout timer (last 8 bits) for PC printing *	Bit 7-0:	00001010	10 sec	Specify together with Mode 456 bits 1-0. (Least significant 8 bits.) Value cannot be set larger than 1000 sec.)
6			00001111	15 sec	
5					
4			**00101100**	**300 sec**	
3					
2			Others	Not available	
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
456	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 1	HEX:01

Bit	Feature	Logic		Description	
		0	1		
1	Select timeout timer (first 2 bit) for PC printing *	Bit1-0:	00	0 sec	Most significant bit for mode 455
0			**01**	**300 sec**	
			11	1000 sec	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
463	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	To enable or disable LDAP search when full dial input is prohibited	**LDAP search disabled**	LDAP search enabled	
6	To enable or disable use of commas in mail address input	**Use of commas disabled**	Use of commas enabled	
5	To enable or disable addition of prefix/suffix	**Addition disabled**	Addition enabled	Before making this setting, set bit 4 of Mode428 to [Displayed] and set Prefix/Suffix.

NOTE

- **Phase2.0 and onward**

MODE	Factory setting bit	
464	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 1 1 0 0	HEX:8C

Bit	Feature	Logic		Description	
		0	1		
7	Select RAW port number (last 8 bits). *	Bit 7-0: 00000000		Not available	Set together with Mode 465. (Least significant 8 bits.)
6					
5			10001100	9100	
4					
3			11111111	65535	
2					
1					
0					

NOTE

- **The features with (*) are settable by users. *: Screen setting of IT Series Agent**

MODE	Factory setting bit	
466	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Synchronize LDAP external server authentication <*>	**Not synchronize**	Synchronize	For logging into the LDAP server, set whether to use the user name/password used for external server authentication.	
6	Enable LDAP search * <*>	**No**	Yes	Set whether to enable LDAP searching.	
5	Select default LDAP server * <*>	Bit 5-3:	**000**	**LDAP Server 1**	Select a default server for LDAP searching.
4			001	LDAP Server 2	
3			010	LDAP Server 3	
			011	LDAP Server 4	
			100	LDAP Server 5	
			Others	Not available	
2	IP filtering permission	**No**	Yes	Set the permission of IP filtering	
1	IP filtering denial	**No**	Yes	Set the denial of IP filtering	
0	Set to use SSL/TLS with HTTP * <*>	**Not use**	Use	Set whether to use SSL/TLS with HTTP.	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
467	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
7	Select frame type for PC printing *	Bit7-5:	**000**	**AUTO-detect**	
6			001	Ethernet-II	
5			010	802.2	
			011	802.3	
			100	SNAP	
			Others	Not available	

NOTE

- **The features with (*) are settable by users. *: Screen setting**

MODE	Factory setting bit	
468	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 1 1	HEX: 0F

Bit	Feature	Logic		Description
		0	1	
6	Set up FTP server passive for downloading firmware	**OFF**	ON	Set up the FTP server passive mode for downloading firmware.

MODE	Factory setting bit	
469	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 40

Bit	Feature	Logic		Description
		0	1	
7	Access lock	**No**	Yes	Set whether or not to enable the access after wrong password is entered three times.
6	Overwrite data	**No**	Yes	Set whether or not to overwrite data to delete the image data in memory. Turn OFF/ON the power after setting the switch.
5	Selection method of classified document	**Display all document**	Display document with ID	0: Display all documents that ID and pass word matches. 1: Display document with ID and reset with password. If access lock is set [YES], document is displayed with ID and reset with password regardless the bit setting.
4	Password regulation	**Without regulation**	With regulation	Set whether or not to apply password regulation.

MODE	Factory setting bit	
470	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Setting export extension <*>	**TXT**	CSV	Set the export file extension for the IP Series Agent export function to CSV or TXT.
6	Setting simplified format <*>	**OFF (mode 1)**	ON (mode 2)	Set to perform the IP Series Agent import/export function by full format (including fax program registration) or simple format (excluding fax program registration).
5	Enable/disable IT Series Agent function <*>	**Enable**	Disable	Set whether to enable the IP Series Agent function.
4	Use of PageScope Data Administrator	**Use**	Not use	

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
471	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
2	Set whether to display the user's list screen, and the default screen * <*>	Bit2-1:	**00**	**Not display list screen**	Specify whether to display the user's list screen for machine authentication, and select the default screen when specifying the list screen.
1		01		Display list screen, entry screen default	
		10		Not available	
		11		Display list screen, list screen default	

NOTE

- **The features with (*) are settable by users. *: Screen setting <*>: Soft switch setting**

MODE	Factory setting bit	
472	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description	
		0	1		
1	Banner paper setting	Bit1-0:	**00**	**Set 1: 430 mm**	Set the banner paper when Custom Size (X = 430 mm) is selected for the bypass paper. If Set 2 or Set 3 is set, however, be sure to load the paper having the set length.
0			01	Set 2: 470 mm	
			10	Set 3: 490 mm	
			11	Not available	

MODE	Factory setting bit	
473	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description
		0	1	
7	Set priority Job List screen <*>	**Display by status**	Display by print order	Set whether to prioritize the print order display.

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
475	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
7	TCP/IP prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of TCP/IP protocol.
3	FTP Client prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of Scan to FTP.

MODE	Factory setting bit	
476	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description
		0	1	
7	Scan to SMB prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of Scan to SMB.
5	G3 Fax prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of G3 Fax function.
4	Scan to HDD prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of Scan to HDD registered operation.
3	Scan to E-mail prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of Scan to E-mail registered operation.
2	IFAX prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of IFAX TX registered operation.
1	IP relay prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of IP relay TX registered operation.
0	IP address FAX prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of IP address FAX TX registered operation.

MODE	Factory setting bit	
477	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX:00

Bit	Feature	Logic		Description		
		0	1			
7	PC (scanner) prohibited	**Allowed**	Not allowed	Set whether or not to allow the use of PC (Scanner) TX registered operation.		
6	Set fax registration restriction and destination display <*>			Fax registration/ Report output restriction	Destination display	Fax registration / report output restriction "Administrator only": Fax registration and report output buttons move to the Admin.Management menu. Destination display "Display one-touch name": Display registered one-touch names for destinations specified for one-touch keys, Job List, destination names of result reports, and Activity Report (TX). (Do not display the tel. no./ address of the destination.)
5		Bit6-5:	**00**	**Allow user**	**Display Tel. No./ Address**	
			01	Not available	Not available	
			10	Administrator only	Display Tel. No./ Address	
			11	Administrator only	Display one-touch name	
4	~~SIP-FAX prohibited~~	**Allowed**	~~Not allowed~~	~~Set whether or not to allow the use of SIP-FAX registered operation.~~		
3	TCPSocket prohibited	**Allowed**	Not allowed	Set whether or not to allow TCPSocket operation.		

NOTE

- **The features with (*) are settable by users. <*>: Soft switch setting**

MODE	Factory setting bit	
478	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 80 (For U.S.) HEX: 00 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Delete key display	**Delete**	**Back space**	Set the function of delete key on input screen with keyboard style. The key function can be deletion of one letter on cursor or deletion of one letter backward on cursor.
6	Set the default input method for Chinese language.	**Pinyin**	Single tap	Specify the input method of the keyboard for Chinese language.

MODE	Factory setting bit	
479	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description	
		0	1		
2	Set up extension scan authentication Set up FAX/SCAN authentication	Bit2-1:	**00**	**Yes**	Set whether or not to authenticate when using extension scan. Set whether or not to authenticate when using Fax/Scan.
1		11		No	

MODE	Factory setting bit	
480	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 0 0 0	HEX: 00

Bit	Feature	Logic		Description	
		0	1		
4	Specify display of default domain name	**Yes**	No	Set whether or not to display domain name (key) when default domain is selected at user login (ActiveDirectory).	
3	ActiveDirectory default domain No.	Bit3-0:	**0000**	**ActiveDirectory domain 1**	Set the registration No. of domain which is to be default domain among the ActiveDirectory domain 1~10 registered at machine.
2			0001	ActiveDirectory domain 2	
1			0010	ActiveDirectory domain 3	
0			0011	ActiveDirectory domain 4	
			0100	ActiveDirectory domain 5	
			0101	ActiveDirectory domain 6	
			0110	ActiveDirectory domain 7	
			0111	ActiveDirectory domain 8	
			1000	ActiveDirectory domain 9	
			1001	ActiveDirectory domain 10	

MODE	Factory setting bit	
512	Bit: 7 6 5 4 3 2 1 0 1 0 0 0 0 0 0 0	HEX:80

Bit	Feature	Logic		Description
		0	1	
7	Detect dial tone (DT)	No	**Yes**	

MODE	Factory setting bit	
768	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 1 0 1	HEX:0D

Bit	Feature	Logic		Description	
		0	1		
7	Soft timer adjustment value between DCS and TCF in V.17 and V.27 tar	Bit 7-0:	00000000	Not available	
6			00000001	5 msec	
5			|		
4			**00001101**	**65 msec**	
3			|		
2			11111111	1275 msec	
1					
0					

MODE	Factory setting bit	
769	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 1 0 0 1	HEX:09

Bit	Feature	Logic		Description	
		0	1		
7	Soft timer adjustment value between DCS and TCF in V.29	Bit 7-0:	00000000	Not available	
6			00000001	5 msec	
5			|		
4			**00001001**	**45 msec**	
3			|		
2			11111111	1275 msec	
1					
0					

MODE	Factory setting bit	
770	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 0	HEX:22 (For U.S.) HEX:C8 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Interval between CFR and PIX	Bit 7-0:	00000000	Not available
6			00000001	5 msec
5			|	
4			**00100010**	**170 msec**
3			|	
			11001000	**1000 msec**
2			11111111	1275 msec
1				
0				

MODE	Factory setting bit	
771	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description
		0	1	
7	T1 timer for automatically sending packets	Bit 7-0:	00000000	Not available
6			00000001	1 sec
5			|	
4			**00100011**	**35 sec**
3			|	
2			11111111	255 sec
1				
0				

MODE	Factory setting bit	
772	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description	
		0	1		
7	T1 timer for automatically receiving packets	Bit 7-0:	00000000	Not available	
6			00000001	1 sec	
5			|		
4			**00100011**	**35 sec**	
3			|		
2			11111111	255 sec	
1					
0					

MODE	Factory setting bit	
773	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description	
		0	1		
7	T1 timer for manually sending packets	Bit 7-0:	00000000	Not available	
6			00000001	1 sec	
5			|		
4			**00100011**	**35 sec**	
3			|		
2			11111111	255 sec	
1					
0					

MODE	Factory setting bit	
774	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description	
		0	1		
7	T1 timer for manually receiving packets	Bit 7-0: 00000000		Not available	
6		00000001		1 sec	
5					
4		**00100011**		**35 sec**	
3					
2		11111111		255 sec	
1					
0					

MODE	Factory setting bit	
775	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description	
		0	1		
7	T1 timer for automatically sending polling packets	Bit 7-0: 00000000		Not available	
6		00000001		1 sec	
5					
4		**00100011**		**35 sec**	
3					
2		11111111		255 sec	
1					
0					

MODE	Factory setting bit	
776	Bit: 7 6 5 4 3 2 1 0 0 0 1 0 0 0 1 1	HEX:23

Bit	Feature	Logic		Description
		0	1	
7	T1 timer for manually sending polling packets	Bit 7-0: 00000000		Not available
6		00000001		1 sec
5				
4		**00100011**		**35 sec**
3				
2		11111111		255 sec
1				
0				

MODE	Factory setting bit	
777	Bit: 7 6 5 4 3 2 1 0 0 0 0 0 0 1 1 1	HEX:07 (For U.S.) HEX:08 (For Europe)

Bit	Feature	Logic		Description
		0	1	
7	Interval between PIX and post command	Bit 7-0: 00000000		Not available
6		00000001		45 msec
5				
4		**00000111**		**75 msec**
3				
		00001010		**90 msec**
2		11111111		1315 msec
1				
0				

MODE	Factory setting bit	
831	Bit: 7 6 5 4 3 2 1 0 1 1 0 0 0 0 0 0	HEX: C0

Bit	Feature	Logic		Description
		0	1	
5	Send DIS (digital identification signal) in 4 Bytes	**Not restrict DIS to 4 bytes**	Restrict DIS to 4 bytes	When sending DIS, set whether to restrict to 4 bytes.

Blank Page

TROUBLESHOOTING

12. Troubleshooting

12.1 Diagnosis by Alarm Code

- This section shows diagnoses of system troubles by alarm codes and their remedies.
- The default setting for diagnostic codes is “not to be displayed.” If you experience errors frequently, setup the soft switch (MODE 020) to display diagnostic codes. Then follow communication error codes tables for troubleshooting.
- Communication error codes tables shows communication error codes. Each of them has 6-digits on the panel and a report.
  Codes 00 to B4 indicate the upper 2 digits. Adding internal 4 digits to them to display 6 digits on the panel and a report.
  Communication reports (TX and RX) print out diagnostic codes for up to 50 activities. Any codes older than those activities cannot be printed.

NOTE

- **Before you proceed with a remedy according to the tables, make sure that the power source cable and the connectors are connected properly.**

- Setting up diagnostic code display

MODE 020	
Bit3	Meaning
0	Do not display codes.
1	Displays codes.

NOTE

- **See Section “Soft Switch List” for setting up soft switches.**

12.2 Communication Error Codes

NOTE

- **Cause - Re: Remote, Li: Line, Lo: Local**

12.2.1 Errors in operations

Code	Description	Cause	Re	Li	Lo	Remedy
00	• Received DIS but no document in local terminal • Polling Reception is requested • Software failure at time of connection	Error in operation			O	Reload a document and retry TX.
		Error in operation at remote end	O			Ask to reload a document and retry TX.
01	• Document pulled out while transmitting. • Document size was too small	Error in operation			O	Reload a correct document and retry TX.
02	• Illegal dialing operation (Example; dialing * or # with DP setting)	Error in setting up			O	Check the soft switch (MODE 006 Bit5 & MODE 011 Bit 5).
		Error in registration			O	Check the registered one-touch dialing number.
03	• Mismatched TX password	Sender's password and receiver's are not matched.	O		O	Check the group password of both sides.
04	• Mismatched RX password	Sender's password and receiver's are not matched.	O		O	Check the group password of both sides.
05	• Mismatched password while polling	Incorrect password was entered for setting up polling.			O	Check the status of the remote machine and the local password.
06	• Remote system has no relay function	Failure in remote machine	O			Check the status of the remote machine.
07	• Remote system has not confidential communication function	Failure in remote machine	O			Check the status of the remote machine.
09	• Incompatibility (Example; no document in local system while polling RX) • TX failure due to mismatch of communication type and/or transmission speed	Error in operation on remote side	O			Ask the remote end to reload the document again.
		Transmission speeds are set 4800/2400 bps. Remote machine has only V.29.	O		O	Check the soft switch (MODE 049 Bit 4 -0).
						Check the maximum transmission speed for each one-touch dialing (only for registration in maintenance features).
10	• Error in F code TX	Failure in remote machine	O			Check the status of the remote machine.
11	• Error in F code RX	Failure in remote machine	O			Check the status of the remote machine.

12.2.2 Terminal alarm

Code	Description	Cause	Re	Li	Lo	Remedy
45	• Memory overflow or nearly full	Memory overflows or nearly full			O	Reset the terminal alarm and ask the remote end for resending.
46	• Document jamming	Feeding is not working continuously.			O	Reload a document.
		Jamming in a long document or in the middle of a page (Feeding is not completed even if feeding exceeds 1 m.)			O	Reload a document.
47	• "No print paper" or "Side cover opened" were detected	Out of print paper			O	Load print paper.
		Side cover was opened while RX			O	Close the side cover.

12.2.3 Communication errors (TX)

Code	Description	Cause	Re	Li	Lo	Remedy
33	• Protocol failure in V.34 sequence	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
70	• Busy tone while waiting for initial identification signal • Timeout or modem failure while detecting 2nd dialing tone • Cannot dial due to dialing/ringing conflict • T1 timeout while waiting for initial identification signal when FAX signal is not detected	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
71	• T1 timeout while waiting for initial identification signal after FAX signal is detected • Detected reverse polarity while waiting for initial identification signal	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try BACK to BACK communication.
72	• Received DCN in phase B while waiting for commands other than DCN	Interruption or failure in remote machine	O			Check the remote system and retry TX.

Code	Description	Cause	Re	Li	Lo	Remedy
74	• Received DIS or DTC 3 times while waiting for response to TCF • No response even after sending TSI/DCS and TCF 3 times • Received FTT twice even TCF has lowest speed	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
		Failure in FAX board			O	Replace FAX board
		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
76	• Reverse polarity while waiting for signal other than initial identification	Failure in remote machine	O			Check the remote system and retry TX.
		Line failure		O		If same error will be experienced several times, set the soft switch (MODE 082 Bit 3) 0.
77	• No response to post message (T4 timeout) • 5 minute timeout in RNR, RR sequence (T5 timeout)	Failure in remote machine	O			Try another remote machine.
		No RTC detection in remote machine (line failure)		O		Try another line.
78	• Received DCN while waiting for response to post message	Interruption or failure in remote machine	O			Check the status of the remote machine and retry TX.
79	• Received PIP for post message (For response to EOP or PPS-EOP, communication is normal even error code is displayed)	Failure in remote machine	O			Check the status of the remote machine.
7A	• Received RTN for post message (where RTN reception is regarded as communication failure) • Retry out of resending error • PPR frame error	Failure in remote machine	O			Check the status of the remote machine.
		Line failure		O		Check the line.
		Failure in TX level			O	Check TX level.
7C	• Received CRP 3 times for TCF • Received CRP 3 times for post message • Received CRP 3 times for DTC of polling reception	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
7D	• RX command error (without cutting off carrier)	Failure in remote machine	O			Check the status of the remote machine.
7F	• No remote machine response after changing mode (T1 timeout)	Failure in remote machine	O			Check the status of the remote machine.
8F	• Received PIN for post message	Failure in remote machine	O			Check the status of the remote machine.

12.2.4 Communication errors (RX)

Code	Description	Cause	Re	Li	Lo	Remedy
33	• Protocol failure in V.34 sequence	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
91	• T1 timeout while waiting for initial identification signal	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
92	• Received DCN while waiting for commands other than DCN in phase B	Interruption or failure in remote machine	O			Check the status of the remote machine and retry TX.
95	• Detected low speed flag followed by 10 sec. timeout while waiting for detection of image signal carrier (HMCD ON)	Failure in remote machine	O			Try another remote system.
		Line failure		O		Try another line.
96	• Carrier disconnected for 15 seconds while receiving G3 image signal	Error in remote machine	O			Ask for resending.
		Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
97	• T2 timeout while waiting for post message • T2 timeout while waiting for DCN after receiving last page • No response from remote system after changing mode (T2 timeout)	Error in remote machine	O			Try another remote machine.
		Accidental RTC detection (line failure)		O		Try another line.
98	• Received DCN while waiting for command other than DCN in phase D	Interruption or failure in remote machine	O			Ask for resending.
99	• Received PRI-Q as post message (Communication is regarded as normal even with error message)	Failure in remote machine	O			Check the status of the remote machine.
9A	• Cannot decode line correctly for 35 seconds while receiving ECM image signal	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Try another line.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
9C	• Received CRP 3 times while waiting for initial identification signal	Failure in remote machine	O			Try another remote machine.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
		Line failure		O		Try another line.

Code	Description	Cause	Re	Li	Lo	Remedy
9D	• RX command error (without cutting off carrier)	Failure in remote machine	O			Check the status of the remote machine.
9F	• Interrupted page reception by EOR-Q or EOR-PRI-Q signal from sender in ECM procedure (next page may be received completely because ECM procedure runs continuously)	Failure in remote machine	O			Try another remote machine.
		Line failure		O		Reduce the initial transmission speed and try resending.

12.2.5 Malfunction

Code	Description	Cause	Re	Li	Lo	Remedy
B0	• Power source off	Power source switch was turned off			O	None.
		Power source failure			O	None.
		Defective power source supply unit			O	Replace the power source supply unit.
B2	• System failure (Examples; image data conversion failure and error in sequence timing)	Warm restart switch was pressed			O	None.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
		Line failure		O		Check line noise and reception level.
B4	• Modem failure	Document was not loaded for polling reception in V.34 mode	O			Check the document loaded in the remote side.
		Line failure		O		Check line noise and reception level.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
B5	• Modem failure (modem failure in V.8 sequence at RX)	Line failure		O		Check line noise and reception level.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
B6	• Modem failure (modem failure in V.8 sequence at RX)	Line failure		O		Check line noise and reception level.
		Failure in FAX board			O	Replace FAX board
▲		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board

Code	Description	Cause	Re	Li	Lo	Remedy
B7	• System failure (Examples; image data conversion failure, error in sequence timing)	Warm restart switch was pressed			O	None.
		Failure in FAX board			O	Replace FAX board
		Failure in MFBS board/ MFBS2 board			O	Replace MFBS board/ MFBS2 board
		Line failure		O		Check line noise and reception level.

12.2.6 Internet Fax (E-mail) Transmission / Scan to E-mail

Item No.	Error Code	Possible Cause	Action to be Taken
1	E4DXXX	The machine cannot connect to a mail server as the SMTP server address has not been set.	Set an SMTP server address.
2	E5AXXX	The machine cannot transmit the document as the DNS settings are incorrect.	Check the DNS settings.
3	E5DXXX	The machine cannot transmit the document with the E-mail address or the destination E-mail address because it has not been specified or is incorrect.	Check the settings and the destination E-mail address.
4	E6FXXX	Transmission attempted and data was too large to be transmitted.	The document may not be transmitted even if the loading of data is successful. Set the quality to Fine or Standard and try again.
5	E7XXXX	SMTP authentication failed.	Confirm SMTP authentication account and password.
6	EAXXXX	A LAN cable has not been connected, or failed to communicate with the SMTP server. You tried to transmit the document to an incorrect destination address.	Check if the LAN cable has been correctly connected, if the SMTP server is ready for communication, if the network settings such as sub-net mask setting are correct, or if the E-mail address of the destination is correct.
7	EAX212	SMTP authentication required.	Enable SMTP authentication settings.
8	EABF4F	The machine has invalid settings for POP3 before SMTP.	Check the POP server settings for administrator maintenance.
9	EABF50	The machine failed to authenticate POP3 before SMTP.	Check the account and the password of POP3.

12.2.6 Internet Fax (E-mail) Transmission / Scan to E-mail

Item No.	Error Code	Possible Cause	Action to be Taken
1	E4DXXX	The machine cannot connect to a mail server as the SMTP server address has not been set.	Set an SMTP server address.
2	E5AXXX	The machine cannot transmit the document as the DNS settings are incorrect.	Check the DNS settings.
3	E5DXXX	The machine cannot transmit the document with the E-mail address or the destination E-mail address because it has not been specified or is incorrect.	Check the settings and the destination E-mail address.
4	E6FXXX	Transmission attempted and data was too large to be transmitted.	The document may not be transmitted even if the loading of data is successful. Set the quality to Fine or Standard and try again.
5	E7XXXX	SMTP authentication failed.	Confirm SMTP authentication account and password.
6	EAXXXX	A LAN cable has not been connected, or failed to communicate with the SMTP server. You tried to transmit the document to an incorrect destination address.	Check if the LAN cable has been correctly connected, if the SMTP server is ready for communication, if the network settings such as sub-net mask setting are correct, or if the E-mail address of the destination is correct.
7	EAX212	SMTP authentication required.	Enable SMTP authentication settings.
8	EABF4F	The machine has invalid settings for POP3 before SMTP.	Check the POP server settings for administrator maintenance.
9	EABF50	The machine failed to authenticate POP3 before SMTP.	Check the account and the password of POP3.

12.2.7 Internet Fax (E-mail) Reception

Item No.	Error Code	Possible Cause	Action to be Taken
1	E40XXX	The machine cannot connect to a mail server as the POP3 server address has not been set correctly. The machine cannot connect to a mail server as the server has failed.	Check the POP3 server address. Check that the POP3 server is operating normally.
2	E50XXX E51XXX E52XXX	The machine cannot receive a document as the POP3 User Name or Password has not been set or is incorrect.	Check the settings.
3	E60XXX E61XXX	The data received in POP3 cannot be printed. A mail with an attached file whose format is not TIFF-F, a mail whose text contains a line exceeding 1000 characters, or mail of large data size is received. A mail with no data is received.	Confirm with the sender.

Item No.	Error Code	Possible Cause	Action to be Taken
4	E7XXXX	APOP authentication failed.	Confirm POP3 account and password.
5	ECXXXX	A LAN cable has not been connected, or failed to communicate with the POP3 server. The User Name or Password has not been registered in the server. They are different from the settings in the machine.	Check if the LAN cable has been correctly connected. Check if the POP3 server settings are correct.

12.2.8 Scan to FTP

Item No.	Error Code	Possible Cause	Action to be Taken
1	ED09C6	The LAN cable is not connected, or the destination address is incorrect.	Check that the LAN cable is correctly connected. Also, check that the settings for the FTP server address, port number, and proxy server are correctly specified.
2	ED09C7	The user name or password is incorrect.	Check the user name and password.
3	ED09C8	The specified folder does not exist.	Check that the save destination folder exists and check the folder name.
4	ED09C9	The FTP server capacity is full.	Free up disk space on the FTP server.
5	ED09CA	An error occurred when data was being transferred.	Check that the FTP server is operating properly, or check that the LAN cable is not broken.
6	EF09CF	The protocol is incorrect.	Ask the administrator to deactivate the protocol usage restrictions, or look for other delivery methods.
7	ED09CC	The FTP server is malfunctioning if other than the above.	Check the status of the FTP server.
8	EF09CD	Available memory is not sufficient.	Expand the memory of this machine.
9	EF09D0	Characters that cannot be used have been entered.	Change the file name.

12.2.9 Scan to SMB

Item No.	Error Code	Possible Cause	Action to be Taken
1	ED09C6	The LAN cable is not connected, or the destination address is incorrect.	Check that the LAN cable is correctly connected. Also, check that the settings for the destination address and port number are correctly specified.
2	ED09C7	The user name or password is incorrect.	Check the user name and password.
3	ED09C8	The specified folder does not exist.	Check that the save destination folder exists and check the folder name.
4	ED09C9	The disk capacity is full.	Free up the disk space on the corresponding disk.
5	ED09CF	The protocol is incorrect.	Ask the administrator to deactivate the protocol usage restrictions, or look for other delivery methods, or look for other delivery methods.
6	ED09CC	The protocol is incorrect.	Ask the administrator to deactivate the protocol usage restrictions, or look for other delivery methods.
7	EF09CD	Available memory is not sufficient.	Expand the memory of this machine.
8	EF09D0	Characters that cannot be used have been entered.	Change the file name.

12.2.10 Scan to PC

Item No.	Error Code	Possible Cause	Action to be Taken
1	EAXXXX	The IP address specified for the destination is wrong.	Set the IP address of the destination PC again.
		The power of the PC with the destination IP address is not turned ON.	Confirm that the power of the PC is turned ON and that ImageReceiver is running.
		ImageReceiver is not running.	Start up ImageReceiver.
		The PC is receiving from another scanner.	Try transmission again after reception is completed.
		An IP address of a network multi-function machine other than that of the sender is set with the ImageReceiver settings of the PC with the destination IP address.	The network multi-function machine that is the destination is fixed. To send from the current network multi-function machine anyway, delete the IP address in the ImageReceiver setting and reboot ImageReceiver.
		The IP address of the destination is not correctly set in the ImageReceiver setting.	Delete the IP address in the ImageReceiver setting and reboot ImageReceiver.
		The IP address of the sender is not set correctly in [Receive Settings] - [Connection Filter].	Set the IP address correctly in [Receive Settings] - [Connection Filter] setting, and reboot ImageReceiver.
		The ImageReceiver is not operating normally.	Restart your PC. Install IP Scanner again. Check the TCP/IP settings of the PC.

Item No.	Error Code	Possible Cause	Action to be Taken
1	EAXXXX	A LAN cable is not connected.	Check that the LAN cable is connected correctly.
		The network of the network multi-function machine and the PC with the IP address of the destination mismatch.	Confirm whether the network settings of the PC and the network settings of the network multi-function machine pose a network-type problem.
		The network settings in the PC have not been set correctly.	Check the TCP/IP settings of the PC.
		The network board of the PC with the IP address of the destination has failed.	Replace the network board or the PC.
		Power is not being supplied to the HUB.	Supply power to the HUB.
		A cross-type network cable is not being used for Peer-to-Peer connection.	Use a cross-type cable.
		The network cable is disconnected.	Replace the network cable.
		Network load in the destination PC is too high.	Check whether a mail with large size data is received in the destination PC, or a large file is downloaded from the Web.
		There is too much transmission data.	If the scan resolution is set high, scan fewer pages.
		The access is limited by the firewall (Windows Firewall) of the network connection in the PC.	Consult with the network administrator, and change the firewall (Windows Firewall) settings of the network connection.

12.2.11 IP Scanner

Item No.	Error Code	Possible Cause	Action to be Taken
1	EAXXXX	The power of the PC with the destination IP address is not turned ON.	Confirm that the power of the PC is turned ON and that ImageReceiver is running.
		The ImageReceiver is not running.	Start up ImageReceiver.
		The IP address specified for the destination is wrong.	Set the IP address of the destination PC again.
		The PC is receiving from another scanner.	Try transmission again after reception is completed.
		An IP address of a network multi-function machine other than that of the sender is set with the ImageReceiver settings of the PC with the destination IP address.	The network multi-function machine that is the destination is fixed. To send from the current network multi-function machine anyway, delete the IP address in the ImageReceiver setting and reboot ImageReceiver.
		The IP address of the destination is not correctly set in the ImageReceiver setting.	Delete the IP address in the ImageReceiver setting and reboot ImageReceiver.
		The IP address of the sender is not set correctly in [Receive Settings] - [Connection Filter].	Set the IP address correctly in [Receive Settings] - [Connection Filter] setting, and reboot ImageReceiver.

Item No.	Error Code	Possible Cause	Action to be Taken
1	EAXXXX	The ImageReceiver is not operating normally.	Restart your PC. Install IP Scanner again. Check the TCP/IP settings of the PC.
		A LAN cable is not connected.	Check that the LAN cable is connected correctly.
		The network of the network multi-function machine and the PC with the IP address of the destination mismatch.	Confirm whether the network settings of the PC and the network settings of the network multi-function machine pose a network-type problem.
		The network settings in the PC have not been set correctly.	Check the TCP/IP settings of the PC.
		The network board of the PC with the IP address of the destination has failed.	Replace the network board or the PC.
		Power is not being supplied to the HUB.	Supply power to the HUB.
		A cross-type network cable is not being used for Peer-to-Peer connection.	Use a cross-type cable.
		The network cable is disconnected.	Replace the network cable.
		Network load in the destination PC is too high.	Check whether a mail with large size data is received in the destination PC, or a large file is downloaded from the Web.
		There is too much transmission data.	If the scan resolution is set high, scan fewer pages.
		The access is limited by the firewall (Windows Firewall) of the network connection in the PC.	Consult with the network administrator, and change the firewall (Windows Firewall) settings of the network connection.

12.2.14 SIP-FAX Function

NOTE

- **Confirm Item "SIP-FAX Adaptor Troubleshooting" simultaneously with <SIP-FAX Function>.**
  See P.210

Item No.	Error Code	Error Details	Analysis Method	Possible Cause	Action to be Taken	Subject
1	E30XXX	Destination error for SIP connection	Confirm the settings of the machine receiving.	Destination number is incorrect.	Correctly set the destination number with the destination.	MFP2
				SIP-FAX adaptor 2 failure (LAN failure, power disconnection, setting error)	Correctly set SIP-FAX adaptor 2 with the destination.	Adaptor 2
		Destination machine busy for SIP connection	If you can successfully send to another machine, take the actions described here.	Destination terminal is being used.	Wait awhile and send again.	MFP2
				Response is not received from destination terminal.	Confirm with the destination: • Power is ON, • SIP-FAX setting, • LAN5 connection, • Correct operation.	MFP2
				IP address of MFP2 registered for SIP-FAX adaptor 2 is incorrect.	Confirm the IP address setting of SIP-FAX adaptor 2 with the destination.	Adaptor 2 / MFP2
				Port number of SIP-FAX function setting of MFP2 differs from port number of SIP-FAX adaptor 2.	Confirm the port number setting of SIP-FAX adaptor 2 with the destination.	Adaptor 2 / MFP2
				SIP-FAX adaptor 2 failure (LAN failure, power disconnection, setting error)	Correctly connect SIP-FAX adaptor 2 with the destination and confirm.	Adaptor 2
		SIP connection error	Confirm the communication operation.	You attempted to communicate with SIP-FAX during FAX over IP communication.	Wait awhile and send again.	MFP1 / Adaptor 1
2	E31XXX	Temporary error for SIP connection	Confirm the communication operation.	A SIP web was called simultaneously.	Wait awhile and send again.	MFP1 / Adaptor 1
				A SIP disconnection occurred during communication.		

Item No.	Error Code	Error Details	Analysis Method	Possible Cause	Action to be Taken	Subject
3	E38XXX	Global error / Server error / Status code error / Protocol error for SIP connection	-	Server setting of SIP-FAX adaptor 1 is incorrect.	Confirm the LED status of SIP-FAX adaptor 1, refer to item <SIP-FAX Adaptor>, and take action.	Adaptor 1
				SIP server is operating incorrectly.	Confirm the SIP server connection and operation status with the network administrator.	SIP server
4	E39XXX	SIP-FAX adaptor connection error for SIP connection	-	SIP-FAX adaptor 1 is not operating.	Confirm the LED status of SIP-FAX adaptor 1, refer to item <SIP-FAX Adaptor>, and take action.	Adaptor 1
				SIP-FAX setting of MFP1 is set to "Not use".	Set the SIP-FAX setting of MFP1 to "Use".	MFP1
5	EA422A	SMTP transmission error	-	Cannot send because documents reserved for transmission have accumulated in MFP2.	Confirm with the destination.	MFP2
6	EAXXXX	SMTP transmission error	-	(Same cause as for IP address FAX)	(Same action as for IP address FAX)	

12.2.15 FAX over IP Communication Error (Sending)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
33	Protocol error during V.34 sequence	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
70	• Busy tone detected during initial recognition signal reception waiting • Modem error or timeout during secondary transmission sound detection • Cannot call due to transmission call conflict • T1 timeout during initial recognition signal reception waiting when FAX signal is not detected	Destination number error			○	Confirm the destination number.
		Destination machine failure	○			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		○		Confirm the status of the network (HUB connection, etc.)
		SIP adaptor failure			○	Confirm the connections, settings, etc. according to SIP-FAX Adaptor Troubleshooting. See P.210
71	• T1 timeout during initial recognition signal reception waiting after FAX signal is detected • Polarity reversal detected during initial recognition signal reception waiting	Destination machine failure	○			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		○		Confirm the status of the network (HUB connection, etc.)
72	DCN reception during waiting for command other than DCN in Phase B	V.34 failure			○	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure or disconnection	○			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		○		Confirm the status of the network (HUB connection, etc.)
74	• DIS or DTC is received thrice during response waiting for TCF • TSI/DCS or TCF is sent thrice, without response • FTT is received twice for TCF of minimum reception sensitivity	V.34 failure			○	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	○			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		○		Confirm the status of the network (HUB connection, etc.)
		FAX(S) board failure			○	Replace FAX(S) board.
		MFBS board failure			○	Replace MFBS board.

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
76	Polarity reversal detected during other than initial recognition signal reception waiting	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Confirm the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
77	• No response for post message (T4 timeout) • 5-minute timeout for RNR, RR sequence (T5 timeout)	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
78	DCN reception during response waiting for post message	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure or disconnection	O			Confirm the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
79	• PIP reception for post message • (Communication result is normal although an error code is set for the response to EOP or PPS-EOP)	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
7A	• RTN reception for post message • (When handling RTN reception as communication error) • Error re-send tryout • PPR frame error	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
7C	• CRP is received thrice for TCF • CRP is received thrice for post message • CRP is received thrice for DTC of polling reception	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
7D	Reception command error (not carrier disconnection)	V.34 failure			O	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
7F	No destination response after changing mode (T1 timeout)	Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)
8F	PIN reception for post message	Destination machine failure	O			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		O		Confirm the status of the network (HUB connection, etc.)

12.2.16 FAX over IP Communication Error (Receiving)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
33	Protocol error during V.34 sequence	V.34 failure			*	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	*			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		*		Confirm the status of the network (HUB connection, etc.)
91	T1 timeout during initial recognition signal reception waiting	Destination machine failure	*			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		*		Confirm the status of the network (HUB connection, etc.)
92	DCN reception during waiting for command other than DCN in Phase B	V.34 failure			*	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure or disconnection	*			Send again to the destination machine.
		Line failure (packet loss, delay, etc.)		*		Confirm the status of the network (HUB connection, etc.)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
95	10-second timeout after low-speed flag detection during image signal carrier (HMCD ON) detection waiting	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
96	15-second carrier disconnection during G3 image signal reception	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
97	• T2 timeout during post message reception waiting • T2 timeout during DCN reception waiting after receiving last page • No destination response after changing mode (T2 timeout)	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
98	DCN reception during waiting for command other than DCN in Phase D	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure or disconnection	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
99	PRI-Q reception forport message (communication result is normal although error code is set)	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Confirm the status of the destination machine.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)

Error Code	Error Details	Possible Cause	Dest.	Line	Self	Action to be Taken
9A	Correct line cannot be decoded within 35 seconds during ECM image signal reception	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
		FAX(S) board failure			•	Replace FAX(S) board.
		MFBS board failure			•	Replace MFBS board.
9C	CRP is received thrice during waiting for answer for initial recognition signal	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Change the destination machine and send again.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
		FAX(S) board failure			•	Replace FAX(S) board.
		MFBS board failure			•	Replace MFBS board.
9D	Reception command error (not carrier disconnection)	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Confirm the status of the destination machine.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)
9F	Pages being received by EOR-Q or EOR-PRI-Q signals from the transmission side with ECM procedure are destroyed (since the procedure is continued, the next page may be transmitted)	V.34 failure			•	Set V.34 to OFF and the signal transmission level to -16dBm, and send again.
		Destination machine failure	•			Confirm the status of the destination machine.
		Line failure (packet loss, delay, etc.)		•		Confirm the status of the network (HUB connection, etc.)

12.3 Diagnosis by Symptoms

- Possible causes of various problems and their remedies are shown below. Carry out troubleshooting according to this table.

Symptom	Item No.	Cause	Remedy	
Received image is stretched with ADF	1	Printed image is excessively stretched in the copy mode? **NOTE** • **The following causes may be possible (improper document handling): special paper such as very thick paper, non-carbon print paper, carbon print paper.**	YES	Go to item 2.
			NO	Failure in remote terminal (improper document handling, error in the transmission unit of the remote terminal).
	2	Is an image from the service center also stretched?	YES	Go to item 3.
			NO	Go to item 4.
	3	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Replace the PWB-A
	4	Is the contact of feed roller gears OK?	YES	Go to item 5.
			NO	Replace the feed roller gear unit.
	5	Any paper dust on feed rollers or pick-up rollers?	YES	Clean up rollers.
			NO	Replace the leaf spring.
Received image is shrunk too much.	1	Printed image is excessively shrunk in the copy mode?	YES	Go to item 2.
			NO	Failure in the remote terminal (improper document handling, error in the transmission unit of the remote terminal).
	2	Is an image from the service center also shrunk?	YES	Go to item 4.
			NO	Go to item 3.
	3	Any improvement after replacing PKG ASS'Y (MFBS)?	YES	END
			NO	Go to item 4.
	4	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Replace the PWB-A
Received image is too light or faded.	1	Are copied image or a test image also too light or faded? **NOTE** • **The following causes may be possible (improper setting of document contrast): a document with small blue characters or file lines**	YES	Go to item 2.
			NO	Failure in the remote side (improper setting of document contrast, improper document handling, poor line condition, and error in the transmission unit of the remote terminal).
	2	Any improvement after replacing the imaging unit?	YES	Replace the imaging unit.
			NO	For details see Main service manual "Image quality problem".

Symptom	Item No.	Cause	Remedy	
Received image is squeezed	1	Are characters of copied image or a test image also squeezed? Improper setting of document contrast: Received image of small characters or blue copies with “contrast” switch set “Darker”. Error in remote machine: The following causes are possible: A. Failure in board of scanner unit B. Improper adjustment of optical focus C. Dew on optical lenses (Proceed to anti-dew.)	YES	Failure in the remote side (improper setting of document contrast, and error in the transmission unit of the remote terminal).
			NO	Go to item 2.
	2	Any improvement after replacing the imaging unit?	YES	Replace the imaging unit.
			NO	For details see Copier service manual “Image quality problem”.
Clock malfunctions	1	No improper operation?	YES	Refer User’s Guide for operation.
			NO	Go to item 2.
	2	Any improvement after replacing RAMS board?	YES	Replace RAMS board.
			NO	Go to item 3.
▲	3	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Replace the PWB-A.
Neither “Sending” nor “Receiving” are displayed.	1	Is an alarm message on screen?	YES	Correct the failure and reset the alarm.
			NO	Go to item 2.
	2	Is the external telephone on-hooked?	YES	Go to item 3.
			NO	Set the external telephone off-hook then press the communication switch.
	3	Are you printing something such as report?	YES	Proceed to communication after completing print jobs.
			NO	Go to item 4.
	4	Any improvement after replacing Operating panel?	YES	Replace Operating panel.
			NO	Go to item 5.
	5	Any improvement after replacing the cable between Operating panel and BCRS?	YES	Replace the cable between Operating panel and BCRS.
			NO	Go to item 6.
	6	Any improvement after replacing FAX board?	YES	Replace FAX board.
			NO	Go to item 7.
▲	7	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Cannot go to "Sending" nor "Receiving" modes	1	Is the password checked?	YES	Go to item 2
			NO	Go to item 3.
	2	Is the password correct?	YES	Disable password check and Go to item 3.
			NO	Match the password.
	3	Try to communicate with the service center. Same problem? Possible causes: D. FAX button is not pressed. E. Both systems are in the transmission (or reception) mode.	YES	Go to item 4.
			NO	END Possible causes are line trouble, trouble or improper operation in the remote terminal, or the remote FAX is not connected.
	4	Are the transmission level and equalizer of the service center set properly?	YES	Go to item 5.
			NO	Set them properly.
	5	Did you check the mode (TX or RX) of the remote side?	YES	Go to item 6.
			NO	Confirm it by phone.
	6	Any improvement after replacing MFBS - FAX cable?	YES	Replace MFBS - FAX cable.
			NO	Go to item 7.
	7	Any improvement after replacing FAX board?	YES	Replace FAX board.
			NO	Go to item 8.
	8	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Go to item 9.
	9	Any improvement after replacing Operating panel?	YES	Replace Operating panel.
			NO	Go to item 10.
	10	Any improvement after replacing the cable between Operating panel and BCRS?	YES	Replace the cable between Operating panel and BCRS.
			NO	Replace the PWB-A
Automatic reception disabled	1	Did you select the automatic reception mode?	YES	Go to item 2
			NO	Select the automatic reception mode.
	2	Is the external telephone on hook?	YES	Go to item 3.
			NO	Set the external telephone on-hook.
	3	Any improvement after replacing MFBS - FAX cable?	YES	Replace MFBS - FAX cable.
			NO	Go to item 4.
	4	Any improvement after replacing FAX board?	YES	Replace FAX board.
			NO	Go to item 5.
	5	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Go to item 6.
	6	Any improvement after replacing Operating panel?	YES	Replace Operating panel.
			NO	Go to item 7.
	7	Any improvement after replacing the cable between Operating panel and BCRS?	YES	Replace the cable between Operating panel and BCRS.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Cannot send dial number from 10 key pad	1	Is the external telephone in on-hook status?	YES	Go to item 2
			NO	Set the handset on-hook.
	2	Is the line type specified correctly?	YES	Go to item 3.
			NO	Specify the line type (MF, 10, 20 PPS) correctly.
	3	Did you enter by 10-key full dialing?	YES	Go to item 5.
			NO	Go to item 4.
	4	Did you register the phone number?	YES	Go to item 5.
			NO	Register the phone number.
	5	Any improvement after replacing MFBS - FAX cable?	YES	Replace the MFBS - FAX cable.
			NO	Go to item 6.
	6	Any improvement after replacing FAX board?	YES	Replace FAX board.
			NO	Go to item 7.
▲	7	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Go to item 8.
	8	Any improvement after replacing Operating panel?	YES	Replace Operating panel.
			NO	Go to item 9.
	9	Any improvement after replacing the cable between Operating panel and BCRS?	YES	Replace the cable between Operating panel and BCRS.
			NO	Replace the PWB-A
Cannot monitor communication	1	Is the sound volume switch OFF?	YES	Select a sound volume switch other than OFF.
			NO	Go to item 2
	2	Is S/W DIP SW set line monitoring?	YES	Go to item 3.
			NO	Set S/W DIP SW.
	3	Any improvement after replacing the speaker?	YES	Replace the speaker.
			NO	Go to item 4.
	4	Any improvement after replacing FAX board?	YES	Replace FAX board.
			NO	Go to item 5.
▲	5	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Go to item 6.
	6	Any improvement after replacing Operating panel?	YES	Replace Operating panel.
			NO	Go to item 7.
	7	Any improvement after replacing the cable between Operating panel and BCRS?	YES	Replace the cable between Operating panel and BCRS.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Image memory (memory stored for TX image) is not backed up.	1	Proceed to the following procedure. Is the image memory backed up? F. TX: Disconnect the line cable and proceed a quick memory transmission. Turn OFF the power switch while waiting for the answer. Turn ON the power and check if data is stored in the image memory. G. RX: Turn OFF the power switch while proceeding memory reception without printing paper. Turn ON the power again and check if data is stored in the image memory.	YES	Normal
			NO	Go to item 2
	2	Is the connector of BCRS board connected?	YES	Go to item 3.
			NO	Connect the connector.
	3	Is the battery voltage appropriate? (1.2 V or more)	YES	Go to item 6.
			NO	Go to item 4.
	4	Is the battery full charged? (Approx. 24hr)	YES	Go to item 5.
			NO	Charge the battery.
	5	Any improvement after replacing the battery?	YES	Replace the battery.
			NO	Go to item 6.
	6	Any improvement after replacing MFBS board/MFBS2 board?	YES	Replace MFBS board/MFBS2 board.
			NO	Go to item 7.
	7	Any improvement after replacing RAMS board?	YES	Replace RAMS board.
			NO	Replace the PWB-A

Symptom	Item No.	Cause	Remedy	
Image memory (memory stored for TX image) is not backed up.	1	Proceed to the following procedure. Is the image memory backed up? F. TX: Disconnect the line cable and proceed a quick memory transmission. Turn OFF the power switch while waiting for the answer. Turn ON the power and check if data is stored in the image memory. G. RX: Turn OFF the power switch while proceeding memory reception without printing paper. Turn ON the power again and check if data is stored in the image memory.	YES	Normal
			NO	Go to item 2
	2	Is the connector of BCRS board connected?	YES	Go to item 3.
			NO	Connect the connector.
	3	Is the battery voltage appropriate? (1.2 V or more)	YES	Go to item 6.
			NO	Go to item 4.
	4	Is the battery full charged? (Approx. 24hr)	YES	Go to item 5.
			NO	Charge the battery.
	5	Any improvement after replacing the battery?	YES	Replace the battery.
			NO	Go to item 6.
	6	Any improvement after replacing MFBS board?	YES	Replace MFBS board.
			NO	Go to item 7.
	7	Any improvement after replacing RAMS board?	YES	Replace RAMS board.
			NO	Replace the PWB-A

12.4 Troubleshooting of Network APL Function

12.4.1 Error Indications (Icons): POP3 Reception Anomalies

Item No.	Condition	Possible Cause	Action to be Taken
1	When the icon is displayed at the bottom of the operation screen.	Failed to receive a document using POP3.	Confirm that the POP3 user name and POP3 password are correctly specified in [Admin.2] - [Network Set].

12.4.2 Internet Fax (E-mail) Transmission / Scan to E-mail

Item No.	Condition	Possible Cause	Action to be Taken
1	Transmission is unsuccessful.	The connection has some defects.	Check the LAN cable. (whether it is Category 5 type) Check the LED indicator and connection of the HUB unit.
		The user has logged in and tried to transmit a document, even though the E-mail address of the account has not been registered yet.	Register the E-mail address of the account logged in.
		The required settings have not been registered in the machine.	Make the required network settings.
		The LAN cable is disconnected.	Replace the LAN cable.
		Other unknown causes.	Check the error details in the [Com.] menu of [Job List], and refer to the error code.
2	The document can be transmitted, but the image is not displayed on the terminal unit or PC at the destination.	The destination machine does not support the function for processing the transmitted image.	Retry the transmission using a size/quality/coding system supported by the destination machine.
		The document was transmitted without inserting a transmission document text.	Depending on the mailing software, it may not be possible to view the attached file when a mail with only the attached file and no text is received. In such a case, insert text into the document to be transmitted and retry.
3	Transmission cancellation has failed.	It may take some time to cancel an Internet Facsimile transmission.	Wait for a while until it is canceled.

12.4.3 Internet Fax (IP-TX) Transmission

Item No.	Condition	Possible Cause	Action to be Taken
1	Transmission is unsuccessful.	The connection has some defects.	Check the LED indicator and connection of the HUB unit.
		The volume of the image data is so large that the recipient is timed out.	• Ask the recipient to delay the time until the time-out occurs. • Reduce the volume of the image data and retry.
		The required settings have not been registered in the machine.	Make the required network settings.
		The LAN cable is disconnected.	Replace the LAN cable.
		Other unknown causes.	Check the error details in the [Com.] menu of [Job List] and refer to the error code.

12.4.4 Internet Fax (E-mail) Reception

Item No.	Condition	Possible Cause	Action to be Taken
1	The reception function does not work.	The connection has some defects.	Check the LED indicator and connection of the HUB unit.
		The automatic check for receipt is set to OFF.	Set an interval between automatic checks.
		The required settings have not been registered in the machine.	Make the required network settings.
		The same POP3 User Name is used for another E-mail software or for another user.	The same POP3 User Name should not be used elsewhere, or for other E-mail software.
		The LAN cable is disconnected.	Replace the LAN cable.
2	Documents are received but not printed out.	Data that is not supported is attached, or a mail with no data is received.	Ask the sender to send the document in TIFF-F or text file format.
		The printing of the received document was not specified.	To print a received document, specify Print in received document handling process.
		Memory Full	Print the stored documents to reduce the memory usage, and then ask the sender to retransmit.
		Other unknown causes	Check the error details in the [Com.] menu of [Job List] and refer to the error code.
3	The machine receives (print) data in binary code.	Data in a format other than MIME is attached or a mail is received via a server that does not support MIME format.	When the format of the attached data is other than MIME, binary codes are printed out as they are in the text. (This is not a machine failure.) Ask the sender to send the data in the MIME format.

Item No.	Condition	Possible Cause	Action to be Taken
4	The machine receives the same document repeatedly.	The size of the mail is so large that the connection with the server is timed out before the document reception is completed.	• Delete the mail in question from the server by receiving it alternatively via a PC. • Ask the sender to reduce the mail size and retry.
5	Transmission cancellation has failed.	It may take some time to cancel an Internet Facsimile reception.	Wait for a while until it is canceled.
6	The icon indicating POP3 receipt error does not go off.	POP3 receipt is not executed as the set time interval has not elapsed after the machine failed to receive a document in POP3 mode last time.	Once the POP3 receipt error icon is displayed, it does not go off until the receipt is completed successfully. Check that the machine receives in the POP3 mode by setting a smaller value of Automatic Check Interval.

12.4.5 Document Forwarding / Archive Distribution

Item No.	Condition	Possible Cause	Action to be Taken
1	Transmission of Mail distribution fails.	The E-mail address of the account to which the mail is to be distributed, has not been registered.	Set an E-mail address for mail distribution. Register the E-mail address of the account whose mail distribution has been set.
2	The mail has been distributed from the machine, but has not been received by the transfer destination.	The address of the transfer destination is incorrect.	Check the mail address of the One-touch key to which mails are to be transferred.
		Other unknown causes.	An error mail may be returned to the E-mail address of the account, to which mail distribution has been set. Check the details.

12.4.6 Scan to PC

Item No.	Condition	Possible Cause	Action to be Taken
1	Transmission is unsuccessful.	Refer to communication error codes.	Check the details of the communication error in the [Com.] menu of [Job List] and refer to error codes.
		The LAN cable is disconnected.	Replace the LAN cables.
2	The PC cannot receive the Image.	Refer to communication error codes.	Check the details of the communication error in the [Com.] menu of [Job List] and refer to error codes.

Item No.	Condition	Possible Cause	Action to be Taken
3	The PC receives the document, but cannot view the image.	IP Scanner is not running.	Start IP Scanner, perform an RX check, and convert the received data file to an image file.
		Viewer software is not installed or it is installed but link is not made.	Install the viewer software. Create the link to the viewer software for browsing TIFF files or PDF files.
		A trouble occurred in image conversion within IP Scanner and the file has not been correctly created.	The file is invalid. Close Image Receiver and start it again, then perform scanner transmission again. If high resolution has been set, perform scanning with lower resolution or fewer pages.
4	The machine cannot cancel transmission or the PC cannot cancel reception.	It may take some time to cancel the transmission.	Wait for a while until it is canceled. If you are in a rush, close the Image Receiver. In this case, the data received by the PC but not processed by IP Scanner will be deleted.

12.4.7 IP Scanner

Item No.	Condition	Possible Cause	Action to be Taken
1	Transmission is unsuccessful.	Refer to communication error codes.	Check the details of the communication error in the [Com.] menu of [Job List] and refer to error codes.
		The setting of [Receive Settings]-[Connection Filter] is wrong.	Check the setting of [Receive Settings] - [Connection Filter].
		The setting of ImageReceiver is wrong.	Check the setting of ImageReceiver.
		The LAN cable is disconnected.	Replace the LAN cable.
		Two LAN boards are inserted.	Cannot be used when two or more LAN boards are inserted. Change the priority in Network setting on PC (Windows).
2	The PC cannot receive the Image.	Refer to communication error codes.	Check the details of the communication error in the [Com.] menu of [Job List] and refer to error codes.
		Another mailer is running, and is affecting ImageReceiver.	Try to close the mailer.

Item No.	Condition	Possible Cause	Action to be Taken
3	The PC receives the document, but cannot view the image.	IP Scanner is not running.	Start the IP Scanner, perform the RX check, and convert the received data file to an image file.
		Viewer software is not installed or it is installed but the link is not made.	Install the viewer software. Create a link to the viewer software for browsing TIFF files or PDF files.
		Trouble occurred in image conversion within IP Scanner and the file has not been correctly created.	The file is invalid. Close Image Receiver and start it again, then perform the scanner transmission again. If high resolution has been set, perform scanning with lower resolution or fewer pages.
4	The machine cannot cancel transmission or the PC cannot cancel reception.	It may take some time to cancel transmission.	Wait for a while until it is canceled. If you are in a rush, close the ImageReceiver. In this case, data received by the PC but not processed by IP Scanner will be deleted.
5	[Failed to connect to machine] is displayed.	The machine has not been turned on.	Turn on the machine.
		LAN cable is disconnected or other network failure.	Check the LAN cable connection.
		The IP address of the machine entered from IP Scanner is wrong.	Set the IP address again.
		TCP/IP setting of the PC is wrong.	Check the network setting of the PC.
		The PC is not connected to the network.	Check the network connection of the PC.
		The LAN cable is not connected.	Check that the LAN cable is connected properly.
6	[Connection Failure with ImageReceiver. Do you want to start up ImageReceiver?] is displayed.	ImageReceiver is not running.	Start ImageReceiver.
		The operation of the ImageReceiver is working wrong.	Restart your PC.
7	[ImageReceiver detected conflict of XXX] is displayed.	Other software is using the port.	Mail server and IP Scanner cannot coexist. Do not start the mail server. Close the software that causes the problem. Change the ports according to the indication.
8	[Connection failure with ImageReceiver] is displayed.	The operation of the IP Scanner or the ImageReceiver is working wrong.	Restart your PC. If the error remains, uninstall IP Scanner and install it again.

Item No.	Condition	Possible Cause	Action to be Taken
18	[Scanner key name has invalid character] is displayed.	Scanner key name has characters other then alphanumeric characters, "-" or "_".	Specify the key name using alphanumeric characters, "-" or "_".
19	[Incorrect IP address] is displayed.	String is entered in the IP address.	Use the format XXX. XXX. XXX. XXX.
20	[Currently this command not acceptable] is displayed.	The next communication is performed while in communication with the machine such as registering or deleting buttons.	Wait until the current connection is disconnected ([Currently this function is not available. Try again later.] at the bottom of the window disappears), and do the next operation.
21	[Filed to write to image file] is displayed.	Insufficient space in the file directory.	Change the directory or secure sufficient space on the hard disk to save the file.
		Trouble in the file directory.	Change the directory to save the file.
22	[Image folder not found] is displayed.	Specified folder is not found.	Check the folder name to save the data. Specify the folder name again to save the data.

12.4.8 Gateway TX / IP Relay

Item No.	Condition	Possible Cause	Action to be Taken
1	This machine does not receive the data.	There is a wrong setting in the Network FAX.	Check the setting of the Network FAX.
		Required software settings are not set completely.	Make the required network settings.
		Transmission data is too large to be transmitted and the fax has not been received because of restriction of a server.	Make data size small by reducing the number of pages, and retransmit.
2	Fax is not transmitted from this machine.	Communication mode of the gateway transmission is not set correctly.	Touch [YES] for Gateway TX and set communication mode correctly.

~~12.4.9 SIP-FAX~~

~~NOTE~~

- ~~**Confirm Item "SIP-FAX Adaptor Troubleshooting" simultaneously with <SIP-FAX>.** See P.210~~

~~Item No.~~	~~Condition~~	~~Possible Cause~~	~~Action to be Taken~~
~~1~~	~~Cannot send with SIP-FAX~~	~~You mistakenly attempted to send to a FAX over IP number.~~	~~Specify a SIP-FAX number.~~
		~~You mistakenly attempted to send in FAX over IP mode.~~	~~Set the communication mode to [SIP-FAX].~~
		~~You cannot send with SIP-FAX during FAX over IP communication.~~	~~Wait awhile until communication ends.~~

Item No.	Condition	Possible Cause	Action to be Taken
2	Cannot send with FAX over IP	The line type is set incorrectly.	Confirm the line type setting for the SIP-FAX adaptor or the machine.
		You mistakenly attempted to send to a SIP-FAX number.	Specify a FAX over IP number.
		You mistakenly attempted to send in SIP-FAX mode.	Set the communication mode to [G3].
		You cannot send with FAX over IP during SIP-FAX communication.	Wait awhile until communication ends.
3	Cannot send with G3 FAX	The line type is set incorrectly.	Confirm the line type setting for the SIP-FAX adaptor or the machine.
		A number is not added (when prefix is set)	Specify the prefix and fax number of the destination.

12.4.10 PageScope Web Connection

Item No.	Condition	Possible Cause	Action to be Taken
1	The IT Series Agent cannot be connected.	No IP address is set to the machine.	Set an IP address.
		The wrong URL setting in browser.	Enter the IP address of the machine in URL.
		The wrong settings in browser.	For some network configurations, connection settings may be required to access the machine. For more information, consult with the network administrator.
		If proxy setting is done in browser and the proxy server does not identify the IP address of this machine, IT Series Agent screen cannot be displayed.	In the proxy setting of the browser, add the IP address of this machine in the exception column not using the proxy server.
		The LAN cable is disconnected.	Replace the LAN cable.
2	Login fails.	Login operation was done by using different user name and password before login operation of this time.	Some browsers hold the user name and password once login succeeds. Close the browser and start it again.
3	Screen is not displayed properly.	The browser size is too small.	Increase the browser size.
		Font size is wrong.	Set proper font sizes for PC and browser.
4	Items not included in device configuration are displayed.	Items not included in device configuration will become invalid at registration. This does not affect the actual registration.	–
5	Half-sized dots are displayed on the screen.	Some browsers display them.	–

Item No.	Condition	Possible Cause	Action to be Taken
2	Cannot send with FAX over IP	The line type is set incorrectly.	Confirm the line type setting for the SIP-FAX adaptor or the machine.
		You mistakenly attempted to send to a SIP-FAX number.	Specify a FAX over IP number.
		You mistakenly attempted to send in SIP-FAX mode.	Set the communication mode to [G3].
		You cannot send with FAX over IP during SIP-FAX communication.	Wait awhile until communication ends.
3	Cannot send with G3 FAX	The line type is set incorrectly.	Confirm the line type setting for the SIP-FAX adaptor or the machine.
		A number is not added (when prefix is set)	Specify the prefix and fax number of the destination.

12.4.10 PageScope Web Connection

Item No.	Condition	Possible Cause	Action to be Taken
1	The IT Series Agent cannot be connected.	No IP address is set to the machine.	Set an IP address.
		The wrong URL setting in browser.	Enter the IP address of the machine in URL.
		The wrong settings in browser.	For some network configurations, connection settings may be required to access the machine. For more information, consult with the network administrator.
		If proxy setting is done in browser and the proxy server does not identify the IP address of this machine, IT Series Agent screen cannot be displayed.	In the proxy setting of the browser, add the IP address of this machine in the exception column not using the proxy server.
		The LAN cable is disconnected.	Replace the LAN cable.
2	Login fails.	Login operation was done by using different user name and password before login operation of this time.	Some browsers hold the user name and password once login succeeds. Close the browser and start it again.
3	Screen is not displayed properly.	The browser size is too small.	Increase the browser size.
		Font size is wrong.	Set proper font sizes for PC and browser.
4	Items not included in device configuration are displayed.	Items not included in device configuration will become invalid at registration. This does not affect the actual registration.	–
5	Half-sized dots are displayed on the screen.	Some browsers display them.	–

12.4.11 Others (Network Device Related)

Item No.	Condition	Possible Cause	Action to be Taken
1	When the power switch is on, [ERROR!!] displays on the touch panel screen.	Failure in PKG connection Unit error	Reattach MEM board or MEMS board. Replace MEM board or MEMS board.
2	[Network Settings] is not displayed on the [Admin2.] menu, even though the Network Application has been installed.	Machine error	Contact your dealer.
3	Facsimile transmission on the Auto mode screen does not work.	The Priority TX mode is set to Mail.	Change [Admin. Management], [Admin. 1], [TX Settings], [Quality/Mode], [Communication Mode]. If the Priority TX mode is Mail, change the Priority screen to FAX.

~~12.4.12 Network Fax Transmission~~

~~Item No.~~	~~Condition (Message)~~	~~Possible Cause~~	~~Action to be Taken~~
~~1~~	~~Canceled by user~~	~~User aborted the send process.~~	
~~2~~	~~Server connection error~~	~~Connection to SMTP server was attempted but failed.~~	~~1. Check that the SMTP server address is correct.~~ ~~2. Check that the network settings on the computer are correct.~~ ~~3. The SMTP server may be down. Contact system administrator responsible to verify the state of the server.~~
~~3~~	~~Server recognition error~~	~~Connection to a server was established but this server was not functioning as an SMTP server.~~	~~Check that the SMTP server address is correct.~~
~~4~~	~~Bad attachment file~~	~~An attempt was made to convert to text format in order to send the attachment file but an error occurred.~~ ~~Or, the creation of the TIFF file E-mail attachment failed.~~	~~This is probably caused by insufficient memory.~~ ~~Try again after closing all other applications.~~
~~5~~	~~To field not set~~	~~The To field has not been properly filled out.~~	~~Specify a receiver in the To field.~~
~~6~~	~~Sender address was not specified.~~	~~The E-mail could not be sent because the sender E-mail address was not entered.~~	~~Enter the sender E-mail address. (See Chapter 1 of the Operations Manual.)~~
~~7~~	~~Invalid sender E-mail address~~	~~The server rejected the E-mail because the sender E-mail address was not a valid E-mail address.~~	~~Check that the E-mail address of the receiver is a valid E-mail address (such as chris@xxxx.com).~~

Item No.	Condition (Message)	Possible Cause	Action to be Taken
8	Invalid receiver E-mail address	The server rejected the E-mail because the receiver E-mail address was not a valid E-mail address.	Check that the E-mail address of the sender is a valid E-mail address (such as edward@xxxx.com).
9	Invalid receiver E-mail address	The domain name of the network MFP device is incorrect.	Check that the domain name is correct. (See Chapter 1 of the Operations Manual for details.)
10	Cannot send message	The fax was sent, but the server rejected it.	Consult with the system administrator responsible for the server to check that the SMTP server is running normally.
11	Send error	An error occurred while sending via facsimile.	When the attached document size is large, the server may not process it correctly.
12	Communication error	An error occurred while communicating with the server, which terminated the connection.	If the user did not abort the send process, this error could indicate a network fault. Wait a few moments before resending, or consult the system administrator.
13	File I/O error	A file operation error occurred.	Restart the computer and tray again.

12.4.13 Network FAX

- Sharing an E-mail address with other E-mail software.

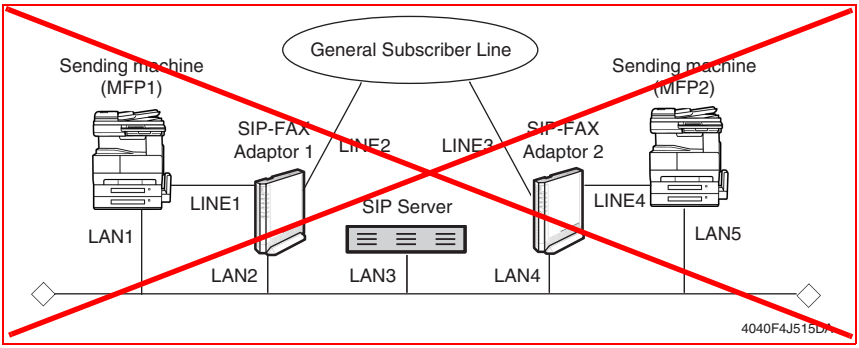
Item No.	Condition	Possible Cause	Action to be Taken
1	An E-mail with a TIFF attachment is returned as undelivered.	These error notices occur when the E-mail is undeliverable.	Check that the receiver's E-mail address is correct.
2	Mail cannot be received	Mail is set to be deleted from the server after being received.	Set the mail software being used so as not to delete mail from the server.

NOTE

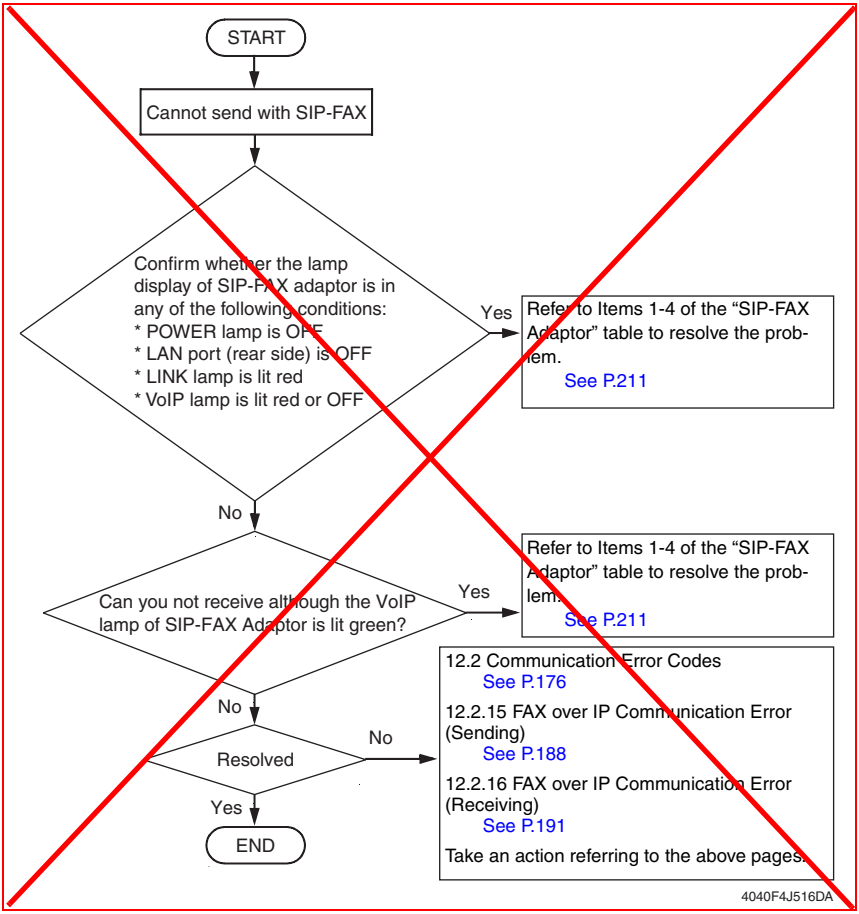
- **Network FAX series have several sister products. Only one can be operated on one PC. Therefore, uninstall another Network FAX series completely referring to ReadMe when you use this software.**

12.5 SIP-FAX Adaptor Troubleshooting

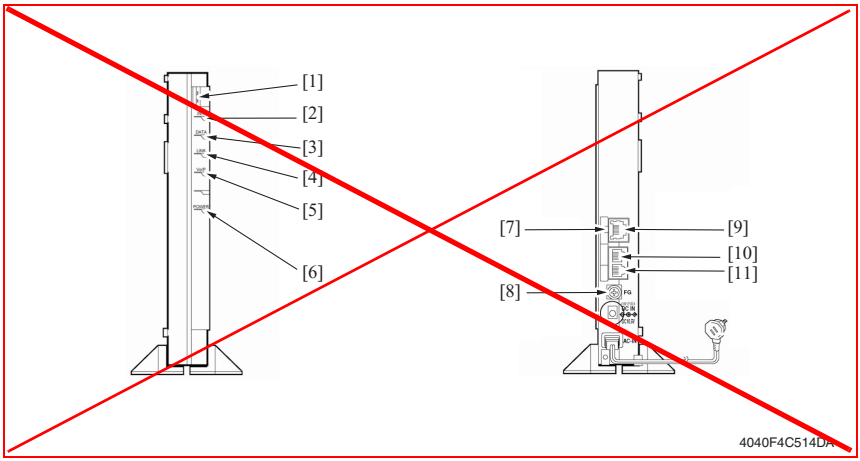
12.5.1 SIP-FAX Basic System Configuration Diagram



12.5.2 Trouble Analysis Flow



12.5.3 SIP-FAX Adaptor



[1] Initialization Button
[2] INIT (Initialization) Lamp
[3] DATA Lamp
[4] LINK Lamp
[5] VoIP Lamp
[6] POWER Lamp
[7] LAN Port Status Display Lamp
[8] Grounding Terminal
[9] LAN Port
[10] PSTN Port
[11] MFP Port

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
1	The power lamp does not light.	The electrical cord plug has disconnected from the wall outlet.	→	Securely insert the electrical plug.	If the problem still is not resolved, refer to the next procedure.
		The electrical cord is inserted into an outlet linked to the PC power.	→	Insert the electrical cord directly into a wall outlet.	If the problem still is not resolved, refer to the next procedure.
		The electrical cord is broken.	→	Replace SIP-FAX Adaptor.	
		None of the above causes are applicable.			

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
2	LAN port status indication lamp does not light.	Confirm whether the HUB power is turned ON.	The HUB cannot be turned ON. HUB failure.	Replace the HUB.	If the problem still is not resolved, refer to the next procedure.
		Confirm whether the LAN cable is connected to the connector.	The lamp lights when you reconnect the cable. Connector connection failure.	LAN cable is defective. Replace the LAN cable.	If the problem still is not resolved, refer to the next procedure.
		Change the HUB insertion connector. (Connect to another port.)	Lamp lights when you connect to another port. HUB failure.	Although operable, replace the HUB.	
			Lamp does not light even if you change ports.	Replace the HUB.	If the problem still is not resolved, refer to the next procedure.
		Replace both the HUB and LAN cables.	→	If the lamp does not light, replace SIP-FAX Adaptor.	

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
3	LINK lamp does not light	After turning OFF the power, you turned it ON again immediately.	→	Turn ON the power after an interval of at least 10 seconds elapses.	If the problem still is not resolved, refer to the next procedure.
		Confirm the connection setting for SIP-FAX Adaptor. (Setting is incorrect. Correct it.)	The IP address or subnet mask is inappropriate.	Compare the machine IP address and subnet mask. Generally, set the subnet mask identically. Confirm with the network administrator of the customer.	If the problem still is not resolved, refer to the next procedure.
		Turn OFF the power of SIP-FAX Adaptor, and execute a PING test from a PC to the problematic IP address.	If you receive a response, the IP address is duplicated with another machine.	Change the IP address to another.	If the problem still is not resolved, refer to the next procedure.
			No response.	Initialize SIP-FAX Adaptor, and execute a PING test to the initial IP address.	If the PING test is OK, re-set.
		If a DHCP server is used as the setting of the connection of SIP-FAX Adaptor, assign an unused fixed IP address.	The lamp lights.	Confirm the DHCP server with the network administrator of the customer.	If the problem still is not resolved, refer to the next procedure.
			Lamp does not light.	Confirm the IP address and subnet mask settings.	Refer to procedure "Confirm the Connection setting for SIP-FAX Adaptor".
		If a DHCP server is used as the setting of the connection of SIP-FAX Adaptor, instead connect to a PC.	The PC operates without problem.	Initialize SIP-FAX Adaptor, and execute a PING test to the initial IP address.	If the PING test is OK, re-set.
			The PC does not operate.	This is a problem of the DHCP server or network path to the DHCP server.	Confirm with the network administrator of the customer.

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
4	VoIP lamp is lit red	Confirm whether the SIP-FAX server name, port number, and SIP domain are correct. Confirm the SIP domain settings with the network administrator of the customer.	→	If the problem still is not resolved, refer to the next procedure.	
		Confirm the HUB and LAN cables on the network path from SIP-FAX Adaptor to the SIP server. Also, confirm whether the firewall and NAT (IP address change) are on the network path.	→	If the problem still is not resolved, refer to the next procedure.	
		Change to the SIP telephone instead of SIP-FAX Adaptor to confirm whether you can use it.	Can be used.	Refer to the next procedure.	
			Cannot be used.	The problem is considered to be on the SIP server side. Confirm with the network administrator of the customer.	
		Confirm the telephone number setting of the SIP-FAX settings.	The telephone number was mistaken.	Confirm the telephone number setting with the network administrator of the customer.	If the problem still is not resolved, refer to the next procedure.
			The use of SIP-FAX and FAX over IP was mistaken.		
		Change to the SIP telephone instead of SIP-FAX Adaptor, and set the above-mentioned telephone number to confirm use.	Can be used.	Refer to the next procedure.	
			Cannot be used.	The problem is considered to be on the SIP server side. Confirm with the network administrator of the customer.	

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
4	VoIP lamp is lit red	The authentication setting of the SIP server settings is incorrect. Confirm the points on the right.	Although authentication is unnecessary, the ID and password have been set.	Confirm the SIP server setting with the network administrator of the customer.	If the problem still is not resolved, refer to the next procedure.
			The authentication ID and password are incorrect.		
			The use of SIP-FAX and FAX over IP was mistaken.		
		Change to the SIP telephone instead of SIP-FAX Adaptor, and set the above-mentioned telephone number and authentication setting to confirm use.	Can be used.	Initialize and reset the settings.	
			Cannot be used.	The problem is considered to be on the SIP server side. Confirm with the network administrator of the customer.	

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
5-1	Although the VoIP lamp is lit green, you cannot transmit (cannot execute FAX over IP)	The PB/DP setting is incorrect. Align with the line type setting of the machine.	→	If the problem still is not resolved, refer to the next procedure.	
		Replace the telephone line.	→	If the problem still is not resolved, refer to the next procedure.	
		Confirm the telephone number.	→	If the problem still is not resolved, refer to the next procedure.	
		Connect the analog telephone instead of the machine to SIP-FAX Adaptor. Call the FAX over IP telephone number and confirm whether you are connected with the destination fax.	Connect to the destination FAX.	Refer to procedure “Although transmission begins, a communication error occurs”.	
			Not connect to the destination FAX.	Confirm whether the SIP-FAX mode mistakenly is selected. (whether the SIP-FAX button is highlighted and activated when sending)	The problem is considered to be on the SIP server side. Confirm whether the destination telephone number is registered with the network administrator of the customer.
				Confirm the transmission with a general subscriber line (PSTN) (whether the prefix number of the SIP-FAX setting is incorrect)	
		Although transmission begins, a communication error occurs.	→	Confirm with the troubleshooting for FAX over IP communication.	

Item No.	Condition	Confirmation Item	Analysis	Action to be Taken (or next Analysis)	Action to be Taken (or next Analysis)
5-2	Although the VoIP lamp is lit green, you cannot transmit (cannot execute SIP-FAX)	Confirm the port number and IP address of the machine set for SIP-FAX. (confirm from the OPE screen of the machine)	The port number or IP address of the machine is incorrect.	Set the port number or IP address of the machine.	
		Set the IP address of the machine instead of SIP-FAX Adaptor and execute the PING test.	Response.	Refer to the next procedure.	
			No response.	The network path to the machine is faulty. Confirm the HUB and LAN cables on the network path from SIP-FAX Adaptor to the machine.	If the problem still is not resolved, refer to the next procedure.
		Start the telnet command from the PC, and connect to the port number and IP address set with the SIP-FAX setting to confirm the response.	No response.	The SIP-FAX Adaptor port number setting of the machine and the machine port number setting for the SIP-FAX setting for SIP-FAX Adaptor do not match.	Match the port number settings.
			Response.	Refer to the next procedure.	
		Execute "SIP Adaptor connection confirmation" from the machine.	The connection is OK.	→	Confirm with the troubleshooting for SIP-FAX communication.
			The connection is NG.	Confirm the SIP-FAX Adaptor setting on the machine side.	

12.5.4 Using telnet

1. Start Command Prompt ([Start] - [Programs] - [Accessories] - Command Prompt)
2. Enter the IP address with port for >telnet.
   Ex. For IP Address 192.168.0.2, Port No. 5060
   >telnet 192.168.0.2 5060
3. If "receiver's host can't accept your mail" is displayed, "No response"
   Screen is cleared, and if a character string is displayed, "Response" (also the screen may be cleared only)

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

DF-620

2008.12

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  to the left of the revised section.
  A number within represents the number of times the revision has been made.

- To indicate clearly a section revised, show  in the lower outside section of the corresponding page.
  A number within 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.

Date	Service manual Ver.	Revision mark	Descriptions of revision
2008/12	1.0	—	Issue of the first edition

CONTENTS

DF-620

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

OUTLINE

1. Product specifications

A. Type

Name	Reverse Automatic Document Feeder	
Type	Paper Feed	Paper Feed from top of stack
	Turnover	Switch back system
	Paper Exit	Straight exit system
Installation	Screw cramp to the main unit	
Document Alignment	Center	
Document Loading	Left image side up	

B. Functions

Modes	1-Sided Mode / 2-Sided Mode

C. Paper type

Type of Document	Standard Mode Plain Paper	1-Sided Mode 35 to 128 g/m² (9.25 to 34 lb)
		2-Sided Mode 50 to 128 g/m² (13.25 to 34 lb)
	Mixed Original Detection Mode Plain Paper	1-Sided / 2-Sided Mode 50 to 128 g/m² (13.25 to 34 lb)
	FAX Mode Plain Paper	1-Sided Mode 35 to 128 g/m² (9.25 to 34 lb)
		2-Sided Mode 50 to 128 g/m² (13.25 to 34 lb)
Detectable Document Size*1	Metric area B6S to A3 Inch area 5 1/2 × 8 1/2S / 5 1/2 × 8 1/2 to 11 × 17	
Capacity	80 sheets (80 g/m²) or load height of 11 mm or less.	

*1: For the Combined Original Detection Mode, Refer to the Mixed Original Detection Enabled Size Combination Table.

D. Paper feed prohibited originals

- If fed, trouble occurrence will be highly possible.

Type of Original	Possible Trouble
Original that is stapled or clipped.	Feed failure, damage to the original, or drive failure due to clip clogging
Book original	Feed failure, damage to the original, or drive failure
Original weighing less than 35g/m^2 or 129g/m^2 or more	Feed failure
Torn original	Feed failure, damaged sheet
Highly curled original (15 mm or more)	Original misfeed due to dog-ear or skew
OHP transparencies	Feed failure
Label Sheet	Feed failure
Offset master	Feed failure
Sheets clipped or notched	Damaged sheet
Sheets patched	Patched part folded or torn sheet, Sheets misfed

E. Paper feed not guaranteed originals

- If fed, paper feed will be possible to some extent but trouble occurrence will be possible.

Type of Original	Possible Trouble
Sheets lightly curled (Curled amount: 10 - 15 mm)	Dog-eared, exit failure
Heat Sensitive Paper	Edge folded, exit failure, transport failure
Coated Paper (Ink Jet Paper)	Take-up failure, transport failure
Translucent paper	Take-up failure, transport failure
Paper immediately after paper exit from the main unit	Take-up failure, transport failure
Paper with many punched holes (e.g., loose leaf) limited to vertical feeding	Multi-page feed due to flashes from holes
Sheets with 2 to 4 holes	Transport failure
Sheets two-folded or Z-folded	Transport failure, image deformation
Sheets with rough surface (e.g., letterhead)	Take-up failure
Sheets folded	Image deformation, multi-page feed, take-up failure

F. Mixed original feed chart

For Metric

	Max. Original Size	297 mm		257 mm		210 mm		182 mm	148 mm
Mixed Original Size		A3	A4	B4	B5	A4S	A5	B5S	A5S
297 mm	A3	OK	OK	-	-	-	-	-	-
	A4	OK	OK	-	-	-	-	-	-
257 mm	B4	OK	OK	OK	OK	-	-	-	-
	B5	OK	OK	OK	OK	-	-	-	-
210 mm	A4S	OK*	OK*	OK	OK	OK	OK	-	-
	A5	NG	NG	OK	OK	OK	OK	-	-
182 mm	B5S	NG	NG	OK*	OK*	OK	OK	OK	-
148 mm	A5S	NG	NG	NG	NG	NG	NG	OK	OK
123 mm	B6S	NG	NG	NG	NG	NG	NG	NG	OK

For Inch

	Max. Original Size	11		8.5			5.5
Mixed Original Size		11 x 17	8.5 x 11	8.5 x 14	8.5 x 11S	5.5 x 8.5	8.5 x 5.5S
11	11 x 17	OK	OK	-	-	-	-
	8.5 x 11	OK	OK	-	-	-	-
8.5	8.5 x 14	OK*	OK*	OK	OK	OK	-
	8.5 x 11S	OK*	OK*	OK	OK	OK	-
5.5	8.5 x 5.5	NG	NG	OK	OK	OK	-
	8.5 x 5.5S	NG	NG	NG	NG	NG	OK

OK	Mixed Original Feed available (Tilted with in 1.5% or less)
NG	NO. Mixed Original Feed
-	Can not Set Original
*	Tilted with in 2% or less is 80%

G. Machine specifications

Power Requirements	DC 24 V (supplied from the main unit)
	DC 5 V (generated within the Automatic Document Feeder)
	DC 3.3 V (supplied from the main unit)
Max. Power Consumption	48 W or less
Dimensions	582 (W) x 558 (D) x 145 (H) mm 23 inch (W) x 20.5 inch (D) x 5.75 inch (H)
Weight	10 kg (22 lb) or less

H. Operating

- Conforms to the operating environment of the main unit.

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

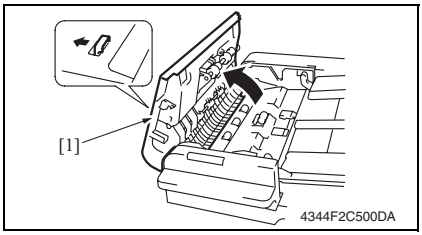
2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

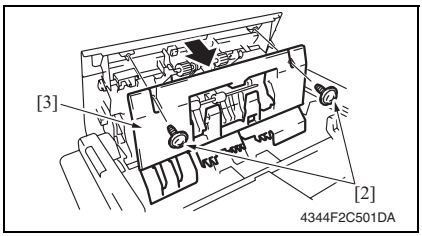
NOTE

- **The alcohol described in the cleaning procedure of Maintenance represents the isopropyl alcohol.**

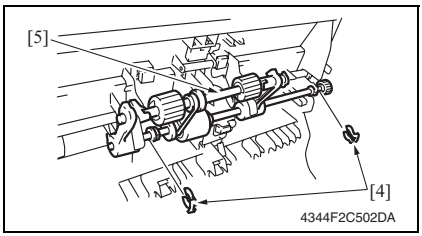
2.1.1 Replacing the Pick-up Roller and Feed Roller



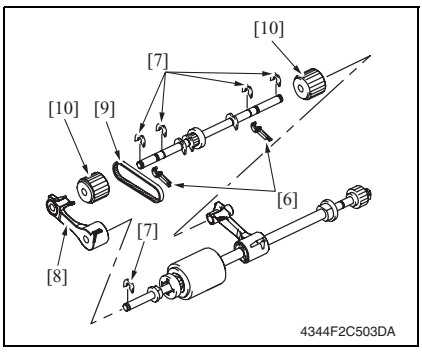
1. Open the Upper Door [1].



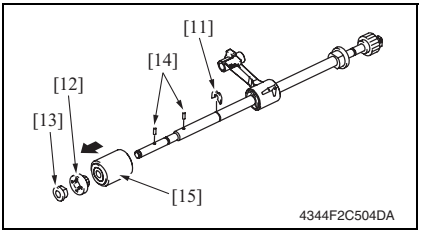
2. Remove two screws [2], and remove the cover [3].



3. Remove two C-clips [4], and remove the Pick-up Roller Assy [5].



4. Remove two levers [6].
5. Remove five C-rings [7].
6. Remove the arm [8].
7. Remove the belt [9].
8. Remove two Pick-up Rollers [10].

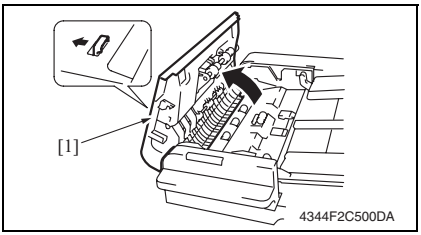


9. Remove the C-ring [11], and remove the gear [12] and the bushing [13].
10. Remove two pins [14].
11. Remove the Feed Roller [15].

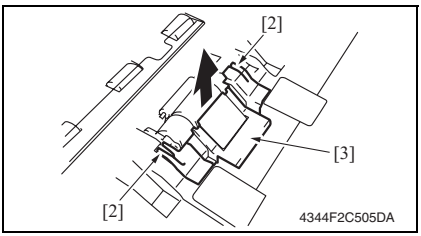
NOTE

- **Use care not to lose the pin.**

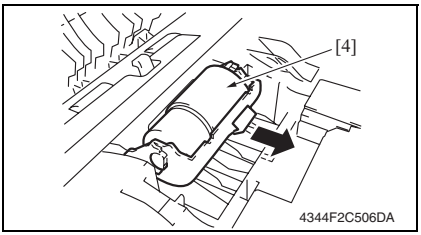
2.1.2 Replacing the Separation Roller



1. Open the Upper Door [1].



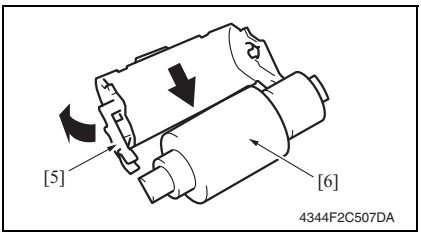
2. Hold the [2] sections in the figure, and remove the cover [3].



3. Remove the Separation Roller Assy [4].

NOTE

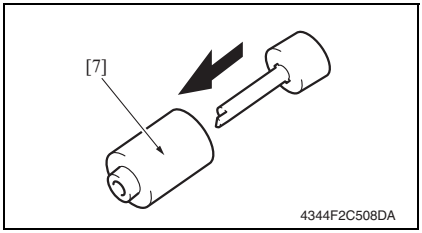
- **Use care not to lose the spring at the bottom side of the Separation Roller Assy.**



4. While opening up the holder [5], remove the shaft [6].

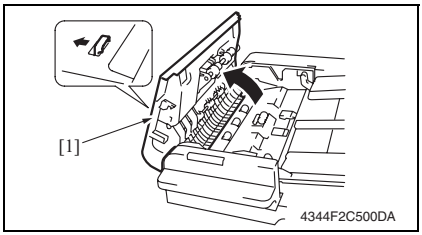
NOTE

- **Opening the holder too much can break the holder.**

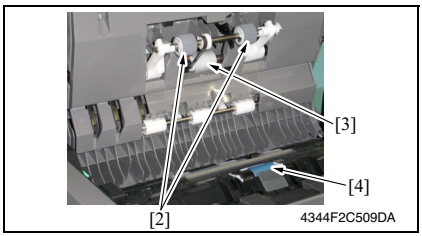


5. Remove the Separation Roller [7] from the shaft.

2.1.3 Cleaning of the Pick-up Roller, Feed Roller and Separation Roller

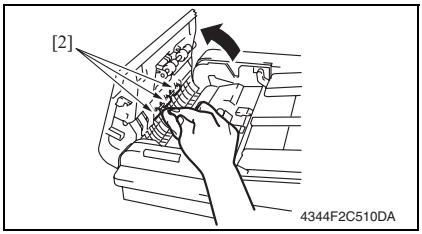


1. Open the Upper Door [1].

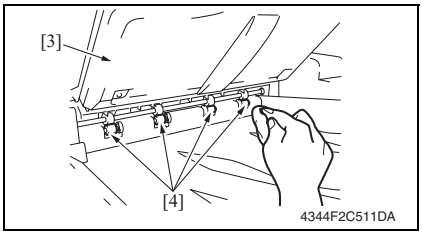


2. Using a soft cloth dampened with alcohol, wipe two Pick-up Rollers [2], Feed Roller [3] and Separation Roller [4].

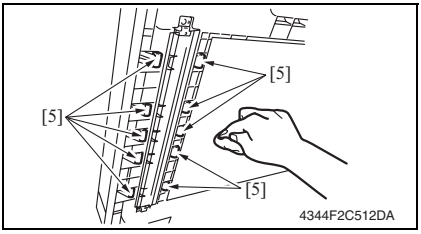
2.1.4 Cleaning of Miscellaneous Rolls



1. Open the Upper Door [1].
2. Using a soft cloth dampened with alcohol, wipe three rolls [2].

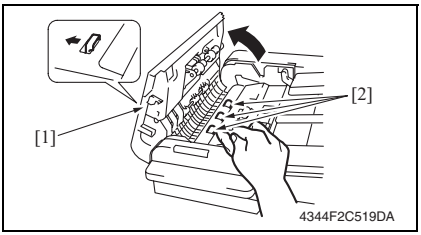


3. Lift up the Original Feed Tray [3].
4. Using a soft cloth dampened with alcohol, wipe four rolls [4].

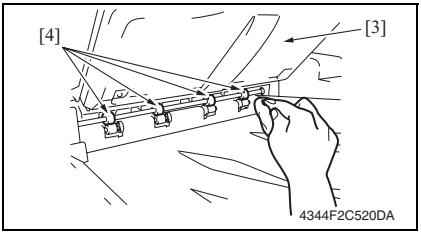


5. Open the Duplexing Document Feeder.
6. Using a soft cloth dampened with alcohol, wipe ten rolls [5].

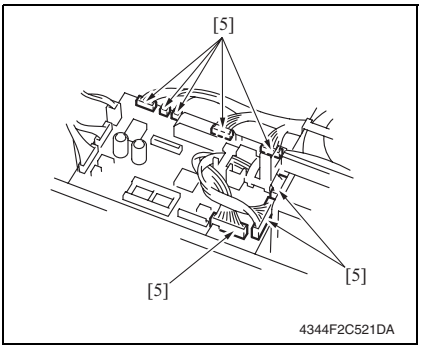
2.1.5 Cleaning of Miscellaneous Rollers



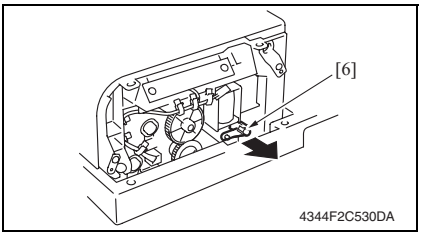
1. Open the Upper Door [1].
2. Using a soft cloth dampened with alcohol, wipe three rollers [2].



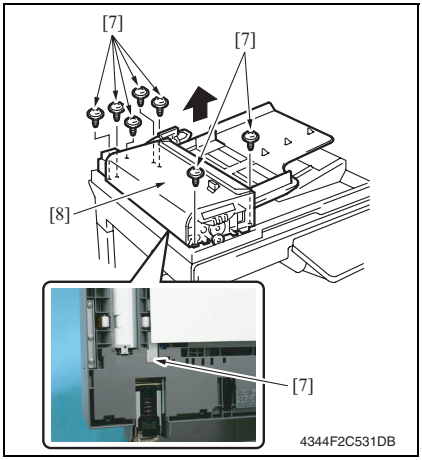
3. Lift up the Original Feed Tray [3].
4. Using a soft cloth dampened with alcohol, wipe four rollers [4].



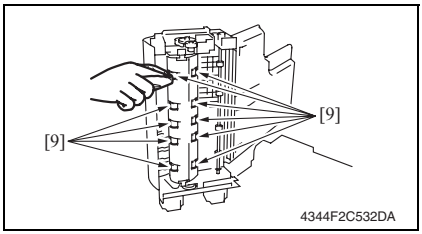
5. Remove the Front Cover and Rear Cover.
See P.11
6. Disconnect eight connectors [5] on the board.



7. Remove the lever [6].

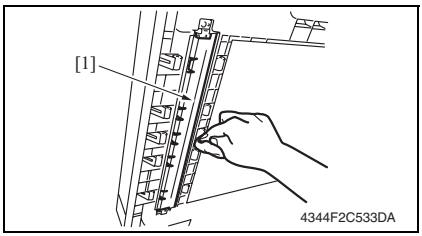


8. Remove eight screws [7], and remove the Paper Feed Unit [8].



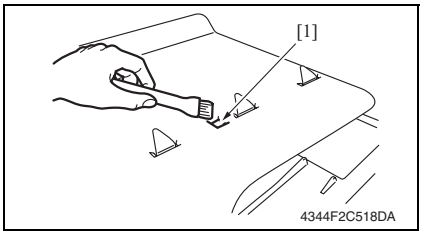
9. Using a soft cloth dampened with alcohol, wipe ten rollers [9].

2.1.6 Cleaning of the Scanning Guide



1. Open the Duplexing Document Feeder.
2. Using a soft cloth dampened with alcohol, wipe the Scanning Guide [1] clean of dirt.

2.1.7 Cleaning of the Reflective Sensor Section



1. Clean the sensor [1] using a brush or other similar tools.

3. Other

3.1 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

⚠ Caution

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**
- **When it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.**

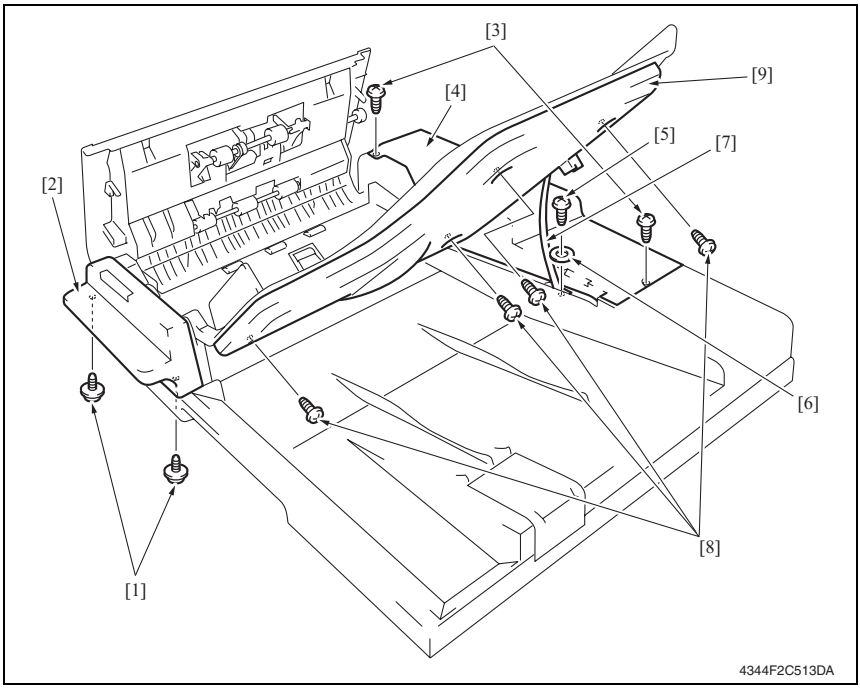
3.2 Disassembly/Assembly/Cleaning list (Other parts)

3.2.1 Disassembly/Assembly parts list

No.	Section	Part name	Ref.Page
1	Exterior parts	Front Cover	P.11
2		Rear Cover	P.11
4		Original Feed Tray Rear Cover	P.11
5	Board and etc.	Main Control Board	P.12
6		Variable Resistor	P.12
7	Others	Complete Stamp Unit 2	P.14
8		Replace Stamp 2	P.15

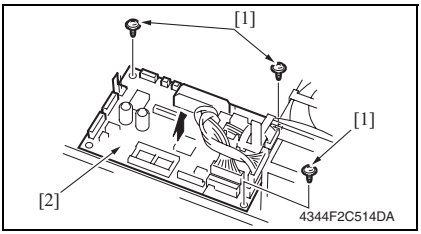
3.3 Disassembly/Assembly procedure

3.3.1 Front Cover/Rear Cover/Original Feed Tray Rear Cover



1. Remove two screws [1], and remove the Front Cover [2].
2. Remove two screws [3].
3. Lift up the Original Feed Tray, and remove the Rear Cover [4].
4. Remove the screw [5] and the washer [6], and remove the stopper [7].
5. Lift up the Original Feed Tray.
6. Remove four screws [8], and remove the Original Feed Tray Rear Cover [9].

3.3.2 Main Control Board



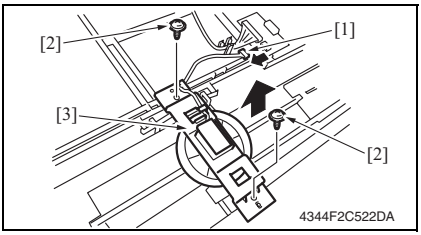
1. Turn OFF the Main Power Switch.
2. Remove the Rear Cover.
See P.11
3. Disconnect all the connectors on the board.
4. Remove three screws [1], and then remove the Main Control Board [2].

NOTE

- **Be sure to perform the following operation when the Main Control Board is replaced.**

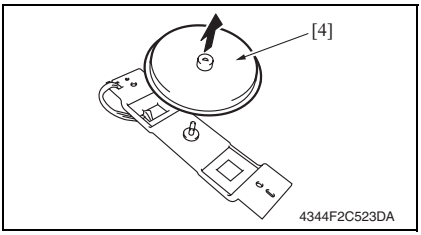
5. Initialize the backup data.
See P.21
6. Perform document width detection adjustment.
See P.18
7. Turn OFF the Main Power Switch and turn it ON again and check whether size detection operates normally.
8. Upgrade the firmware.
See P.16

3.3.3 Variable Resistor

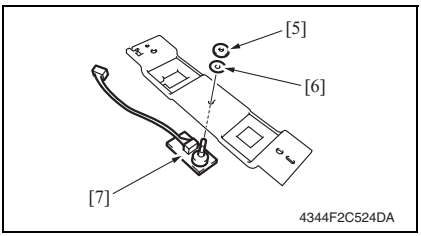


A. Removal Procedure

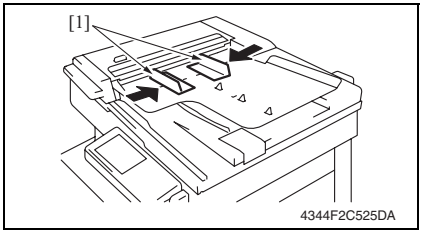
1. Turn OFF the Main Power Switch.
2. Remove the Original Feed Tray Rear Cover.
See P.11
3. Disconnect the connector [1].
4. Remove two screws [2] and the mounting bracket [3].



5. Remove the gear [4].



6. Remove the nut [5] and the washer [6], and remove the Variable Resistor [7].

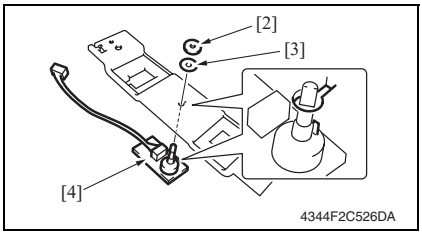


B. Reinstallation Procedure

1. Close the Side Edge Stops [1] of the Original Feed Tray.

NOTE

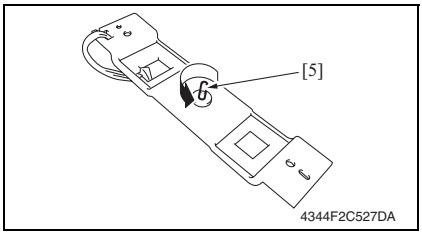
- **Be sure to perform document width detection adjustment after replacing the Variable Resistor (PBA-VR).** See P.26



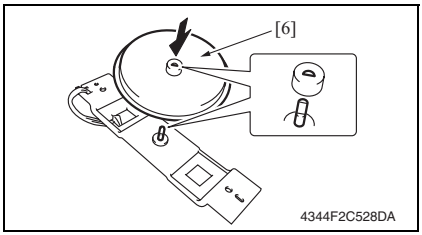
2. Use the nut [2] and the washer [3] to install the Variable Resistor [4].

NOTE

- **Align the protrusion of the Variable Resistor and the cutout of the mounting bracket.**



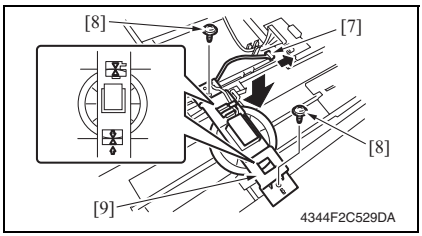
3. Turn the Variable Resistor [5] counterclockwise until it stops.



4. Reinstall the gear [6].

NOTE

- **Note the mounting position of the gear and the Variable Resistor.**



5. Connect the connector [7].

6. Use two screws [8] to install the Variable Resistor [9].

NOTE

- **Install the gear and rack gear by aligning the arrows.**

7. Install the Original Feed Tray Rear Cover and turn ON the Main Power Switch.

NOTE

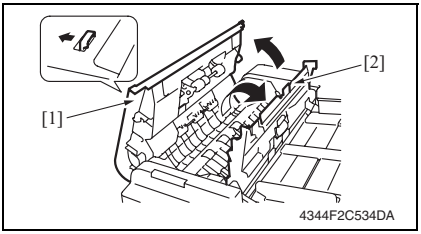
- **Be sure to perform the following operation when the Variable Resistor is replaced.**

8. Initialize the backup data.
See P.21

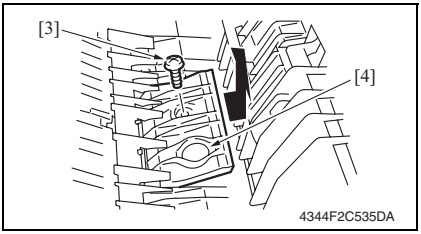
9. Perform document width detection adjustment.
See P.18

10. Turn OFF the Main Power Switch and turn it ON again and check whether size detection operates normally.

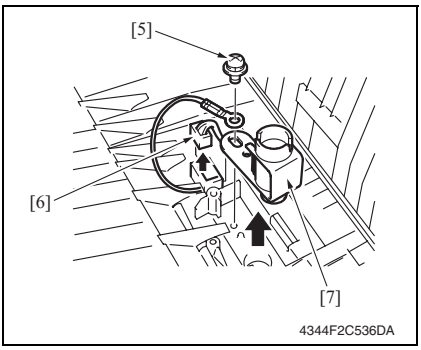
3.3.4 Complete Stamp Unit 2



1. Open the Upper Door [1].
2. Open the Processing Guide [2].

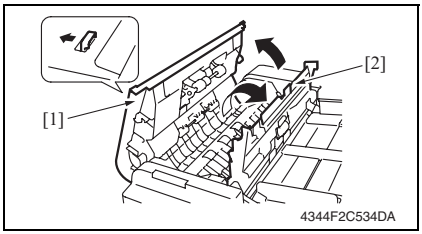


3. Remove the screw [3] and the cover [4].

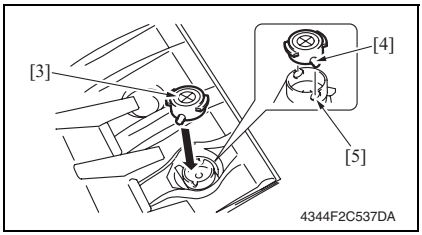


4. Remove the screw [5] and disconnect the connector [6], and remove the Complete Stamp Unit 2 [7].

3.3.5 Replacing the Replace Stamp 2



1. Open the Upper Door [1].
2. Open the Processing Guide [2].



3. Remove the stamp.
4. Reinstall the new Replace Stamp 2 [3].

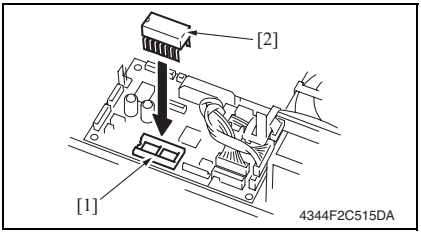
NOTE

- **Align the protrusion [4] of the stamp to the crevice [5] of the holder.**

5. Close the Processing Guide.
6. Close the Upper Door.

4. Firmware upgrade

1. Prepare the firmware upgrade EP-ROM.
2. Turn OFF the Main Power Switch.
3. Remove the Rear Cover.
See P.11

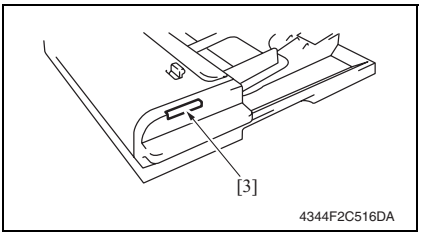


4. Insert the prepared EP-ROM [2] to the IC socket section [1] of the Main Control Board.

NOTE

- **Ensure that the EP-ROM is installed in the correct direction.**

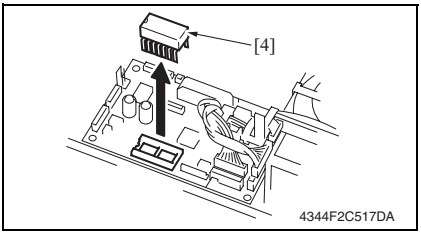
5. Turn ON the Main Power Switch.



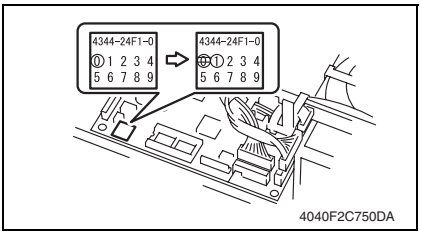
6. Check the firmware update status at the Print Lamp Display Section [3] of the Duplexing Document Feeder.

Updating: Green and red light up alternately.
Successful completion: Blinks in green.
Failure: Blinks in red.

- If failure occurs, redo the procedure from step 4.



7. After the firmware has been upgraded successfully, turn OFF the Main Power Switch and remove the EP-ROM [4] that was attached at step 4.



8. Turn ON the Main Power Switch.
9. Display Tech. Rep. Mode.
10. Touch the [ROM Version] and check the ADF ROM version.
11. Correct the version indication on the ROM label on the Main Control Board using a pen or other similar means.
12. Reinstall the Rear Cover.

ADJUSTMENT/SETTING

5. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

6. Tech. Rep. Mode

6.1 Tech. Rep. Mode function setting procedure

See P.154 of the main body service manual.

6.2 Setting in the Tech. Rep. Choice

6.2.1 Sheet-through-ADF

A. Registration Loop

Functions	• To adjust the length of the loop to be formed in paper before the Registration Rollers.
Use	• For factory adjustment only

B. Zoom

Functions	• To set the CD and FD scan zoom ratios in the sheet-through ADF.
Use	• When setting up the ADF
Setting/ Procedure	P.23

C. Feed (CD)

Functions	• To adjust the CD image scan start position in the sheet-through ADF.
Use	• When setting up the ADF
Setting/ Procedure	P.24

D. Feed (FD)

Functions	• To adjust the FD image scan start position in the sheet-through ADF.
Use	• When setting up the ADF
Setting/ Procedure	P.24

6.3 Setting in the Function

6.3.1 Org. Width Detect Adjust

Functions	• To detect the size of the original loaded in the ADF
Use	• When the Variable Resistor is replaced with a new one • When the backup data is initialized
Setting/ Procedure	P.26

6.4 I/O Check

6.4.1 Sheet-through-ADF (2-sided)

Functions	• To check sensors on the paper path.
Use	• When a document misfeed occurs.

A. Check procedure

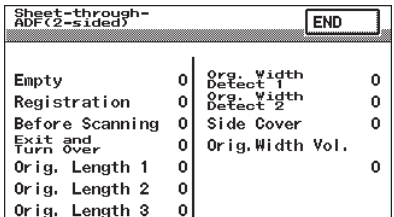
- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main unit in the standby state (including a misfeed, malfunction, and closure failure condition).

B. Procedure

1. Set the mode to the Tech. Rep. Mode.
2. Touch the [I/O Check].
3. Touch the [Sheet-through-ADF (2-sided)].
4. Operate the sensor to check by using paper or the like, and check the screen display. (Paper detected: 1, No paper detected: 0)

C. I/O check screen

- This is only typical screen which may be different from what are shown on each individual main unit.



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D. I/O check list

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC5-ADF	Sheet-through-ADF (2-sided)	Empty	Empty Sensor	Paper present	Paper not present
PC9-ADF		Registration	Registration Sensor	Paper present	Paper not present
PC8-ADF		Before Scanning	Original Detection Sensor	Paper present	Paper not present
PC10-ADF		Exit and Turn Over	Exit/Turnover Sensor	Paper present	Paper not present
PC1-ADF		Orig. Length 1	FD Paper Size Detection Sensor 1	Paper present	Paper not present
PC2-ADF		Orig. Length 2	FD Paper Size Detection Sensor 2	Blocked	Unblocked
PC3-ADF		Orig. Length 3	FD Paper Size Detection Sensor 3	Paper present	Paper not present
PC4-ADF		Orig. Length 4	FD Paper Size Detection Sensor 4	Paper present	Paper not present
PC6-ADF		Behind Separator	Separator Sensor	Blocked	Unblocked
PWB-SIZE		Org. Width Detect 0	Mix Document Size Detection Board	Paper present	Paper not present
		Org. Width Detect 1		Paper present	Paper not present
		Org. Width Detect 2		Paper present	Paper not present
PC7-ADF		Side Cover	Upper Door Open/Close Sensor	OPEN	CLOSE
PBA-VR		Orig. Width Vol.	Variable Resistor	Analog value	

6.5 Setting in the Operation Check

6.5.1 Paper Passage

Functions	• To check for paper passage through the ADF in each of the ADF modes.
Use	• Used for checking the document path for any abnormal condition when a document misfeed occurs.
Setting/ Procedure	<Procedure> *1.* Set the mode to the Tech. Rep. Mode. *2.* Touch the [Operation Check]. *3.* Touch the [ADF]. *4.* Touch the [Paper Passage]. *5.* Select the Paper Passage Mode to be tested from [1-Sided No Detect] and [Double-Sided]. *6.* Set the Original in the Take-up Tray. *7.* The Start key color changes from orange to green. *8.* Press the Start key. The operation starts. **NOTE** **• After starting the operation by pressing the Start key, if the Start key is pressed during the operation, the operation will be suspended. Then, if the Start key is pressed again during the suspension, the operation will be resumed.** **• If the Stop key is pressed during the test operation, the test will be forced to end.** **• If there is no Original set in the Take-up Tray, the Start key will not work.** **• All Originals set in the Take-up Tray are passed through. Upon the completion of all Originals passed through, the Paper Through Test ends.**

6.5.2 ADF Sensor Adjust

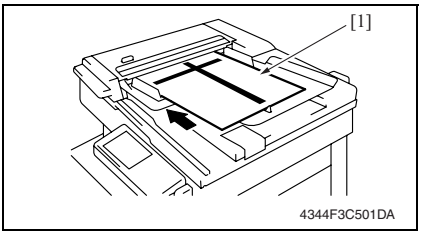
Functions	• To make an automatic adjustment of the sensor.
Use	• When a document misfeed occurs. • When the sensor is replaced.
Setting/ Procedure	<Procedure> *1.* Set the mode to the Tech. Rep. Mode. *2.* Touch the [Operation Check]. *3.* Touch the [ADF]. *4.* Touch the [ADF Sensor Adjust]. *5.* Press the Start key to let the ADF start making an automatic adjustment of the sensor.

6.5.3 Backup Data Initialization

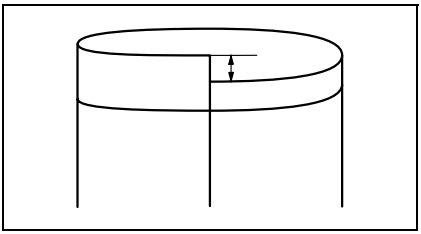
Functions	• To initialize the values set through ADF Sensor Adjust and Org. Width Detect Adjust.
Use	• When the Main Control Board is replaced. • When the Variable Resistor is replaced.
Setting/ Procedure	<Procedure> *1.* Set the mode to the Tech. Rep. Mode. *2.* Touch the [Operation Check]. *3.* Touch the [ADF]. *4.* Touch the [Backup Data Initialization]. *5.* [Touch [Yes] and [Enter] to start the initialization sequence.

7. Mechanical adjustment

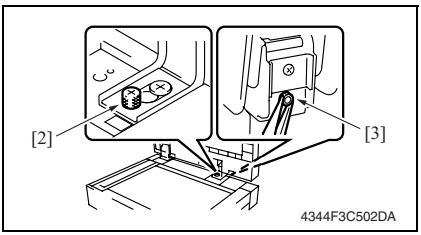
7.1 Leading Edge Skew Adjustment



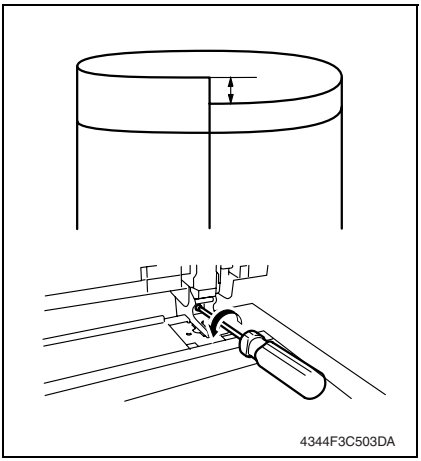
1. Load the test chart [1] in the Reverse Automatic Document Feeder and make one 1-sided copy five consecutive times.



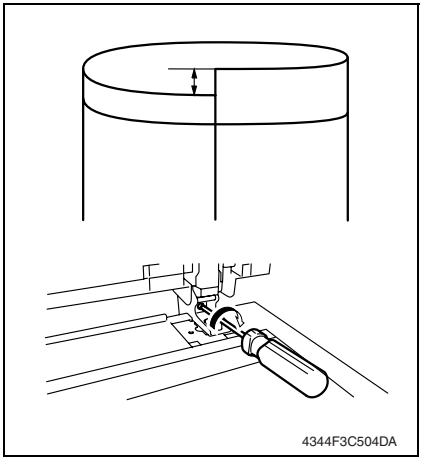
2. Fold each of the sample copies as illustrated and check for any deviation.
   Specifications: 0 ± 3.0 mm
3. If the deviation does not fall within the specified range, perform the following adjustment procedure.



4. Loosen the decorative screw [2] and the nut [3] in the back to the right.



5. If there is a deviation as shown on the figure, turn the screw counterclockwise to adjust it.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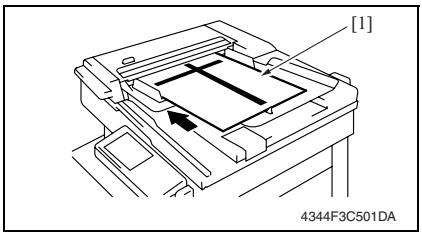
6. If there is a deviation as shown on the figure, turn the screw clockwise to adjust it.
7. After the adjustment procedure has been completed, tighten the decorative screw and the nut which has been loosened in step 4.

7.2 Adjustment of the Scanning Zoom Ratio in the Main and Sub-Scanning Directions



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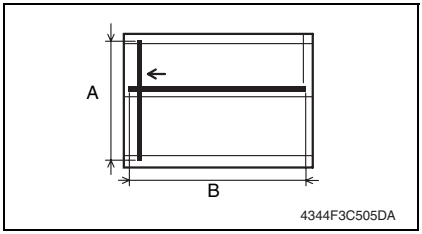
1. Load the test chart [1] in the Reverse Automatic Document Feeder and make a full-size copy.



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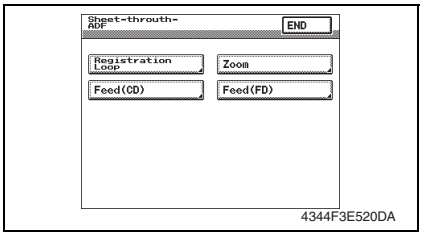
2. Check that the lengths of the reference lines reproduced on the copy, A (CD) and B (FD), meet the following specifications.
Specification:
A (CD): 250 ± 2.5 mm (± 1.0 %)
B (FD): 400 ± 6.0 mm (± 1.5 %)



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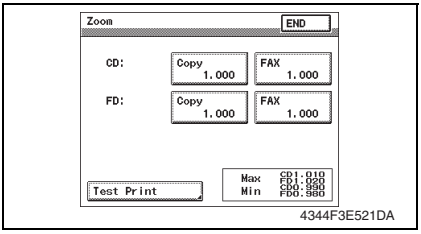
3. If the length of the line reproduced on the copy falls outside the specified range, select Tech. Rep. Mode → [Tech. Rep. Choice] → [Sheet-through-ADF] → [Zoom].



4344F3E521DA

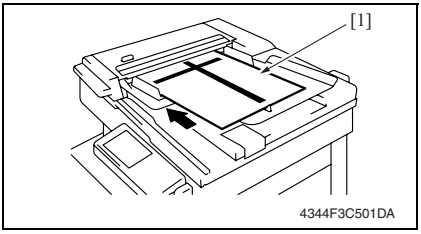
4. Touch the [Copy] of CD or FD.
5. Press the Clear key.
6. Enter the value from the 10-Key Pad.
- If the line is longer than the specifications, adjust toward the reduction side.
- If the line is shorter than the specifications, adjust toward the enlargement side.

Adjustment Range:
CD: ×1.010 to ×0.990
FD: ×1.020 to ×0.980

7. Touch the [END].
8. Produce another test print and check for width A.

7.3 Adjustment of the Scanning Start Position in the Main and Sub-Scanning Directions

NOTE
- **Make this adjustment after adjusting the scanning zoom ratio in the main and sub-scanning directions.**



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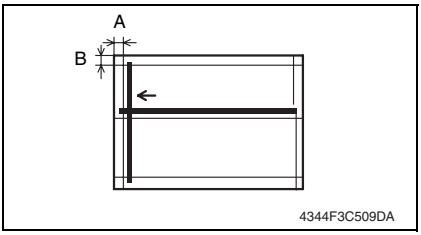
1. Load the test chart [1] in the Reverse Automatic Document Feeder and make a full-size copy.
2. Make a full-size copy using the 2-side original/2-side copy mode. (Face down the test chart)



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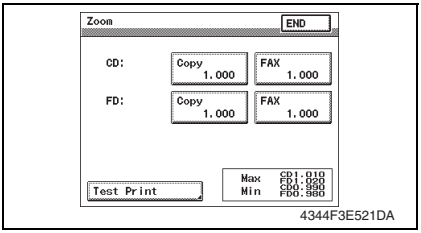
3. Check that the margins reproduced on the copy meet the following specifications.
- In full size copy mode

Specification:
Width A: 20 ± 3.0 mm
Width B: 20 ± 2.0 mm

- In 2-side original mode

Specification:
Width A: 20 ± 3.5 mm



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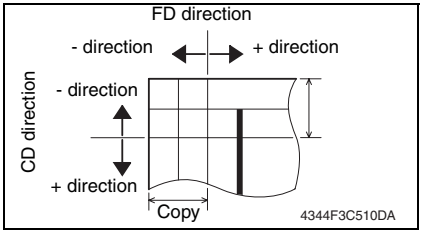
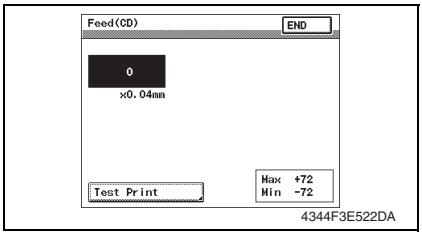
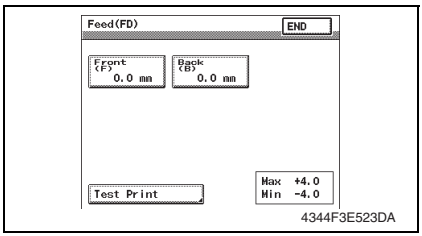
4. If the length of the line reproduced on the copy falls outside the specified range, select Tech. Rep. Mode → [Tech. Rep. Choice] → [Sheet-through-ADF] → [Feed (CD)] or [Feed (FD)].







5. By referring to the left figure, select [Feed (CD)] or [Feed (FD)] to adjust the deviation.

- If the deviation is in the - direction with respect to the reference line: Adjust in the + direction.
- If the deviation is in the + direction with respect to the reference line: Adjust in the - direction.

In the case of Feed (CD)

6. Press the Clear key.

7. Enter the numeric value from the 10-Key Pad.
(1 mm = 24 dot)

Adjustment Range:
Max +72
Min -72
Press the ✻ key to change the sign to select either + or -.

In the case of Feed (FD)

8. Select [Front (F)] or [Back (B)].

9. Press the Clear key.

10. Enter the numeric value from the 10-Key Pad.
(0.1 mm increments)

Adjustment Range:
Max +4.0 mm (F), +4.0 mm (B)
Min -4.0 mm (F), -4.0 mm (B)

11. Touch the [END].

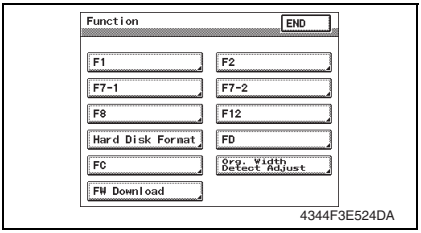
12. Make another copy and check the error.

7.4 Document Size Detection Adjustment

NOTE

Make this adjustment after any of the following procedures has been performed.

- **When the Variable Resistor has been replaced.**
- **When the backup data has been initialized.**



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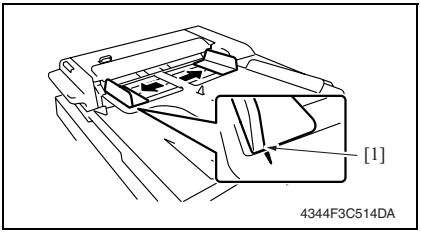
1. Display Tech. Rep. Mode.
2. Touch the [Function].
3. Touch the [Org. Width Detect Adjust].



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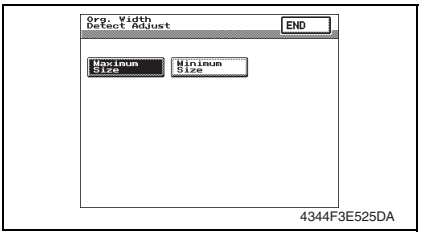
4. Align the original edge plane of the Side Edge Stop [1] of the Original Feed Tray to the outside ▼ mark.



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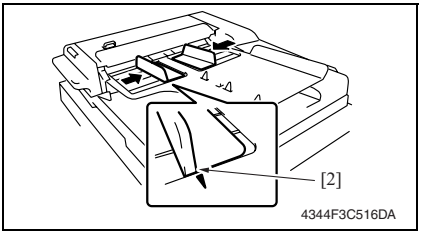
5. Touch the [Maximum Size].
6. Press the Start key.



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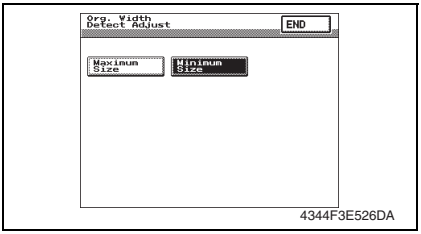
7. Align the original edge plane of the Side Edge Stop [2] of the Original Feed Tray to the inside ▼ mark.



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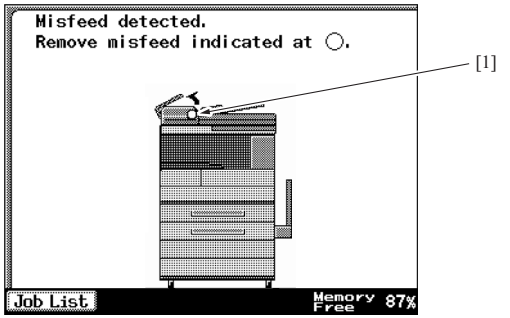
8. Touch the [Minimum Size].
9. Press the Start key.
10. Check whether size detection operates normally.

TROUBLESHOOTING

8. Jam Display

8.1 Misfeed display

- When misfeed occurs, message, misfeed location “Blinking” and paper location “Lighting” are displayed on the Touch Panel of the main body.

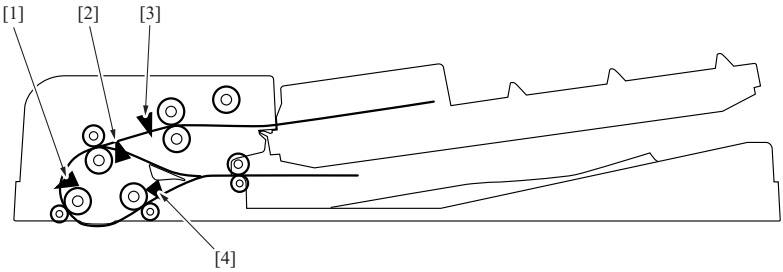


Panel display	Misfeed location	Misfeed access location	Action
[1]	Paper Take-Up section	Paper Take-Up section Cover	P.28
	Transport section	Paper Take-Up section Cover	P.29
	Turnover section	Paper Exit section Cover	P.29
	Paper Exit section	Paper Exit section Cover	P.30

8.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

8.2 Sensor layout



[1]	Original Detection Sensor	PC8-ADF	[3]	Separator Sensor	PC6-ADF
[2]	Registration Sensor	PC9-ADF	[4]	Exit/Turnover Sensor	PC10-ADF

8.3 Solution

8.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper. Instruct the user on the correct paper storage procedures.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

8.3.2 Misfeed at Paper Take-Up section

A. Detection timing

Type	Description
Detection of misfeed at Paper Take-Up section	The Separator Sensor (PC6-ADF) is not blocked even after the set period of time has elapsed after the Paper Feed Motor (M1-ADF) is energized.
	The Registration Sensor (PC9-ADF) is not blocked even after the set period of time has elapsed after the Paper Feed Motor (M1-ADF) is energized.
Detection of paper left in Paper Take-Up section	The Separator Sensor (PC6-ADF) is not blocked even after the set period of time has elapsed after the Original Detection Sensor (PC8-ADF) is blocked by the paper.
	The Registration Sensor (PC9-ADF) is not blocked even after the set period of time has elapsed after the Original Detection Sensor (PC8-ADF) is blocked by the paper.

B. Action

Relevant Electrical Parts	
Paper Feed Motor (M1-ADF) Separator Sensor (PC6-ADF) Registration Sensor (PC9-ADF) Original Detection Sensor (PC8-ADF)	Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC6-ADF I/O check	PBA-CONT CN5CONT-11	DF-620 G-5
3	PC9-ADF I/O check	PBA-CONT CN6CONT-3	DF-620 G-3
4	PC8-ADF I/O check	PBA-CONT CN6CONT-6	DF-620 G-3
5	M1-ADF operation check	PBA-CONT CN7CONT-3 to 6	DF-620 C-6
6	Change PBA-CONT	-	-

8.3.3 Misfeed at Transport section

A. Detection timing

Type	Description
Detection of misfeed at Transport section	The Original Detection Sensor (PC8-ADF) is not blocked even after the set period of time has elapsed after the Registration Sensor (PC9-ADF) is blocked by the paper.
Detection of paper left in Transport section	The Original Detection Sensor (PC8-ADF) is not unblocked even after the set period of time has elapsed after the Registration Sensor (PC9-ADF) is unblocked by the paper.

B. Action

Relevant Electrical Parts	
Paper Feed Motor (M1-ADF) Transport Motor (M2-ADF) Registration Sensor (PC9-ADF) Original Detection Sensor (PC8-ADF)	Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC9-ADF I/O check	PBA-CONT CN6CONT-3	DF-620 G-3
3	PC8-ADF I/O check	PBA-CONT CN6CONT-6	DF-620 G-3
4	M1-ADF operation check	PBA-CONT CN7CONT-3 to 6	DF-620 C-6
5	M2-ADF operation check	PBA-CONT CN8CONT-3 to 6	DF-620 C-6
6	Change PBA-CONT	-	-

8.3.4 Misfeed at Turnover section

A. Detection timing

Type	Description
Detection of misfeed at Turnover section	The Registration Sensor (PC9-ADF) is not blocked even after the set period of time has elapsed after the Transport Motor (M2-ADF) is energized.

B. Action

Relevant Electrical Parts	
Transport Motor (M2-ADF) Registration Sensor (PC9-ADF)	Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC9-ADF I/O check	PBA-CONT CN6CONT-3	DF-620 G-3
3	M2-ADF operation check	PBA-CONT CN8CONT-3 to 6	DF-620 C-6
4	Change PBA-CONT	-	-

8.3.5 Misfeed at Paper Exit section

A. Detection timing

Type	Description
Detection of misfeed at Paper Exit section	The Exit/Turnover Sensor (PC10-ADF) is not blocked even after the set period of time has elapsed after the Original Detection Sensor (PC8-ADF) is blocked by the paper.
Detection of paper left in Paper Exit section	The Exit/Turnover Sensor (PC10-ADF) is not unblocked even after the set period of time has elapsed after the Original Detection Sensor (PC8-ADF) is unblocked by the paper.

B. Action

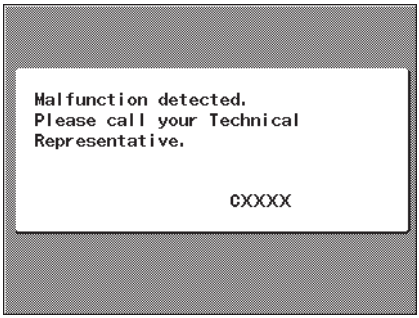
Relevant Electrical Parts	
Transport Motor (M2-ADF) Original Detection Sensor (PC8-ADF) Exit/Turnover Sensor (PC10-ADF)	Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC8-ADF I/O check	PBA-CONT CN6CONT-6	DF-620 G-3
3	PC10-ADF I/O check	PBA-CONT CN6CONT-9	DF-620 G-4
4	M2-ADF operation check	PBA-CONT CN8CONT-3 to 6	DF-620 C-6
5	Change PBA-CONT	-	-

9. Malfunction code

9.1 Trouble code

- The copier's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code and maintenance call mark on the Touch Panel.



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9.2 Solution

9.2.1 C8301: ADF Cooling Fan Motor Failure

A. Detection timing

Trouble Code	Description
C8301	• The Lock signal remains HIGH for a predetermined continuous period of time while ADF Cooling Fan Motor is rotating.

B. Action

Relevant Electrical Parts	
Cooling Fan Motor (M3-ADF)	Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M3-ADF connector for proper connection and correct as necessary.	-	-
2	M3-ADF operation check	PBA-CONT CN9CONT-2	DF-620 C-6
3	Change PBA-CONT	-	-

9.2.2 C9701: ADF Document Size Failure Adjustment

A. Detection timing

Trouble Code	Description
C9701	• Any of ADF Sensor Adjust, Firmware Upgrade, and Org. Width Detection Adjust available from the Tech. Rep. mode has not been properly completed.

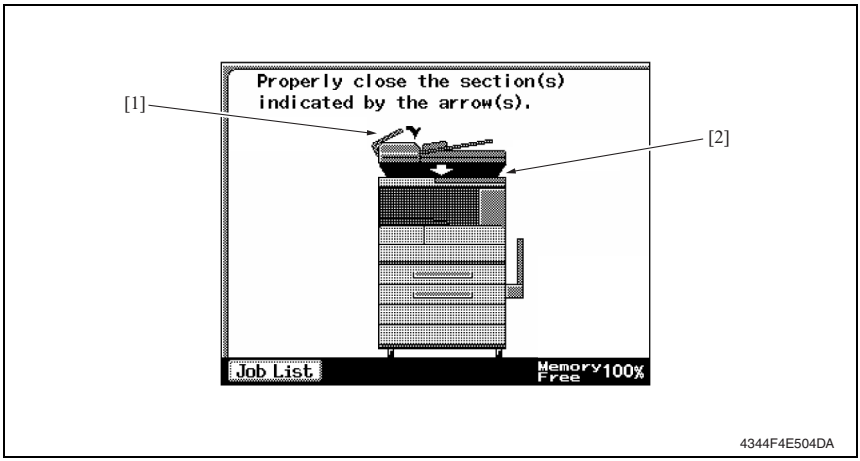
B. Action

Relevant Electrical Parts	
ADF Sensor Adjust Org. Width Detection Adjust Firmware Upgrade	Variable Resistor (PBA-VR) Main Control Board (PBA-CONT)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	ADF Sensor Adjust	-	-
2	Org. Width Detection Adjust	-	-
3	Firmware Upgrade	-	-
4	Change PBA-VR	-	-
5	Change PBA-CONT	-	-

10. Set error detection

- When the ADF or cover set error for some reason is detected, the Panel of the main body will have the following display.



<Panel display and detection timing for each>

Panel display	Description of error	Detection start	Detection timing
[1]	Upper Door closure	When the document is loaded into the ADF	Upper Door Open/Close Sensor (unblocked)
[2]	ADF closure	When the document is loaded into the ADF	Copier Size Reset Switch (ON)

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

PC-108/PC-206

2008.12
KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
  A number within ▲1 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.

2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

PC-108/PC-206

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

OUTLINE

1. Product specifications

A. Type

Name	2 way Paper Take-Up Cabinet
Type	Front loading type 2 way paper take-up device
Installation	Desk type
Document Alignment	Center

B. Paper type

Type	Same as the main body.	
Size	Metric: A3, B4, A4, A4S, B5, A5S, 11 × 17, 8½ × 11, 8½ × 11S, Foolscap, 8K *1, 16K *1 Inch: 11 × 17, 8½ × 14, 8½ × 11, 8½ × 11S, 5½ × 8½S, A3, A4, A4S, Foolscap	
Capacity	3rd Tray	500 sheets (80 g/m², 21.25 lb)
	4th Tray	500 sheets (80 g/m², 21.25 lb)

*1: Only supported in Taiwan.

C. Machine specifications

Power Requirements	DC 24 V ± 10 % (supplied from the main unit)
	DC 5 V ± 5 %
Max. Power Consumption	15 W or less
Dimensions	570 mm (W) × 577 mm (D) × 300 mm (H)
Weight	PC-108: 22.0 kg (48.5 lb) PC-206: 26.0 kg (57.25 lb)

D. Operating environment

- Conforms to the operating environment of the main body.

NOTE

- **These specifications are subject to change without notice.**

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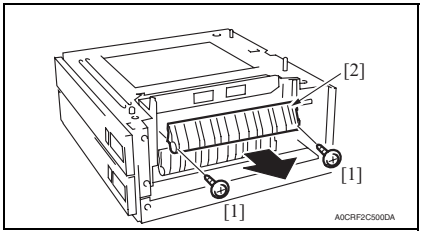
MAINTENANCE

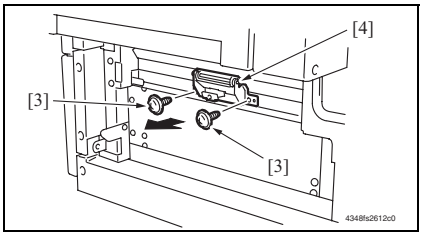
2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

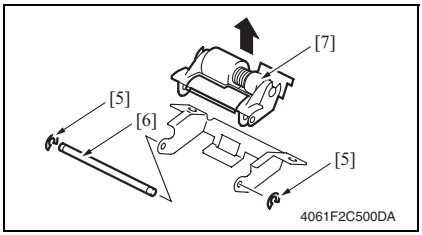
2.1.1 Replacing the Separation Roller Assy



1. Remove the Right Door.
See P.10
2. Remove two screws [1] and remove the Jam Access Cover [2].



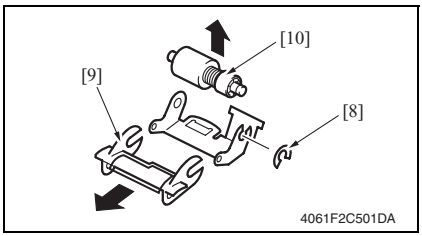
3. Remove two screws [3] and remove the Paper Separation Roller Mounting Bracket Assy [4].



4. Remove two C-rings [5] and the shaft [6], and remove the Paper Separation Roller Fixing Bracket Assy [7].

NOTE

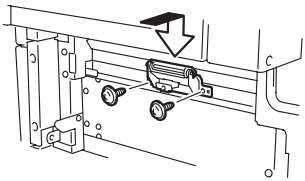
- **Be careful not to lose spring at this time.**



5. Remove the C-ring [8], the Guide [9], and remove the Separation Roller Assy [10].
6. Repeat steps 1 to 5 similarly for the 4th Drawer.

NOTE

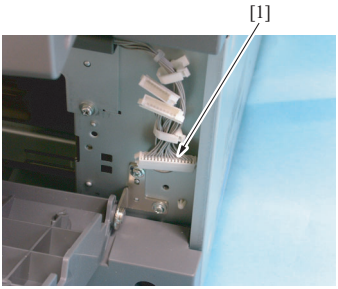
- **Install the Separation Roller Assy while pressing the holder down so that it aligns to the metal bracket of the machine.**
- **Make sure that the Separation Roller Assy is not tilted to the right or left when installed.**



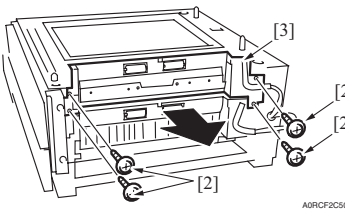
NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

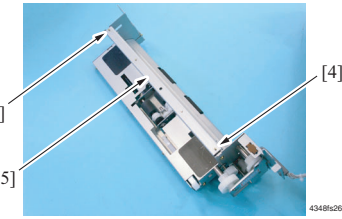
2.1.2 Replacing the Paper Take-up Roller



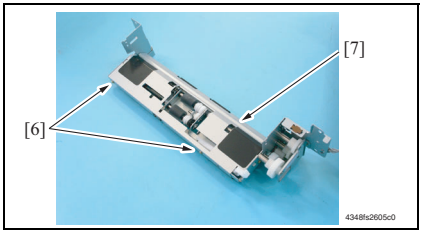
1. Remove the Rear Right Cover. (Remove the Right Lower Cover for 4th row.)
See P.10
2. Remove the Tray3. (Remove the Tray4 from 4th row.)
3. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 3 of “Replacing the Separation Roller Assy” on P.3.
4. Disconnect the connector [1] and remove the harness from two wire saddles.



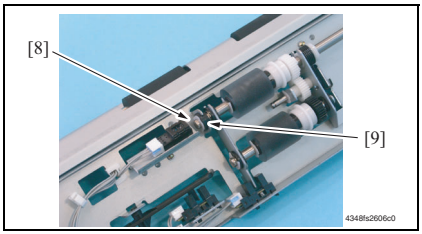
5. Remove four screws [2] and remove the Paper Take-up Unit [3].



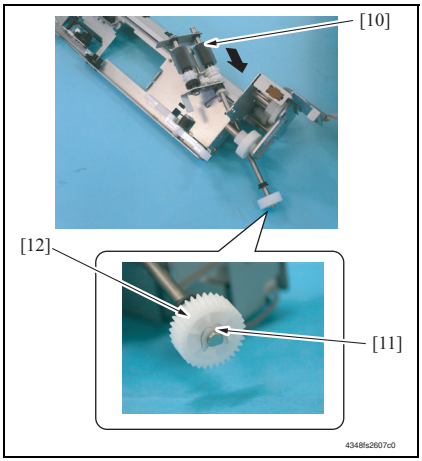
6. Remove two screws [4] and remove the Mounting Frame [5] for the Paper Separation Roller Mounting Bracket Assy.



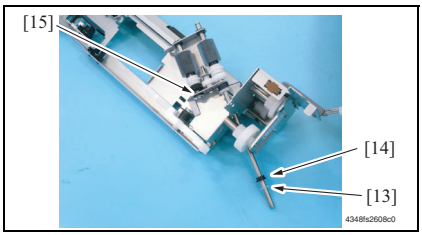
7. Remove two screws [6] and remove the Paper Take-up Cover [7].



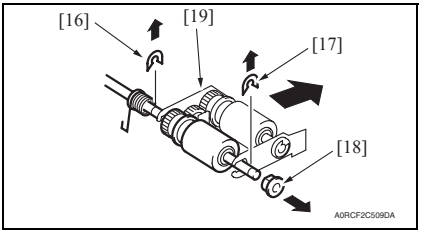
8. Remove the C-ring [8] and remove the bushing [9].



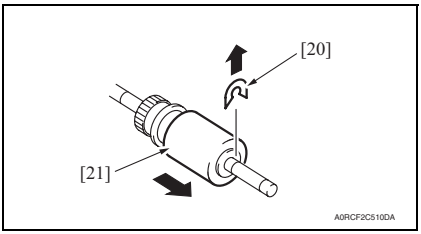
9. Shift the Shaft Assy [10] in the orientation as shown on the left, and remove the C-ring [11] and the gear [12].



10. Remove the C-ring [13], the bushing [14], and remove the shaft Assy [15].



11. Remove C-ring [16], E-rings [17] and the bushing [18], and remove the Pick-up Roller Fixing Bracket Assy [19].

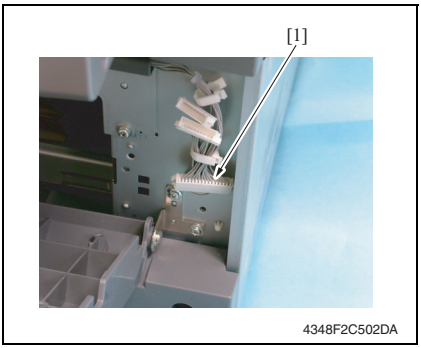


12. Remove the C-ring [20] and remove the Paper Take-up Roller [21].
13. Repeat steps 1 to 12 similarly for the 4th Drawer.

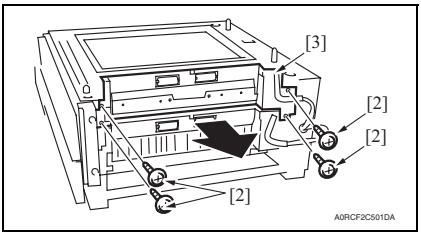
NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

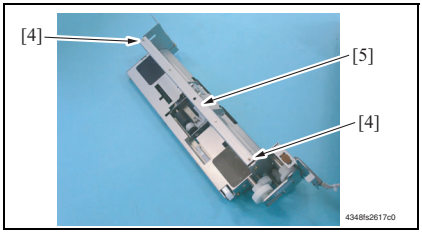
2.1.3 Replacing the Pick-up Roller



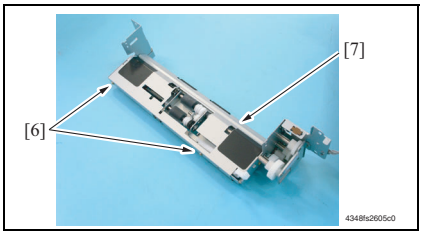
1. Remove the Rear Right Cover. (Remove the Right Lower Cover for 4th row.)
See P.10
2. Remove the Tray3.(Remove the Tray4 from 4th row.)
3. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 3 of “Replacing the Separation Roller Assy” on P.3.
4. Disconnect the connector [1] and remove the harness from two wire saddles.



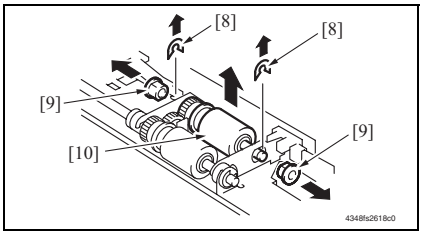
5. Remove four screws [2] and remove the Paper Take-up Unit [3].



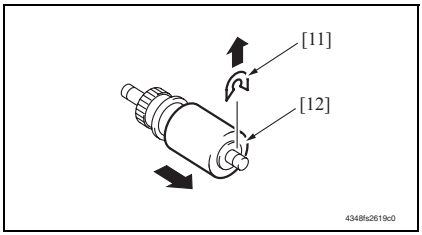
6. Remove two screws [4] and remove the Paper Separation Roller Mounting Bracket Assy [5] together with frame.



7. Remove two screws [6] and remove the Paper Take-up Cover [7].



8. Remove two C-rings [8], two bushings [9], and remove the Pick-up Roller Assy [10].



9. Remove the C-ring [11] and remove the Pick-up Roller [12].
10. Repeat steps 1 to 9 similarly for the 4th Drawer.

NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

3. Other

3.1 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

⚠ CAUTION

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**
- **When 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/Cleaning list (Other parts)

3.2.1 Disassembly/Assembly parts list

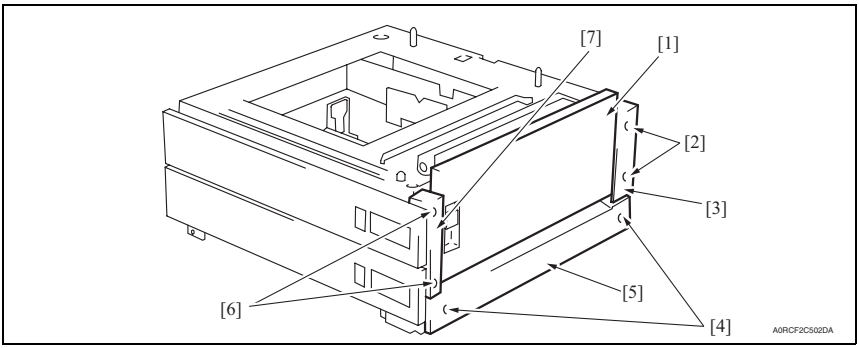
No	Section	Part name	Ref. page
1	Exterior parts	Right Door	P.10
2		Rear Right Cover	P.10
3		Lower Right Cover	P.10
4		Front Right Cover	P.10
5		Rear Cover	P.10

3.2.2 Cleaning parts list

No	Section	Part name	Ref. page
1	Paper feed section	Separation Roller	P.11
2		Paper Take-up Roller	P.11
3		Pick-up Roller	P.12
4	Transport section	Vertical Transport Roller	P.12

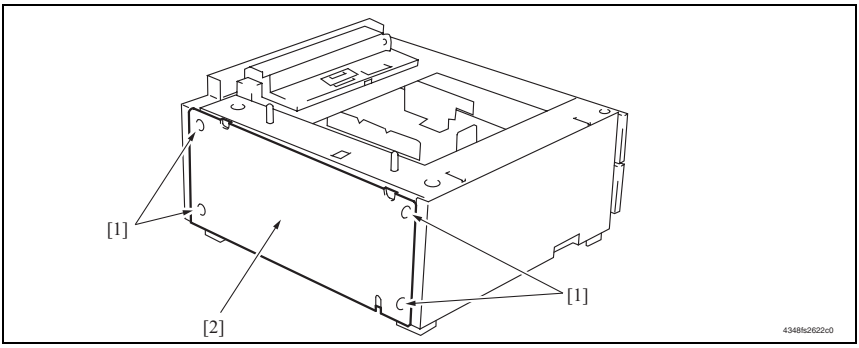
3.3 Disassembly/Assembly procedure

3.3.1 Right Door/Rear Right Cover/Lower Right Cover/Front Right Cover



1. Open the Right Door [1].
2. Remove the Right Door [1].
3. Remove two screws [2] and remove the Rear Right Cover [3].
4. Remove two screws [4] and remove the Lower Right Cover [5].
5. Remove two screws [6] and remove the Front Right Cover [7].

3.3.2 Rear Cover



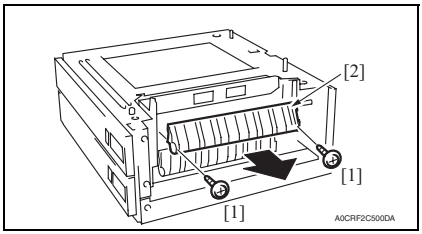
1. Remove four screws [1] and remove the Rear Cover [2].

3.4 Cleaning procedure

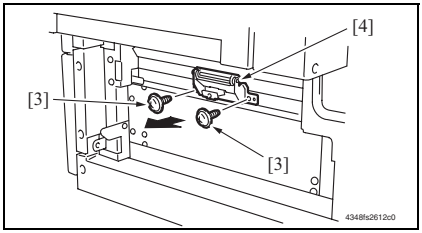
NOTE

- **The alcohol described in the cleaning procedure represents the isopropyl alcohol.**

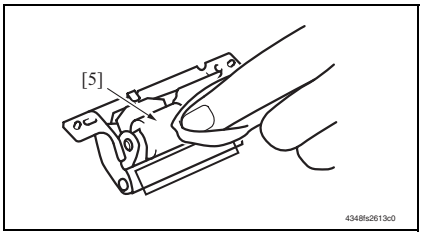
3.4.1 Separation Roller



1. Remove the Right Door.
See P.10
2. Remove two screws [1] and remove the Jam Access Cover [2].

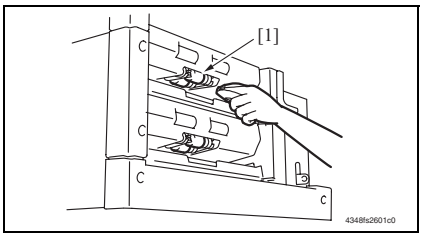


3. Remove two screws [3] and remove the Paper Separation Roller Mounting Bracket Assy [4].



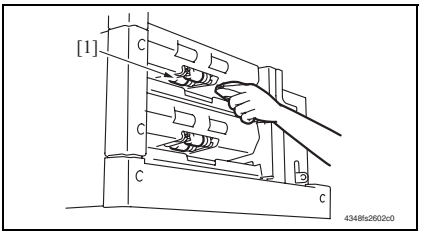
4. Using a soft cloth dampened with alcohol, wipe the Separation Roller [5] clean of dirt.
5. Repeat steps 1 to 4 similarly for the 4th Drawer.

3.4.2 Paper Take-up Roller



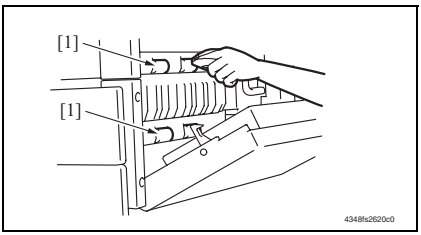
1. Remove the Tray3.(Remove the Tray4 from 4th row.)
2. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 3 of the cleaning procedure for “Separation Roller” on P.11.
3. Using a soft cloth dampened with alcohol, wipe the Paper Take-up Roller [1] clean of dirt.
4. Repeat steps 1 to 3 similarly for the 4th Drawer.

3.4.3 Pick-up Roller



1. Remove the Tray3.(Remove the Tray4 from 4th row.)
2. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 3 of the cleaning procedure for “Separation Roller” on P.11.
3. Using a soft cloth dampened with alcohol, wipe the Pick-up Roller [1] clean of dirt.
4. Repeat steps 1 to 3 similarly for the 4th Drawer.

3.4.4 Vertical Transport Roller



1. Open the Right Door.
2. Using a soft cloth dampened with alcohol, wipe the Vertical Transport Rollers [1] clean of dirt.

ADJUSTMENT/SETTING

4. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

5. I/O check

5.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main unit in the standby state (including a misfeed, malfunction, and closure failure condition).

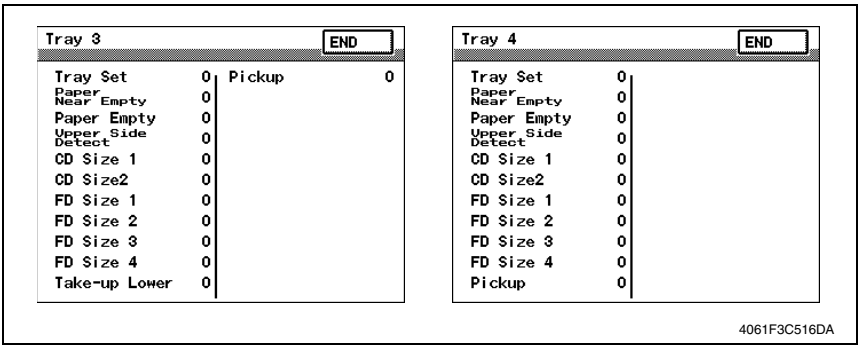
<Procedure>

1. Display Tech. Rep. Mode.
   See P.154 of the main body service manual.
2. Touch the [I/O Check].
3. Touch the [Printer].
4. Touch the [Tray 3] or [Tray 4].

5.2 I/O check list

5.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main unit.



5.2.2 Sensor check list

A. Printer (PC-108/PC-206)

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC112-PF	Tray 3	Tray Set	Tray3 Set Sensor	Set	Out of position
PC113-PF		Paper Near Empty	Tray3 Paper Near-Empty Sensor	Blocked	Unblocked
PC115-PF		Paper Empty	Tray3 Paper Empty Sensor	Paper not present	Paper present
PC114-PF		Upper Side Detect	Tray3 Lift Sensor	Raised Position	Not raised
PC118-PF		CD Size 1	Tray3 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC119-PF		CD Size 2	Tray3 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I3 PF		FD Size 1	Tray3 FD Paper Size Detection Board	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC111-PF		Take-up Lower	Door Sensor	When opened	When closed
PC116-PF		Pickup	Tray3 Paper Take-Up Sensor	Paper present	Paper not present
PC121-PF	Tray 4	Tray Set	Tray4 Set Sensor	Set	Out of position
PC122-PF		Paper Near Empty	Tray4 Paper Near-Empty Sensor	Blocked	Unblocked
PC124-PF		Paper Empty	Tray4 Paper Empty Sensor	Paper not present	Paper present
PC123-PF		Upper Side Detect	Tray4 Lift Sensor	Raised Position	Not raised
PC127-PF		CD Size 1	Tray4 CD Paper Size Sensor 1	Maximum value	Not at maximum value
PC128-PF		CD Size 2	Tray4 CD Paper Size Sensor 2	Maximum value	Not at maximum value
PWB-I4 PF		FD Size 1	Tray4 FD Paper Size Detection Board	Maximum value	Not at maximum value
		FD Size 2		Maximum value	Not at maximum value
		FD Size 3		Maximum value	Not at maximum value
		FD Size 4		Maximum value	Not at maximum value
PC125-PF		Pickup	Tray4 Paper Take-Up Sensor	Paper present	Paper not present

6. Mechanical adjustment

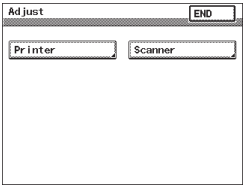
6.1 Registration (CD)

NOTE

Make this adjustment after any of the following procedures has been performed.

- **When the PH Unit has been replaced.**
- **When the image on the copy is offset in the CD direction.**
- **When a faint image occurs on the leading edge of the image.**

1. Display Tech. Rep. Mode.
See P.154 of the main body service manual.



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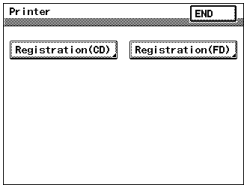
2. Press the Stop key followed by the Start key to display the Adjust Mode.
3. Touch the [Printer].



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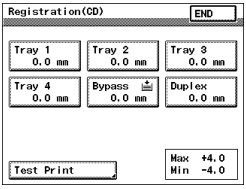
4. Touch the [Registration (CD)].



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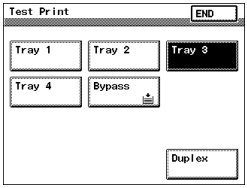
5. Touch the [Test Print].



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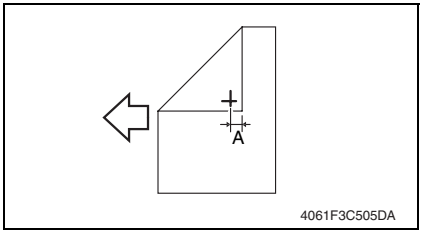
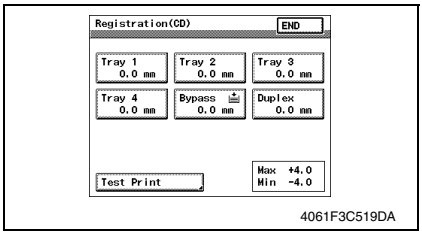
6. Touch the [Tray 3] or [Tray 4].
7. Press the Start key.



8. Measure the width of printed reference line A.
Specification: 10 mm ± 2.0 mm
9. If width A falls within the specified range, finish the adjustment procedure. If outside the specified range, perform the adjustment below.

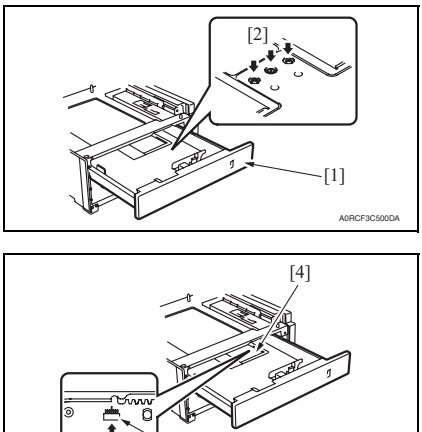


10. Touch [END] to display the Registration (CD) screen.
11. Touch the [Tray 3] or [Tray 4].

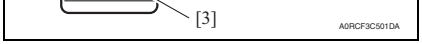
12. Press the Clear key and use the 10-Key Pad to set the value.
- If width A is wider than the specified range, enter a negative value.
- If width A is narrower than the specified range, enter a positive value.

Adjustment range: + 4.0 max. and -4.0 min.
Use the * key to switch between + and -.
13. Turn OFF the Main Power Switch, wait for 10 sec., then turn the switch ON.

NOTE
- **If width A falls outside the specified range, redo the adjustment from step 13.**



14. Slide out the Tray [1] and unload paper from it.
15. Loosen three screws [2] at the center of the Paper Lifting Plate.



16. Watching the graduations [3] provided in the drawer, move the Edge Guide [4] in the rear.
- If width A is greater than the specified value, move the Edge Guide toward the front.
- If width A is smaller than the specified value, move the Edge Guide toward the rear.

17. Perform another test print and check the reference deviation.
18. Repeat the adjustment until the reference line falls within the specified range.
19. Tighten the adjustment screw.
20. Repeat steps 1 to 19 similarly for the tray 4.

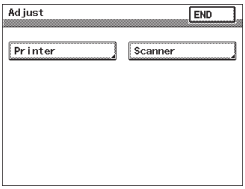
6.2 Registration (FD)

NOTE

Make this adjustment after any of the following procedures has been performed.

- **When the PH Unit has been replaced.**
- **When the image on the copy is offset in the FD direction.**

1. Display Tech. Rep. Mode.
   See P.154 of the main body service manual.



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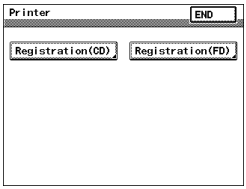
2. Press the Stop key followed by the Start key to display the Adjust Mode.
3. Touch the [Printer].



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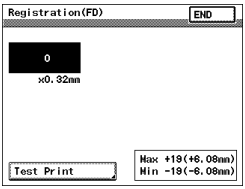
4. Touch the [Registration (FD)].



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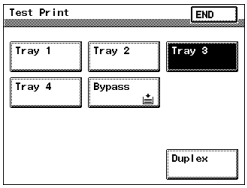
5. Touch the [Test Print].



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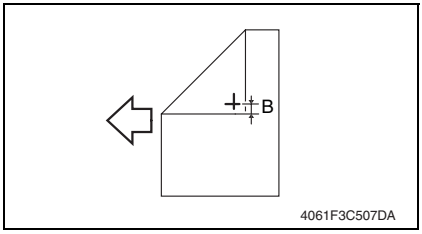
6. Touch the [Tray 3] or [Tray 4].
7. Press the Start key.



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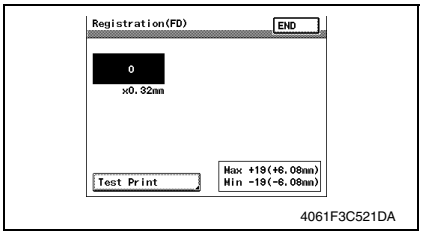
8. Measure the width of printed reference line B.
Specification: 11.3 mm ± 1.5 mm
9. If width B falls within the specified range, finish the adjustment procedure. If outside the specified range, perform the adjustment below.



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10. Touch [END] to display the Registration (FD) screen.

11. Press the Clear key and use the 10-Key Pad to set the value.
- If width B is wider than the specified range, enter a negative value.
- If width B is narrower than the specified range, enter a positive value.

Adjustment range: + 19.0 (+6.08 mm) max. and -19.0 (-6.08 mm) min.
Use the * key to switch between + and -.
12. Perform another test print and check the reference deviation.
13. Repeat the adjustment until the reference line falls within the specified range.

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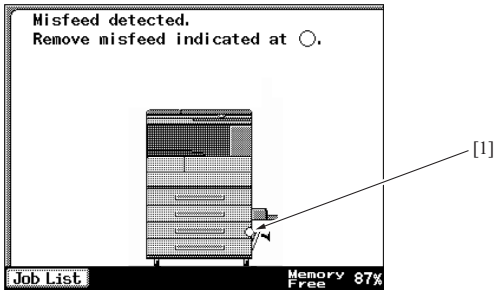
TROUBLESHOOTING

7. Jam Display

7.1 Misfeed display

- When misfeed occurs, message, misfeed location “Blinking” and paper location “Lighting” are displayed on the Touch Panel of the main body.



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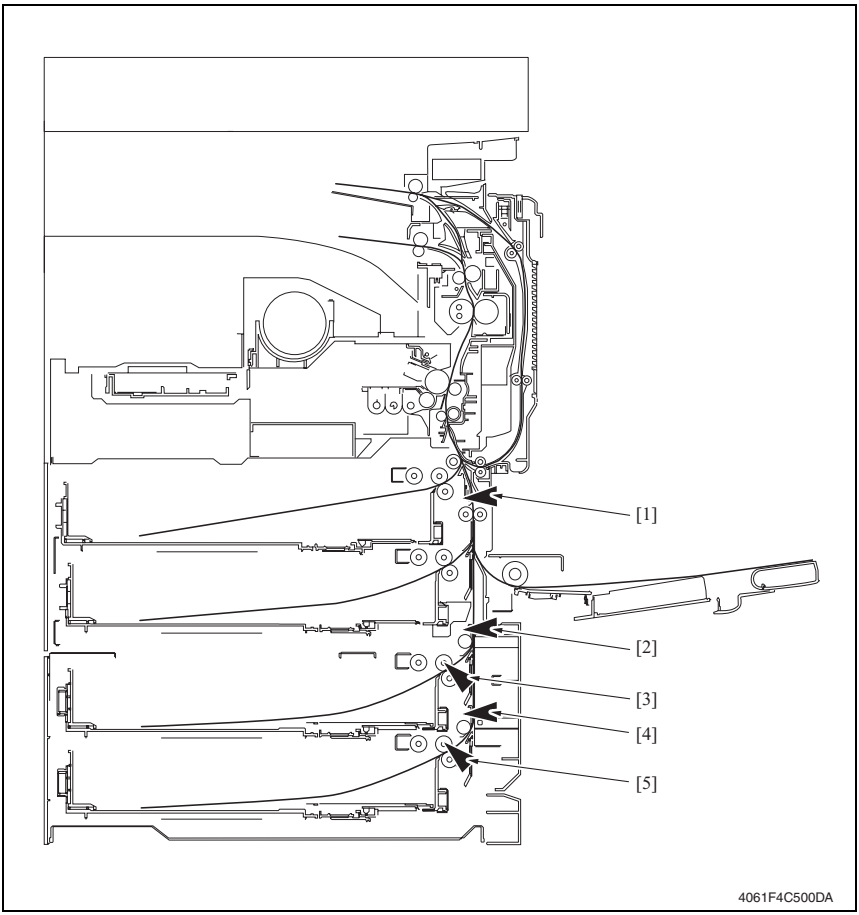
No.	Misfeed location	Misfeed access location	Action
[1]	Tray 3 Paper Take-Up Section Tray 3 Paper Vertical Transport Section	Right Door	P.24
	Tray 4 Paper Take-Up Section Tray 4 Paper Vertical Transport Section	Right Door	P.25

7.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

7.2 Sensor layout



[1]	Vertical Conveyance Sensor	PC2	[4]	Tray4 Vertical Conveyance Sensor	PC126-PF
[2]	Tray3 Vertical Conveyance Sensor	PC117-PF	[5]	Tray4 Paper Take-Up Sensor	PC125-PF
[3]	Tray3 Paper Take-Up Sensor	PC116-PF			

7.3 Solution

7.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper. Instruct the user on the correct paper storage procedures.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are the Paper Separator Fingers dirty, deformed, or worn?	Clean or replace the defective Paper Separator Finger.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

7.3.2 Tray3 Paper Take-Up section/Vertical Transport section misfeed (PC-108/ PC-206)

A. Detection timing

Type	Description
Tray3 Paper Take-Up section/ Vertical transport section misfeed detection	The leading edge of the paper does not block the Tray3 Vertical Conveyance Sensor (PC117-PF) even after the set period of time has elapsed after the Tray3 Paper Feed Motor (M122-PF) is energized.
	The Vertical Conveyance Sensor (PC2) is not blocked even after the lapse of a given period of time after the Tray3 Vertical Conveyance Sensor (PC117-PF) has been blocked by a paper.
	The Tray3 Vertical Conveyance Sensor (PC117-PF) is not unblocked even after the lapse of a given period of time after PC117-PF has been blocked by a paper.
Tray3 detection of paper remaining	The Tray3 Vertical Conveyance Sensor (PC117-PF) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Tray3 Paper Take-Up Sensor (PC116-PF) is blocked when the Main 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	
Tray3 Paper Take-Up Sensor (PC116-PF) Tray3 Vertical Conveyance Sensor (PC117-PF) Vertical Conveyance Sensor (PC2) Tray3 Paper Feed Motor (M122-PF)	Main Control Board (PWB-C2 PF)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial check items	-	-
2	PC116-PF sensor check	PWB-C2 PF PJ6C2 PF-8 (ON)	PC-206 C-4
3	PC117-PF sensor check	PWB-C2 PF PJ6C2 PF-11 (ON)	PC-206 C-4
4	PC2 sensor check	PWB-A PJ22A-9 (ON)	D-7
5	M122-PF operation check	PWB-C2 PF PJ5C2 PF-1 to 4	PC-206 C-4
6	PWB-C2 PF replacement	-	-

7.3.3 Tray4 Paper Take-Up section/Vertical Transport section misfeed (PC-206)

A. Detection timing

Type	Description
Tray4 Paper Take-Up section/ Vertical transport section misfeed detection	The leading edge of the paper does not block the Tray4 Vertical Conveyance Sensor (PC126-PF) even after the set period of time has elapsed after the Tray4 Paper Feed Motor (M123-PF) is energized.
	The Tray3 Vertical Conveyance Sensor (PC117-PF) is not blocked even after the lapse of a given period of time after the Tray4 Vertical Conveyance Sensor (PC126-PF) has been blocked by a paper.
	The Tray4 Vertical Conveyance Sensor (PC126-PF) is not unblocked even after the lapse of a given period of time after PC126-PF has been blocked by a paper.
Tray4 detection of paper remaining	The Tray4 Vertical Conveyance Sensor (PC126-PF) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Tray4 Paper Take-Up Sensor (PC125-PF) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

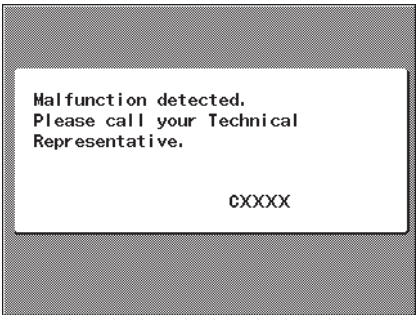
Relevant electrical parts	
Tray4 Paper Take-Up Sensor (PC125-PF) Tray4 Vertical Conveyance Sensor (PC126-PF) Tray3 Vertical Conveyance Sensor (PC117-PF) Tray4 Paper Feed Motor (M123-PF)	Main Control Board (PWB-C2 PF)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial check items	-	-
2	PC125-PF sensor check	PWB-C2 PF PJ10C2 PF-8 (ON)	PC-206 G-6
3	PC126-PF sensor check	PWB-C2 PF PJ11C2 PF-2 (ON)	PC-206 G-6
4	PC117-PF sensor check	PWB-C2 PF PJ6C2 PF-11 (ON)	PC-206 C-4
5	M123-PF operation check	PWB-C2 PF PJ5C2 PF-1 to 4	PC-206 G-6
6	PWB-C2 PF replacement	-	-

8. Trouble code

8.1 Trouble code display

- The main body's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code on the Touch Panel.



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8.2 Trouble code list

Code	Item	Description
C0206	Tray3 Lift-Up Failure	• The Lift-Up Sensor is not blocked even after the set period of time has elapsed after the paper lift-up operation for the drawer began.
C0208	Tray4 Lift-Up Failure	

- Open and close the Front Door or turn OFF and ON the Main Power Switch.

8.3 Solution

8.3.1 C0206: Tray3 Lift-Up Failure
C0208: Tray4 Lift-Up Failure

Relevant electrical parts	
Tray3 Lift Motor (M-124-PF) Tray4 Lift Motor (M-125-PF) Tray3 Lift Sensor (PC114-PF) Tray4 Lift Sensor (PC123-PF)	Main Control Board (PWB-C2 PF) Main body Control Board (PWB-MC) Main body DC Power Supply (PU1)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the motor and sensor connectors for proper connection, and correct as necessary.	-	-
2	Check the connector of each motor for proper drive coupling, and correct as necessary.	-	-
3	Check the PU1 connector for proper connection, and correct as necessary.	-	-
4	PC114-PF sensor check	PWB-C2 PF PJ6C2 PF-3 (ON)	PC-206 C-3
5	PC123-PF sensor check	PWB-C2 PF PJ10C2 PF-3 (ON)	PC-206 G-5
6	M124-PF operation check	PWB-C2 PF PJ4C2 PF-4 to 5	PC-206 C-5
7	M125-PF operation check	PWB-C2 PF PJ8C2 PF-12 to 13	PC-206 G-3
8	PWB-C2 PF replacement	-	-
9	PWB-MC replacement	-	-
10	PU1 replacement	-	-

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

PC-407

2008.12

KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
  A number within ▲1 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.

2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

PC-407

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

OUTLINE

1. Product specification

A. Type

Name	Large Capacity Cabinet
Type	Front loading type LCC
Installation	Desk type
Document Alignment	Center

B. Paper type

Type	Plain paper	56 to 90 g/m² (15 to 24 lb)
Size	Metric: A4 Inch: 8½ × 11	
Capacity	2500 sheets (80 g/m², 21.25 lb)	

C. Machine specifications

Power Requirements	DC 24 V ± 10 % (supplied from the main body)
	DC 5 V ± 5 %
Max. Power Consumption	45 W or less
Dimensions	570 mm (W) × 577 mm (D) × 300 mm (H)
Weight	26.0 kg (57 lb)

D. Operating environment

- Conforms to the operating environment of the main body.

NOTE

- **These specifications are subject to change without notice.**

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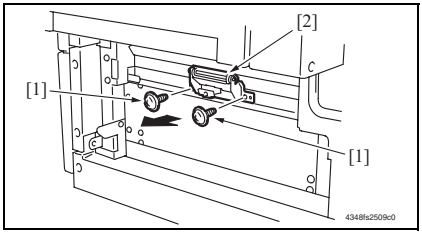
MAINTENANCE

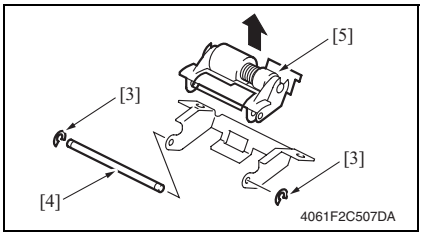
2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

2.1.1 Replacing the Separation Roller Assy



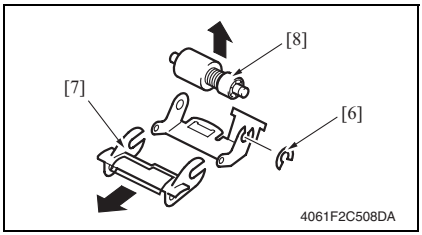
1. Remove the Right Door. See P.10
2. Remove two screws [1] and remove the Paper Separation Roller Mounting Bracket Assy [2].



3. Remove two C-rings [3] and the shaft [4], and remove the Paper Separation Roller Fixing Bracket Assy [5].

NOTE

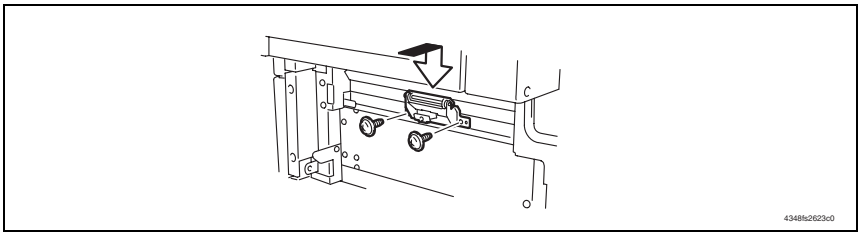
- **Be careful not to lose spring at this time.**



4. Remove the C-ring [6], the Guide [7], and remove the Separation Roller Assy [8].

NOTE

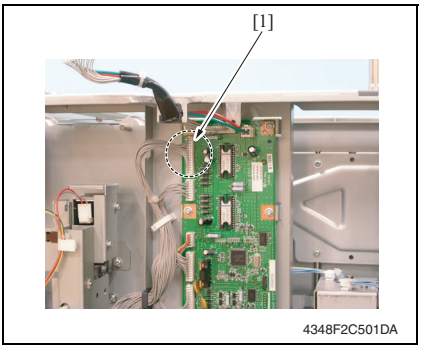
- **Install the Separation Roller Assy while pressing the holder down so that it aligns to the metal bracket of the machine.**
- **Make sure that the Separation Roller Assy is not tilted to the right or left when installed.**



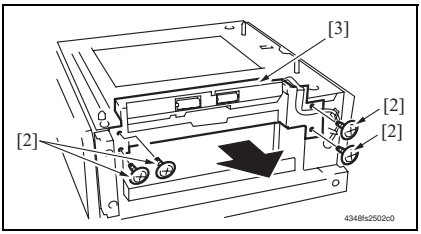
NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

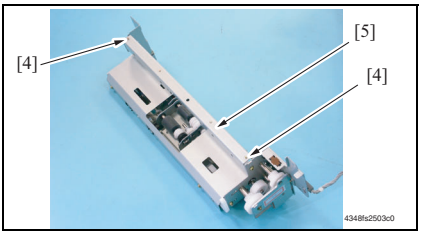
2.1.2 Replacing the Paper Take-up Roller



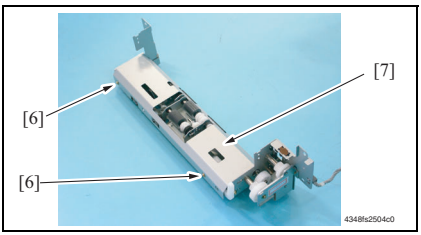
1. Remove the Rear Cover and the Rear Right Cover.
See P.10
2. Remove the Tray3.
3. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 2 of “Replacing the Separation Roller” on P.3.
4. Disconnect the connector [1] from the Main Control Board.



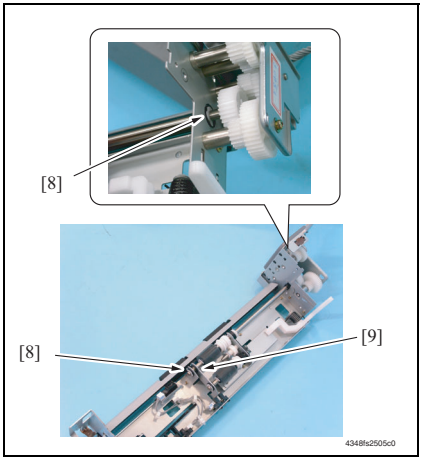
5. Remove four screws [2] and remove the Paper Take-up Unit [3].



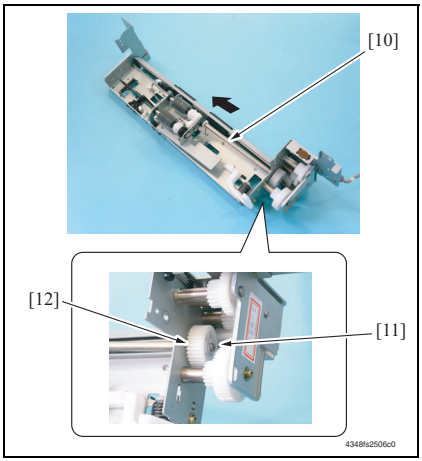
6. Remove two screws [4] and remove the Mounting Frame [5] for the Paper Separation Roller Mounting Bracket Assy.



7. Remove two screws [6] and remove the Paper Take-up Cover [7].

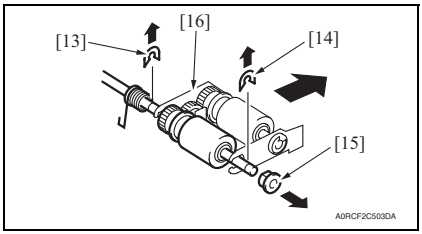


8. Remove two C-rings [8] and remove the bushing [9].

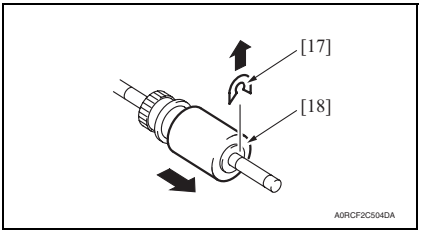


9. Shift the Shaft Assy [10] in the orientation as shown on the left, and remove the C-ring [11] and the gear [12].

10. Remove the shaft Assy [10].



11. Remove C-ring [13], E-ring [14], and the bearing [15], and remove the Pick-up Roller Fixing Plate Assy [16].

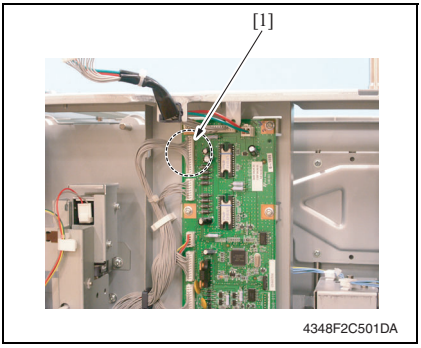


12. Remove the C-ring [17] and remove the Paper Take-up Roller [18].

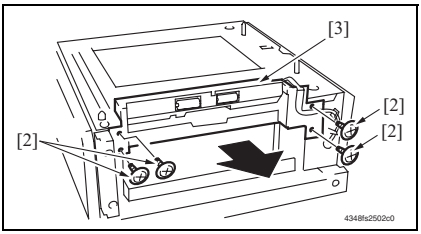
NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

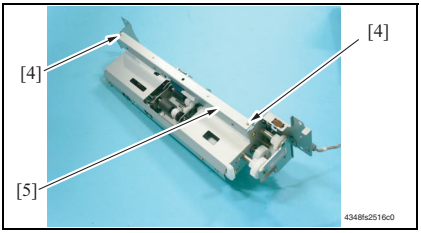
2.1.3 Replacing the Pick-up Roller



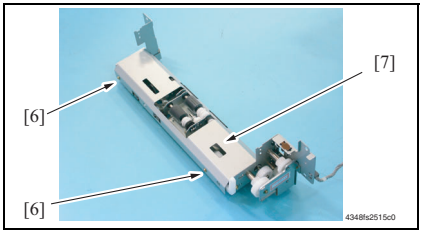
1. Remove the Rear Cover and the Rear Right Cover.
See P.10
2. Remove the Tray3.
3. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 2 of “Replacing the Separation Roller” on P.3.
4. Disconnect the connector [1] from the Main Control Board.



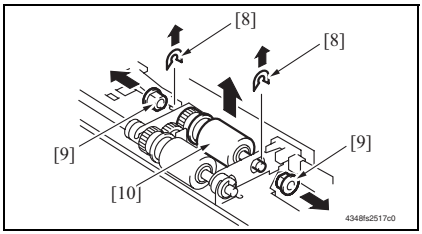
5. Remove four screws [2] and the Paper Take-up Unit [3].



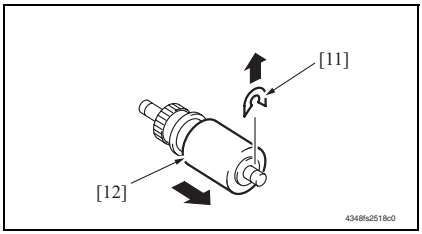
6. Remove two screws [4] and remove the Paper Separation Roller Mounting Bracket Assy [5] together with frame.



7. Remove two screws [6] and remove the Paper Take-up Cover [7].



8. Remove two C-rings [8], two bushings [9], and the Pick-up Roller Assy [10].



9. Remove the C-ring [11] and remove the Pick-up Roller [12].

NOTE

- **Replace the Separation Roller Assy, Paper Take-up Roller and Pick-up Roller at the same time.**

3. Other

3.1 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

⚠ CAUTION

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**
- **When 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/Cleaning list (Other parts)

3.2.1 Disassembly/Assembly parts list

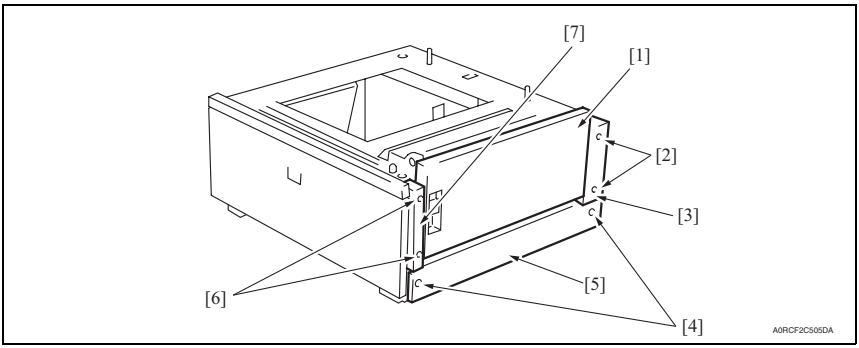
No	Section	Part name	Ref. page
1	Exterior parts	Right Door	P.10
2		Rear Right Cover	P.10
3		Lower Right Cover	P.10
4		Front Right Cover	P.10
5		Rear Cover	P.10
6	Unit	Drawer	P.11
7		Wire	P.11

3.2.2 Cleaning parts list

No	Section	Part name	Ref. page
1	Paper feed section	Separation Roller	P.14
2		Paper Take-up Roller	P.14
3		Pick-up Roller	P.14
4	Transport section	Vertical Transport Roller	P.15

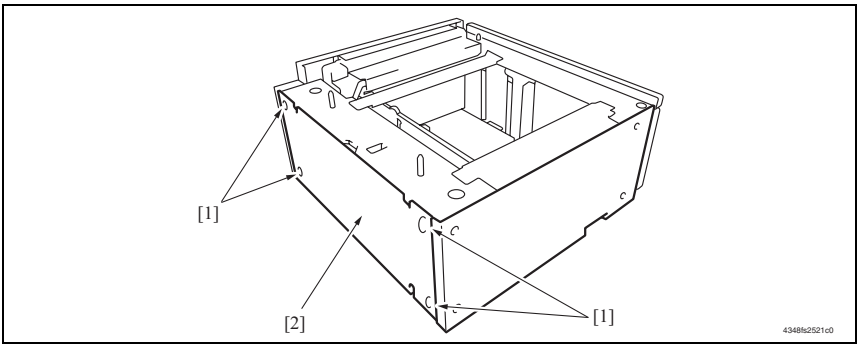
3.3 Disassembly/Assembly procedure

3.3.1 Right Door/Rear Right Cover/Lower Right Cover/Front Right Cover



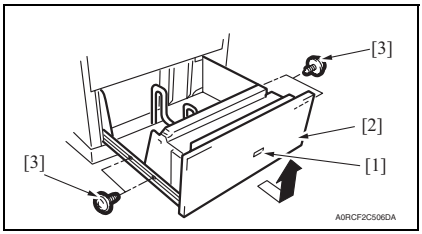
1. Open the Right Door [1].
2. Remove the Right Door [1].
3. Remove two screws [2] and remove the Rear Right Cover [3].
4. Remove two screws [4] and remove the Lower Right Cover [5].
5. Remove two screws [6] and remove the Front Right Cover [7].

3.3.2 Rear Cover

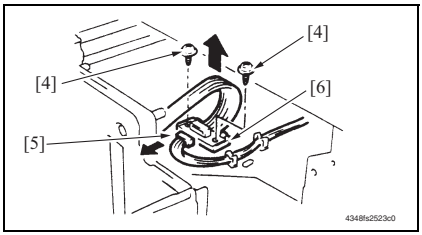


1. Remove four screws [1] and remove the Rear Cover [2].

3.3.3 Drawer



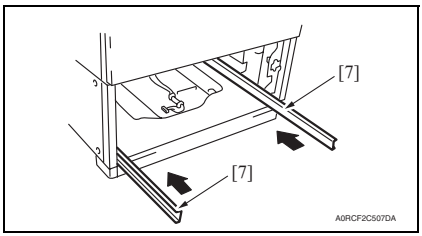
1. Press the Drawer Eject Button [1] and slide out the drawer [2].
2. Remove the paper.
3. Remove four screws [3] and slide out the drawer [2].



4. Remove two screws [4], the connector [5], and remove the Connector Board [6].
5. Remove the Drawer.

NOTE

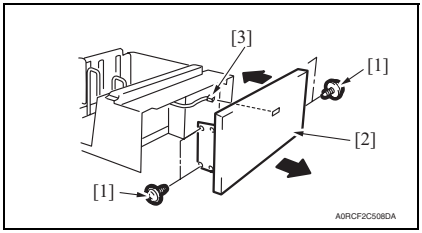
- **When removing the Connector Board, use care not to drop the drawer from the guide rail.**



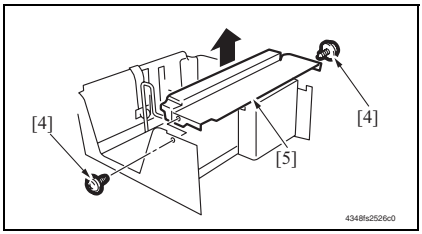
⚠ CAUTION

- **To prevent injuries, press the guide rail [7] inside the machine.**

3.3.4 Wire



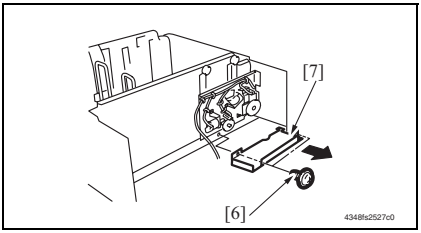
1. Remove the Drawer.
See P.11
2. Remove four screws [1] and remove the Front Cover Assy [2].
3. Unplug the connector [3].



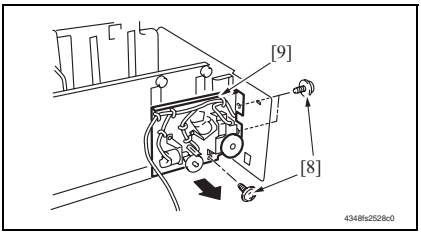
4. Remove two screws [4] and the Inner Cover Assy [5].

NOTE

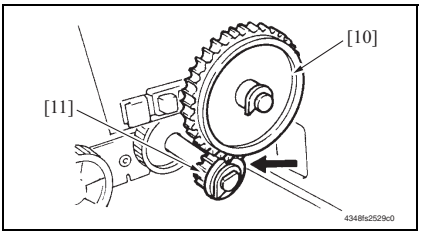
- **Do not peel off pulley protective mylar sheet.**



5. Remove two screws [6] and remove the Driver Cover [7].

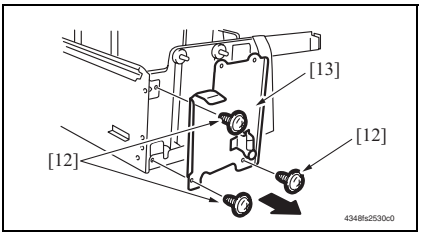


6. Remove three screws [8] and remove the Driver Mounting Plate Assy [9].

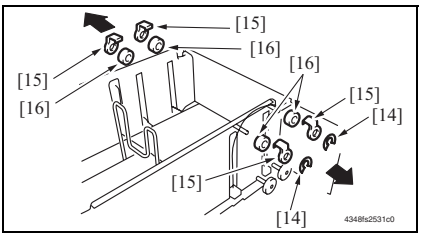


NOTE

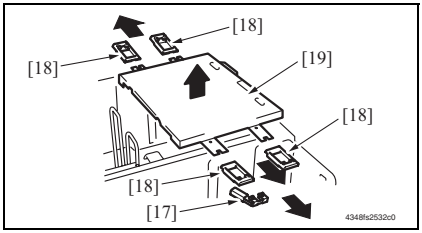
- **When assembling, be sure to engage rib of gear 1 [10] with convex section of gear 2 [11].**



7. Remove three screws [12] and remove the Reinforcement Bracket Assy [13].

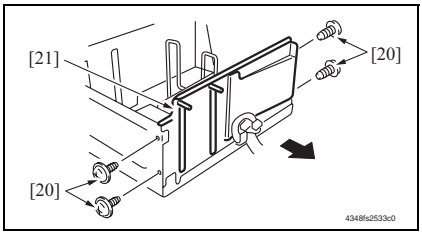


8. Remove two C-clips [14].
9. Remove four Pulley Covers [15].
10. Unhook four pulleys [16].

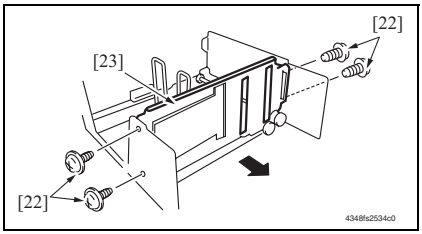


11. Remove the Ground Plate [17].
12. Remove four Cable Holding Jigs [18] and remove the Main Drawer [19].

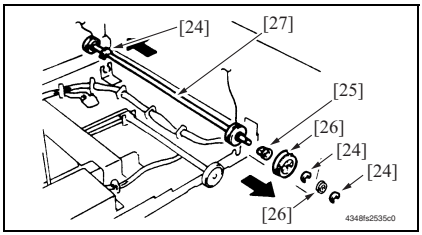
NOTE
- **Use care not to bend the wires.**



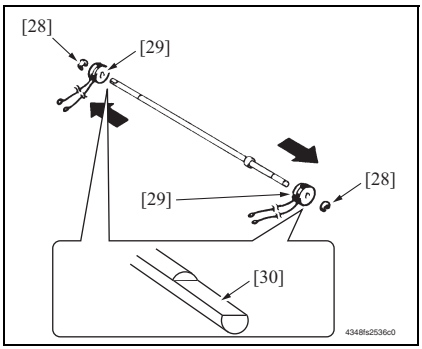
13. Remove four screws [20] and remove the Rear Trailing Edge Assy [21].



14. Remove four screws [22] and remove the Front Trailing Edge Assy [23].



15. Remove three C-rings [24], the bushing [25], and two gears [26].
16. Remove the Take-up Drum Assy [27].



17. Remove two C-rings [28] and two Take-up Drums [29].

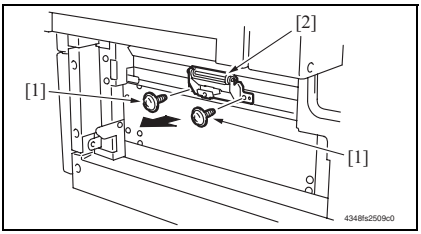
NOTE
- **Take care not to lose fixing pins.**
- **When reinstalling the Take-up Drum, check that the direction of the wire coming from both Take-up Drums are the same.**
- **Install so that cut parts [30] at both ends of shaft face up.**

3.4 Cleaning procedure

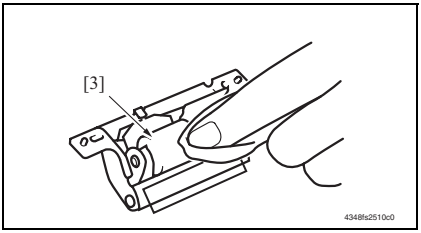
NOTE

- **The alcohol described in the cleaning procedure represents the isopropyl alcohol.**

3.4.1 Separation Roller

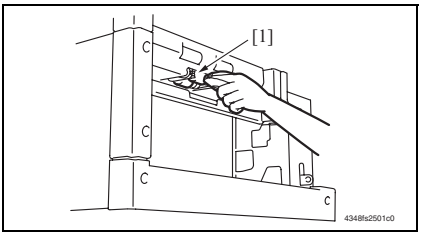


1. Remove the Right Door.
See P.10
2. Remove two screws [1] and remove the Paper Separation Roller Mounting Bracket Assy [2].



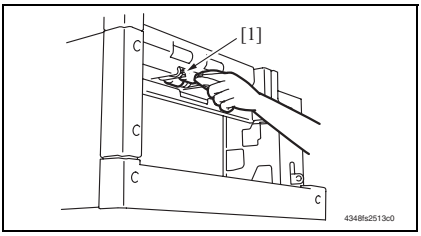
3. Using a soft cloth dampened with alcohol, wipe the Separation Roller [3] clean of dirt.

3.4.2 Paper Take-up Roller



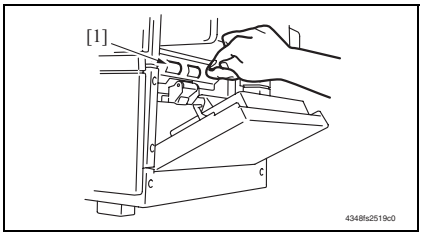
1. Remove the Tray3.
2. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 2 of the cleaning procedure for “Separation Roller” on P.14.
3. Using a soft cloth dampened with alcohol, wipe the Paper Take-Up Roller [1] clean of dirt.

3.4.3 Pick-up Roller



1. Remove the Tray3.
2. Remove the Paper Separation Roller Mounting Bracket Assy.
See steps 1 to 2 of the cleaning procedure for “Separation Roller” on P.14.
3. Using a soft cloth dampened with alcohol, wipe the Pick-up Roller [1] clean of dirt.

3.4.4 Vertical Transport Roller



1. Open the Right Door.
2. Using a soft cloth dampened with alcohol, wipe the Vertical Transport Roller [1] clean of dirt.

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ADJUSTMENT/SETTING

4. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

5. I/O check

5.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main body in the standby state (including a misfeed, malfunction, and closure failure condition).

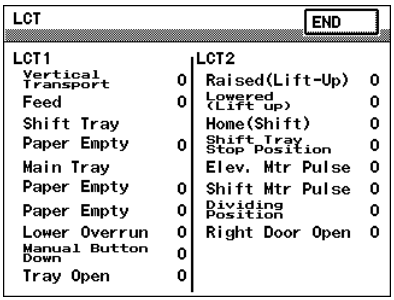
<Procedure>

1. Display Tech. Rep. Mode.
   See P.154 of the main body service manual.
2. Touch the [I/O Check].
3. Touch the [Printer].
4. Touch the [LCT].

5.2 I/O check list

5.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main body.



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5.2.2 I/O check list

A. Printer (PC-407)

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC2-LCT	LCT	Vertical Transport	Vertical Conveyance Sensor	Paper present	Paper not present
PC1-LCT		Feed	Paper Feed Sensor	Paper present	Paper not present
PC9-LCT		Shift Tray Paper Empty	Shift Tray Paper Empty Sensor	Paper present	Paper not present
PC3-LCT		Main Tray Paper Empty	Upper Paper Empty Sensor	Paper present	Paper not present
PWB-E LCT		Paper Empty	Paper Empty Board	Paper present	Paper not present
PC7-LCT		Lower Overrun	Lower Limit Sensor	malfunction	operational
UN1-LCT		Manual Button Down	Paper Descent Key	ON	OFF
PC6-LCT		Tray Open	Tray Set Sensor	Open	Close
PC4-LCT		Raised (lift-Up)	Tray Upper Limit Sensor	At raised position	Not at raised position
PC13-LCT		Lowered (Lift up)	Tray Lower Position Sensor	At lower limit	Not at lower limit
PC12-LCT		Home (Shift)	Shifter Home Position Sensor	At home	Not at home
PC11-LCT		Shift Tray Stop Position	Shifter Return Position Sensor	At stop position	Not at stop position
PC10-LCT		Elev. Mtr Pulse	Elevator Motor Pulse Sensor	Blocked	Unblocked
PC8-LCT		Shift Mtr Pulse	Shift Motor Pulse Sensor	Blocked	Unblocked
PC14-LCT		Dividing Position	Shift Gate Home Position Sensor	At home	Not at home
PC5-LCT		Right Door Open	Right Lower Door Sensor	Open	Close

6. Mechanical adjustment

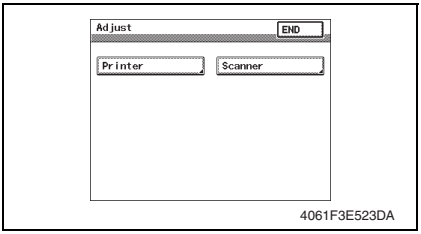
6.1 Registration (CD)

NOTE

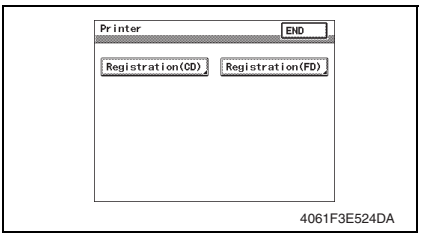
Make this adjustment after any of the following procedures has been performed.

- **When the PH Unit has been replaced.**
- **When the image on the copy is offset in the CD direction.**
- **When a faint image occurs on the leading edge of the image.**

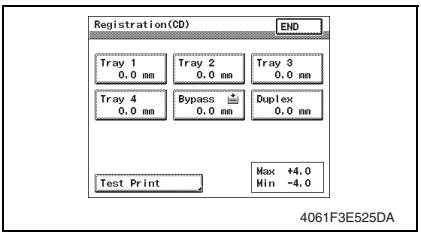
1. Display Tech. Rep. Mode.
See P.154 of the main body service manual.



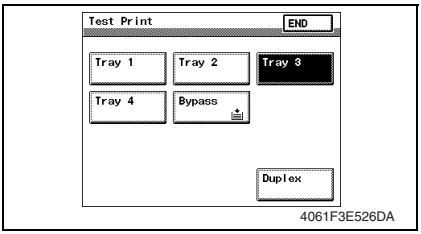
2. Press the Stop key followed by the Start key to display the Adjust Mode.
3. Touch the [Printer].



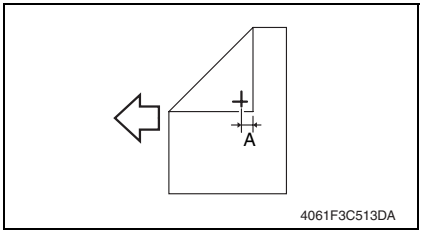
4. Touch the [Registration (CD)].



5. Touch the [Test Print].

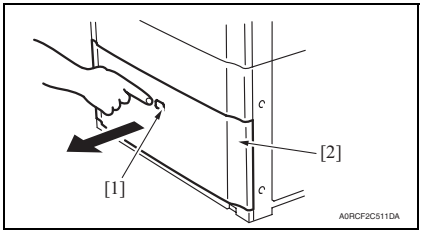


6. Touch the [Tray 3].
7. Press the Start key.

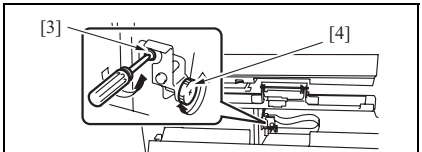


8. Measure the width of printed reference line A.
Specification: 10 mm ± 2.0 mm
9. If the measured width A falls outside the specified range, enter the correction value.
10. Produce another test print and check to see if width A falls within the specified range.

- **If adjustment cannot be completed only by inputting numeric value, perform adjustment according to the following procedure.**



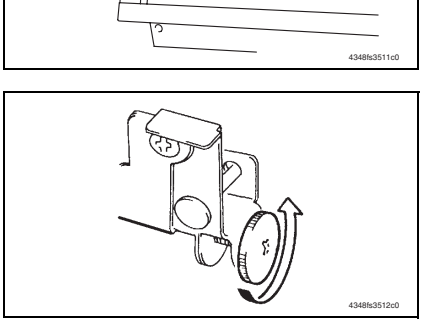
11. Press the Drawer Release button [1] and then slide out the drawer [2] from the Paper Feed Cabinet.



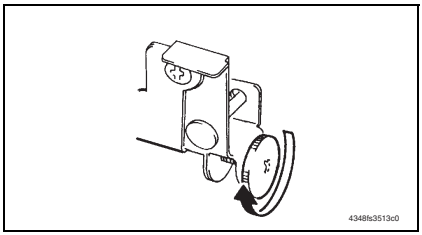
12. Open the Right Door.
13. Loosen the adjustment screw [3] and turn screw D [4] to make the adjustment.

NOTE

- **Do not damage the passage surface of the Right Door.**



- If width A is greater than the specified value: Turn screw D counterclockwise.



- If width A is smaller than the specified value: Turn screw D clockwise.

14. Perform another test print and check the reference deviation.
15. Tighten the adjustment screw.

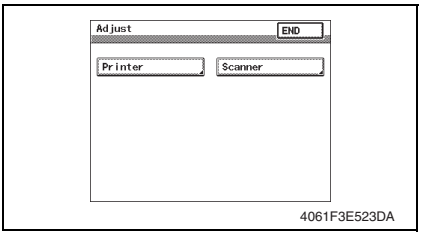
6.2 Registration (FD)

NOTE

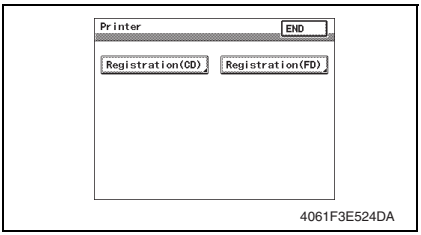
Make this adjustment after any of the following procedures has been performed.

- **When the PH Unit has been replaced.**
- **When the image on the copy is offset in the FD direction.**

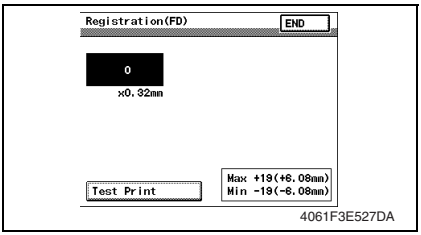
1. Display Tech. Rep. Mode.
See P.154 of the main body service manual.



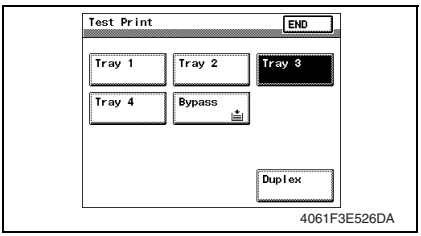
2. Press the Stop key followed by the Start key to display the Adjust Mode.
3. Touch the [Printer].



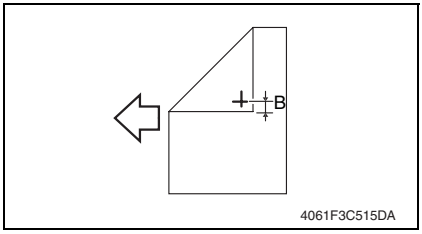
4. Touch the [Registration (FD)].



5. Touch the [Test Print].



6. Touch the [Tray 3].
7. Press the Start key.



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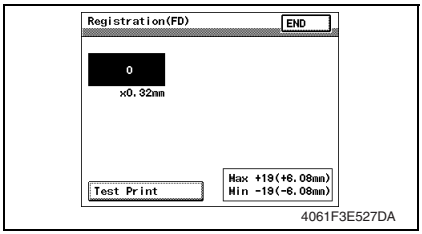
8. Measure the width of printed reference line B.
Specification: 11.3 mm ± 1.5 mm

9. If width B falls within the specified range, finish the adjustment procedure.
If outside the specified range, perform the adjustment below.



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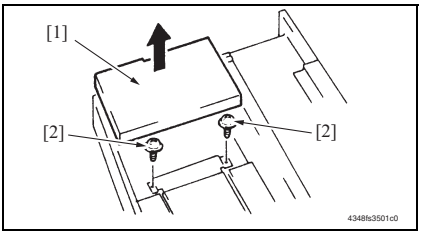
10. Touch [END] to display the Registration (FD) screen.

11. Press the Clear key and use the 10-Key Pad to set the value.
- If width B is wider than the specified range, enter a negative value.
- If width B is narrower than the specified range, enter a positive value.

Adjustment range: + 19.0 (+6.08 mm) max. and -19.0 (-6.08 mm) min.
Use the * key to switch between + and -.

12. Perform another test print and check the reference deviation.
13. Repeat the adjustment until the reference line falls within the specified range.

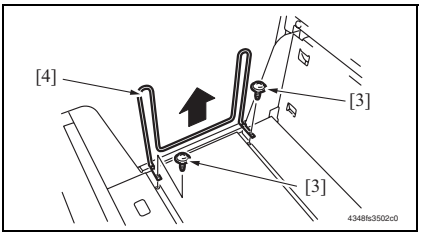
6.3 Shifter Movement Timing Belt Adjustment



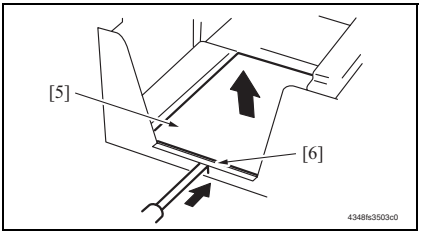
1. Slide out the Drawer and remove it.
2. Lift the Main Drawer [1], and remove two screws [2] fixing the Shift Tray.

NOTE

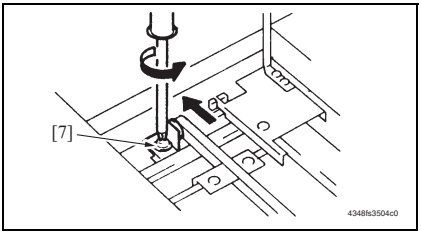
- **When reinstalling, use caution because the wire of the Main Drawer comes off easily.**



3. Remove two screws [3] and remove the Shifter [4].



4. Push the tab [6] of the Shift Tray [5] as shown on the left and release the lock.
5. Remove the Shift Tray [5].



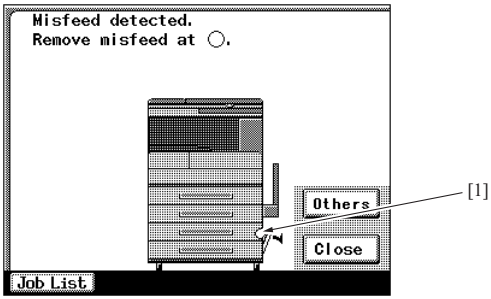
6. Loosen the screw [7] fixing the Tension Pulley Assy as shown to the left and move it in the direction of the arrow.
7. After moving the Shifter, tighten the fixing screw [7].

TROUBLESHOOTING

7. Jam Display

7.1 Misfeed display

- When misfeed occurs, message, misfeed location “Blinking” and paper location “Lighting” are displayed on the Touch Panel of the main body.



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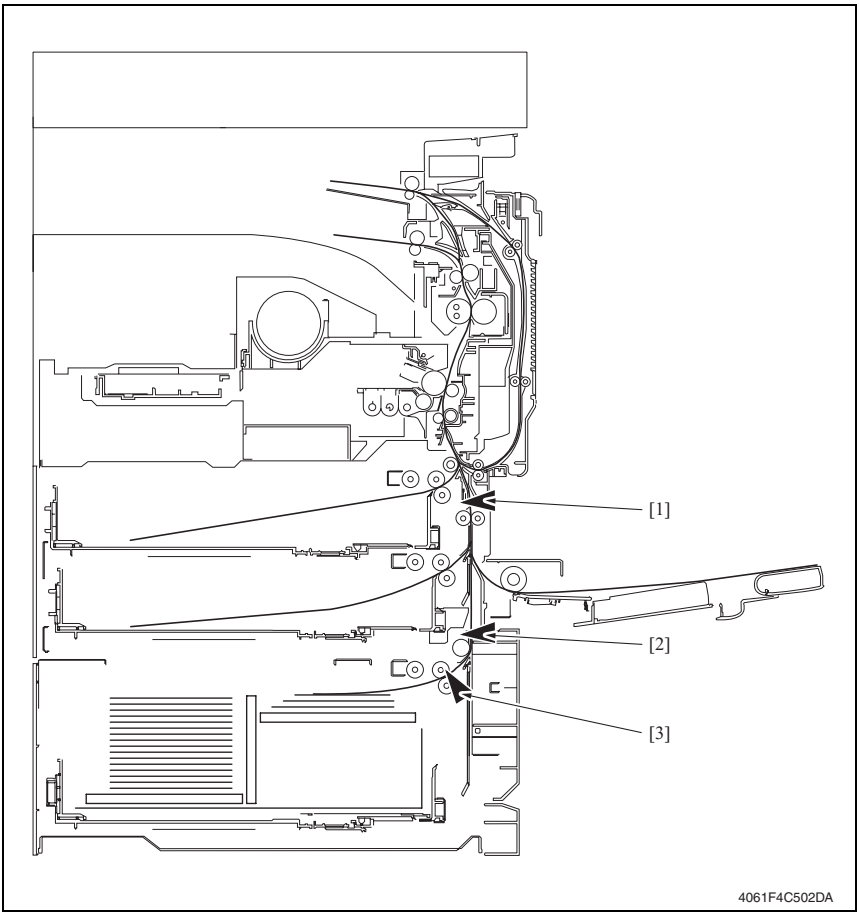
No.	Misfeed location	Misfeed access location	Action
[1]	LCT Paper Take-Up section	Right Door	P.28
	LCT Vertical Transport Section		

7.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

7.2 Sensor layout



[1]	Vertical Conveyance Sensor	PC2	[3]	Paper Feed Sensor	PC1-LCT
[2]	Vertical Conveyance Sensor	PC2-LCT			

7.3 Solution

7.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper. Instruct the user on the correct paper storage procedures.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are the Paper Separator Fingers dirty, deformed, or worn?	Clean or replace the defective Paper Separator Finger.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

7.3.2 LCT Paper Take-Up section/LCT Vertical Transport Section

A. Detection timing

Type	Description
LCT Paper Take-Up section/ Vertical transport section misfeed detection	The leading edge of the paper does not block the Paper Feed Sensor (PC1-LCT) or the LCT Vertical Transport Sensor (PC2-LCT) even after the set period of time has elapsed after the Paper Feed Motor (M1-LCT) is energized.
	The Vertical Conveyance Sensor (PC2) is not blocked even after the lapse of a given period of time after the LCT Vertical Transport Sensor (PC2-LCT) has been blocked by a paper.
	The Paper Feed Sensor (PC1-LCT) is not unblocked even after the lapse of a given period of time after PC1-LCT has been blocked by a paper.
LCT detection of paper remaining	The LCT Vertical Transport Sensor (PC2-LCT) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Paper Feed Sensor (PC1-LCT) is blocked when the Main Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

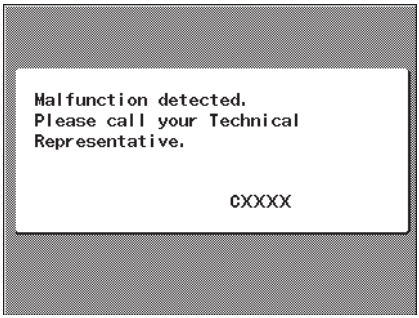
Relevant electrical parts	
Paper Feed Sensor (PC1-LCT) Vertical Conveyance Sensor (PC2-LCT) Vertical Conveyance Sensor (PC2) Paper Feed Motor (M1-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial check items	-	-
2	PC1-LCT sensor check	PWB-C1 LCT PJ5C1 LCT-2 (ON)	PC-407 C-8
3	PC2-LCT sensor check	PWB-C1 LCT PJ5C1 LCT-5 (ON)	PC-407 C-7
4	PC2 sensor check	PWB-A PJ22A-9 (ON)	D-7
5	M1-LCT operation check	PWB-C1 LCT PJ6C1 LCT-1 to 4	PC-407 C-8
6	PWB-C1 LCT replacement	-	-

8. Trouble code

8.1 Trouble code display

- The main body's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code on the Touch Panel.



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8.2 Trouble code list

Code	Item	Description
C0001	LCT communication error	• Due to a software malfunction, etc., the time on the watchdog timer has run out and a reset is performed.
C0209	LCT Elevator Motor Failure	• The Elevator Motor Pulse Sensor (PC10-LCT) cannot detect both edges of H/L even after the set period of time has elapsed while the Elevator Motor (M5-LCT) is turning backward/forward (raise/lower).

Code	Item	Description
C0210	LCT Lift Failure	• The Tray Upper Limit Sensor (PC4-LCT) is not blocked even after the set period of time has elapsed after the paper lift-up operation began. • The Tray Upper Limit Sensor (PC4-LCT) is not blocked even after the set pulse is detected by the Elevator Motor Pulse Sensor (PC10-LCT) after the paper lift-up operation began. • The Tray Lower Position Sensor (PC13-LCT) is not unblocked even after the set pulse is detected by the Elevator Motor Pulse Sensor (PC10-LCT) after the paper lift-up operation began. • The Tray Upper Limit Sensor (PC4-LCT) is not blocked even after the set period of time has elapsed after the paper lift-up operating. • The Tray Lower Position Sensor (PC13-LCT) is not blocked even after the set period of time has elapsed after the paper lift-down operation began. • The Tray Lower Position Sensor (PC13-LCT) is not blocked even after the set pulse is detected by the Elevator Motor Pulse Sensor (PC10-LCT) after the paper lift-down operation began. • The Tray Upper Limit Sensor (PC4-LCT) is not unblocked even after the set pulse is detected by the Elevator Motor Pulse Sensor (PC10-LCT) after the paper lift-down operation began. • The Lower Limit Sensor (PC7-LCT) is blocked while the paper lift-down operating.
C0212	LCT Lock Release Failure	• The drawer cannot be determined to be out of position even after the set period of time has elapsed after the Tray Lock Solenoid (SL1-LCT) is energized after the lowering operation is finished.
C0213	LCT Shift Gate Operation Failure	• The Shift Gate Home Position Sensor (PC14-LCT) cannot be set to L even after the set period of time has elapsed after the operation of the Shift Gate Motor (M3-LCT) began with the Shift Gate Home Position Sensor (PC14-LCT) set to L.

Code	Item	Description
C0214	LCT Shift Failure	• The Shifter Return Position Sensor (PC11-LCT) is not blocked even after the set period of time has elapsed after the shift operation began (shift to the right). • The Shifter Return Position Sensor (PC11-LCT) is not blocked even after the set pulse is detected by the Shift Motor Pulse Sensor (PC8-LCT) after the shift operation began (shift to the right). • The Shifter Home Position Sensor (PC12-LCT) is not unblocked even after the set pulse is detected by the Shift Motor Pulse Sensor (PC8-LCT) after the shift operation began (shift to the right). • The Shifter Home Position Sensor (PC12-LCT) is not blocked even after the set period of time has elapsed after the return operation began (shift to the left). • The Shifter Home Position Sensor (PC12-LCT) is not blocked even after the set pulse is detected by the Shift Motor Pulse Sensor (PC8-LCT) after the return operation began (shift to the left). • The Shifter Return Position Sensor (PC11-LCT) is not unblocked even after the set pulse is detected by the Shift Motor Pulse Sensor (PC8-LCT) after the return operation began (shift to the left).
C0215	LCT Shift Motor Failure	• The Shift Motor Pulse Sensor (PC8-LCT) cannot detect both edges of H/L even after the set period of time has ward/forward (raise/lower).

• Open and close the Front Door or turn OFF and ON the Main Power Switch.

8.3 Solution

8.3.1 C0001: LCT communication error

Relevant electrical parts	
Main Control Board (PWB-C1 LCT)	

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Turn the main body off, then on again.	-	-
2	PWB-C1 LCT replacement	-	-

8.3.2 C0209: LCT Elevator Motor Failure

Relevant electrical parts	
Elevator Motor (M5-LCT) Elevator Motor Pulse Sensor (PC10-LCT)	Interface Board (PWB-H LCT) Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the motor and sensor connectors for proper connection, and correct as necessary.	-	-
2	Check the connector of motor for proper drive coupling, and correct as necessary.	-	-
3	PC10-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-5 (ON)	PC-407 G-5
4	M5-LCT operation check	PWB-C1 LCT PJ2H<B> LCT-6 to 7	PC-407 G-6
5	PWB-H LCT replacement	-	-
6	PWB-C1 LCT replacement	-	-

8.3.3 C0210: LCT Lift Failure

Relevant electrical parts	
Tray Upper Limit Sensor (PC4-LCT) Tray Lower Position Sensor (PC13-LCT) Elevator Motor Pulse Sensor (PC10-LCT) Lower Limit Sensor (PC7-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the sensor connectors for proper connection, and correct as necessary.	-	-
2	PC4-LCT sensor check	PWB-C1 LCT PJ5C1 LCT-12 (ON)	PC-407 C-7
3	PC13-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-9 (ON)	PC-407 G-3
4	PC10-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-5 (ON)	PC-407 G-5
5	PC7-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-2 (ON)	PC-407 G-6
6	PWB-C1 LCT replacement	-	-

8.3.4 C0212: LCT Lock Release Failure

Relevant electrical parts	
Tray Lock Solenoid (SL1-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the SL1-LCT connector for proper connection, and correct as necessary.	-	-
2	SL1-LCT operation check	PWB-C1 LCT PJ7C1 LCT-4 (ON)	PC-407 C-8
3	PWB-C1 LCT replacement	-	-

8.3.5 C0213: LCT Shift Gate Operation Failure

Relevant electrical parts	
Shift Gate Home Position Sensor (PC14-LCT) Shift Gate Motor (M3-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the motor and sensor connectors for proper connection, and correct as necessary.	-	-
2	Check the connector of motor for proper drive coupling, and correct as necessary.	-	-
3	PC14-LCT sensor check	PWB-C1 LCT PJ2H<B> LCT-1 (ON)	PC-407 G-6
4	M3-LCT operation check	PWB-C1 LCT PJ2H<B> LCT-2 to 3	PC-407 G-6
5	PWB-C1 LCT replacement	-	-

8.3.6 C0214: LCT Shift Failure

Relevant electrical parts	
Shift Motor Pulse Sensor (PC8-LCT) Shifter Return Position Sensor (PC11-LCT) Shifter Home Position Sensor (PC12-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the sensor connectors for proper connection, and correct as necessary.	-	-
2	PC8-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-3 (ON)	PC-407 G-5
3	PC11-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-7 (ON)	PC-407 G-4
4	PC12-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-8 (ON)	PC-407 G-4
5	PWB-C1 LCT replacement	-	-

8.3.7 C0215: LCT Shift Motor Failure

Relevant electrical parts	
Shift Motor (M4-LCT) Shift Motor Pulse Sensor (PC8-LCT)	Main Control Board (PWB-C1 LCT)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Check the motor and sensor connectors for proper connection, and correct as necessary.	-	-
2	Check the connector of motor for proper drive coupling, and correct as necessary.	-	-
3	PC8-LCT sensor check	PWB-C1 LCT PJ2H<A> LCT-3 (ON)	PC-407 G-5
4	M4-LCT operation check	PWB-C1 LCT PJ2H<B> LCT-4 to 5	PC-407 G-6
5	PWB-C1 LCT replacement	-	-

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

JS-502

2008.12

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.

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2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

JS-502

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

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OUTLINE

1. System configuration

A. Type

Name	Job Separator
Type	Expansion drawer
Installation	Installed in the copier
Document Alignment	Center

B. Paper type

Exit Tray	Size	Type		capacity
Tray 1	A6S to A3 (5 1/2 to 11 x 17 inch) width: 90 mm to 297 mm (3.5 to 11.75 inch) length: 139.7 mm to 432 mm (5.5 to 17 inch)	Plain Paper (56 to 90 g/m^2 ,15 to 24 lb)		250 sheets
		Special	OHP transparencies	20 sheets
			Thick paper (91 to 210g/m^2, 24.25 to 55.75 lb)	
			Envelope	
			Label	
			Letterhead	
			Governmentstandard postcards	
Tray 2	A5 to A3 (5.5 to 8.5 inch) Max.: 297 mm x 432 mm (11.75 to 17 inch) Min.: 139.7 mm x 139.7 mm (5.5 to 5.5 inch)	Plain Paper (56 to 90 g/m^2 ,15 to 24 lb)		100 sheets

C. Machine specifications

Power Requirements	DC 5 V ± 5 % (supplied from the main unit)
Max. Power Consumption	0.2 W or less
Dimensions	450 mm (W) x 443 mm (D) x 75 mm (H) 17.75 inch (W) x 17.5 inch (D) x 3 inch (H)
Weight	Approx. 1.7 kg (3.75 lb)

D. Operating environment

- Conforms to the operating environment of the main body.

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

2. Other

2.1 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

⚠ Caution

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**
- **When it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.**

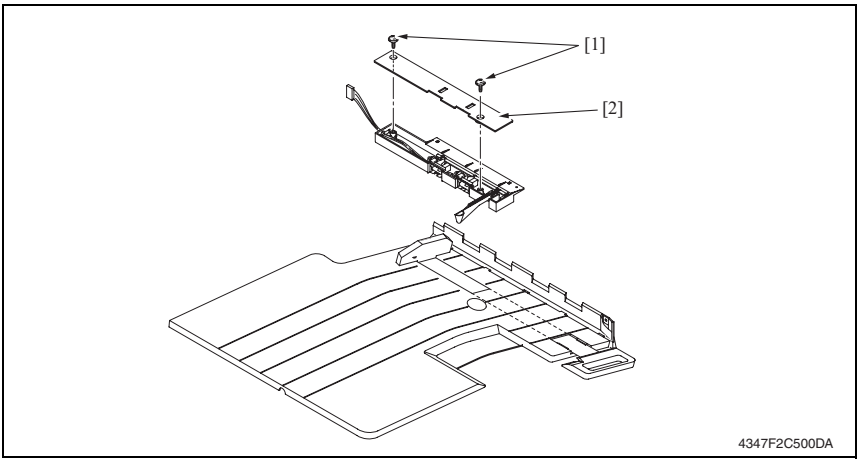
2.2 Disassembly/Assembly/Cleaning list (Other parts)

2.2.1 Disassembly/Assembly parts list

No.	Section	Part name	Ref.Page
1	Exterior parts	Upper Cover	P.4

2.3 Disassembly/Assembly procedure

2.3.1 Upper Cover



1. Remove two screws [1], and remove the Upper Cover [2].

ADJUSTMENT/SETTING

3. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

4. Sensor Check

4.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main body in the standby state (including a misfeed, malfunction, and closure failure condition).

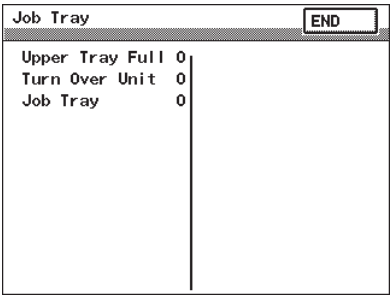
<Procedure>

1. Display the Tech. Rep. Mode screen.
   See P.154 of the main body service manual.
2. Touch [I/O Check].
3. Touch [Job Tray].

4.2 I/O check list

4.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main body.



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4.2.2 I/O check list

A. Job Tray

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC1-JOB	Job Tray	Upper Tray Full	Paper Full Detection Sensor	Blocked	Unblocked
-		Turn Over Unit	Turn Over Unit Set signal	Set	Not set
-		Job Tray	Job Tray Set signal	Set	Not set

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

FS-530/PU-501 /OT-602

2008.12

KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 1.0

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2008/12	1.0	—	Issue of the first edition

CONTENTS

FS-530/PU-501/OT-602

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

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OUTLINE

1. Product specifications

1.1 FS-530

A. Type

Name	Multi staple finisher built into the copier
Installation	Installed in the copier
Document Alignment	Center
Consumables	Staples

B. Functions

Modes	Non sort, sort, group, sort stable, and punch (when PU-501 is mounted)

C. Paper type

(1) Non sort

Type	Size	Weight	Max. Capacity		
Plain paper	A6S to A3 5 1/2 to 11 x17 Max. 297 mm x 431.8 mm 11.75 x 17 inch Min. 100 mm x 139.7 mm 4 x 5.5 inch	56 to 90g/m² 15 to 24 lb	Exit Tray1	200 sheets	
			Exit Tray2	A4S, 8 1/2 x 11S or less	1000 sheets
				B4, 8 1/2 x 14S or greater	500 sheets
Thick paper		91 to 210g/m² 24.25 to 55.75 lb	20 sheets		
OHP trans-parencies		-			
Translucent paper		-			
Government-standard postcards		-			
Envelope		-			
Label		-			
Letterhead		-			

(2) Sort/Group

Type	Size	Weight	Max. Capacity		
Plain paper	A6S to A3 5 1/2 to 11 x17 Max. 297 mm x 431.8 mm 11.75 x 17 inch Min. 182 mm x 139.7 mm 7.25 x 5.5 inch	56 to 90g/m² 15 to 24 lb	Exit Tray1	200 sheets	
			Exit Tray2	A4S, 8 1/2 x 11S or less	1000 sheets
				B4, 8 1/2 x 14S or greater	500 sheets

(3) Sort Staple

Type	Size	Weight	Max. Capacity		
Plain paper	A6S to A3 5 1/2 to 11 x17 Max. 297 mm x 431.8 mm 11.75 x 17 inch Min. 182 mm x 139.7 mm 7.25 x 5.5 inch	56 to 90g/m² 15 to 24 lb	Exit Tray1	200 sheets	
			Exit Tray2	A4S, 8 1/2 x 11S or less	1000 sheets
				B4, 8 1/2 x 14S or greater	500 sheets

(4) Punch

Type	Size	Weight	Exit Tray
Plain paper	B5S/B5 to A3 8 1/2 to 11 x 17	60 to 90 g/m² 15 to 24 lb	Exit Tray1 Exit Tray2 OT-602 MT-502

D. Stapling

Staple Filling Mode	Dedicated Staple Cartridge (5000 staples)	
Staple Detection	Available (Nearly Empty: 20 remaining staples)	
Stapling Position	Front: Diagonal 45° 1 point *1	A4, A3, B5, B4S 8 1/2 x 11, 11 x 17
	Rear: Diagonal 45° 1 point *1	
	Front: Parallel 1 point	A4S, B5S, A5 8 1/2 x 11S, 8 1/2 x 14S, 5 1/2 x 8 1/2
	Rear: Parallel 1 point	
	Side: Parallel 2 point	A4, A4S, A3, B5, B5S, B4S, A5 8 1/2 x 11, 8 1/2 x 11S, 8 1/2 x 14S, 11 x 17, 5 1/2 x 8 1/2
Manual Staple	None	

*1: Diagonal 30° for B5 and B4S

E. Hole Punch

No. of Holes	Metric: 4holes, Inch: 2holes / 3holes
Punch dust full detection	Available

F. Machine specifications

Power Requirements	DC 24 V (supplied from the main body)
	DC 5.1 V (generated by Finisher)
Max. Power Consumption	63 W
Dimensions	319 mm (W) x 558 mm (D) x 573 mm (H) 12.5 inch (W) x 22 inch (D) x 22.5 inch (H)
Weight	21.4 kg (47.25 lb)

G. Operating environment

- Conforms to the operating environment of the main body.

1.2 PU-501

A. Type

Name	Punch Unit PU-501
Installation	Built into the Finisher
Paper Size	B5S/B5 to A3 8 $^1/_2$ x 11S, 8 $^1/_2$ x 11, 8 $^1/_2$ x 14S, 11 x 17
Paper Type	Plain Paper (60 to 163 g/m^2 , 16 to 43.5 lb)
Punch Hole	Metric: 4hole, Inch: 2,3hole
Number of Stored Punch Wastes	Metric (4hole): For 1,500 sheets of paper (80 g/m^2) Inch (2,3hole): For 1,000 sheets of paper (75 g/m^2)
Document Alignment	Center

B. Machine specifications

Power Requirements	Supplied by the Finisher
Dimensions	114 mm (W) x 461 mm (D) x 136 mm (H) 4.5 inch (W) x 18.25 inch (D) x 5.25 inch (H)
Weight	Approx. 1.9 kg (4.25 lbs) or less

C. Operating environment

- Conforms to the operating environment of the main body.

1.3 OT-602

A. Type

Name	Output Tray OT-602
Installation	Fixed to the Finisher
Mode	Non sort, sort, group, and sort stable
Number of Bins	1 bin
Document Alignment	Center

B. Paper Type

<table>
<tr><th>Mode</th><th>Size</th><th colspan="2">Type</th><th>Capacity</th></tr>
<tr><td rowspan="9">Non sort</td><td rowspan="9">A6S to A3
5 1/2 to 11 x17
Max. 297 mm x 431.8 mm
11.75 x 17 inch
Min. 100 mm x 139.7 mm
4 x 5.5 inch</td><td colspan="2">Plain Paper
(56 to 90 g/m²,15 to 24 lb)</td><td>200 sheets
(up to a height of 24 mm)</td></tr>
<tr><td rowspan="8">Special</td><td>OHP transparencies</td><td rowspan="8">20 sheets
(up to a height of 24 mm</td></tr>
<tr><td>Thick paper
(91 to 210g/m²,
24.25 to 55.75 lb)</td></tr>
<tr><td>Envelope</td></tr>
<tr><td>Label</td></tr>
<tr><td>Letterhead</td></tr>
<tr><td>Translucent paper</td></tr>
<tr><td>Governmentstandard postcards</td></tr>
<tr><td>sort / group</td><td rowspan="2">A6S to A3
5 1/2 to 11 x17
Max. 297 mm x 431.8 mm
11.75 x 17 inch
Min. 182 mm x 139.7 mm
7.25 x 5.5 inch</td><td colspan="2" rowspan="2">Plain Paper
(56 to 90 g/m² ,15 to 24 lb)</td><td>200 sheets
(up to a height of 24 mm)</td></tr>
<tr><td>sort stable</td><td>200 sheets or 20 copies (up to a height of 24 mm)</td></tr>
</table>

C. Machine specifications

Dimensions	282 mm (W) x 368 mm (D) x 57 mm (H) 11 inch (W) x 14.5 inch (D) x 2.25 inch (H)
Weight	0.7 kg (1.5 lb)

D. Operating environment

- Conforms to the operating environment of the main body.

NOTE

How product names appear in the document

- FS-530: Finisher
- PU-501: Punch Unit
- OT-602: Output Tray

NOTE

- **These specifications are subject to change without notice.**

MAINTENANCE

2. Periodical check

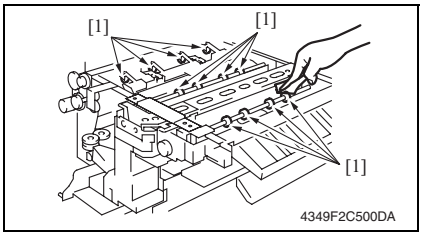
2.1 Maintenance procedure (Periodical check parts)

NOTE

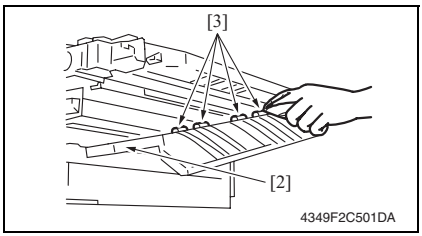
- **The alcohol described in the cleaning procedure of Maintenance represents the isopropyl alcohol.**

2.1.1 Cleaning of the Roller and Roll

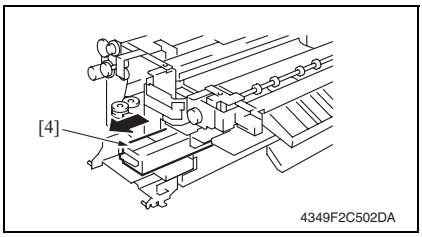
1. Remove the Sorted Copy Tray.
See P.16
2. Remove the Horizontal Transport Unit.
See P.16
3. Remove the Horizontal Transport Top Cover.
See P.13



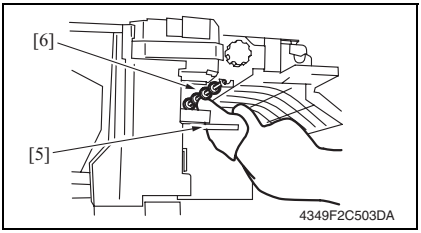
4. Using a soft cloth dampened with alcohol, wipe the rollers and rolls [1].



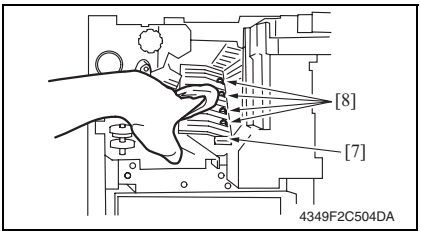
5. Lower Processing Guide FN1 [2].
6. Using a soft cloth dampened with alcohol, wipe four rolls [3].



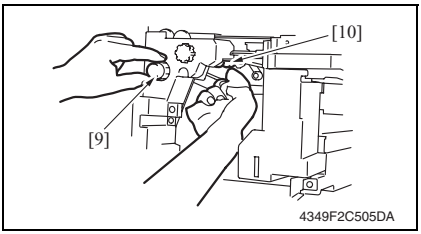
7. Remove Punch Waste Storage Box FN3.1 [4].
(only when PU-501 is installed)



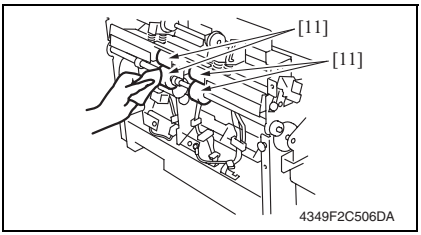
8. Lower Processing Guide FN-3 [5].
9. Using a soft cloth dampened with alcohol, wipe the roll [6].



10. Lower Processing Guide FN-4 [7].
11. Using a soft cloth dampened with alcohol, wipe four rolls [8].



12. While turning Processing Knob FN-5 [9], wipe the roll [10] using a soft cloth dampened with alcohol.



13. Using a soft cloth dampened with alcohol, wipe four rollers [11].

3. Firmware upgrade

3.1 Preparations for Firmware rewriting

3.1.1 Service environment

- Drive which enables writing/reading of Compact flash
- Compact flash (with 32 MB or more)

3.1.2 Writing into the Compact flash

- Copy the firmware files using the computer.

NOTE

- **Copy only those files to be upgraded to the compact flash.**
- **If wrong firmware is copied, no screen display is given and thus no firmware can be downloaded.**

3.1.3 Checking ROM version

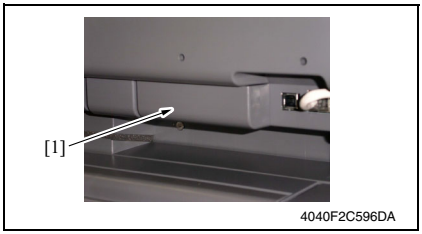
- Before attempting to upgrade the firmware, check the current ROM version.
  See P.210 of the main body service manual.

3.2 Firmware rewriting

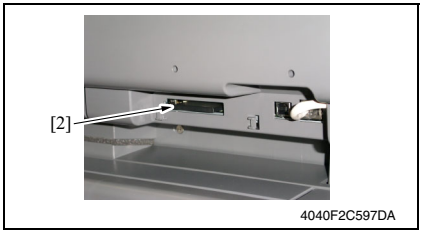
3.2.1 Finisher

NOTE

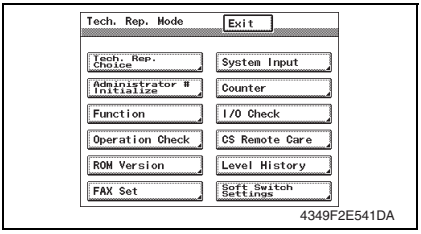
- **NEVER remove or insert the Compact Flash card with the machine power turned ON.**
- **Make sure that the MSC firmware has not been copied to the compact flash card.**
- **The engine firmware and Finisher firmware can be upgraded at the same time.**
  See P.41 of the main body service manual.
- **If the files copied to the compact flash card are those of either the engine or Finisher, or wrong, no screen display is given and thus no firmware can be downloaded.**



1. Turn OFF the main power switch.
2. Remove the Compact flash Cover [1].



3. Insert the compact flash card [2], to which the finisher upgrading files have been copied, into the slot.



4. Open the Right Door.

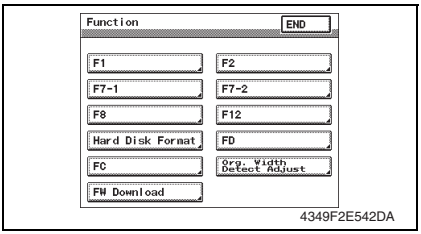
NOTE

- **Be sure to open the Right Door before turning ON the main power switch.**

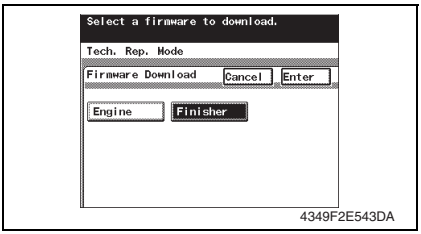
5. Turn ON the main power switch.

6. Display the Tech. Rep. Mode screen. See P.154 of the main body service manual.

7. Touch [Function].



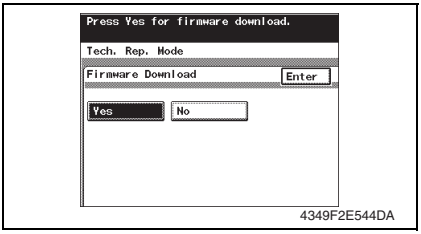
8. Touch [FW Download].



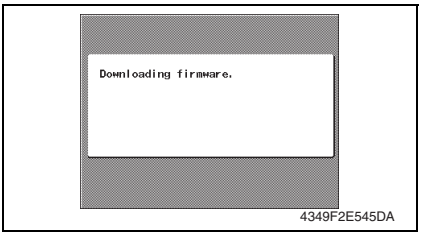
9. Select [Finisher] and touch [Enter].

NOTE

- **Touch [Engine] also if the Engine firmware is to be upgraded at the same time.**



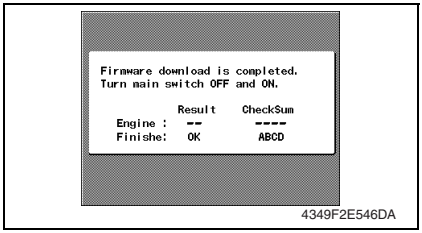
10. Select [Yes] and touch [Enter].



11. The firmware upgrading sequence will start.

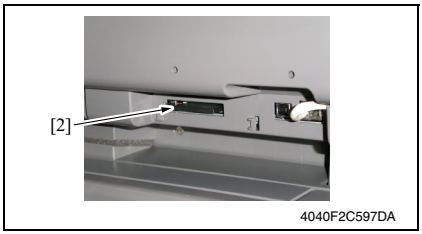
NOTE

- **The firmware upgrading sequence will last for 5 to 6 min. During this period, NEVER turn off the machine power.**
- **If the Engine firmware is also upgraded, the entire sequence will take about 10 to 11 min.**



4349F2E546DA

12. When the upgrading sequence is completed, turn OFF the main power switch.



4040F2C597DA

13. Remove the compact flash card [2] from the slot. After some while thereafter, turn ON the main power switch.

14. Display the Tech. Rep. Mode screen.
See P.154 of the main body service manual.

15. Touch [ROM Version].

16. Make sure if the version of Firmware is updated.

4. Other

4.1 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

⚠ Caution

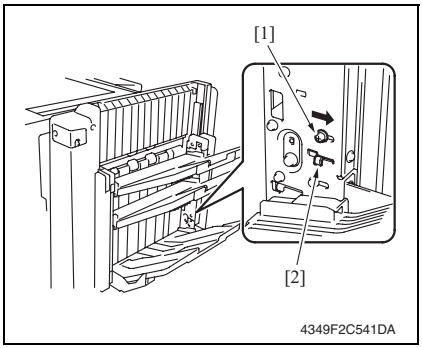
- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" and follow the corresponding removal procedures.**
- **The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.**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

4.2 Precautions to be observed when option configuration is changed

- The Exit Tray detection position must be changed depending on configuration of the options mounted on the copier.

4.2.1 Setting the Exit Tray Detection Position

A. When only OT-602, MT-502, or SD-507 is mounted

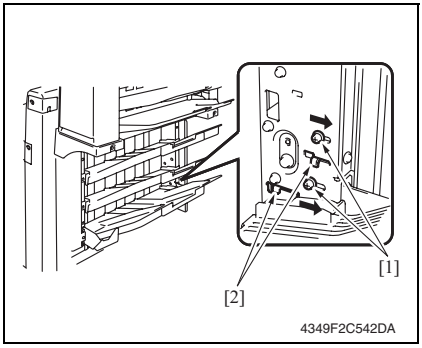


1. Loosen the screw [1] and move it in the direction of the arrow. Then, tighten it at the new position.

NOTE

- **This step should be done securely. If not, any trouble may happen.**
- **Be sure to move the screw itself.**
- **Do not move the screw by using the Adjust Plate [2].**

B. When OT-602 + MT-502 or OT-602 + SD-507 are mounted

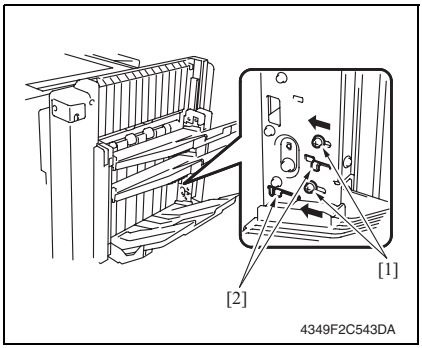


1. Loosen the two screws [1] and move them in the direction of the arrow. Then, tighten them at the corresponding new positions.

NOTE

- **This step should be done securely. If not, any trouble may happen.**
- **Be sure to move the screw itself.**
- **Do not move the screw by using the Adjust Plate [2].**

C. When only FS-530 is mounted



1. Loosen the two screws [1] and move them in the direction of the arrow. Then, tighten them at the corresponding new positions.

NOTE

- **This step should be done securely. If not, any trouble may happen.**
- **Be sure to move the screw itself.**
- **Do not move the screw by using the Adjust Plate [2].**

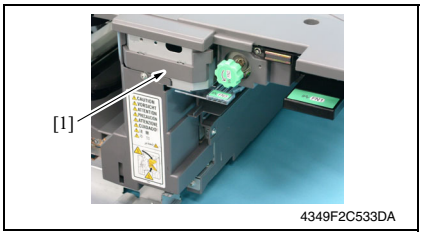
4.3 Disassembly/Assembly/Cleaning list (Other parts)

4.3.1 Disassembly/Assembly parts list

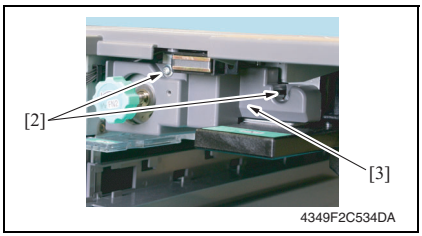
No.	Section	Part name	Ref.Page
1	Exterior parts	Horizontal Transport Upper Front Cover	P.13
2		Horizontal Transport Upper Cover	P.13
3		Horizontal Transport Front Right Cover	P.13
4		Front Door	P.14
5		Horizontal Transport Lower Front Cover	P.13
6		Horizontal Transport Left Front Cover	P.14
7		Paper Exit Front Cover	P.14
8		2nd Drawer	P.15
9		Output Tray OT-601 (Option)	P.15
10		1st Drawer	P.15
11		Connector Cover	P.14
12		Paper Exit Rear Cover	P.14
13	Unit	Sorted Copy Tray	P.16
14		Horizontal Transport Unit	P.16
15		Stapler Unit	P.17
16		Punch Unit PU-501 (Option)	P.18
17	Others	Storage Paddle Drive Clutch	P.19
18		Exit Paddle Drive Clutch	P.20

4.4 Disassembly/Assembly procedure

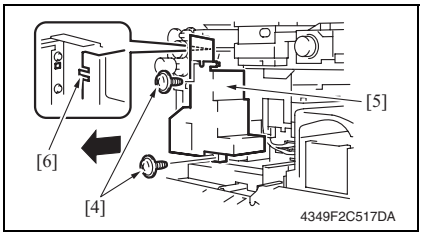
4.4.1 Horizontal Transport Upper Front Cover/Horizontal Transport Front Right Cover/Horizontal Transport Lower Front Cover



1. Open the Front Door.
2. Unhook the tab, and remove the Horizontal Transport Upper Front Cover [1].



3. Remove two screws [2], and remove the Horizontal Transport Front Right Cover [3].

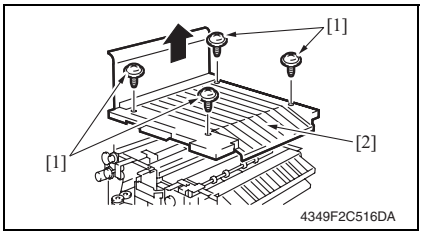


4. Remove two screws [4], and remove the Horizontal Transport Lower Front Cover [5].

NOTE

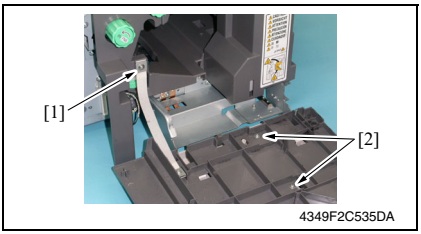
- **At reinstallation, first fit the tab [6] into position.**

4.4.2 Horizontal Transport Upper Cover

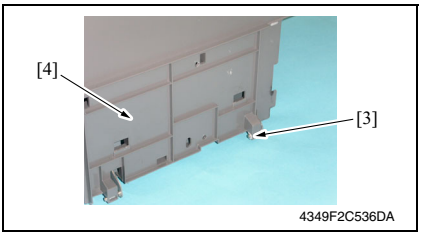


1. Remove four screws [1], and remove the Horizontal Transport Upper Cover [2].

4.4.3 Front Door

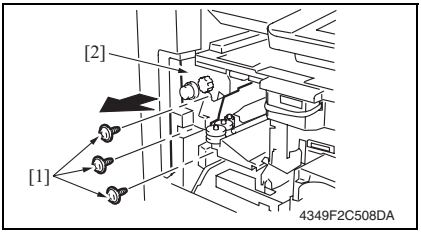


1. Open the Front Door.
2. Remove the screw [1], and remove the stopper.
3. Remove two screws [2], and remove the dummy cover.



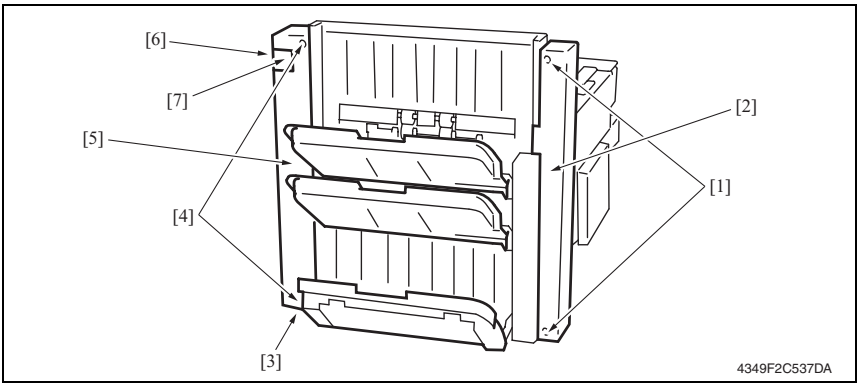
4. Close the Front Door.
5. Remove the clip [3], and remove the Front Door [4].

4.4.4 Horizontal Transport Left Front Cover



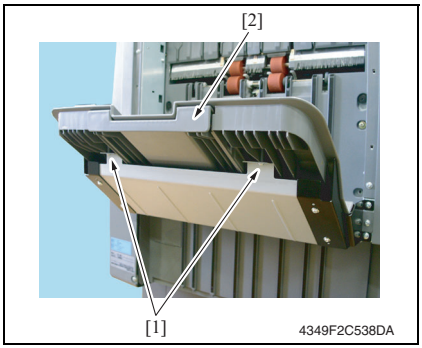
1. Remove three screws [1], and remove the Horizontal Transport Left Front Cover [2].

4.4.5 Paper Exit Front Cover/Paper Exit Rear Cover/Connector Cover



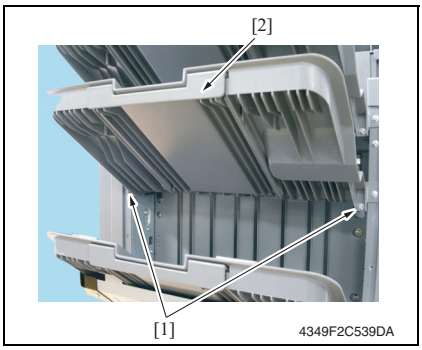
1. Remove two screws [1], and remove the Paper Exit Front Cover [2].
2. Loosen the screw [3], remove two screws [4], and remove the Paper Exit Rear Cover [5].
3. Remove the screw [6], and remove the Connector Cover [7].

4.4.6 2nd Drawer



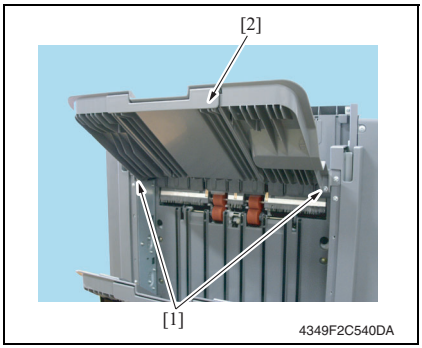
1. Remove two screws [1], and remove the 2nd Drawer [2].

4.4.7 Output Tray (OT-602)



1. Remove two screws [1], and remove the Exit Tray [2].

4.4.8 1st Drawer

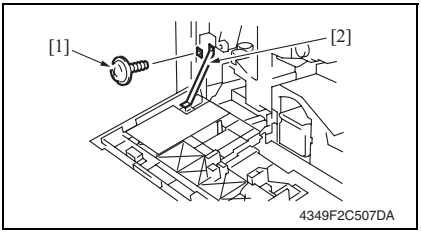


1. Remove two screws [1], and remove the 1st Drawer [2].

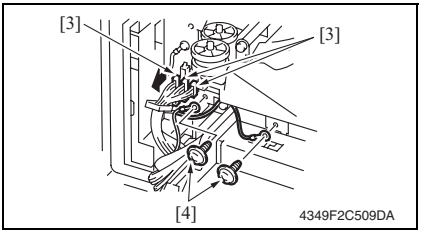
4.4.9 Sorted Copy Tray

NOTE

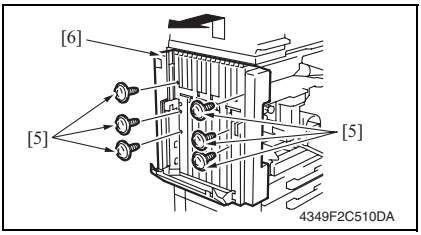
- **When removing the Sorted Copy Tray, set the Sorted Copy Tray to its home position.**
- **If the Exit Tray (OT-602) is installed, remove it in advance.**



1. Open the Front Door.
2. Remove the screw [1], and remove the Front Door Stopper [2].
3. Remove the Horizontal Transport Left Front Cover.
See P.14

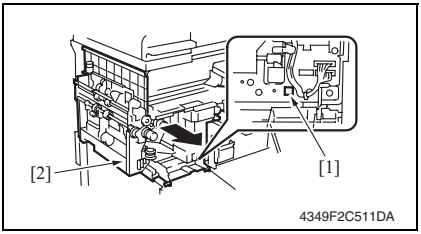


4. Disconnect three connectors [3].
5. Remove two screws [4], and remove the ground wire.



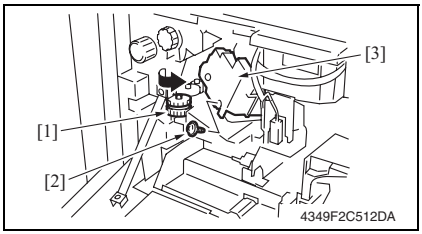
6. Remove six screws [5], and lift the Sorted Copy Tray [6] upward and off the copier.

4.4.10 Horizontal Transport Unit

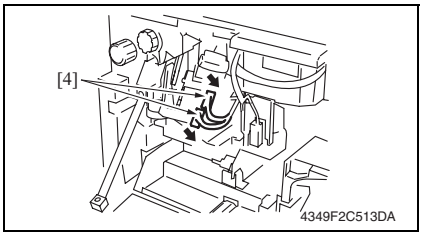


1. Remove the Sorted Copy Tray.
See P.16
2. Remove the Front Right Door.
See P.14
3. While holding down the lock release button [1], remove the Horizontal Transport Unit [2].

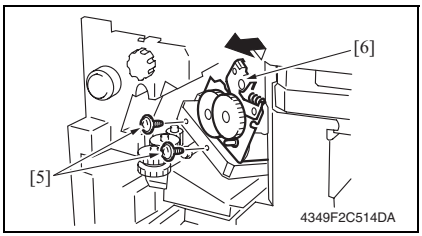
4.4.11 Stapler Unit



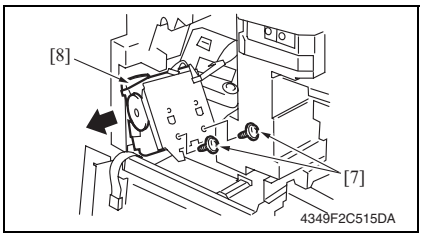
1. Open the Front Door.
2. Turn the dial [1], and move the stapler forward.
3. Remove the Staple Cartridge.
4. Remove the screw [2], and remove the cover [3].



5. Disconnect two connectors [4].

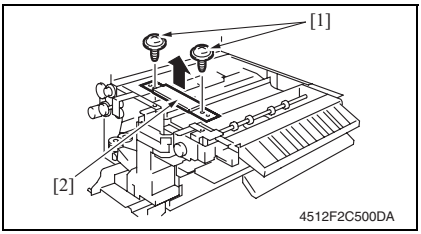


6. Remove two screws [5], and remove the Stapler Unit Assy [6].

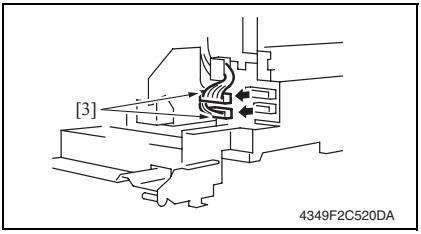


7. Remove two screws [7] and remove the Stapler Unit [8].

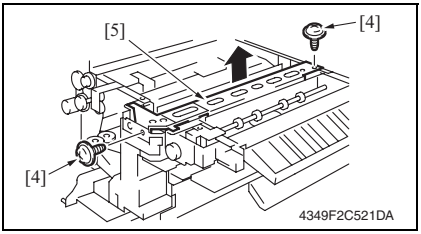
4.4.12 Punch Unit (PU-501)



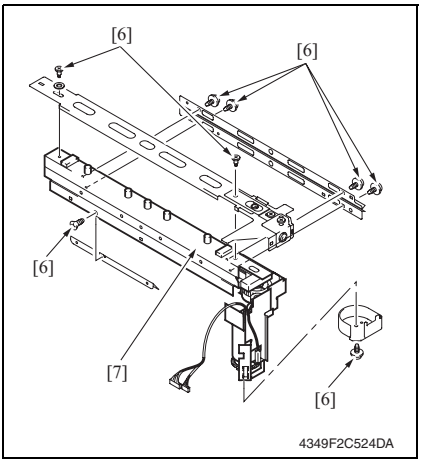
1. Remove the Sorted Copy Tray.
See P.16
2. Remove the Horizontal Transport Unit.
See P.16
3. Remove the Horizontal Transport Upper Cover.
See P.13
4. Remove two screws [1], and remove the Reinforcement Bracket [2].



5. Disconnect two connectors [3].

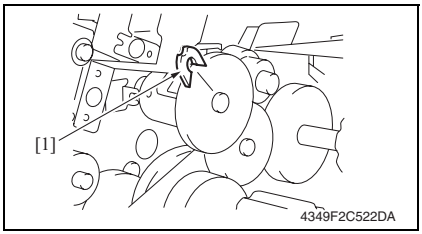


6. Remove two screws [4], and remove the Punch Kit [5].



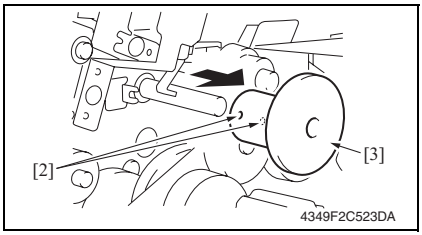
7. Remove eight screws [6], and the Punch Unit [7].

4.4.13 Storage Paddle Drive Clutch



A. Removal Procedure

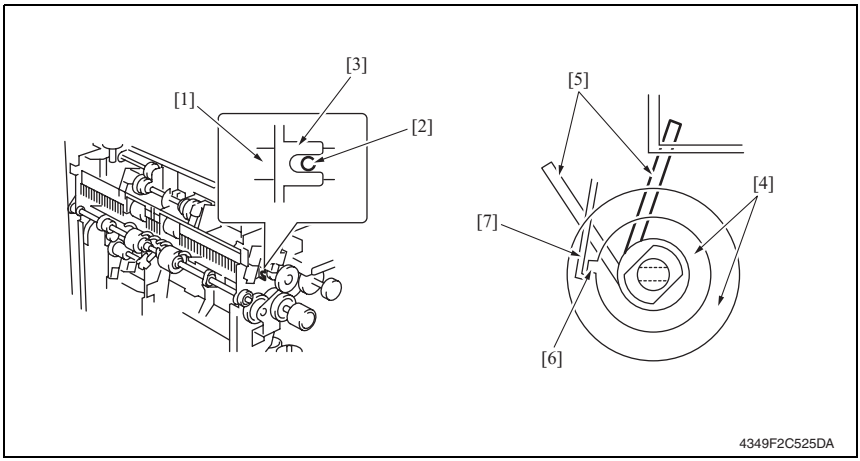
1. Remove the Sorted Copy Tray. See P.16
2. Remove the Horizontal Transport Unit. See P.16
3. Remove the Horizontal Transport Upper Cover. See P.13
4. Remove the C-ring [1].



5. Loosen two hexagonal socket head screws [2], and remove the Storage Paddle Drive Clutch Assy [3].

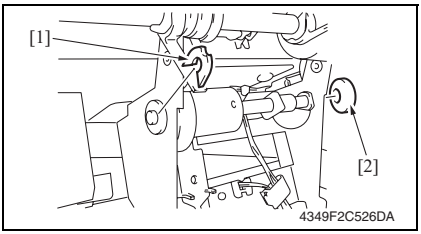
B. Reinstallation Procedure

1. Check that the 2-mm hole [2] of the storage paddle drive shaft [1] and the cutout of the frame [3] are aligned and install the Storage Paddle Drive Clutch Assy [4].
2. Refer to the figure below and check the paddle position [5].



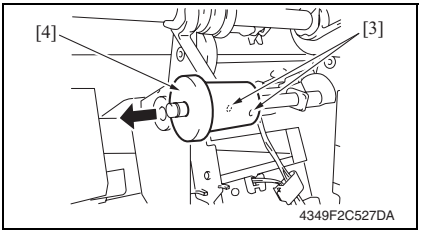
3. Hook the Solenoid Flapper [7] to the tab [6] of the Storage Paddle Drive Clutch Assy [4].
4. Attach the C-ring and reinstall the Storage Paddle Drive Clutch Assy.
5. Adjust the spacing between the C-ring and the Storage Paddle Drive Clutch Assy to 0.2 mm and tighten two hexagonal socket head screws.

4.4.14 Exit Paddle Drive Clutch

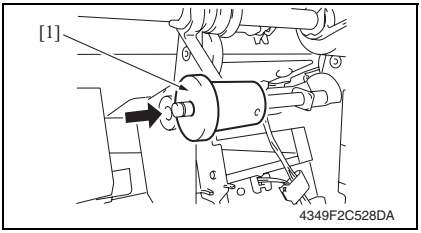


A. Removal Procedure

1. Remove the Sorted Copy Tray.
See P.16
2. Remove the Horizontal Transport Unit.
See P.16
3. Remove the Horizontal Transport Upper Cover.
See P.13
4. Remove the C-ring [1].
5. Remove the gear [2].



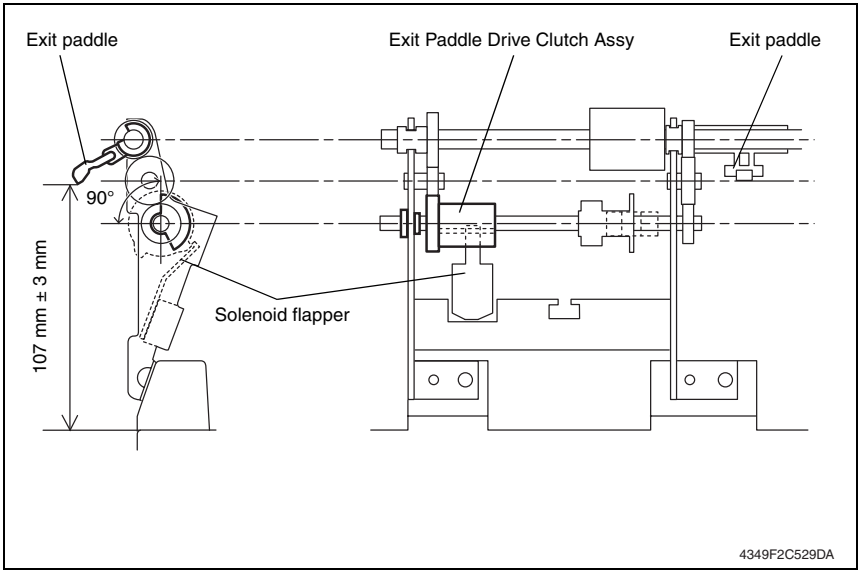
6. Loosen two hexagonal socket head screws [3], and remove the Exit Paddle Drive Clutch Assy [4].

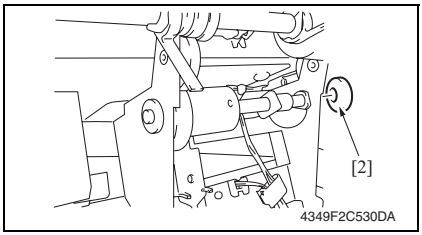


B. Reinstallation Procedure

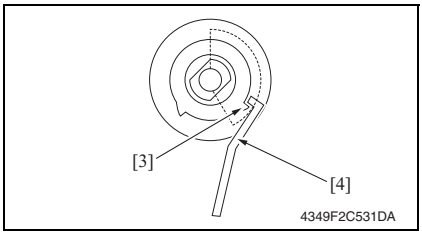
1. Reinstall the Exit Paddle Drive Clutch Assy [1].

Precaution for Exit Paddle Drive Clutch Reinstallation





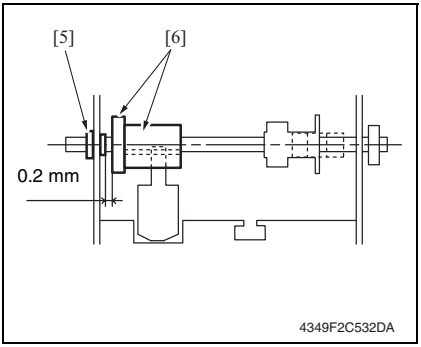
2. Install the gear [2].



3. Hook the Solenoid Flapper [4] to the tab [3] of the Exit Paddle Drive Clutch Assy.

NOTE

- **Install the Exit Paddle Drive Clutch Assy with the side having a wider spacing between the tabs facing upward.**



4. Attach the C-ring and press the Exit Paddle Drive Clutch Assy [6] to the bushing [5].
5. Adjust the spacing between the bushing [5] and the Exit Paddle Drive Clutch Assy [6] to 0.2 mm and tighten two hexagonal socket head screws.

ADJUSTMENT/SETTING

5. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

6. I/O Check

6.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main body in the standby state (including a misfeed, malfunction, and closure failure condition).

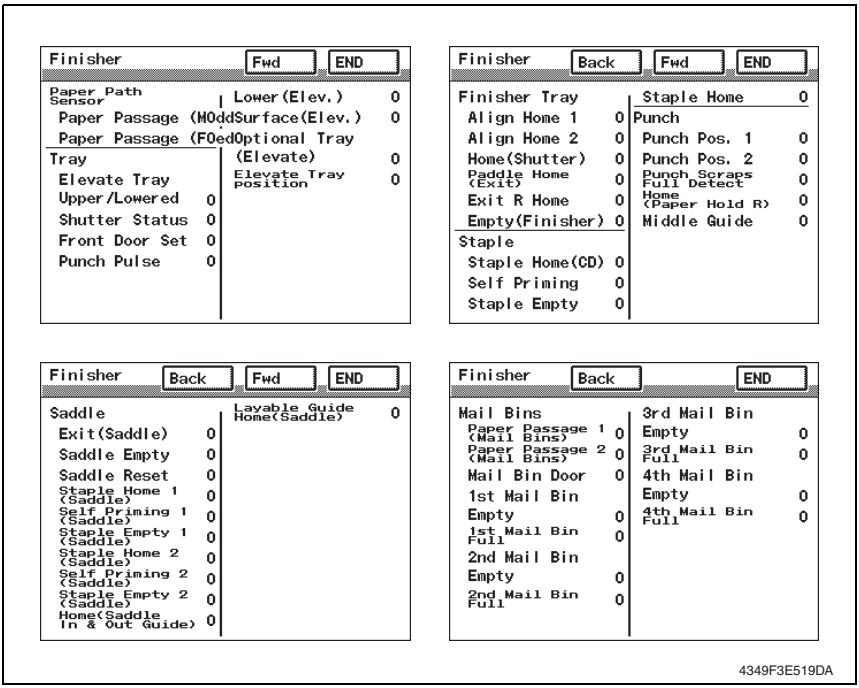
<Procedure>

1. Display the Tech. Rep. Mode screen.
   See P.154 of the main body service manual.
2. Touch [I/O Check].
3. Touch [Finisher].

6.2 I/O check list

6.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main body.



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6.2.2 I/O check list

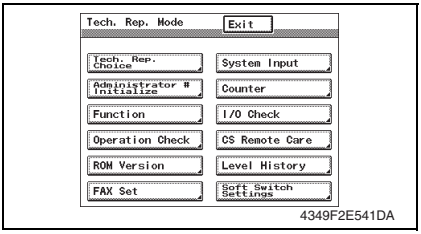
A. Finisher (FS-530/PU-501)

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC5-FN	Finisher	Paper Passage (Middle)	Transport Sensor	Paper present	Paper not present
PC4-FN		Paper Passage (Feed in)	Entrance Sensor	Paper present	Paper not present
PC3-FN		Elevate Tray Upper/ Lowered	Elevator Tray Home Position Sensor	Raised Position	Not raised
S2-FN		Shutter Status	Shutter Detection Switch	Closed	Open
S1-FN		Front Door Set	Front Cover Detection Switch	Closed	Open
PC2-PK		Punch Pulse	Punch Motor Pulse Sensor	Blocked	Unblocked
PC14-FN		Lower (Elev.)	Elevator Tray Lower Limit Sensor	Blocked	Unblocked
PC15-FN		Surface (Elev.)	Top Face Detection Sensor	Blocked	Unblocked
-		Optional Tray (Elevate)	Short Connector	Set	Not set
PC3-FN		Elevate Tray Position	Elevator Tray Home Position Sensor	Blocked	Unblocked
PC6-FN		Align Home 1	Alignment Home Position Sensor 1	At home	Not at home
PC7-FN		Align Home 2	Alignment Home Position Sensor 2	At home	Not at home
PC16-FN		Home (Shutter)	Shutter Home Position Sensor	At home	Not at home
PC11-FN		Paddle Home (Exit)	Exit Paddle Home Position Sensor	At home	Not at home
PC12-FN		Exit R Home	Exit Roller Home Position Sensor	At home	Not at home
PC8-FN		Empty (Finisher)	Storage Tray Detecting Sensor	Paper present	Paper not present
PC10-FN		Staple Home (CD)	Staple Home Position Sensor	Blocked	Unblocked
-		Self Priming	Self-Priming Sensor	Blocked	Unblocked
-		Staple Empty	Staple Empty Detection Sensor	Blocked	Unblocked
-		Staple Home	Staple Home Position Sensor	Blocked	Unblocked
PC3-PK		Punch Pos. 1	Punch Positioning Sensor 1	Unblocked	Blocked
PC4-PK		Punch Pos. 2	Punch Positioning Sensor 2	Unblocked	Blocked
PC1-PK		Punch Scraps Full Detect	Punch Trash Full	Blocked	Unblocked
PC22-SK		Home (Paper Hold R)	Crease Roller Home Position Sensor	Blocked	Unblocked
S4-FN		Middle Guide	Transport Jam Detection Switch	Closed	Open

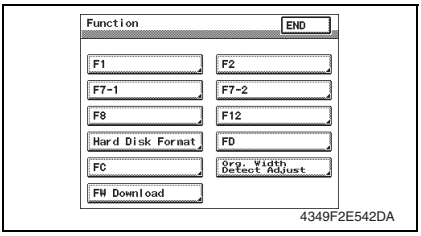
7. Test Mode

7.1 Entering Function Mode

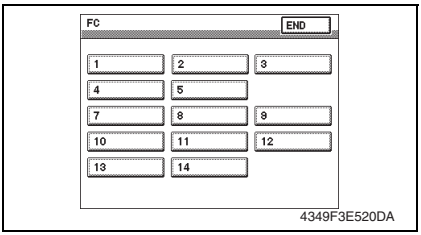
1. Display the Tech. Rep. Mode screen.
See P.154 of the main body service manual.



2. Touch [Function].



3. Touch [FC].



4. Touch the button for the desired function.

7.2 Function Modes

1: Staple unit CD movement mode

- Returns the Staple Unit to the predetermined position after it moves to the 2-point stapling position for A4.
  → Moves from the predetermined position to the inner 2-point stapling position for A4.
  → Moves from the starting position and stops after the predetermined time.
  → Moves to the front of A4.
  → Moves from the starting position and stops after the predetermined time.
  → Moves to the predetermined position.
  → The operation is finished.

2: Aligning movement mode

- Aligning Plates 1 and 2 return to the predetermined position after moving to the aligning position for A4S.
  → Moves from the predetermined position to the second predetermined position for A4S.
  → Stops after the predetermined time.
  → Moves to the aligning position for A4S.
  → Stops after the predetermined time.
  → Moves to the predetermined position.
  → The operation is finished.

3: Elevator Tray ascent operation mode

- The Elevator Tray is raised to mailbin 1. (Mailbin 1 → Additional Mailbin → Mailbin 2)
  → The Exit opens.
  → The Shutter closes.
  → The Paper Output Tray is raised to mailbin 1.
  → The Shutter opens.
  → The Exit closes.
  → The operation is finished.

4: Elevator Tray descent operation mode

- The Elevator Tray is lowered from mailbin 1. (Mailbin 2 → Additional Mailbin → Mailbin 1)
  → The Exit opens.
  → The Shutter closes.
  → The Paper Output Tray is lowered from mailbin 1.
  → The Shutter opens.
  → The Exit closes.
  → The operation is finished.

5: Punch Unit movement mode (appears only when the Punch Kit PU-501 is installed)

- The punch is driven once at a standard hole.
  → The operation is finished.

7: Exit open/close mode

- Opens and closes the Exit.
  → The Exit opens.
  → Stops after the predetermined time.
  → The Exit closes.
  → The operation is finished.

8: Folding Unit movement mode (appears only when the Saddle Kit SD-507 is installed)

See P.32 of the SD-507 service manual.

9: Saddle Unit exit open/close mode (appears only when the Saddle Kit SD-507 is installed)

See P.32 of the SD-507 service manual.

10: Transport drive mode

- Transport drive is performed for the predetermined time. (Performs the same transport drive as the pre-drive with the high speed of the connected copier.)
  → Drives the Entrance Motor (M3-FN).
  → Drives the Transport Motor (M2-FN).
  → Drives the Exit Motor (M1-FN).
  → The operation is finished.
- If the Mail Bin Kit MT-502 is installed, the Mailbins are also driven.
- If the Saddle Kit SD-507 is also installed, the Saddle Transport Motor (M8-SK) is also driven.

11: Shutter drive mode

- Opens and closes the Shutter.
  → The Exit opens.
  → The Shutter closes.
  → Stops after the predetermined time.
  → The Shutter opens.
  → The Exit closes.
  → The operation is finished.

12: Mailbin Solenoid movement mode (appears only when the Mail Bin Kit MT-502 is installed)

See P.10 of the MT-502 service manual.

13: Storage Paddle operation mode

- Performs the single rotate operation for the Storage Paddle.
  → The operation is finished.

14: Exit Paddle movement mode

- Performs the single rotate operation for the Storage Paddle.
  → The operation is finished.

8. Mechanical adjustment

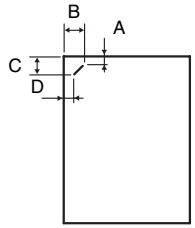
8.1 Staple Position Adjustment

NOTE

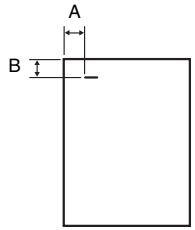
Make this adjustment after any of the following procedures has been performed.

- **When the Stapler has been replaced.**
- **When staple position is misaligned.**

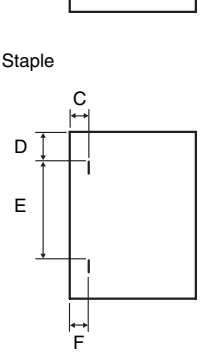
1-Point Tilted Staple



1-point parallel staple



2-Point Staple



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1. Set the staple mode and make a copy.
2. Check the staple position of the paper.

- 1-Point Tilted Staple
  (Paper Width: 216 to 297 mm)
  279 to 297 mm: 45° tilt,
  B5, B4S: 30° tilt

Measurement position	Specification	Adjustment range
A	4.4 mm	—
B	12.1 mm	+1 mm to -2mm
C	12.1 mm	—
D	4.4 mm	+1 mm to -2mm

- 1-Point Parallel Staple
  (Paper Width: 182 to 216 mm)

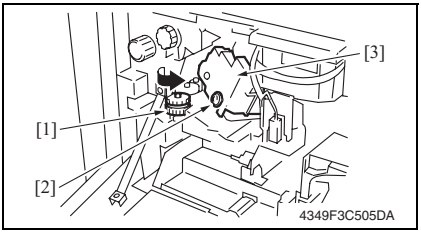
Measurement position	Specification	Adjustment range
A	4.5 mm	—
B	6 mm	+1 mm to -2mm

- 2-Point Staple

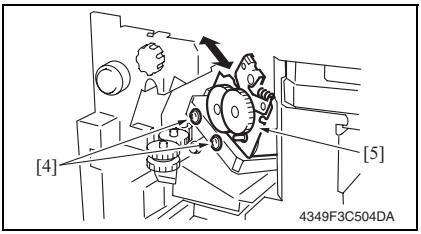
Measurement position	Specification	Adjustment range
C, F	6 mm	+1 mm to -2mm
D	Y	—
E	X	—

Y = (paper width-X-11) / 2
X = A3, A4: 137
B4S, B5: 114
A4S: 190
B5S: 162
Substitute above into the equation.

3. If the staple position is misaligned, adjust with the following procedure.



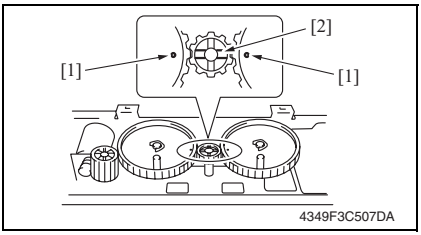
4. Open the Front Door.
5. Turn the dial [1], and move the stapler forward.
6. Loosen the screw [2], and remove the cover [3].



7. Loosen two adjustment screws [4] and move the Stapler Unit [5] in the direction of the arrow to make the adjustment.
8. Make another copy and check the staple position.

8.2 Adjustment of the Installation Position of the Shutter Drive Gear

NOTE
Make this adjustment after any of the following procedures has been performed.
- **When any of gear 1, 2, or 3 has been replaced.**
- **When gears 1, 2, and 3 has been disassembled.**



1. Set three gears.

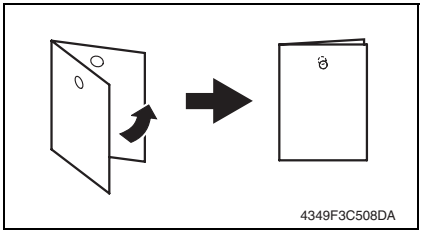
NOTE
- **Set the gears so that the marks on Gears 1 and 3 [1] are aligned with the rib of Gear 2 [2] as shown on the right.**

8.3 Punch Hole Deviance Adjustment (PU-501)

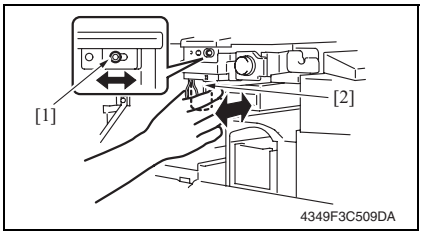
NOTE

Make this adjustment after any of the following procedures has been performed.

- **When the Punch Kit has been replaced.**
- **When the Punch Kit has been removed.**

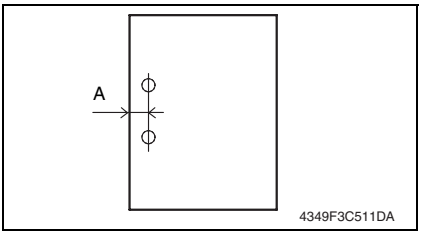


1. Set the copier into the Hole Punch mode and make a 1-sided copy from a 1-sided original.
2. Fold the output paper in half and check whether the punch hole positions are aligned.
   Specification: 0±2 mm
3. If the punch hole position is misaligned, adjust with the following procedure.

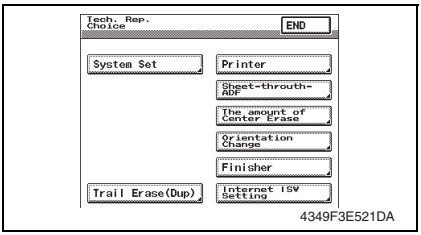


4. Remove the Horizontal Transport Lower Front Cover.
   See P.13
5. Loosen the adjustment screw [1], and move the Punch Unit [2] forward or backward to make the adjustment.
6. Make another copy and check the punch hole position.

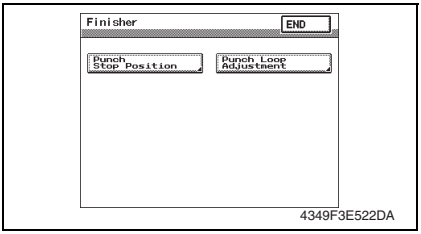
8.4 Punch Stop Position Adjustment (PU-501)



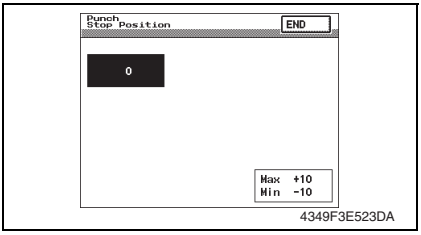
1. Set the copier into the Hole Punch mode and make a 1-sided copy from a 1-sided original.
2. Check width A on the output paper.



3. Display the Tech. Rep. Mode screen. See P.154 of the main body service manual.
4. Touch [Tech. Rep. Choice].



5. Touch [Finisher].
6. Touch [Punch Stop Position].



7. Press the Clear key and use the 10-Key Pad to set the value.

- To make width A wider, enter a positive value.
- To make width A narrower, enter a negative value.

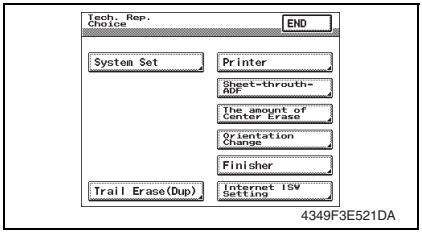
Adjustment range: +10 max. and -10 min.
1 increment: 0.5 mm
Use the ✻ key to switch between + and -.

8.5 Punch Loop Length Adjustment (PU-501)

NOTE

This adjustment must be made in any of the following cases:

- **When a slant occurs in the punch hole position.**
- **When misfeed frequently occurs in punch hole mode.**



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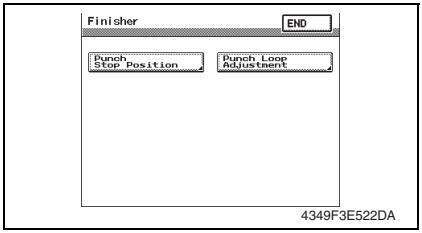
1. Display the Tech. Rep. Mode screen. See P.154 of the main body service manual.
2. Touch [Tech. Rep. Choice].



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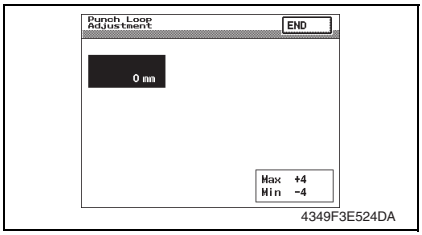
3. Touch [Finisher].
4. Touch [Punch Loop Adjustment].



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5. Press the Clear key and use the 10-Key Pad to set the value.

- To make loop length larger, enter a positive value.
- To make loop length smaller, enter a positive value.

Adjustment range: +4 max. and -4 min.
1 increment: 1 mm
Use the ✻ key to switch between + and -.

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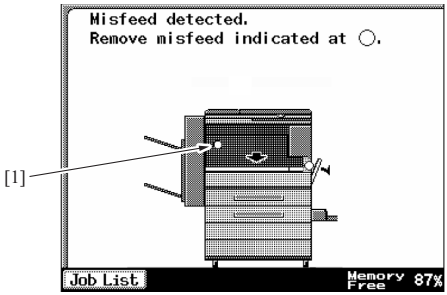
TROUBLESHOOTING

9. Jam Display

9.1 Misfeed Display

- When a paper misfeed occurs, the misfeed message, misfeed location, and paper location are displayed on the Touch Panel of the machine.



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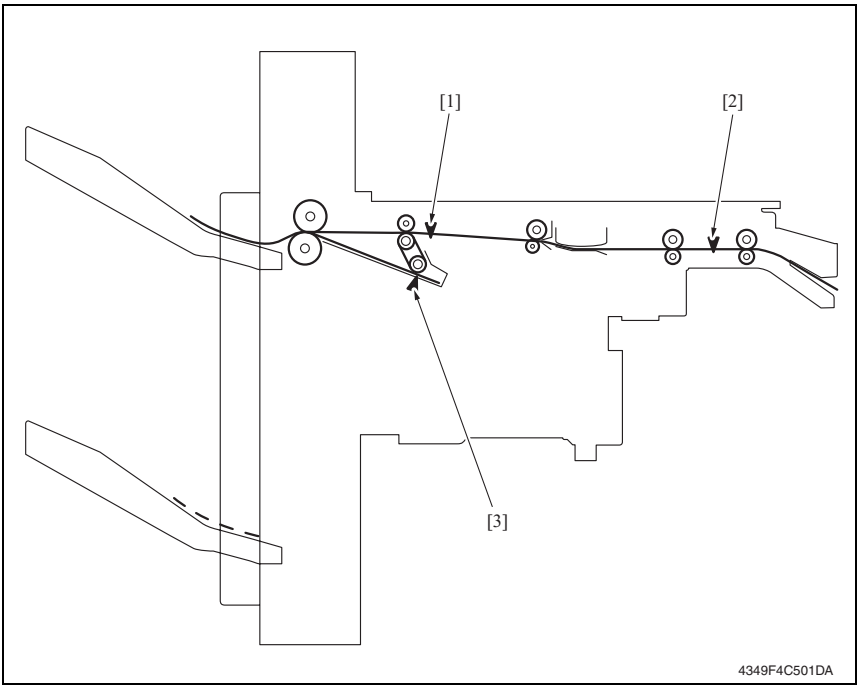
Display	Misfeed Location	Misfeed processing location	Action
[1]	Transport Section Misfeed	Front Door	P.38
	Finisher Staple Misfeed	Front Door	P.39
	Finisher Punch Misfeed	Front Door	P.39
	Finisher Bundle Exit Misfeed	Front Door	P.40

9.1.1 Misfeed Display Resetting Procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

9.2 Sensor layout



[1]	Transport Sensor	PC5-FN
[2]	Entrance Sensor	PC4-FN
[3]	Storage Tray Detecting Sensor	PC8-FN

9.3 Solution

9.3.1 Initial Check Items

- When a paper misfeed occurs, first make checks of the following initial check items

Check Item	Action
Does paper meet product specifications?	Change paper.
Is paper curled, wavy, or damp.	Change paper. Instruct user in correct paper storage.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean or change the paper 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 paper?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

9.3.2 Transport Section Misfeed

A. Detection Timing

Type	Description
Finisher Transport Section misfeed detection	The Entrance Sensor (PC4-FN) is not blocked even after the set period of time has elapsed after the copier's Paper Exit Sensor (PC4) is blocked by the paper.
	The Entrance Sensor (PC4-FN) is not unblocked even after the set period of time has elapsed after the copier's Paper Exit Sensor (PC4) is unblocked by the paper.
Finisher Paper Exit Section misfeed detection	The Transport Sensor (PC5-FN) is not blocked even after the set period of time has elapsed after the Entrance Sensor (PC4-FN) is blocked by the paper.
	The Transport Sensor (PC5-FN) is not unblocked even after the set period of time has elapsed after the Entrance Sensor (PC4-FN) is unblocked by the paper.
Detection of paper remaining in the Transport Section	The Entrance Sensor (PC4-FN) is blocked when the Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Transport Sensor (PC5-FN) is blocked 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	
Paper Exit Sensor (PC4) Entrance Sensor (PC4-FN) Transport Sensor (PC5-FN)	Main Control Board (PWB-A FN) Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 I/O check	PWB-A PJ18A-11 (ON)	M-12
3	PC4-FN I/O check	PWB-A FN PJ25A FN-4 (ON)	FS-530 G-4
4	PC5-FN I/O check	PWB-A FN PJ20A FN-9 (ON)	FS-530 B-5
5	Change PWB-A FN	-	-
6	Change PWB-A	-	-

9.3.3 Finisher Staple Misfeed

A. Detection Timing

Type	Description
Finisher Staple misfeed detection	The Staple Home Position Sensor in the Staple Unit is not blocked even after the set period of time has elapsed after the Staple Motor rotates forward, and then the Staple Motor rotates backward, and the Staple Home Position Sensor in the Staple Unit is blocked within the set period of time.

B. Action

Relevant Electrical Parts	
Staple Unit	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	Drive Coupling Section check	-	-
3	I/O Check	-	-
4	Change Staple Unit	-	-
5	Change PWB-A FN	-	-

9.3.4 Finisher Punch Misfeed (PU-501)

A. Detection Timing

Type	Description
Finisher Punch misfeed detection	Punch Positioning Sensors 1 and 2 are not blocked even after the set period of time has elapsed after the Punch Motor is energized.

B. Action

Relevant Electrical Parts	
Punch Unit	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	Drive Coupling Section check	-	-
3	I/O Check	-	-
4	Change Punch Unit	-	-
5	Change PWB-A FN	-	-

9.3.5 Finisher Bundle Exit Misfeed

A. Detection Timing

Type	Description
Finisher Bundle Exit misfeed detection	The Storage Tray Detecting Sensor (PC8-FN) is not unblocked even after the set period of time has elapsed after the Exit Motor (M1-FN) is energized.

B. Action

Relevant Electrical Parts	
Storage Tray Detecting Sensor (PC8-FN) Exit Motor (M1-FN)	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC8-FN I/O check	PWB-A FN PJ13A FN-8 (ON)	FS-530 G-8
3	Change PWB-A FN	-	-

10. Malfunction code

10.1 Trouble code

- The machine's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code and maintenance call mark on the Touch Panel.

Code	Description	Detection Timing
C1183	Elevator Motor Ascent/Descent Drive Failure	• The Elevator Tray Lower Limit Sensor (PC14-FN) is not blocked even after the set period of time has elapsed after the Main Power Switch is set to ON. • The Elevator Tray Home Position Sensor (PC3-FN) and Top Face Detection Sensor (PC15-FN) are not blocked even after the set period of time has elapsed after the Elevator Motor (M11-FN) is energized. • The Elevator Tray does not stop at the position for the specified tray after the Elevator Motor (M11-FN) is energized (beginning of descent operation) and the Elevator Tray Lower Limit Sensor (PC14-FN) is blocked. • The Top Face Detection Sensor (PC15-FN) is not blocked even after the set period of time has elapsed after the Elevator Motor (M11-FN) is energized (beginning of ascent operation) when paper is being fed out. • The Lock signal is detected after the set period of time has elapsed after the Elevator Motor (M11-FN) is energized.
C1190	Aligning Plate 1 Drive Failure	• The Alignment Home Position Sensor 1 (PC6-FN) is not blocked even after the set period of time has elapsed after the Main Power Switch is set to ON. • The Alignment Home Position Sensor 1 (PC6-FN) is not unblocked even after the set period of time has elapsed after the Alignment Motor 1 (M4-FN) is energized.
C1191	Aligning Plate 2 Drive Failure	• The Alignment Home Position Sensor 2 (PC7-FN) is not blocked even after the set period of time has elapsed after the Main Power Switch is set to ON. • The Alignment Home Position Sensor 2 (PC7-FN) is not unblocked even after the set period of time has elapsed after the Alignment Motor 2 (M5-FN) is energized.
C11A0	Paper Holding Drive Failure	• The Exit Paddle Home Position Sensor (PC11-FN) is not blocked even after the set period of time has elapsed after the Exit Paddle Solenoid (SL2-FN) is activated (beginning of paddle retraction operation). • The Exit Paddle Home Position Sensor (PC11-FN) is not unblocked even after the set period of time has elapsed after the Exit Paddle Solenoid (SL2-FN) is activated (beginning of paddle paper-holding operation).
C11A1	Exit Roller Pressure/ Retraction Failure	• The Exit Roller Home Position Sensor (PC12-FN) is not blocked even after the set period of time has elapsed after the Exit Open/ Close Motor (M6-FN) is energized (beginning of pressure operation). • The Exit Roller Home Position Sensor (PC12-FN) is not unblocked even after the set period of time has elapsed after the Exit Open/ Close Motor (M6-FN) is energized (beginning of retraction operation).

Code	Description	Detection Timing
C11A3	Shutter Drive Failure	• The Shutter Home Position Sensor (PC16-FN) is not unblocked even after the set period of time has elapsed after the Exit Open/Close Motor (M6-FN) is energized (beginning of shutter-opening operation). • The Shutter Home Position Sensor (PC16-FN) is not blocked even after the set period of time has elapsed after the Exit Open/Close Motor (M6-FN) is energized (beginning of shutter-closing operation).
C11B0	Staple Unit CD Drive Failure	The Staple Home Position Sensor (PC10-FN) is not blocked even after the set period of time has elapsed after the Stapling Unit Moving Motor (M7-FN) is energized (beginning of return operation to predetermined position).
C11B2	Staple Drive Failure	The Home Position Sensor is not blocked even after the set period of time has elapsed after the Staple Motor is energized (beginning of staple operation).
C11C0	Punch Cam Motor Unit Failure	The Punch Motor Pulse Sensor cannot detect both edges of H/L even after the set period of time has elapsed while the Punch Drive Motor is energized.
CC155	Finishing Option Flash ROM Failure	• Data of flash ROM of the finishing options is determined to be faulty when the power is turned ON.

10.2 Solution

10.2.1 C1183: Elevator Motor Ascent/Descent Drive Failure

Relevant Electrical Parts	
Elevator Motor (M11-FN)	Top Face Detection Sensor (PC15-FN)
Elevator Tray Home Position Sensor (PC3-FN)	Elevator Board (PWB-B FN)
Elevator Tray Lower Limit Sensor (PC14-FN)	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M11-FN connector for proper connection and correct as necessary.	-	-
2	Check M11-FN for proper drive coupling and correct as necessary.	-	-
3	If OT-601 is connected, check the connector for proper connection, and correct as necessary.	-	-
4	Check the installation position of the OT-601 tray, and correct as necessary.	-	-
5	Check the setting of the adjusting plate for the Exit Tray detection position and correct as necessary.	-	-
6	M11-FN operation check	PWB-A FN PJ7A FN-1 to 2	FS-530 G-7
7	PC3-FN I/O check	PWB-A FN PJ12A FN-2 (ON)	FS-530 G-4
8	PC14-FN I/O check	PWB-B FN PJ2B FN-3 (ON)	FS-530 H-6
9	PC15-FN I/O check	PWB-B FN PJ2B FN-6 (ON)	FS-530 H-6
10	Change PWB-B FN	-	-
11	Change PWB-A FN	-	-

10.2.2 C1190: Aligning Plate 1 Drive Failure

10.2.3 C1191: Aligning Plate 2 Drive Failure

Relevant Electrical Parts	
Alignment Motor 1 (M4-FN) Alignment Motor 2 (M5-FN) Alignment Home Position Sensor 1 (PC6-FN) Alignment Home Position Sensor 2 (PC7-FN)	Main Control Board (PWB-A FN)

- C1190

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M4-FN connector for proper connection and correct as necessary.	-	-
2	Check M4-FN for proper drive coupling and correct as necessary.	-	-
3	M4-FN operation check	PWB-A FN PJ14A FN-1 to 4	FS-530 G-7
4	PC6-FN I/O check	PWB-A FN PJ13A FN-3 (ON)	FS-530 G-8
5	Change PWB-A FN	-	-

- C1191

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M5-FN connector for proper connection and correct as necessary.	-	-
2	Check M5-FN for proper drive coupling and correct as necessary.	-	-
3	M5-FN operation check	PWB-A FN PJ14A FN-5 to 8	FS-530 G-8
4	PC7-FN I/O check	PWB-A FN PJ13A FN-6 (ON)	FS-530 G-8
5	Change PWB-A FN	-	-

10.2.4 C11A0: Paper Holding Drive Failure

Relevant Electrical Parts	
Exit Paddle Solenoid (SL2-FN) Exit Paddle Home Position Sensor (PC11-FN)	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the SL2-FN connector for proper connection and correct as necessary.	-	-
2	PC11-FN I/O check	PWB-A FN PJ17A FN-7 (ON)	FS-530 B-7
3	SL2-FN operation check	PWB-A FN PJ18A FN-6 (REM)	FS-530 B-7
4	Change PWB-A FN	-	-

10.2.5 C11A1: Exit Roller Pressure/Retraction Failure

Relevant Electrical Parts	
Exit Open/Close Motor (M6-FN) Exit Roller Home Position Sensor (PC12-FN)	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M6-FN connector for proper connection and correct as necessary.	-	-
2	Check M6-FN for proper drive coupling and correct as necessary.	-	-
3	M6-FN operation check	PWB-A FN PJ20A FN-1 to 2	FS-530 B-6
4	PC12-FN I/O check	PWB-A FN PJ20A FN-7 (ON)	FS-530 B-5
5	Change PWB-A FN	-	-

10.2.6 C11A3: Shutter Drive Failure

Relevant Electrical Parts	
Exit Open/Close Motor (M6-FN) Shutter Home Position Sensor (PC16-FN)	Elevator Board (PWB-B FN) Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M6-FN connector for proper connection and correct as necessary.	-	-
2	Check M6-FN for proper drive coupling and correct as necessary.	-	-
3	M6-FN operation check	PWB-A FN PJ20A FN-1 to 2	FS-530 B-6
4	PC16-FN I/O check	PWB-B FN PJ2B FN-9 (ON)	FS-530 H-6
5	Change PWB-B FN	-	-
6	Change PWB-A FN	-	-

10.2.7 C11B0: Staple Drive Failure

Relevant Electrical Parts	
Stapling Unit Moving Motor (M7-FN) Staple Home Position Sensor (PC10-FN)	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check for interference with the Shutter and Exit Roller, and correct as necessary.	-	-
2	Check the M7-FN connector for proper connection and correct as necessary.	-	-
3	Check M7-FN for proper drive coupling and correct as necessary.	-	-
4	M7-FN operation check	PWB-A FN PJ15A FN-1 to 4	FS-530 G-9
5	PC10-FN I/O check	PWB-A FN PJ17A FN-3 (ON)	FS-530 B-7
6	Change PWB-A FN	-	-

10.2.8 C11B2: Staple Drive Failure

Relevant Electrical Parts	
Staple Unit	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the Staple unit connector for proper connection and correct as necessary.	-	-
2	Check the Staple Unit for proper drive coupling, and correct as necessary.	-	-
3	Staple Unit operation check	-	-
4	Change Staple Unit	-	-
5	Change PWB-A FN	-	-

10.2.9 C11C0: Punch Cam Motor Unit Failure

Relevant Electrical Parts	
Punch Unit	Main Control Board (PWB-A FN)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the Punch Unit connectors for proper connection, and correct as necessary.	-	-
2	Check the Punch Unit for proper drive coupling, and correct as necessary.	-	-
3	Punch Unit I/O check	-	-
4	Change Punch Unit	-	-
5	Change PWB-A FN	-	-

10.2.10 CC155: Finishing Option Flash ROM Failure

Relevant Electrical Parts	
Main Control Board (PWB-A FN)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Disconnect and then connect the power cord. Turn OFF the Main Power Switch, wait for 10 sec. or more, and turn ON the Main Power Switch.	-	-
2	Rewrite firmware using the Compact Flash card.	-	-
3	Change PWB-A FN	-	-

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

MT-502

2008.12

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
  A number within ▲1 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.

2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

MT-502

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

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OUTLINE

1. Product specification

A. Type

Name	Mail Bin Kit
Installation	Install at the top section of the Finisher Elevator Tray.
Number of Bins	4 bins
Number of Sheets Stored per Bin	125 sheets (80 g/m^2)
Storable Paper	Plain paper (56 to 90 g/m^2), recycled paper (60 to 90 g/m^2)
Storable Paper Size	Metric: A4, B5, 8½ x 11 Inch: 8½ x 11, 5½ x 8½S

B. Machine specifications

Power Requirements	DC 24 V (supplied from the Finisher) DC 5 V (generated inside the Mail Bin)
Dimensions	624 (W) x 503 (D) x 390 mm (H)
Weight	8 kg

C. Operating environment

- Conforms to the operating environment of the main body.

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

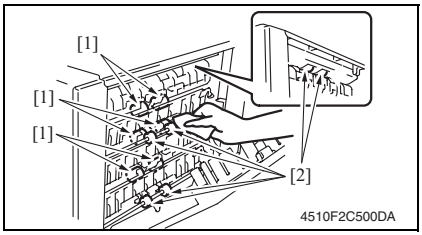
2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

NOTE

- **The alcohol described in the cleaning procedure of Maintenance represents the isopropyl alcohol.**

2.1.1 Cleaning of the Roller and Roll



1. Open the Right Door.
2. Using a soft cloth dampened with alcohol, wipe the rollers [2] and rolls [1].

3. Other

3.1 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

NOTE

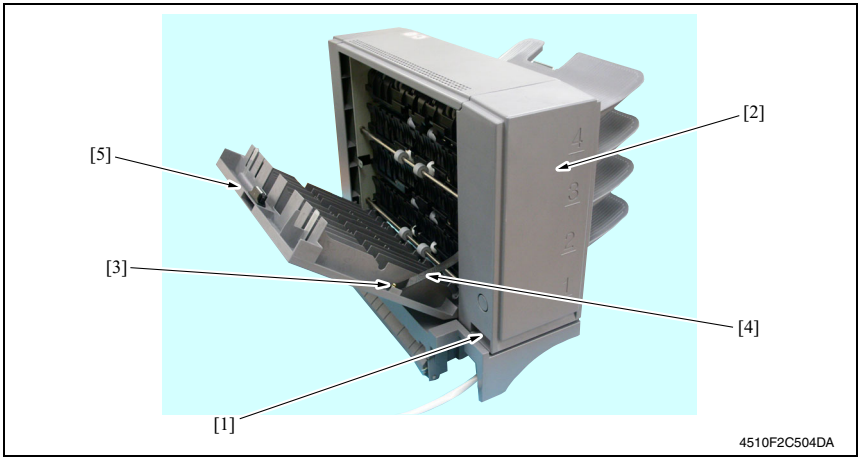
- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" and follow the corresponding removal procedures.**
- **The removal procedures given in the following omit the removal of connectors and screws securing the circuit board support or circuit board.**
- **When 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)

No.	Section	Part name	Ref. page
1	Exterior parts	Rear Cover	P.5
2		Front Cover	P.6
3		Upper Cover	P.6
4		Right Door	P.5
5		Paper Output Tray	P.6

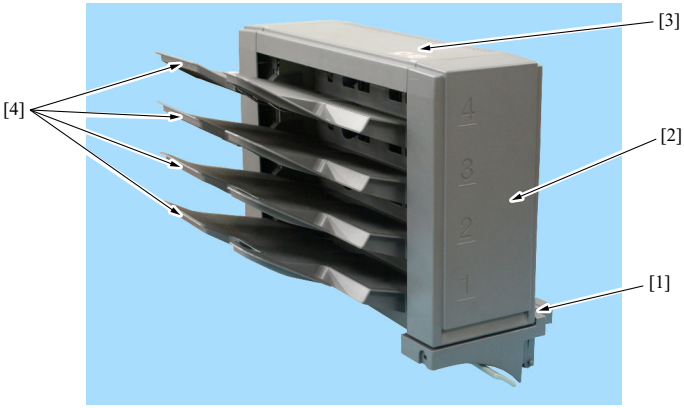
3.3 Disassembly/Assembly procedure

3.3.1 Rear Cover/Right Door



1. Remove the screw [1] and remove the Rear Cover [2].
2. Remove the screw [3], the stopper [4], and remove the Right Door [5].

3.3.2 Front Cover/Upper Cover/Paper Output Tray



1. Remove the screw [1] and remove the Front Cover [2].
2. Remove the Rear Cover.
   See P.5
3. Remove the Upper Cover [3].
4. Remove the Paper Output Trays [4].

ADJUSTMENT/SETTING

4. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

5. I/O check

5.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main body in the standby state (including a misfeed, malfunction, and closure failure condition).

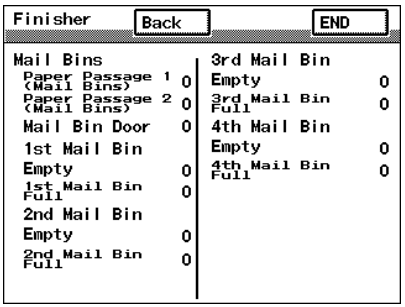
<Procedure>

1. Display the Tech. Rep. Mode screen.
   See P.154 of the main body service manual.
2. Touch the [I/O Check] key.
3. Touch the [Finisher] key.
4. Touch [Fwd] three times.

5.2 I/O check list

5.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main body.



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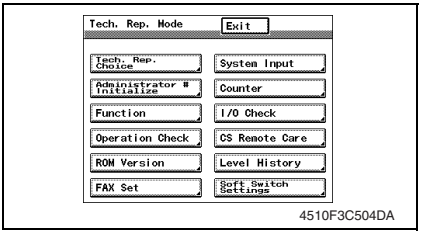
5.2.2 I/O check list

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC10-MK	Finisher	Paper Passage 1 (Mail Bins)	Lower Transport Sensor	Paper present	Paper not present
PC9-MK		Paper Passage 2 (Mail Bins)	Upper Transport Sensor	Paper present	Paper not present
PC11-MK		Mail Bin Door	Cover Open/Close Sensor	Open	Close
PC1-MK		1st Mail Bin Empty	Paper Detection Sensor 1	Paper not present	Paper present
PC5-MK		1st Mail bin Full	Paper Full Detection Sensor 1	Blocked	Unblocked
PC2-MK		2nd Mail Bin Empty	Paper Detection Sensor 2	Paper not present	Paper present
PC6-MK		2nd Mail Bin Full	Paper Full Detection Sensor 2	Blocked	Unblocked
PC3-MK		3rd Mail Bin Empty	Paper Detection Sensor 3	Paper not present	Paper present
PC7-MK		3rd Mail Bin Full	Paper Full Detection Sensor 3	Blocked	Unblocked
PC4-MK		4th Mail Bin Empty	Paper Detection Sensor 4	Paper not present	Paper present
PC8-MK		4th Mail Bin Full	Paper Full Detection Sensor 4	Blocked	Unblocked

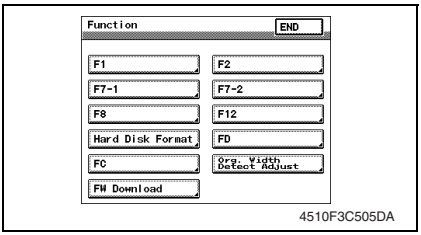
6. Test Mode Operations

6.1 Entering Function Mode

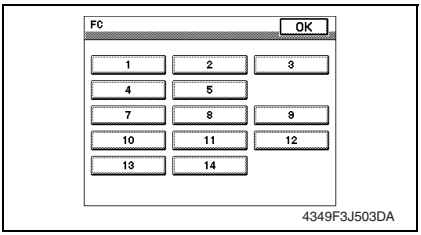
1. Display the Tech. Rep. Mode screen.
See P.154 of the main body service manual.



2. Touch [Function].



3. Touch [FC].



4. Touch [12].

6.2 Function Modes

12: Mailbin solenoid drive mode

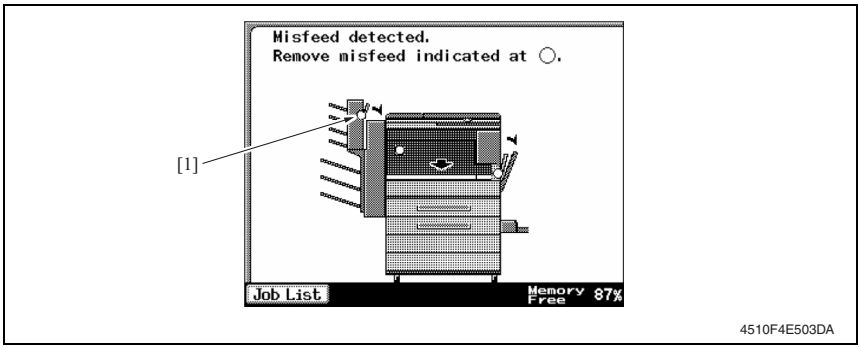
- Bin Entrance Switching Solenoids 1, 2 and 3 switch, in order, at the predetermined times.
  → Bin Entrance Switching Solenoid 1 (SL1-MK) activates for the predetermined time.
  → Bin Entrance Switching Solenoid 2 (SL2-MK) activates for the predetermined time.
  → Bin Entrance Switching Solenoid 3 (SL3-MK) activates for the predetermined time.
  → All Bin Entrance Switching Solenoids deactivate.
  → The operation is finished.

TROUBLESHOOTING

7. Jam Display

7.1 Misfeed display

- When misfeed occurs, message, misfeed location “Blinking” and paper location “Lighting” are displayed on the Touch Panel of the main body.

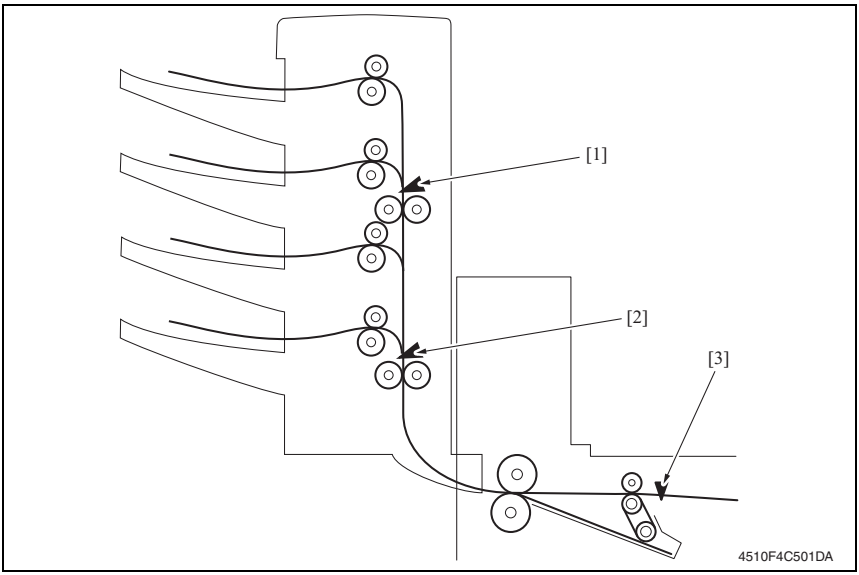


No.	Misfeed location	Misfeed access location	Action
[1]	Vertical Transport Section	Right Door	P.14

7.1.1 Misfeed display resetting procedure

- Open the corresponding door, clear the sheet of paper misfeed, and close the door.

7.2 Sensor layout



[1]	Upper Transport Sensor	PC9-MK
[2]	Lower Transport Sensor	PC10-MK
[3]	Transport Sensor	PC5-FN

7.3 Solution

7.3.1 Initial check items

- When a paper misfeed occurs, first perform the following initial check items.

Check item	Action
Does paper meet product specifications?	Replace paper.
Is the paper curled, wavy, or damp?	Replace paper. Instruct the user on the correct paper storage procedures.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean the paper path and replace if necessary.
Are rolls/rollers dirty, deformed, or worn?	Clean or replace the defective roll/roller.
Are the Edge Guide and Trailing Edge Stop at the correct position to accommodate the paper?	Set as necessary.
Are the actuators operating correctly?	Correct or replace the defective actuator.

7.3.2 Transport Section Misfeed

A. Detection timing

Type	Description
Transport Section misfeed detection	The Lower Transport Sensor (PC10-MK) is not blocked even after the set period of time has elapsed after the Transport Sensor (PC5-FN) is unblocked by the paper.
	The Upper Transport Sensor (PC9-MK) is not blocked even after the set period of time has elapsed after the Lower Transport Sensor (PC10-MK) is blocked by the paper.
Detection of paper remaining in the Transport Section	The Lower Transport Sensor (PC10-MK) is blocked when the Power Switch is set to ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.
	The Upper Transport Sensor (PC9-MK) is blocked 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	
Transport Sensor (PC5-FN) Lower Transport Sensor (PC10-MK) Upper Transport Sensor (PC9-MK)	Main Control Board (PWB-A MK)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (Electrical components)
1	Initial checks	-	-
2	PC5-FN sensor check	PWB-MK CN102A MK-5 (ON)	FS-530 C-5
3	PC10-MK sensor check	PWB-MK CN102A MK-8 (ON)	MT-502 C-5
4	PC9-MK sensor check	PWB-MK CN101A MK-8 (ON)	MT-502 C-4
5	PWB-A MK replacement	-	-

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

SD-507

2008.12

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 △1 to the left of the revised section.
  A number within △1 represents the number of times the revision has been made.

- To indicate clearly a section revised, show ▲1 in the lower outside section of the corresponding page.
  A number within ▲1 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.

2008/12	1.0	—	Issue of the first edition
Date	Service manual Ver.	Revision mark	Descriptions of revision

CONTENTS

SD-507

OUTLINE

MAINTENANCE

ADJUSTMENT/SETTING

TROUBLESHOOTING

OUTLINE

1. Product specifications

A. Type

Name	Saddle Sticher SD-507
Type	Built into the Finisher
Installation	Screwed to the Finisher
Document Alignment	Center
Stapling Function	Center parallel two points No. of sheets to be stapled together: 2 to 15

B. Paper type

Type	Plain Paper	56 g/m^2 to 90 g/m^2 15 to 24 lb
Size	Metric: A3, B4, A4S, B5S *2, 11 x 17, 8½ x 11S, Foolscap, 8K *1, 16KS *1 Inch: 11 x 17, 8½ x 14, 8½ x 11S, A3, A4S, Foolscap	
Capacity	200 sheets or 20 copies	

*1: Only supported in Taiwan.
*2: Supported in other than inch area and Taiwan.

C. Machine specifications

Power Requirements	DC 24 V (supplied from the Finisher)) DC 5 V
Max. Power Consumption	9.5 W or less
Dimensions	445 mm (W) x 203 mm (D) x 478 mm (H) 17.5 inch (W) x 8 inch (D) x 18.75 inch (H)
Weight	9.3 kg (20.5 lb)

D. Operating environment

- Conforms to the operating environment of the main body.

E. Consumables

- Staples 2000 (MS-2C) x 2

NOTE

- **These specifications are subject to change without notice.**

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MAINTENANCE

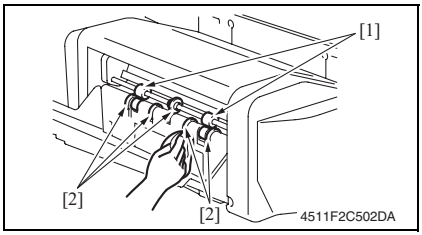
2. Periodical check

2.1 Maintenance procedure (Periodical check parts)

NOTE

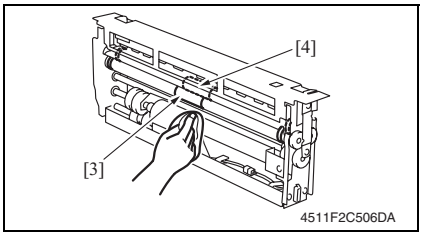
- **The alcohol described in the cleaning procedure of Maintenance represents the isopropyl alcohol.**

2.1.1 Cleaning of the Rollers and Rolls



1. Using a soft cloth dampened with alcohol, wipe two rollers [1] and five rolls [2].

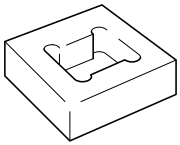
2. Remove the Folding Unit.
See P.8



3. Using a soft cloth dampened with alcohol, wipe the roller [3] and roll [4].

3. Service tool

3.1 CE Tool list

Tool name	Shape	Personnel	Parts No.	Remarks
Stapler Unit Positioning Jig		1	4511-7901-01	

4. Other

4.1 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

⚠ Caution

- **When removing a circuit board or other electrical component, refer to "SAFETY AND IMPORTANT WARNING ITEMS" 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.**
- **When it is absolutely necessary to touch the ICs and other electrical components on the board, be sure to ground your body.**

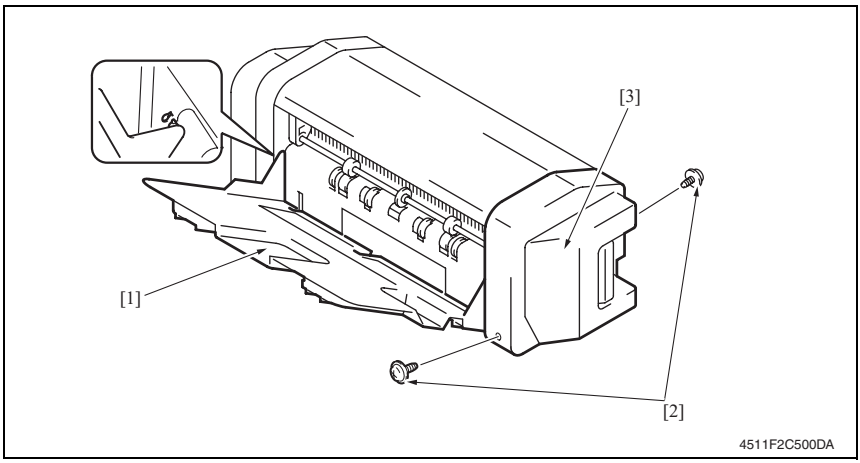
4.2 Disassembly/Assembly list (Other parts)

4.2.1 Disassembly/Assembly parts list

No.	Section	Part name	Ref.Page
1	Exterior parts	Paper Output Tray	P.5
2		Front Cover	P.5
3		Upper Cover	P.6
4		Rear Cover	P.6
5	Unit	Saddle Unit	P.7
6		Folding Unit	P.8
7		Stapler Unit	P.9
8	Others	In & Out Guide Drive Motor (M13-SK)	P.14
9		Folding Roller	P.18

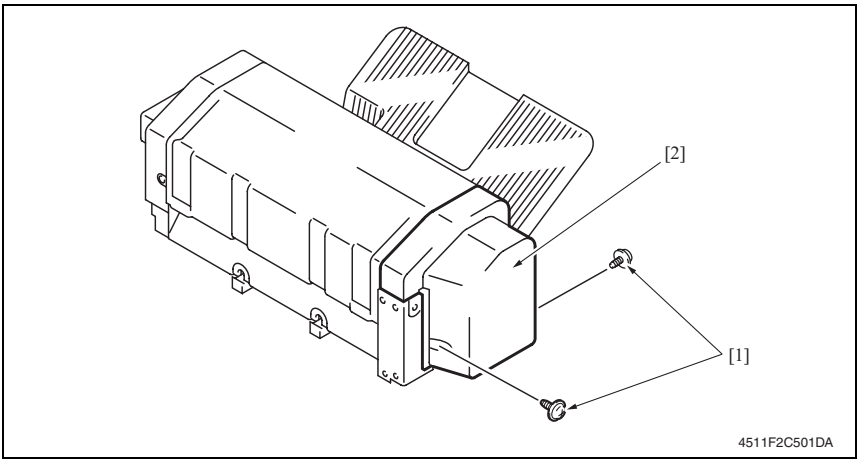
4.3 Disassembly/Assembly procedure

4.3.1 Paper Output Tray/Front Cover



1. Align the cutout and remove the Paper Output Tray [1].
2. Remove two screws [2], and remove the Front Cover [3].

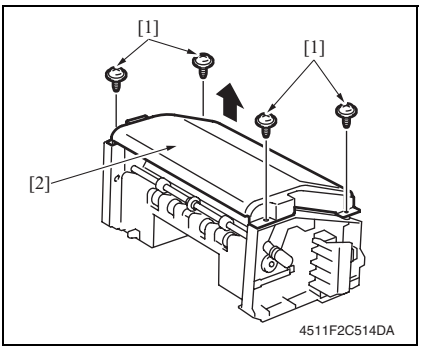
4.3.2 Rear Cover



1. Remove two screws [1], and remove the Rear Cover [2].

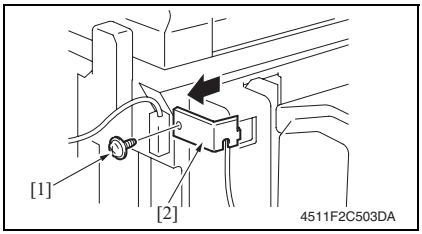
4.3.3 Upper Cover

1. Remove the Front Cover.
See P.5
2. Remove the Rear Cover.
See P.6

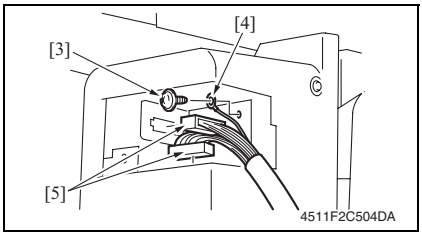


3. Remove four screws [1], and remove the Upper Cover [2].

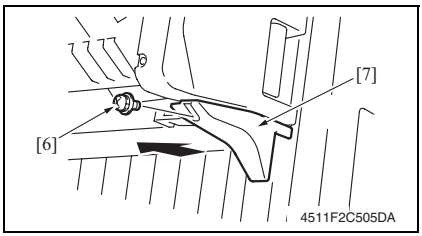
4.3.4 Saddle Unit



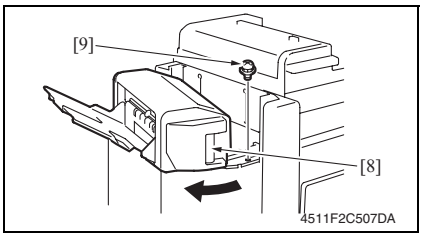
1. Remove the screw [1], and remove the Connector Cover [2].



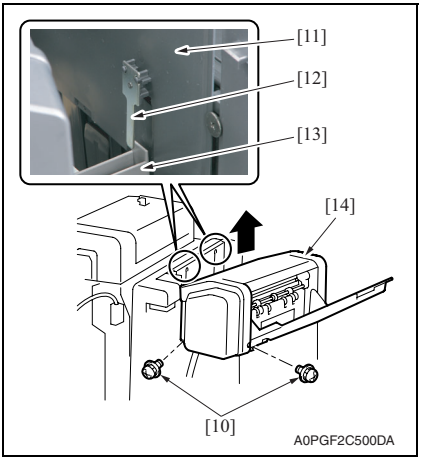
2. Remove the screw [3], and remove the ground terminals [4].
3. Unplug two connectors [5].



4. Remove the screw [6], and remove the Lower Front Cover [7].



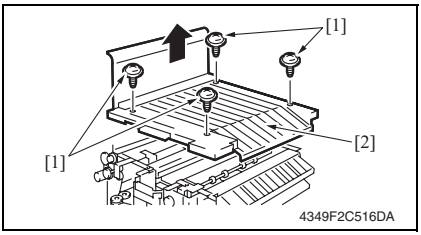
5. Pull the lock release lever [8], and open the Saddle Unit.
6. Remove the screw [9], and close the Saddle Unit.



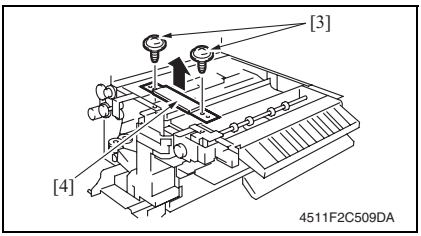
7. Remove two screws [10].
8. Pull up the Shutter [11], remove the two Claws [12] from the hole [13] and remove the Saddle Unit [14].

4.3.5 Folding Unit

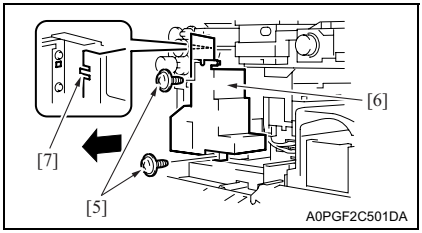
1. Remove the Saddle Unit.
See P.7
2. Remove the Sorted Copy Tray.
See P.16 of the FS-530/PU-501/OT-602 service manual.
3. Remove the Horizontal Transport Unit.
See P.16 of the FS-530/PU-501/OT-602 service manual.



4. Remove four screws [1], and remove the Horizontal Transport Upper Cover [2].



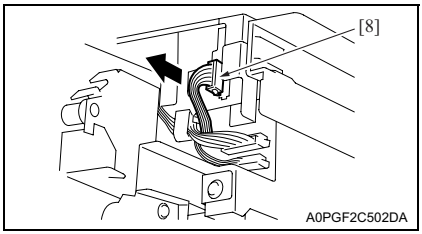
5. Remove two screws [3], and remove the Reinforcement Plate [4].



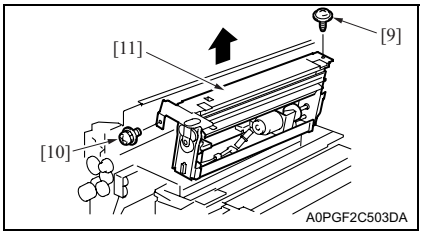
6. Remove two screws [5], and remove the Horizontal Transport Lower Front Cover [6].

NOTE

- **At reinstallation, first fit the claw [7] into position.**



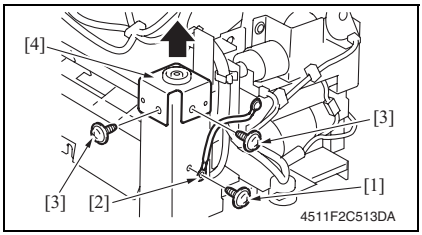
7. Unplug the connector [8].



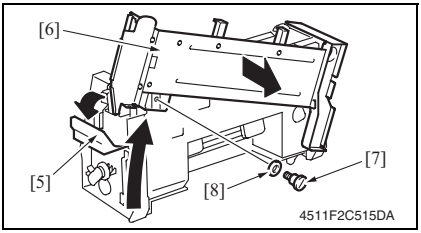
8. Remove the Shoulder Screw [9] and the screw [10], and remove the Folding Unit [11].

4.3.6 Stapler Unit

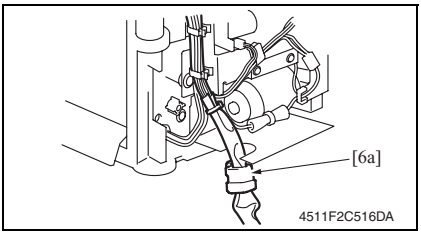
1. Remove the Saddle Unit.
See P.7
2. Remove the Paper Output Tray.
See P.5
3. Remove the Front Cover.
See P.5
4. Remove the Rear Cover.
See P.6
5. Remove the Upper Cover.
See P.6



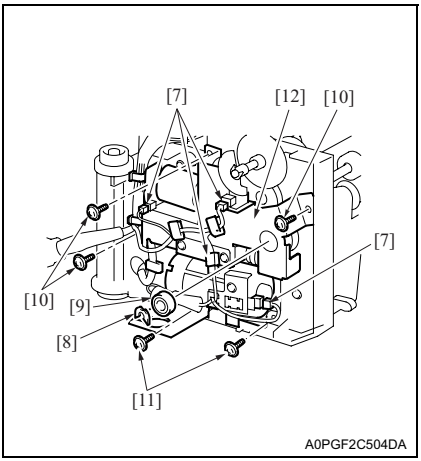
6. Remove the screw [1], and remove the ground terminal [2].
7. Remove two screws [3], and remove the holder [4].



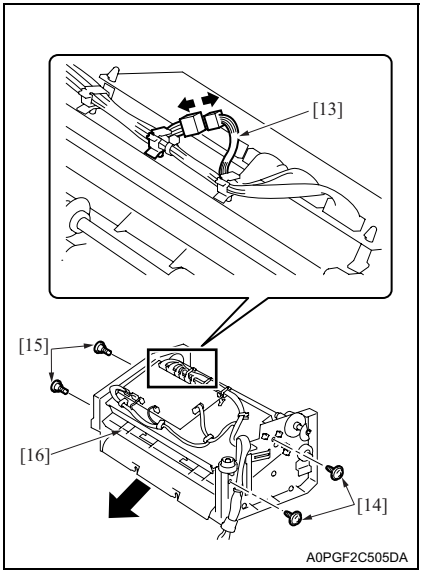
8. Release the lock release lever [5], and slide the Saddle Unit Mounting Plate [6].
9. Remove the screw [7] and the washer [8], and remove the Saddle Unit Mounting Plate [6].



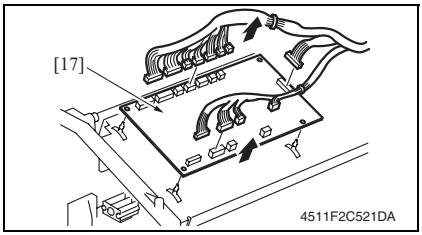
10. Remove the harness clamp [6a] from the Metal Plate.



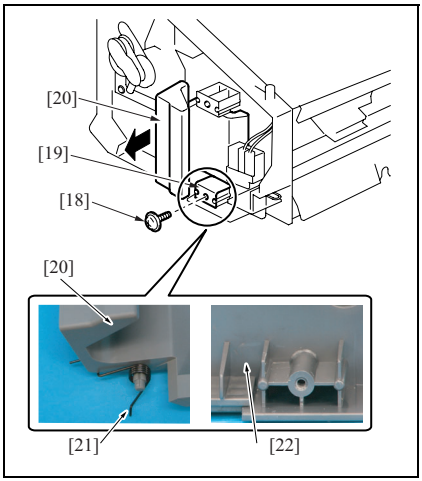
11. Unplug four connectors [7].
12. Remove the C-ring [8], and remove the bearing [9].
13. Remove three screws [10] and two screws [11], and remove the Drive Unit [12].



14. Unplug the connector [13].
15. Remove two screws [14] and two screws [15].
16. Remove the Tray [16].



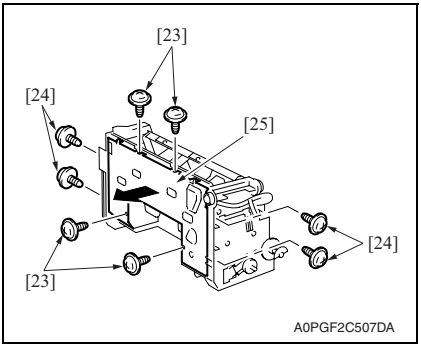
17. Unplug all the connectors on the Main Control Board.
18. Remove the PWB support, and then remove the Main Control Board [17].



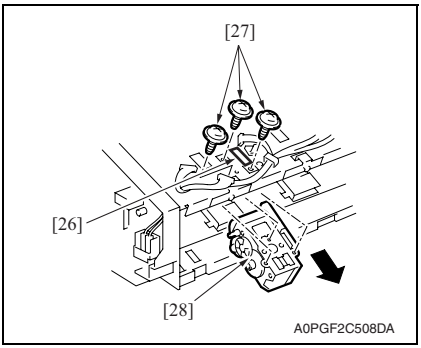
19. Remove the screw [18], and then remove the Mounting Bracket [19] and the Lock Release Lever [20].

NOTE

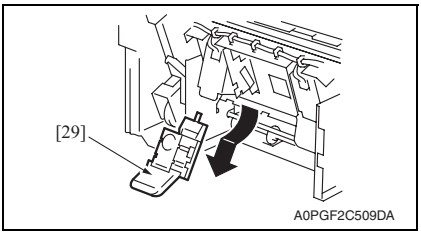
- **Be careful that when the Mounting Bracket [19] is removed, the spring [21] is also removed.**
- **When installing the spring, install the end of spring [21] into the gap [22] between the ribs.**



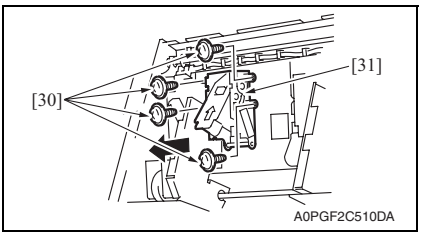
20. Remove four screws [23] and four screws [24], and remove the Lower Cover [25].



21. Remove the harness clamp and unplug the connector [26].
22. Remove three screws [27], and remove the Clincher/1 [28].



23. Remove the Staple Cartridge/1 [29].



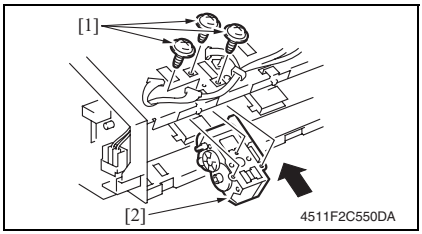
24. Remove four screws [30], unplug the connector, and remove the Stapler/1 [31].

NOTE

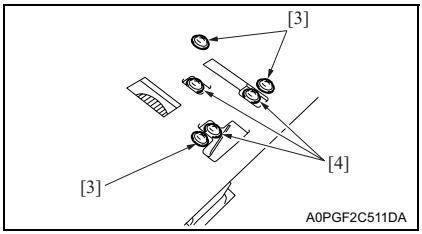
- **To replace Clincher/2 and Stapler/2, repeat steps 21 to 24.**

Precaution for Clincher Reinstallation

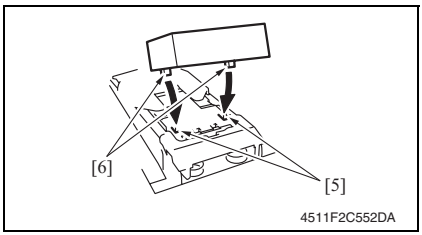
- **When the Clincher is installed, the position of the Stapler and the Clincher will be misaligned. Be sure to perform the following adjustment.**



1. Install the Stapler, and then install the Staple Cartridge.
2. Use three screws [1] to temporary fix the Clincher [2].



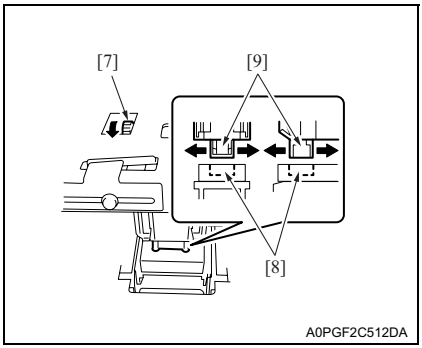
3. Loosen three screws [3] of the stopper.
4. Loosen three screws [4] of the Clincher.



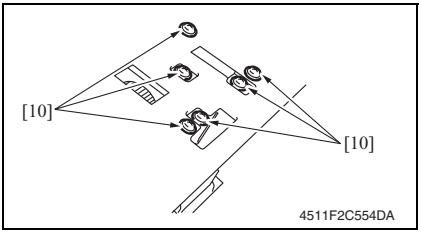
5. Aligning the protrusions of the jig [6] with the recesses in the Stapler [5], fit the jig to the Stapler.

NOTE

- **Make sure that the protrusions of the jig properly rest in the recesses.**



6. Turn the gear [7] of the Clincher to project the protrusions [9] of the Clincher, and then slide to put into the Clincher as it fits into the recesses [8] of the jig.



7. Tighten six screws [10].

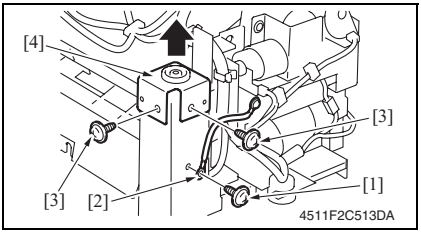
NOTE

- **Turn the gear again and check to see that the protrusion of the Clincher smoothly fits into the recess in the jig.**

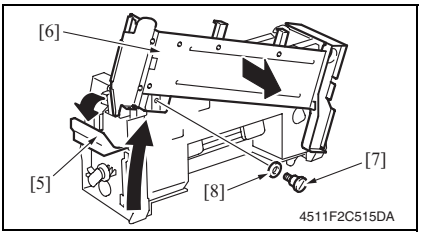
8. Turn the gear and remove the jig.

4.3.7 In & Out Guide Drive Motor (M13-SK)

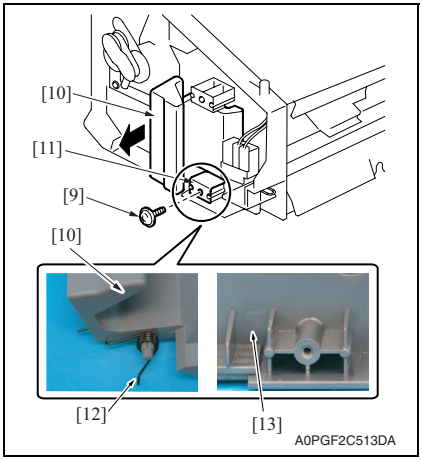
1. Remove the Saddle Unit.
See P.7
2. Remove the Paper Output Tray.
See P.5
3. Remove the Front Cover.
See P.5
4. Remove the Rear Cover.
See P.6
5. Remove the Upper Cover.
See P.6



6. Remove the screw [1], and remove the ground terminal [2].
7. Remove two screws [3], and remove the holder [4].



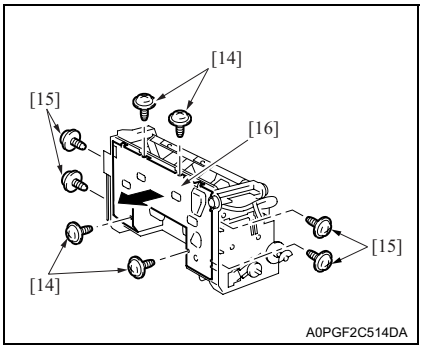
8. Release the lock release lever [5], and slide the Saddle Unit Mounting Plate [6].
9. Remove the screw [7] and the washer [8], and remove the Saddle Unit Mounting Plate [6].



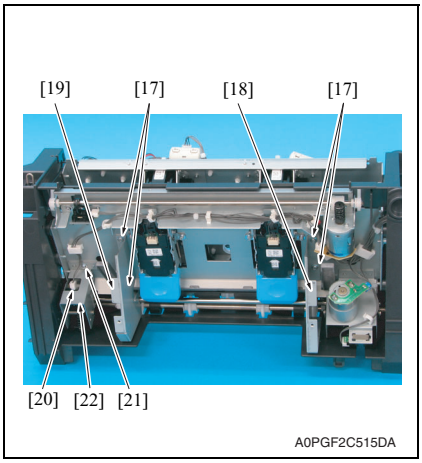
10. Remove the screw [9], and then remove the Mounting Bracket [11] and the Lock Release Lever [10].

NOTE

- **Be careful that when the Mounting Bracket [11] is removed, the spring [12] is also removed.**
- **When installing the spring, install the end of spring [12] into the gap [13] between the ribs.**

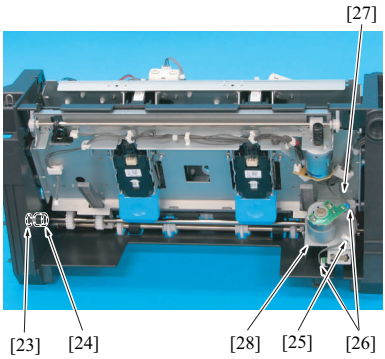


11. Remove four screws [14] and four screws [15], and remove the Lower Cover [16].



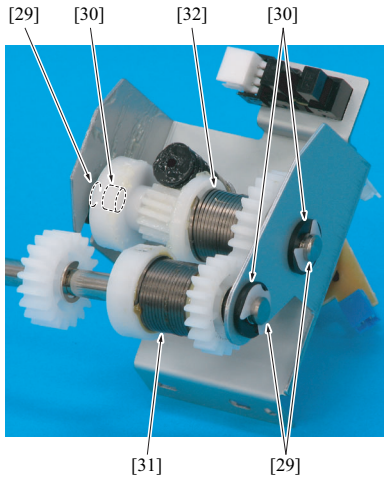
12. Remove four screws [17], and remove the plate [18] and [19].

13. Unplug the connector [20] and remove the screw [21], and then remove the Paper Guide Gear Assy [22].



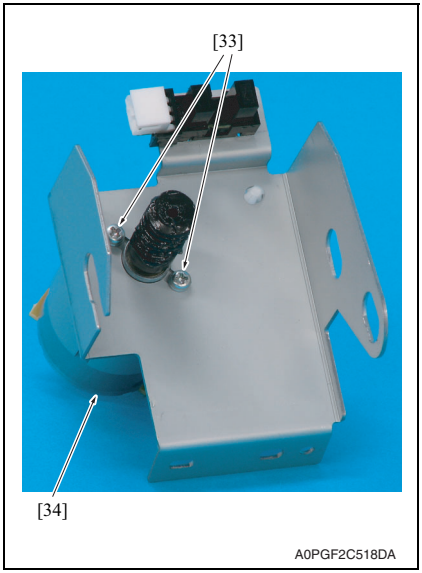
A0PGF2C516DA

14. Remove the C-ring [23], and remove the bearing [24].
15. Remove the Wire Saddle [25], and unplug two connectors [26]. Remove the screw [27], and remove the In & Out Guide Drive Motor Assy [28].



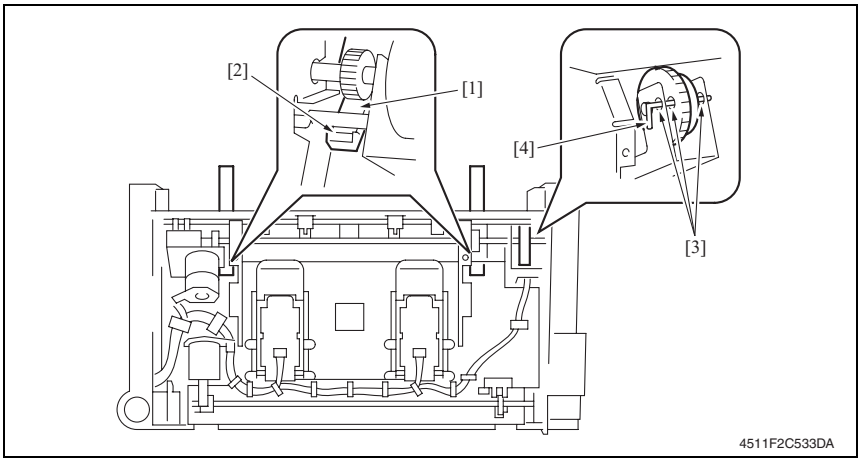
A0PGF2C517DA

16. Remove three C-rings [29], and remove three bearings [30].
17. Remove the Clutch Gear Drive Shaft [31], and remove the Clutch Gear Assy [32].



18. Remove two screws [33], and remove the In & Out Guide Drive Motor [34].

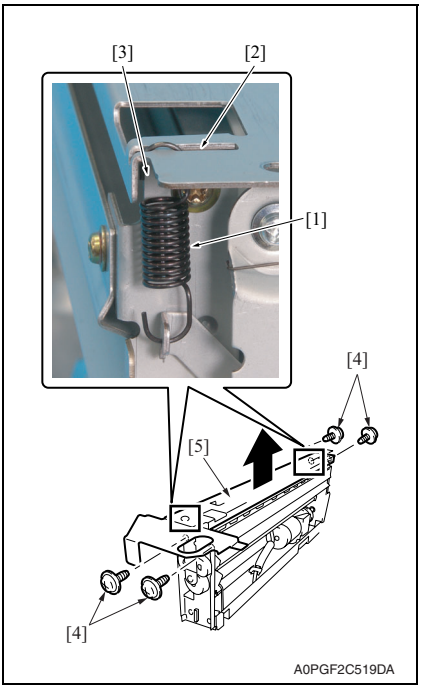
Precaution for In & Out Guide Drive Motor Reinstallation



1. Press the two In & Out Guides [1] in and check that they touch the stopper [2] simultaneously.
2. Check that pins [4] can be inserted through the positioning holes [3] (3 holes) of the In & Out Guide Sensor Assy.
3. Use two screws to secure the In & Out Guide Drive Motor.

4.3.8 Folding Roller

1. Remove the Folding Unit.
See P.8

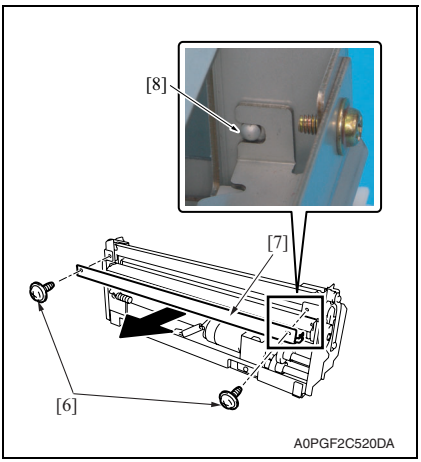


2. Remove the two springs [1].

NOTE

- **When reinstalling the spring, put it through the hole [2] with the end [3] faced out side.**

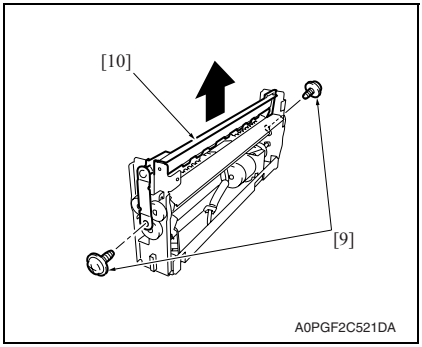
3. Remove four screws [4] and then remove the Upper Plate [5].



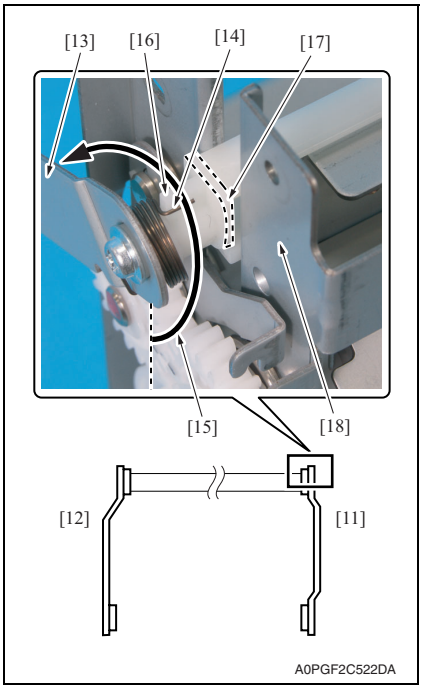
4. Remove two screws [6], and remove the Guide Plate [7].

NOTE

- **When reinstalling the Guide Plate, put it into the boss [8].**

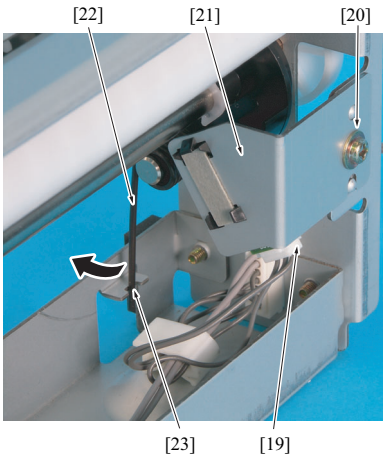


5. Remove two screws [9], and remove the Folding Blade Assy [10].



NOTE

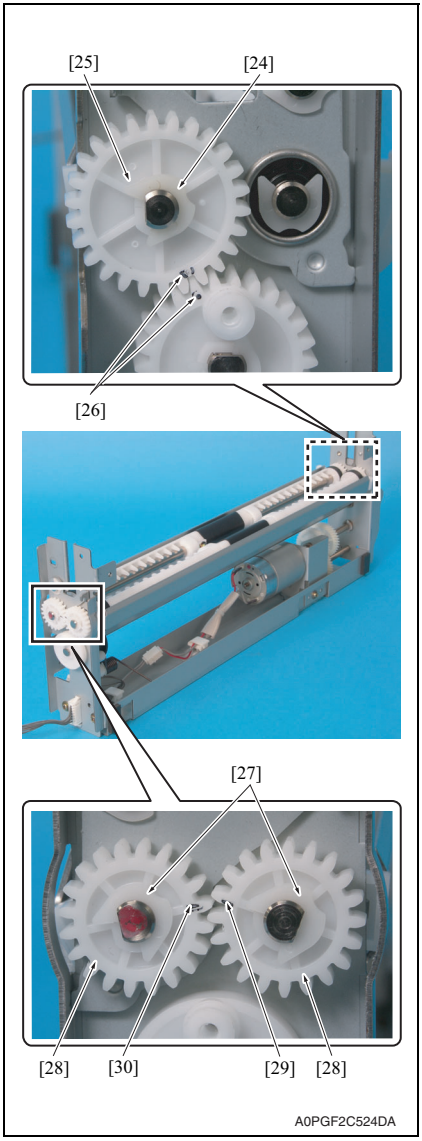
- **Install the Folding Blade Assy in the direction shown in the left figure.**
  [11] Front
  [12] Rear
- **Be sure to rotate the Crank Arm [13] one turn in counter clockwise [15] (as seen from the front of device) from the position that the spring [14] doesn't work (the spring hangs down vertical), and then install the Folding Blade Assy in the position that the spring can hook the Stopper [16].**
- **Be sure to install the edge [17] of Blade Support comes outside of the metal plate [18].**



6. Unplug the connector [19] and remove the screw [20], and then remove the sensor [21].
7. Release the spring [22].

NOTE

- **When reinstalling the spring [22], insert the recess [23].**



8. Remove the C-ring [24] and remove the gear [25].

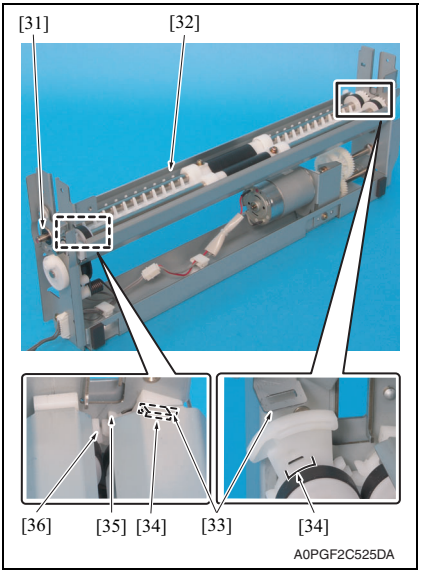
NOTE

- **Install the gear [25] so that the marks [26] of gear are aligned to the position shown in the left figure.**

9. Remove two C-rings [27] and then remove the two gears [28].

NOTE

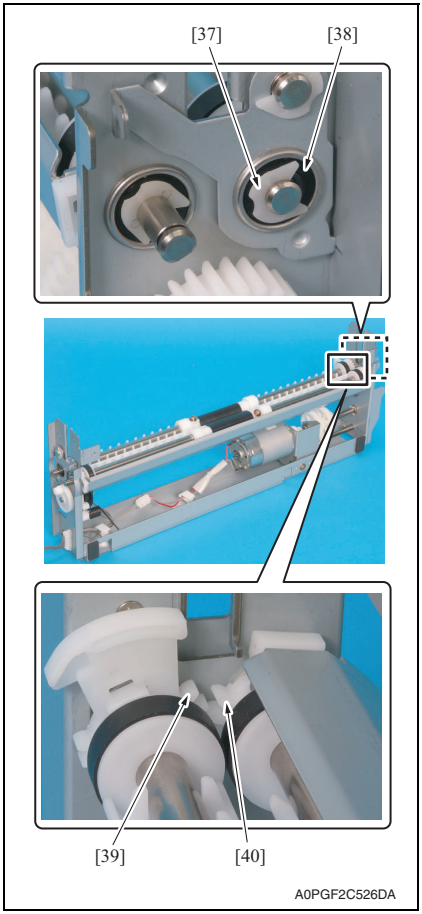
- **Install the gears [28] so that the mark [29] of Folding Roller/Rt comes half tooth above the mark [30] of Folding Roller/Lt.**



10. Remove the bearing [31], and remove the Lower Guide Plate/Lt [32].

NOTE

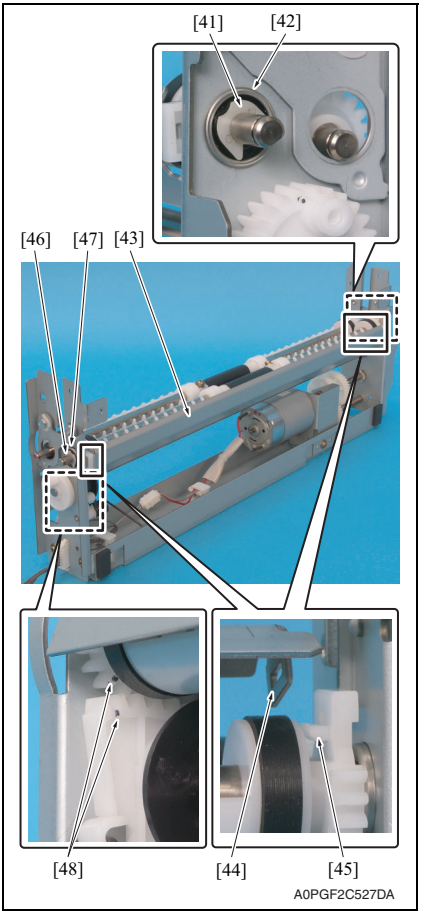
- **Install the Lower Guide Plate/Lt [32] so that the claw [34] of Guide Plate Gear make sure to put into the hole [33].**
- **Install the bearing [31] so that the last tooth [35] of Guide Plate Gear/ LtFr comes half tooth above the last tooth [36] of Guide Plate Gear/RtFr.**



11. Remove the C-ring [37], and remove the bearing [38].

NOTE

- **Install the bearing [38] so that the last tooth [39] of Guide Plate Gear/ LtRr comes half tooth above the last tooth [40] of Guide Plate Gear/ RtRr.**



12. Remove the C-ring [41] and the bearing [42], and remove the Lower Guide Plate/Rt [43].

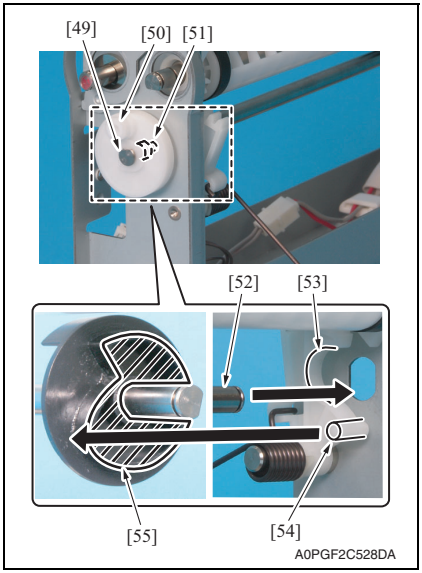
NOTE

- **Install the Lower Guide Plate/Rt [43] so that the claw [45] of Guide Plate Gear make sure to put into the hole [44].**

13. Remove the C-ring [46] and the bearing [47].

NOTE

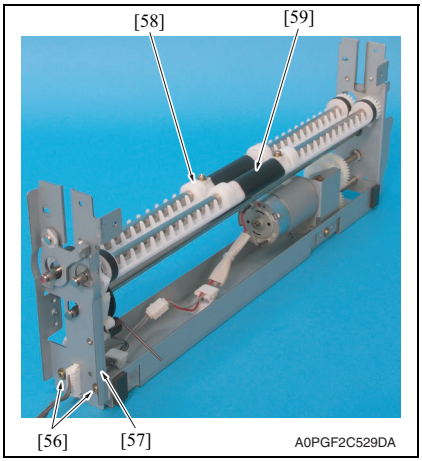
- **Install the bearing [47] so that the marks [48] are aligned.**



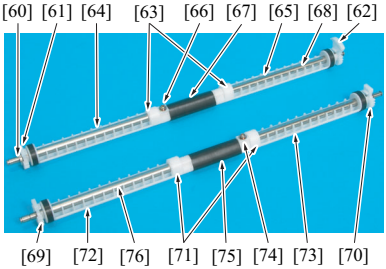
14. Remove the C-ring [49], and remove the Crank Plate [50] and the bearing [51].

NOTE

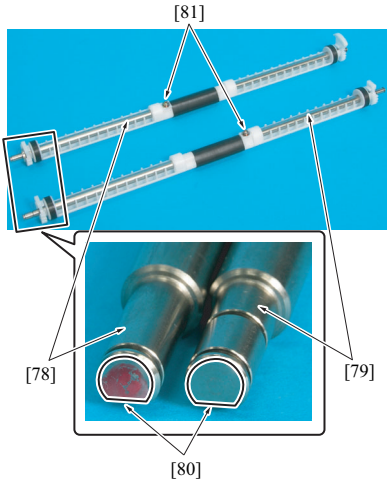
- **When reinstalling it, insert the Crank Shaft [52] into the recess [53] of Guide Gear Plate. And, be sure not to insert the Cam pin [54] into the Cam [55].**



15. Remove two screws [56], and remove the Side Plate [57].
16. Remove the Folding Roller Assy/Lt [58] and the Folding Roller Assy/Rt [59].



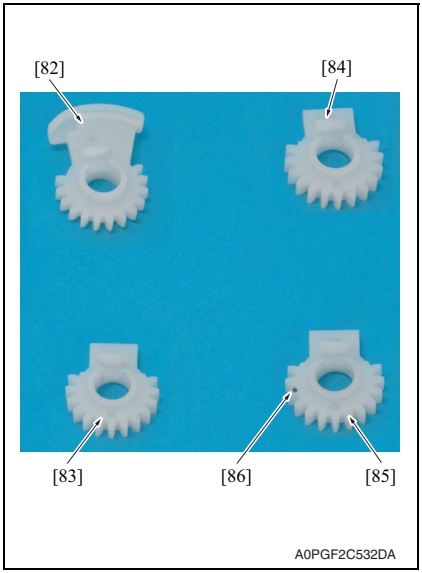
17. Remove the washer [60] and the Guide Plate Gear/LtFr [61], and remove the Guide Plate Gear/LtRr [62].
18. Remove two C-rings [63], and remove the Folding Roller A [64] and C [65].
19. Remove the screw [66], and remove the Folding Roller B [67] from the Folding Roller Shaft/Lt [68].
20. Remove the Guide Plate Gear/RtFr [69] and the Guide Plate Gear/RtRr [70].
21. Remove two C-rings [71], and remove the Folding Roller A [72] and C [73].
22. Remove the screw [74], and remove the Folding Roller B [75] from the Folding Roller Shaft/Rt [76].



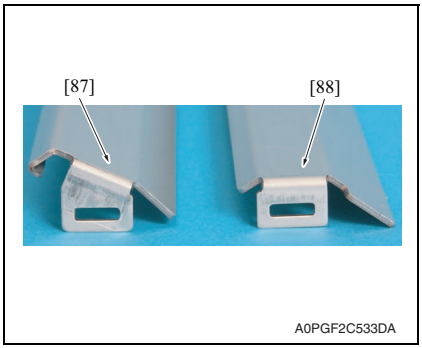
23. Reinstall the above parts following the removal steps in reverse.

NOTE

- **There is 1 each a groove of the both ends of the Folding Roller Shaft/Lt [78]. However there is 2 each a groove of the both ends of the Folding Roller Shaft/Rt [79]. Be careful not to confuse one with the other.**
- **Be sure to place it with the D-cut [80] down, and install the screw [81] from the top.**
- **Be sure to install the Folding Roller Shaft so that the screw of Folding Roller Shaft/Lt [78] faced to the front side of device and the screw of Folding Roller Shaft/Rt [79] faced to the rear side of device.**



- **Be careful not to confuse the Guide Plate Gear/LtRr [82], /LtFr [83], / RtRr [84] and /RtFr [85]. The outward appearance is identical for the Guide Plate Gear/LtFr [83], /RtRr [84] and /RtFr [85]. However, the mark [86] is provided on the Guide Plate Gear/RtFr [85]. Install claw in facing.**



- **Be careful not to confuse the directions of Lower Guide Plate/Lt [87] and /Rt [88]. Be sure to install the direction (as seen from the front of device) as shown in the figure.**

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ADJUSTMENT/SETTING

5. 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 " ".

Advance Checks

Before attempting to solve the customer problem, the following advance checks must be made. Check to see if:

- The power supply voltage meets the specifications.
- The power supply is properly grounded.
- 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.
- The original has a problem that may cause a defective image.
- The density is properly selected.
- The Original Glass, slit glass, or related part is dirty.
- Correct paper is being used for printing.
- 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.
- Toner is not running out.

⚠ CAUTION

- **To unplug the power cord of the machine before starting the service job procedures.**
- **If it is unavoidably necessary to service the machine with its power turned ON, use utmost care not to be caught in the Scanner Cables or gears of the Exposure Unit.**
- **Special care should be used when handling the Fusing Unit which can be extremely hot.**
- **The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.**
- **Take care not to damage the PC Drum with a tool or similar device.**
- **Do not touch IC pins with bare hands.**

6. I/O Check

6.1 Check procedure

- To allow sensors to be checked for operation easily and safely, data applied to the IC on the board can be checked on the panel with the main unit in the standby state (including a misfeed, malfunction, and closure failure condition).

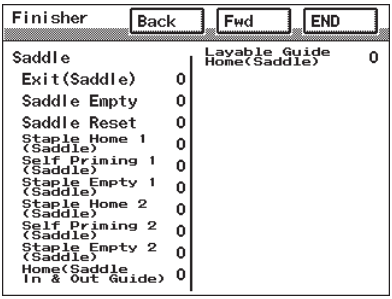
<Procedure>

1. Display the Tech. Rep. Mode screen.
   See P.154 of the main body service manual.
2. Touch [I/O Check].
3. Touch [Finisher].
4. Touch [Fwd] two times.

6.2 I/O check list

6.2.1 I/O check screen

- This is only typical screen which may be different from what are shown on each individual main unit.



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6.2.2 I/O check list

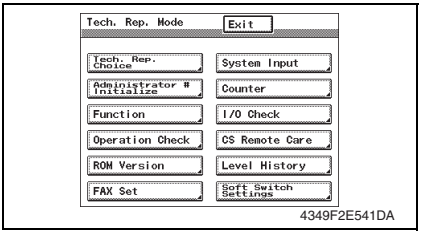
A. Finisher (SD-502)

Symbol	Panel display		Part/Signal name	Operation characteristics/ Panel display	
				1	0
PC20-SK	Finisher	Exit (Saddle)	Saddle Exit Sensor	Paper present	Paper not present
PC21-SK		Saddle Empty	Saddle Tray Empty Sensor	Paper present	Paper not present
S4-SK		Saddle Reset	Saddle Interlock Switch	Open	Closed
-		Staple Home 1 (Saddle)	Staple Home Position Sensor 1	Blocked	Unblocked
-		Self Priming 1 (Saddle)	Self-Priming Sensor 1	Blocked	Unblocked
-		Staple Empty 1 (Saddle)	Staple Empty Detection Sensor 1	Blocked	Unblocked
-		Staple Home 2 (Saddle)	Staple Home Position Sensor 2	Blocked	Unblocked
-		Self Priming 2 (Saddle)	Self-Priming Sensor 2	Blocked	Unblocked
-		Staple Empty 2 (Saddle)	Staple Empty Detection Sensor 2	Blocked	Unblocked
PC23-SK		Home (Saddle In & Out Guide)	In & Out Guide Home Sensor	Blocked	Unblocked
PC26-SK		Layable Guide Home (Saddle)	Layable Guide Home Sensor	Blocked	Unblocked

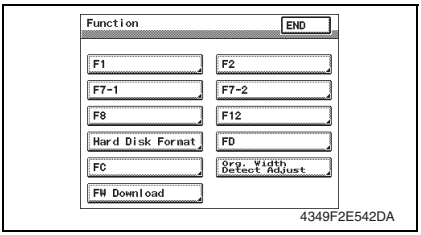
7. Test mode

7.1 Entering Function Mode

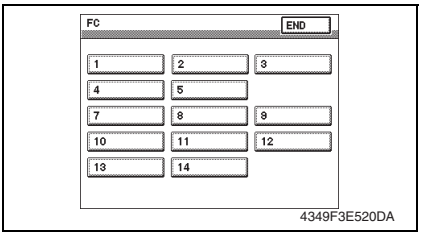
1. Display the Tech. Rep. Mode screen.
See P.154 of the main body service manual.



2. Touch [Function].



3. Touch [FC].



4. Touch [8] or [9].

7.2 Function Modes

8: Folding Unit movement mode

- Performs the creasing drive once.
  → Raises the Layable guide.
  → Stops after the predetermined time.
  → Lowers the Layable guide.
  → The operation is finished.

9: Saddle Unit exit open/close mode

- Opens the Saddle Exit after the Saddle Exit is opened and closed.
  → Stops after the predetermined time.
  → The Saddle Exit closes.
  → The Saddle In & Out Guide advances.
  → Stops after the predetermined time.
  → The Saddle In & Out Guide retracts.
  → The operation is finished.

8. Mechanical adjustment

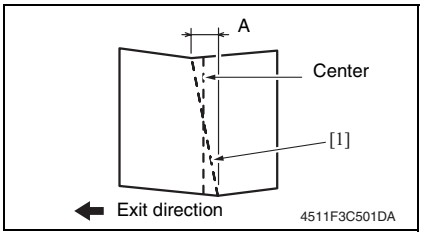
8.1 Fold Angle Adjustment

NOTE

Make this adjustment after any of the following procedures has been performed.

- **When the Folding Unit has been replaced.**
- **When a slant occurs in the crease.**

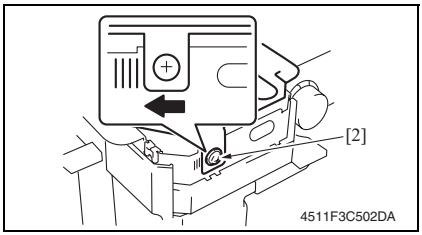
1. Enter the Crease mode and make a copy. (A3 or 11x17 Size)



2. Fold the output paper along the crease [1].

3. Fold the output paper and half and measure the width A of the paper.
Specification: 0 ± 1.5 mm

4. If the fold position is slanted as shown on the left, make the following adjustment.



5. Open the Front Door, loosen the adjustment screw [2], and move the Folding Unit to the left to make the adjustment.
Graduated in 1-mm divisions

- If the fold position is slanted opposite to the figure of step 4, move the Folding Unit to the right to make the adjustment.

6. Make another copy and check the fold position.

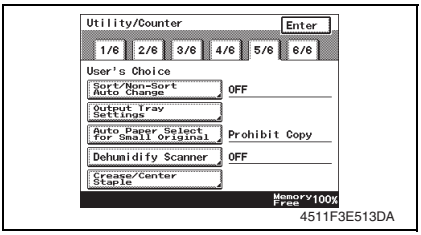
8.2 Fold Position Adjustment

NOTE

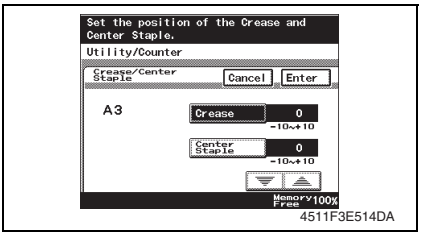
Make this adjustment after any of the following procedures has been performed.

- **When the Folding Unit has been replaced.**
- **When a deviation occurs in the crease.**
- **When fold angle adjustment has been made.**

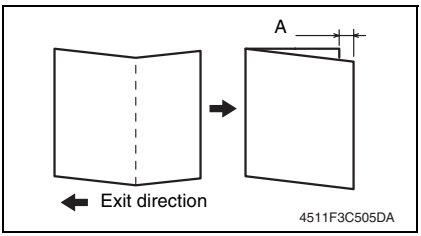
1. Enter the Booklet + Crease mode and make a copy. (A3 or 11x17 Size)



2. Press the Utility/Counter key, and touch [User's Choice].
3. Touch the [5/6] tab.
4. Touch [Crease/Center Staple].

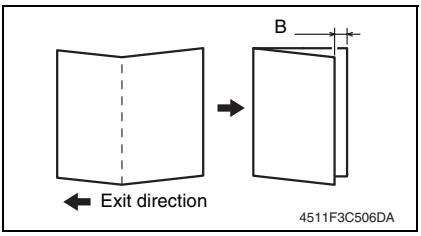


5. Select [A3] and touch [Enter].
6. Touch [Crease].
7. Check the copy of step 1 and make the following adjustment.



If the fold is offset as shown on the left.

8. Fold the copy along the crease and measure width A.
Specification: 0 ± 1.5 mm
9. Touch [▲] and set the appropriate numeric value.
Adjustment range: 0 to +10
(1 increment 0.5 mm)



If the fold is offset as shown on the left.

10. Fold the copy along the crease and measure width B.
Specification: 0 ± 1.5 mm
11. Touch [▼] and set the appropriate numeric value.
Adjustment range: 0 to -10
(1 increment 0.5 mm)

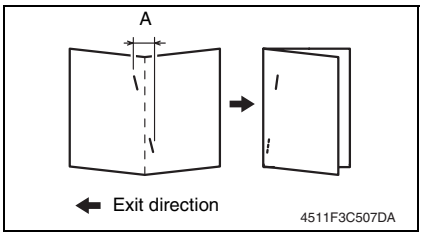
12. Touch [Enter].
13. Make another copy, and check the deviation.

8.3 Center Staple Angle Adjustment

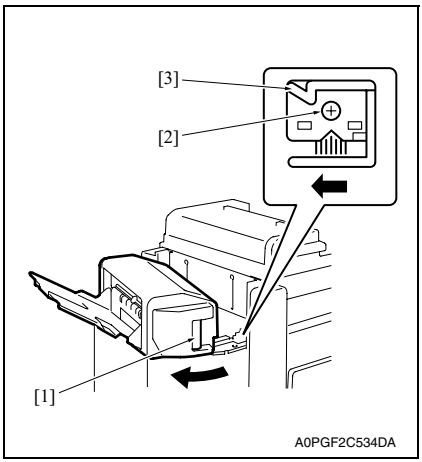
NOTE

Make this adjustment after any of the following procedures has been performed.

- **When Staple Unit 1 or 2 has been replaced.**
- **When a slant occurs in the position of the center staple.**



1. Set to Booklet + 2-point Staple and Crease mode and make a copy. Measure the width A of the paper. Specification: 0 ± 1.5 mm
2. If the staple position is slanted as shown on the left, make the following adjustment.



3. Release the lock release lever [1] of the Saddle Unit.
4. Loosen the adjustment screw [2] and move the lock member [3] to the left to make the adjustment.

- If the staple position is skewed opposite to the figure of step 2, move the lock member to the right to make the adjustment.

5. Make another copy and check the staple position.

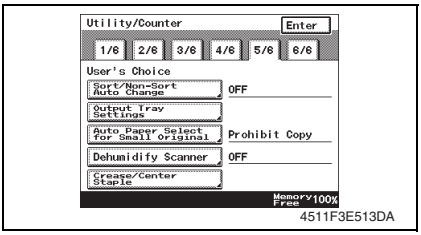
8.4 Center Staple Position Adjustment

NOTE

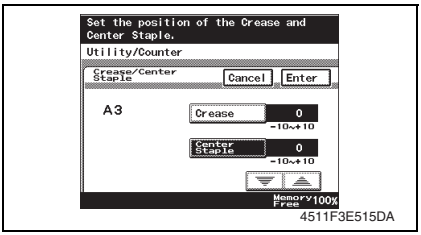
Make this adjustment after any of the following procedures has been performed.

- **When Staple Unit 1 or 2 has been replaced.**
- **When center staple position is misaligned.**
- **When center staple angle adjustment has been made.**

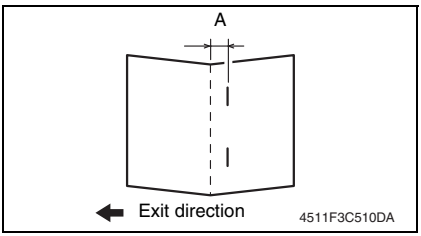
1. Make a copy in the Center Staple mode. (A3 or 11x17 Size)



2. Press the Utility/Counter key, and touch [User's Choice].
3. Touch the [5/6] tab.
4. Touch [Crease/Center Staple].

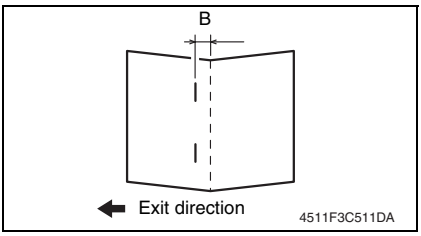


5. Select [A3] and touch [Enter].
6. Touch [Center Staple].
7. Check the copy of step 1 and make the following adjustment.



If the staple position is offset as shown on the left

8. Fold the copy in half at the center and measure width A.
Specification: 0 ± 1.5 mm
9. Touch [▲] and set the appropriate numeric value.
Adjustment range: 0 to +10
(1 increment 0.5 mm)



If the staple position is offset as shown on the left

10. Fold the copy in half at the center and measure width B.
Specification: 0 ± 1.5 mm
11. Touch [▼] and set the appropriate numeric value.
Adjustment range: 0 to -10
(1 increment 0.5 mm)

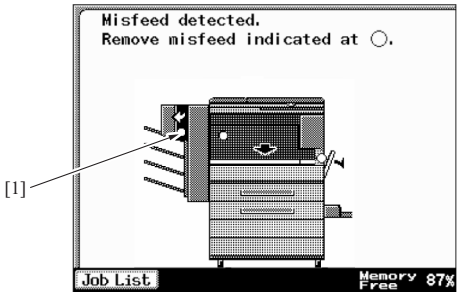
12. Touch [Enter].
13. Make another copy, and check the deviation.

TROUBLESHOOTING

9. Jam Display

9.1 Misfeed Display

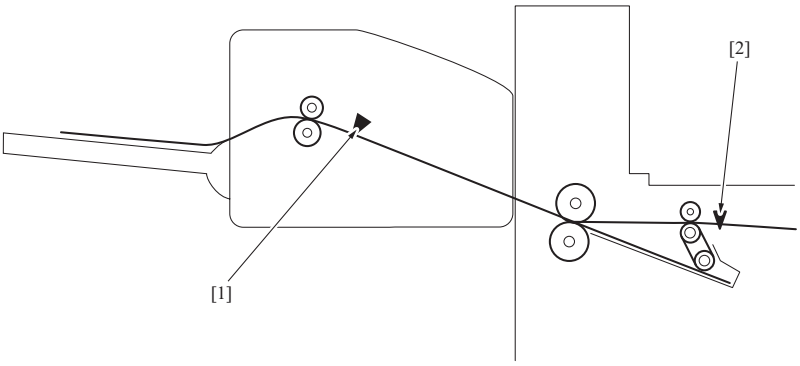
- When a paper misfeed occurs, the misfeed message, misfeed location, and paper location are displayed on the Touch Panel of the machine.



4511F4E502DA

Display	Misfeed Location	Misfeed processing location	Action
[1]	Folding Section Misfeed	Front Door	P.38
	Staple Unit Misfeed	Front Door	P.39
	Paper Bundle Exit Misfeed	Front Door	P.40

9.2 Sensor layout



4511F4C501DA

[1] Saddle Exit Sensor PC20-SK

[2] Transport Sensor PC5-FN

9.3 Solution

9.3.1 Initial Check Items

- When a paper misfeed occurs, first make checks of the following initial check items

Check Item	Action
Does paper meet product specifications?	Change paper.
Is paper curled, wavy, or damp.	Change paper. Instruct user in correct paper storage.
Is a foreign object present along the paper path, or is the paper path deformed or worn?	Clean or change the paper 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 paper?	Set as necessary.
Are actuators found operational as checked for correct operation?	Correct or change the defective actuator.

9.3.2 Folding Section Misfeed

A. Detection Timing

Type	Description
Folding Section misfeed detection	The Entrance Sensor (PC4-FN) is not blocked even after the set period of time has elapsed after the Entrance Motor (M3-FN) is energized (beginning of backward rotation operation).
	The Entrance Sensor (PC4-FN) is not unblocked even after the set period of time has elapsed after the Entrance Motor (M3-FN) is energized (beginning of forward rotation operation).

B. Action

Relevant Electrical Parts	
Entrance Motor (M3-FN) Entrance Sensor (PC4-FN)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4-FN I/O check	PWB-A FN PJ25A FN-4 (ON)	FS-530 B-6
3	Change PWB-C SK	-	-

9.3.3 Staple Unit Misfeed

A. Detection Timing

Type	Description
Staple Unit misfeed detection	The Staple Home Position Sensor in the Staple Unit is not blocked even after the set period of time has elapsed after the Staple Motor rotates forward, and then the Staple Motor rotates backward, and the Staple Home Position Sensor in the Staple Unit is blocked within the set period of time.

B. Action

Relevant Electrical Parts	
Staple Unit 1 Staple Unit 2	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	Drive Coupling Section check	-	-
3	I/O Check	-	-
4	Change Staple Unit 1	-	-
5	Change Staple Unit 2	-	-
6	Change PWB-C SK	-	-

9.3.4 Paper Bundle Exit Misfeed

A. Detection Timing

Type	Description
Paper Bundle misfeed detection	The Storage Tray Detecting Sensor (PC8-FN) is not unblocked even after the set period of time has elapsed after the Exit Motor (M1-FN) is energized.
	The Saddle Exit Sensor (PC20-SK) is not blocked even after the set period of time has elapsed after the Exit Motor (M1-FN) is energized.
	The Saddle Exit Sensor (PC20-SK) is not unblocked even after the set period of time has elapsed after the Saddle Exit Sensor (PC20-SK) is blocked.

B. Action

Relevant Electrical Parts	
Exit Motor (M1-FN) Saddle Exit Motor (M8-SK) Storage Tray Detecting Sensor (PC8-FN)	Saddle Exit Sensor (PC20-SK) Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC8-FN I/O check	PWB-A FN PJ13A FN-8 (ON)	FS-530 G-8
3	PC20-SK I/O check	PWB-C SK PJ19C SK-8 (ON)	SD-507 B-4
4	Change PWB-C SK	-	-

10. Malfunction code

10.1 Trouble code

- The machine's CPU performs a self-diagnostics function that, on detecting a malfunction, gives the corresponding malfunction code and maintenance call mark on the Touch Panel.

Code	Item	Description
C11A2	Saddle Exit Roller Pressure/Retraction Failure	• The Saddle Exit Roller Home Position Sensor (PC18-SK) is not blocked even after the set period of time has elapsed after the Saddle Exit Open/Close Motor (M9-SK) is energized (beginning of pressure operation). • The Saddle Exit Roller Home Position Sensor (PC18-SK) is not unblocked even after the set period of time has elapsed after the Saddle Exit Open/Close Motor (M9-SK) is energized (beginning of retraction operation).
C11A4	Saddle Exit Motor Failure	The Lock signal is detected after the set period of time has elapsed after the Saddle Exit Motor (M8-SK) is energized.
C11A5	Saddle In & Out Guide Motor Failure	• The In & Out Guide Home Sensor (PC23-SK) is not unblocked even after the set period of time has elapsed after the In & Out Guide Motor (M13-SK) is energized (beginning of advancing operation). • The In & Out Guide Home Sensor (PC23-SK) is not unblocked even after the set period of time has elapsed after the In & Out Guide Motor (M13-SK) is energized (beginning of retracting operation).
C11A6	Saddle Layable Guide Drive Failure	• The Layable Guide Home Sensor (PC26-SK) is not blocked even after the set period of time has elapsed after the Layable Guide Motor (M14-SK) is energized (beginning of return operation to predetermined position). • The Layable Guide Home Sensor (PC26-SK) is not unblocked even after the set period of time has elapsed after the Layable Guide Motor (M14-SK) is energized (beginning of return operation to predetermined position).
C11B5	Side Staple 1 Drive Failure	Home Position Sensor 1 is not blocked even after the set period of time has elapsed after Saddle Staple Motor 1 is energized (beginning of staple operation).
C11B6	Side Staple 2 Drive Failure	Home Position Sensor 2 is not blocked even after the set period of time has elapsed after Saddle Staple Motor 2 is energized (beginning of staple operation).
C11D0	Crease Motor Drive Failure	• The Crease Roller Home Position Sensor (PC22-SK) is not unblocked even after the set period of time has elapsed after the Crease Motor (M10-SK) is energized (beginning of backward rotation operation). • The Crease Roller Home Position Sensor (PC22-SK) is not blocked even after the set period of time has elapsed after the Crease Motor (M10-SK) is energized (beginning of forward rotation operation).

10.2 Solution

10.2.1 C11A2: Saddle Exit Roller Pressure/Retraction Failure

Relevant Electrical Parts	
Saddle Exit Open/Close Motor (M9-SK) Saddle Exit Roller Home Position Sensor (PC18-SK)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M9-SK connector for proper connection and correct as necessary.	-	-
2	Check M9-SK for proper drive coupling and correct as necessary.	-	-
3	M9-SK operation check	PWB-C SK PJ4C SK-6 to 7	SD-507 H-6
4	PC18-SK I/O check	PWB-C SK PJ9C SK-6 (ON)	SD-507 B-3
5	Change PWB-C SK	-	-

10.2.2 C11A4: Saddle Exit Motor Failure

Relevant Electrical Parts	
Saddle Exit Motor (M8-SK)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M8-SK connector for proper connection and correct as necessary.	-	-
2	Check M8-SK for proper drive coupling and correct as necessary.	-	-
3	M8-SK operation check	PWB-C SK PJ4C SK-6 to 7	SD-507 H-6
4	Change PWB-C SK	-	-

10.2.3 C11A5: Saddle In & Out Guide Motor Failure

Relevant Electrical Parts	
In & Out Guide Motor (M13-SK) In & Out Guide Home Sensor (PC23-SK)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M13-SK connector for proper connection and correct as necessary.	-	-
2	Check M13-SK for proper drive coupling and correct as necessary.	-	-
3	M13-SK operation check	PWB-C SK PJ4C SK-4 to 5	SD-507 H-6
4	PC23-SK I/O check	PWB-C SK PJ10C SK-3 (ON)	SD-507 B-4
5	Change PWB-C SK	-	-

10.2.4 C11A6: Saddle Layable Guide Drive Failure

Relevant Electrical Parts	
Layable Guide Motor (M14-SK) Layable Guide Home Sensor (PC26-SK)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M14-SK connector for proper connection and correct as necessary.	-	-
2	Check M14-SK for proper drive coupling and correct as necessary.	-	-
3	M14-SK operation check	PWB-C SK PJ4C SK-8 to 9	SD-507 H-6
4	PC26-SK I/O check	PWB-C SK PJ10C SK-6 (ON)	SD-507 B-4
5	Change PWB-C SK	-	-

10.2.5 C11B5: Side Staple 1 Drive Failure

10.2.6 C11B6: Side Staple 2 Drive Failure

Relevant Electrical Parts	
Staple Unit 1 Staple Unit 2	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the Staple Unit 1 and 2 connectors for proper connection and correct as necessary.	-	-
2	Check Staple Units 1 and 2 for proper drive coupling, and correct as necessary.	-	-
3	Staple Units 1 and 2 operation check	-	-
4	Change Staple Units 1 and 2	-	-
5	Change PWB-C SK	-	-

10.2.7 C11D0: Crease Motor Drive Failure

Relevant Electrical Parts	
Crease Motor (M10-SK) Crease Roller Home Position Sensor (PC22-SK)	Main Control Board (PWB-C SK)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M10-SK connector for proper connection and correct as necessary.	-	-
2	Check M10-SK for proper drive coupling and correct as necessary.	-	-
3	M10-SK operation check	PWB-C SK PJ3C SK-1 to 2	SD-507 D-7
4	PC22-SK I/O check	PWB-C SK PJ2C SK-3 (ON)	SD-507 D-7
5	Change PWB-C SK	-	-

bizhub 362/282/222 Overall wiring diagram

DF-620(Option)
Power Supply Cooling Fan Motor
Tray2 Paper Empty Sensor
Tray2 Paper Lift Sensor
Vertical Conveyance Sensor
Right Lower Door Sensor
1st Drawer Paper Feed Clutch
Polygon Motor
Paper Dehumidifying Heater(Option)
Temperature/Humidity Sensor
2nd Drawer Paper Feed Clutch
Vertical Conveyance Clutch
Sub Hopper Solenoid
Sub Hopper Empty Switch
Erase Lamp
FS-530(Option)
ATDC Sensor(TCR)
Toner Suction Fan Motor
Total Counter
Plug-In Counter(Option)
IU Cooling Fan Motor
Main Hopper Solenoid
Tray1 Paper Empty Sensor
Tray1 Paper Lift Sensor
Front Door Sensor
Tray2 CD Paper Size Sensor 1
Tray2 CD Paper Size Sensor 2
PWB-J2
FD Paper Size Board 2
Tray2 Paper Lift Motor
Tray2 Paper Near-Empty Sensor
Tray2 Set Sensor
Tray1 Paper Near-Empty Sensor
Tray1 Set Sensor
Tray1 CD Paper Size Sensor 1
Tray1 CD Paper Size Sensor 2
PWB-J1
FD Paper Size Board 1
Tray1 Paper Lift Motor
HV1
High Voltage Unit
Pre-Transfer Guide Plate Resistor

PWB-A
Mechanical Control Board

PWB-B
LD Board
LD1
Laser Diode

Main Motor
IU Motor
Switchback Unit Sensor
Switchback Solenoid
Switchback Motor
PC-100/200/407
(Option)
Drum Thermistor
Cooling Fan Motor
Synchronizing Roller Sensor
Synchronizing Roller Clutch
Bypass Paper Empty Sensor
Bypass FD Paper Size Sensor/1
Bypass FD Paper Size Sensor/2
Bypass FD Paper Size Sensor/3
Bypass Paper Feed Clutch
Fusing Unit Cooling Fan Motor
Fusing Roller Sub Thermistor
Fusing Roller Thermistor
Paper Exit Sensor
Bypass FD Paper Size Sensor/4
Bypass PicK-Up Solenoid
Bypass Paper Size Detection Unit
Bypass Lift Sensor
Duplex Unit Transport Clutch 2
Duplex Unit Transport Clutch 1
Duplex Unit Door Sensor
Duplex Unit Lower Transport Sensor
Duplex Unit Upper Transport Sensor
Paper Full Detection Sensor
Paper Empty Sensor
JS-502(Option)
D-103
(Option)
CD-5
(Option)
MK-709
(Option)
New Vender
(Option)
Right Side Door Interlock Switch 1
PU1
Power Supply Unit
Main Power Switch
Fusing Roller Heater Lamp
Fusing Roller Sub Heater Lamp
Right Side Door Interlock Switch 2
High Voltage Resistor
Fusing Roller Thermostat

ML-502(Option)
AC Adapter
FAXS(Expansion)
FK-503(Option)
UN1
Control Panel
Auxiliary Power Button
Compact Flash
Warm Restart Switch
MFBS
MFBS Board
HDD
Hard Disc Drive
(Option)
SU-501/EM-303/
EM-304/EM-305
(Option)

Original Size Detecting Sensor 3 *7
Original Size Detecting Sensor 5
Original Size Detecting Sensor 6 *7
Ni-MH Battery
EK-502(Option)
PWB-S
Local Interface kit
Scanner Motor
BCRS
BCRS Board
INV
Inverter Board
Exposure Lamp
Original Cover Angle Sensor
Scanner Home Sensor
Original Size Detecting Sensor 4
Speaker
Size Reset Switch
Original Size Detecting Sensor 2
Original Size Detecting Sensor 1 *8
Original Size Detecting Sensor 7 *9
CCD
CCD Board
PU2
HDD Power Supply Unit
(Option)

*1 T : Image Transfer
TXD : Transmission Data
RXD : Reception Data
TPC : Photo Conductor
TPS : Paper Separator
CW/CCW : Clock Wise/Counter Clock Wise

*7 Option
*8 Inch Areas : Not Use
Metric Areas : Option
*9 Inch Areas : Option
Metric Areas : Standard

DESCRIPTION
CONNECTOR NO.
DESTINATION | LOCATION
CLOSED END CONNECTORS LARGE
CLOSED END CONNECTORS MEDIUM
CLOSED END CONNECTORS SMALL
POSITIVE LOCK RECEPTACLE #250 WITH HOUSING
POSITIVE LOCK RECEPTACLE #187 WITH HOUSING
OUTPUT OF ACTIVE LOW
OUTPUT OF ACTIVE HIGH
INPUT OF ACTIVE LOW
INPUT OF ACTIVE HIGH
OUTPUT OF ACTIVE HIGH OR LOW
INPUT OF ACTIVE HIGH OR LOW
DC24V
DC5V

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Dec.2008

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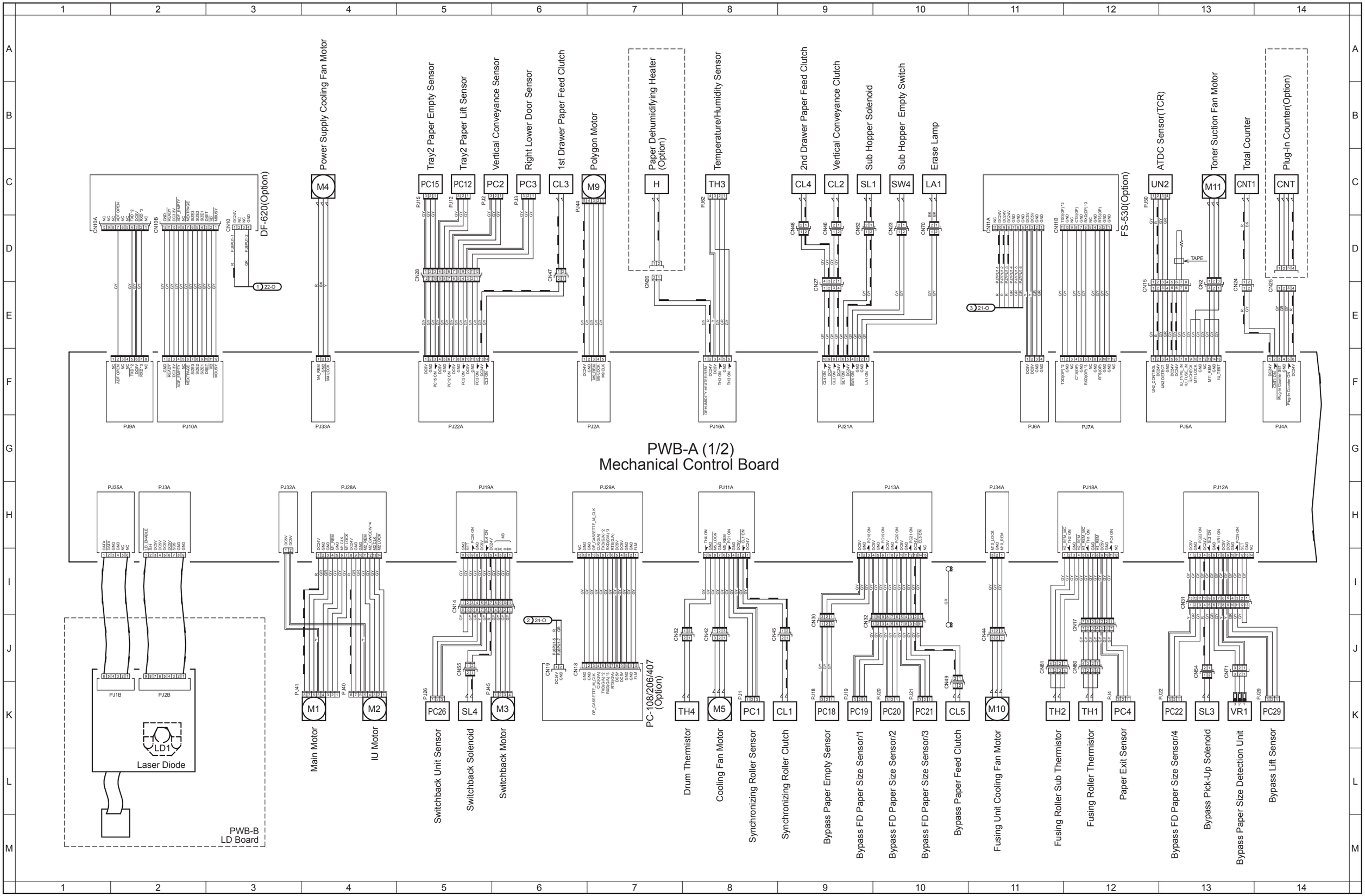
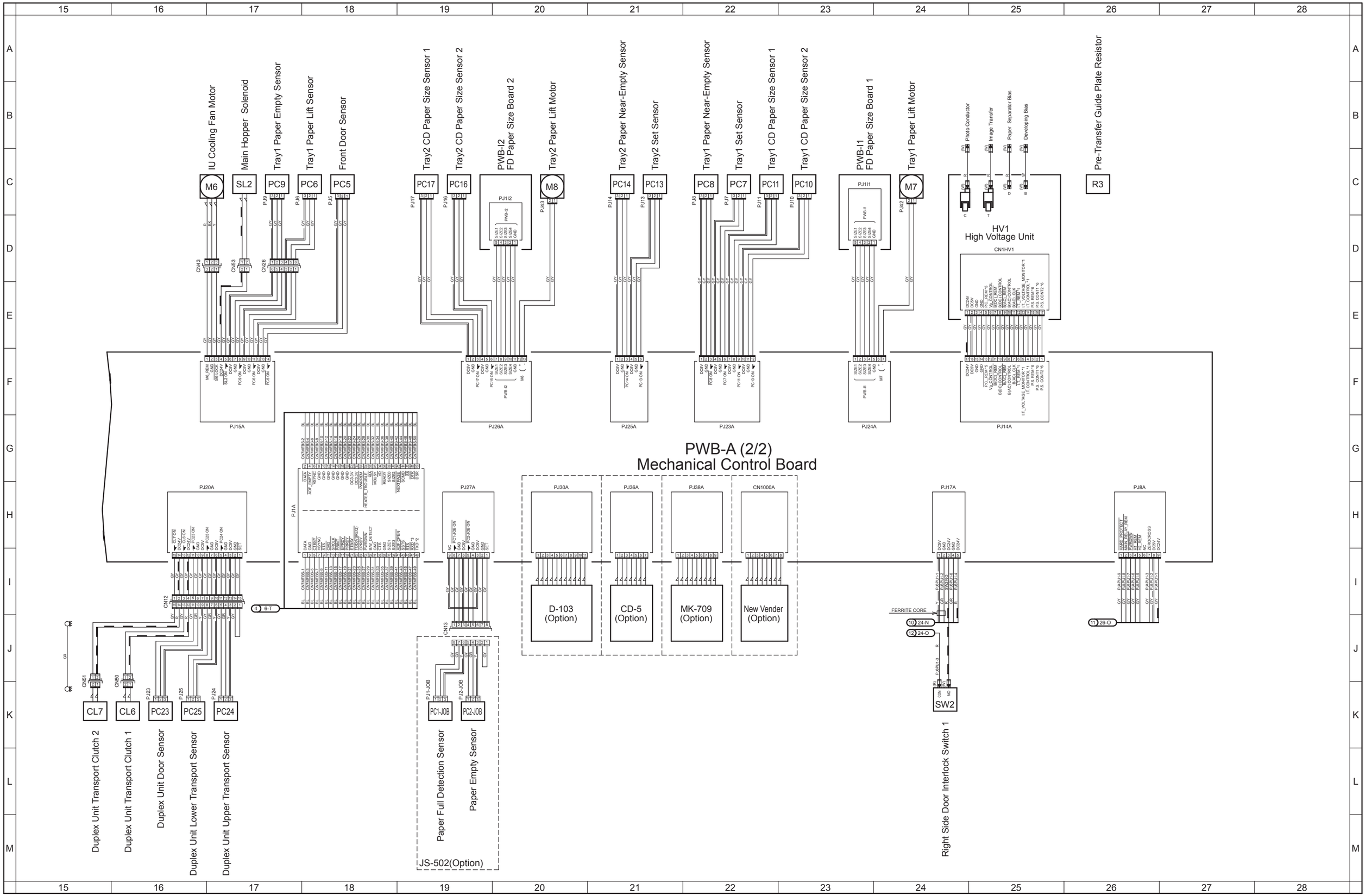
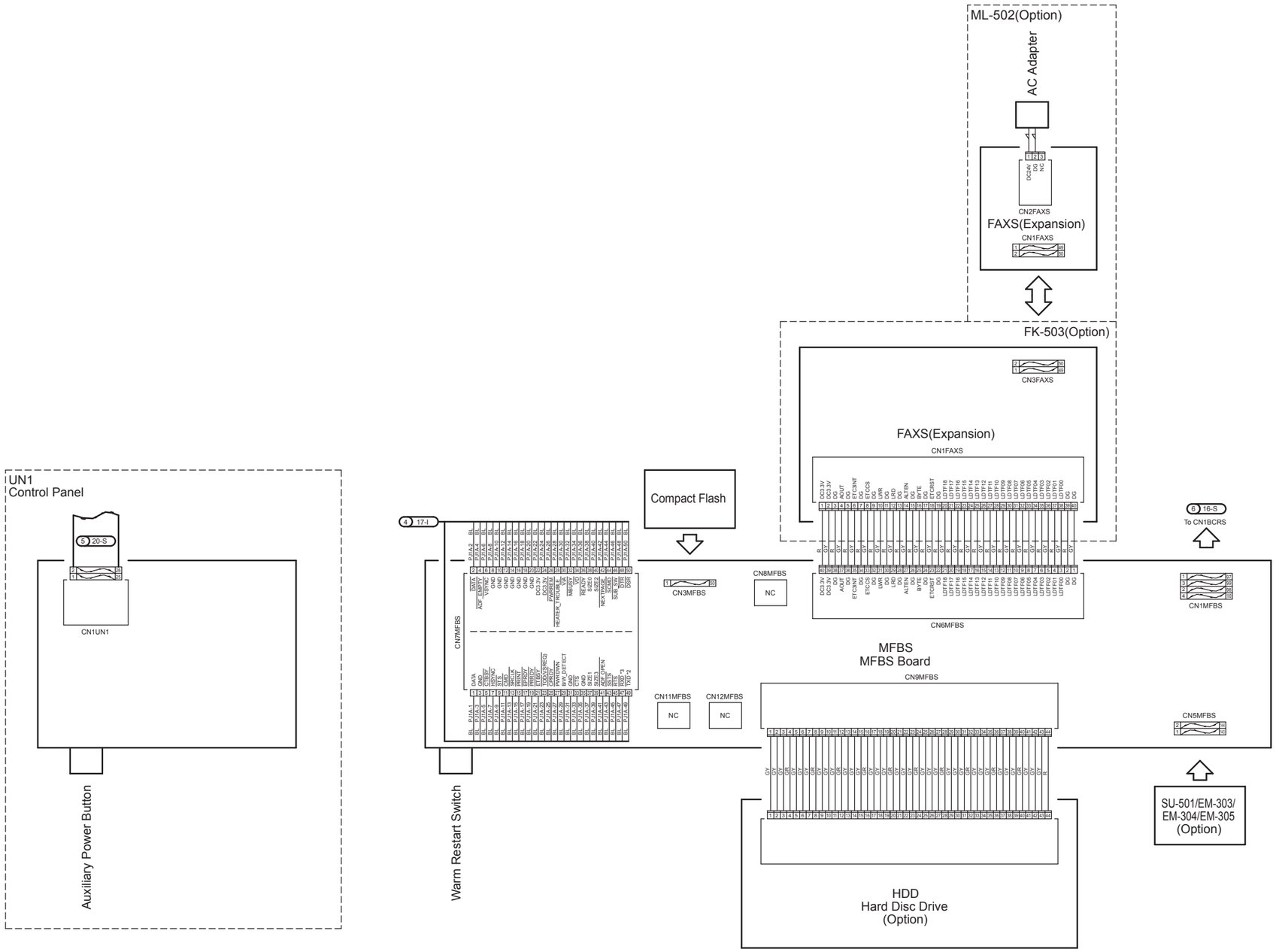


A11U-B001-0A 1/4
Dec.2008

bizhub 362/282/222 Overall wiring diagram 2/4



bizhub 362/282/222 Overall wiring diagram 3/4



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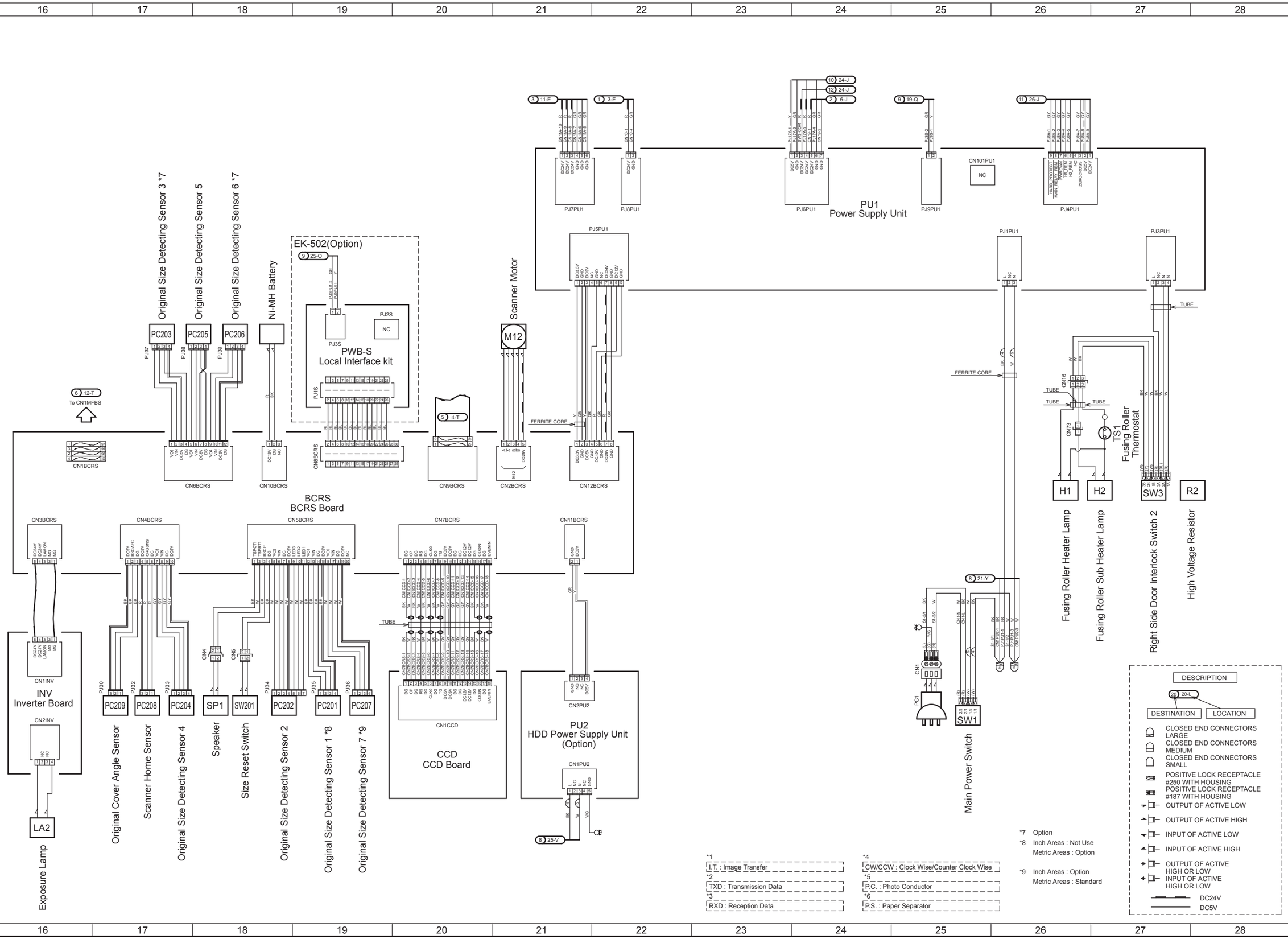
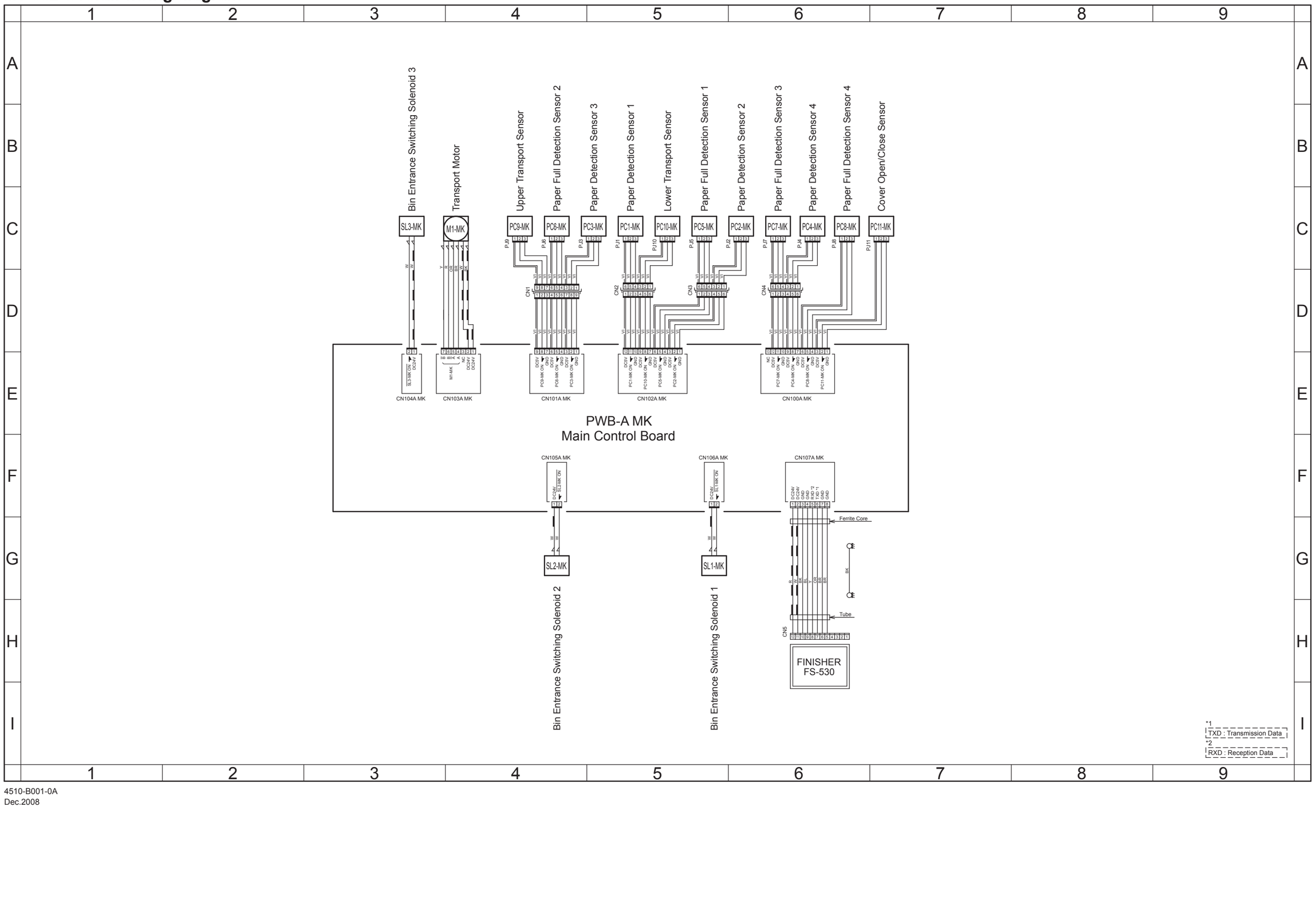
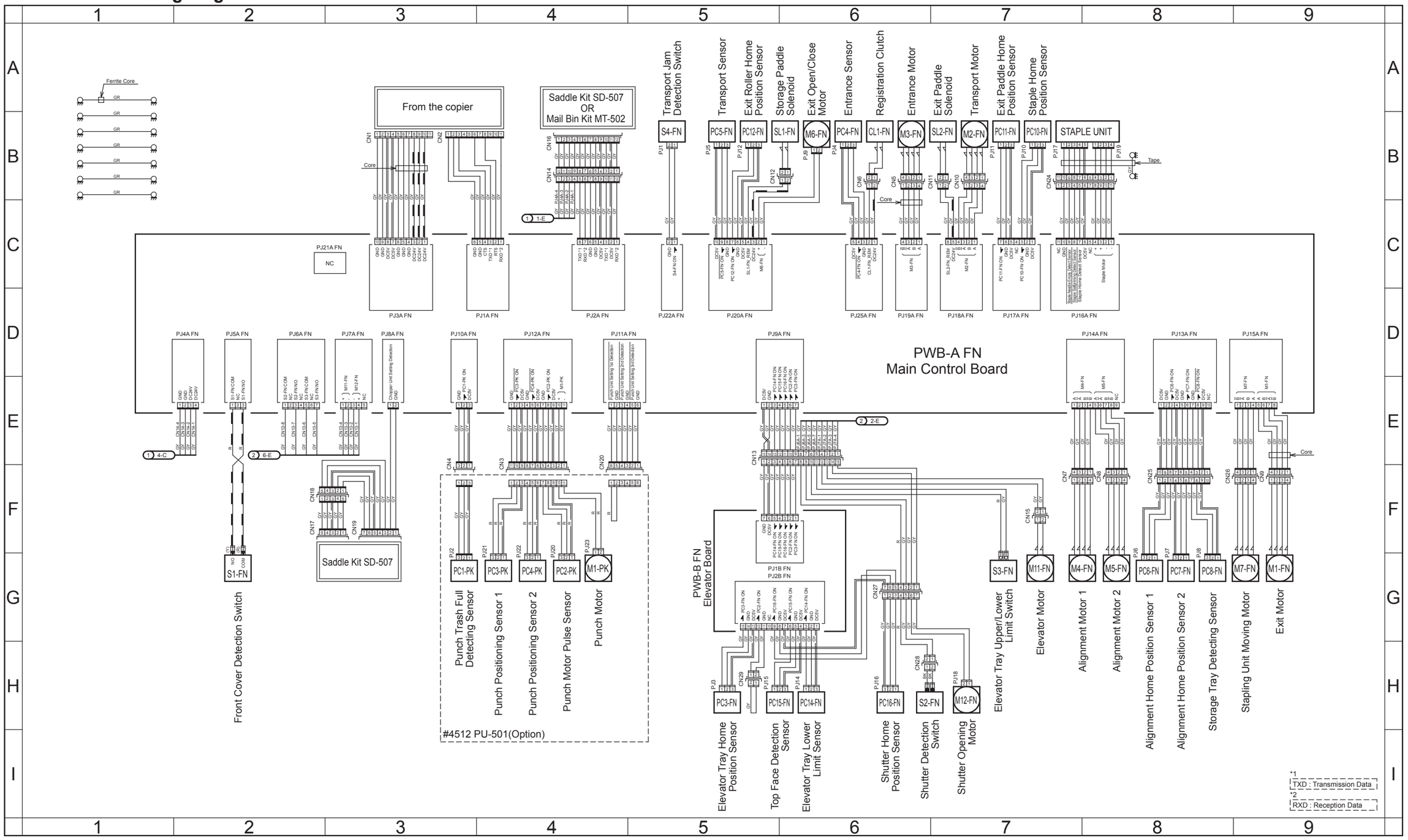


MT-502 Overall wiring diagram



4510-B001-0A
Dec.2008

FS-530 Overall wiring diagram



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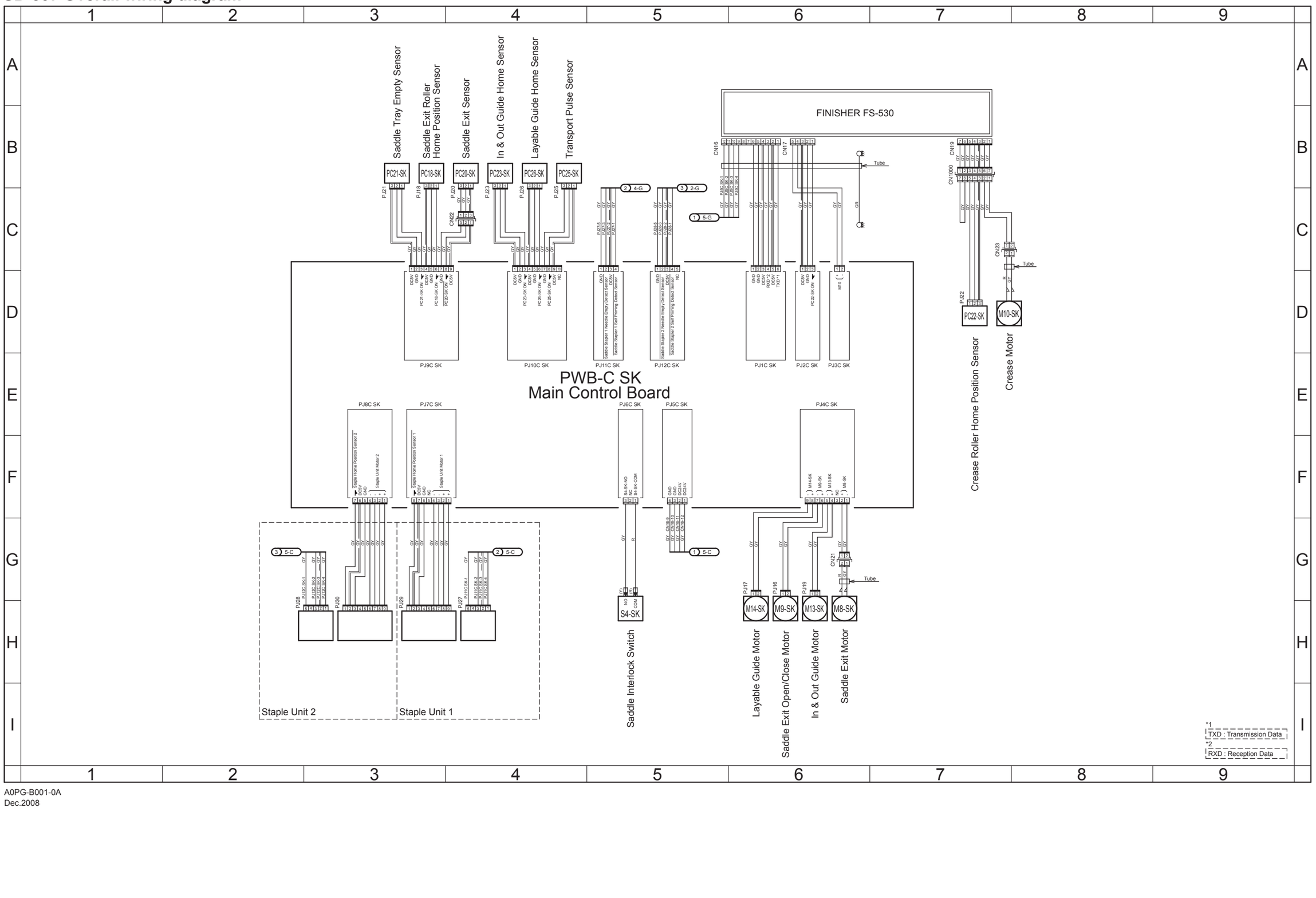
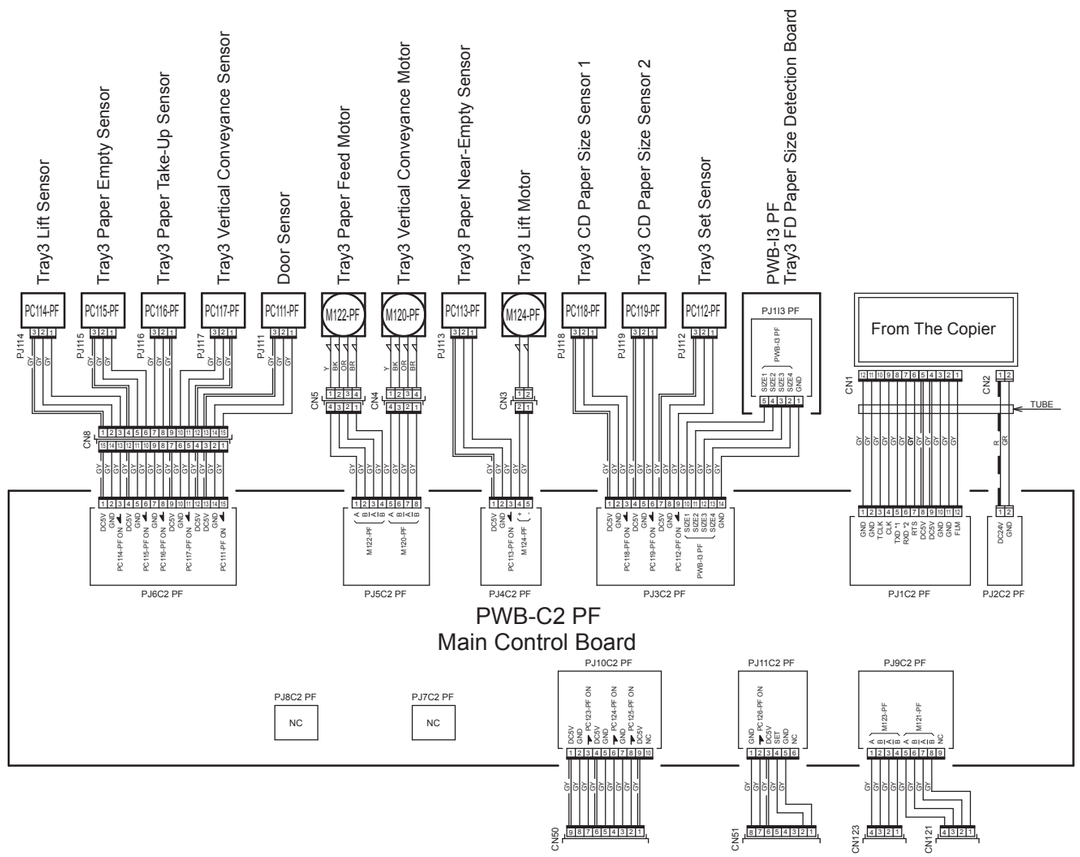
Dec.2008

SD-507 Overall wiring diagram



A0PG-B001-0A
Dec.2008

PC-108 Overall wiring diagram

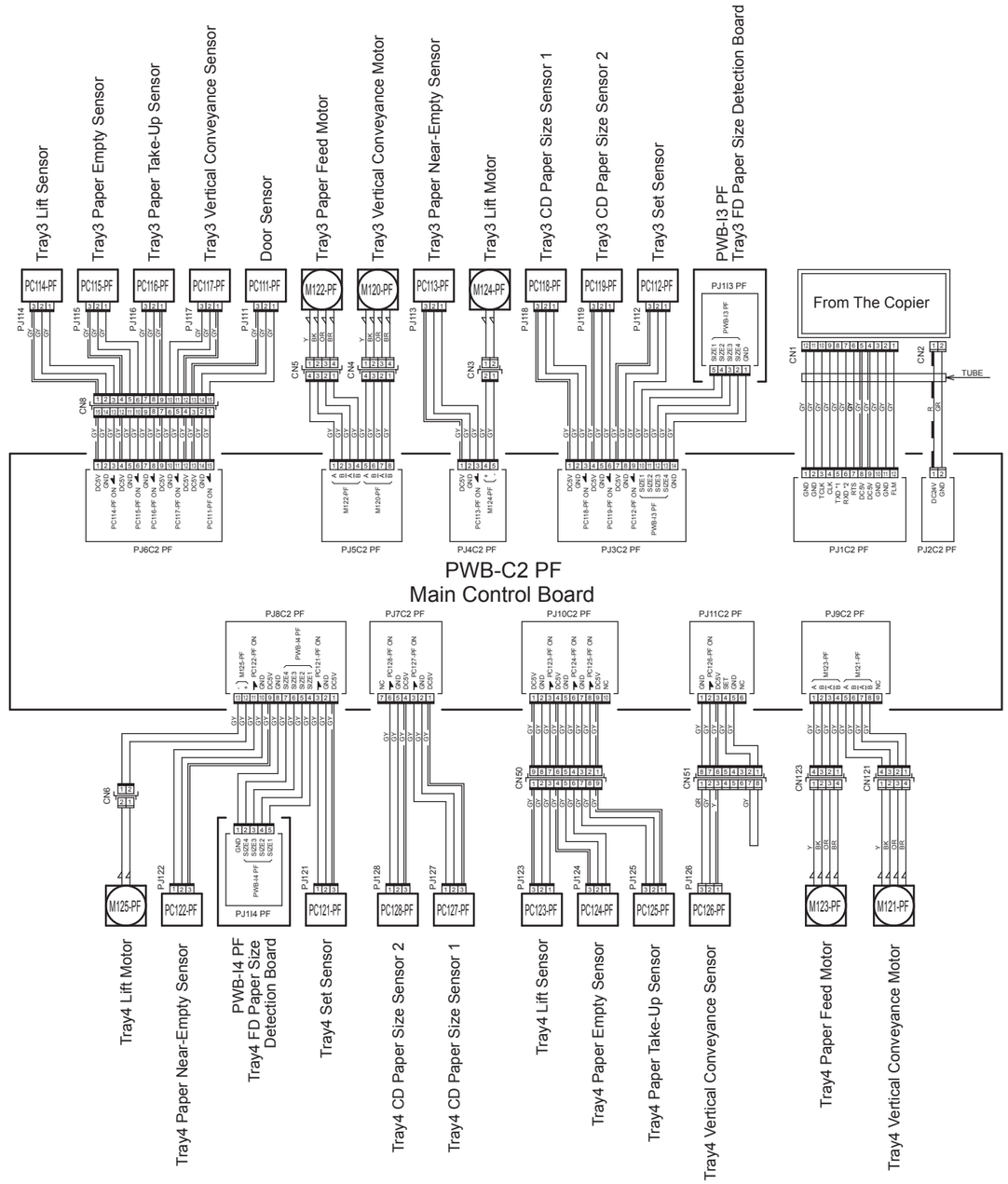


*1 TXD : Transmission Data

*2 RXD : Reception Data

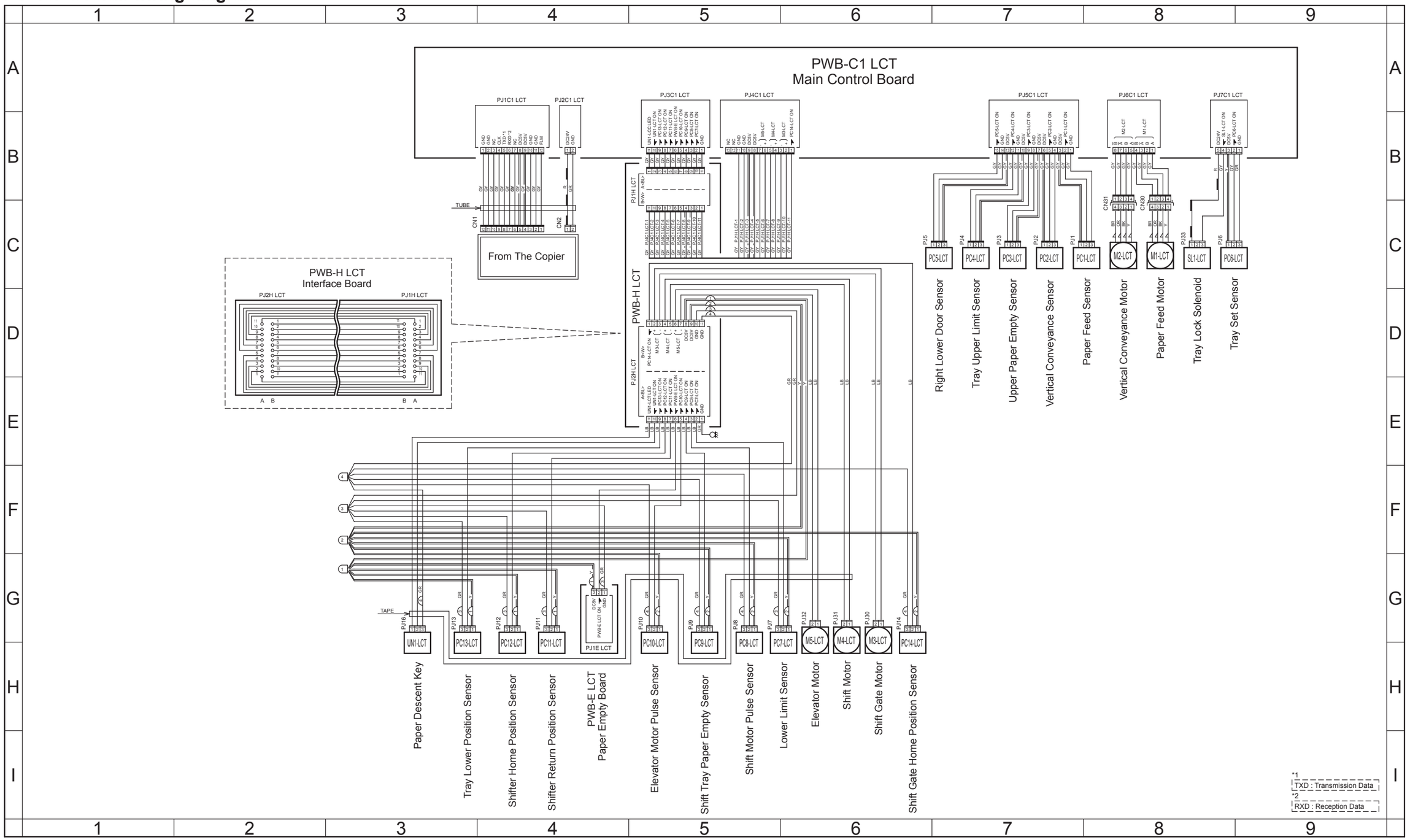
A0RC-B001-0A
Dec.2008

PC-206 Overall wiring diagram



A0RC-B001-1A
Dec.2008

PC-407 Overall wiring diagram



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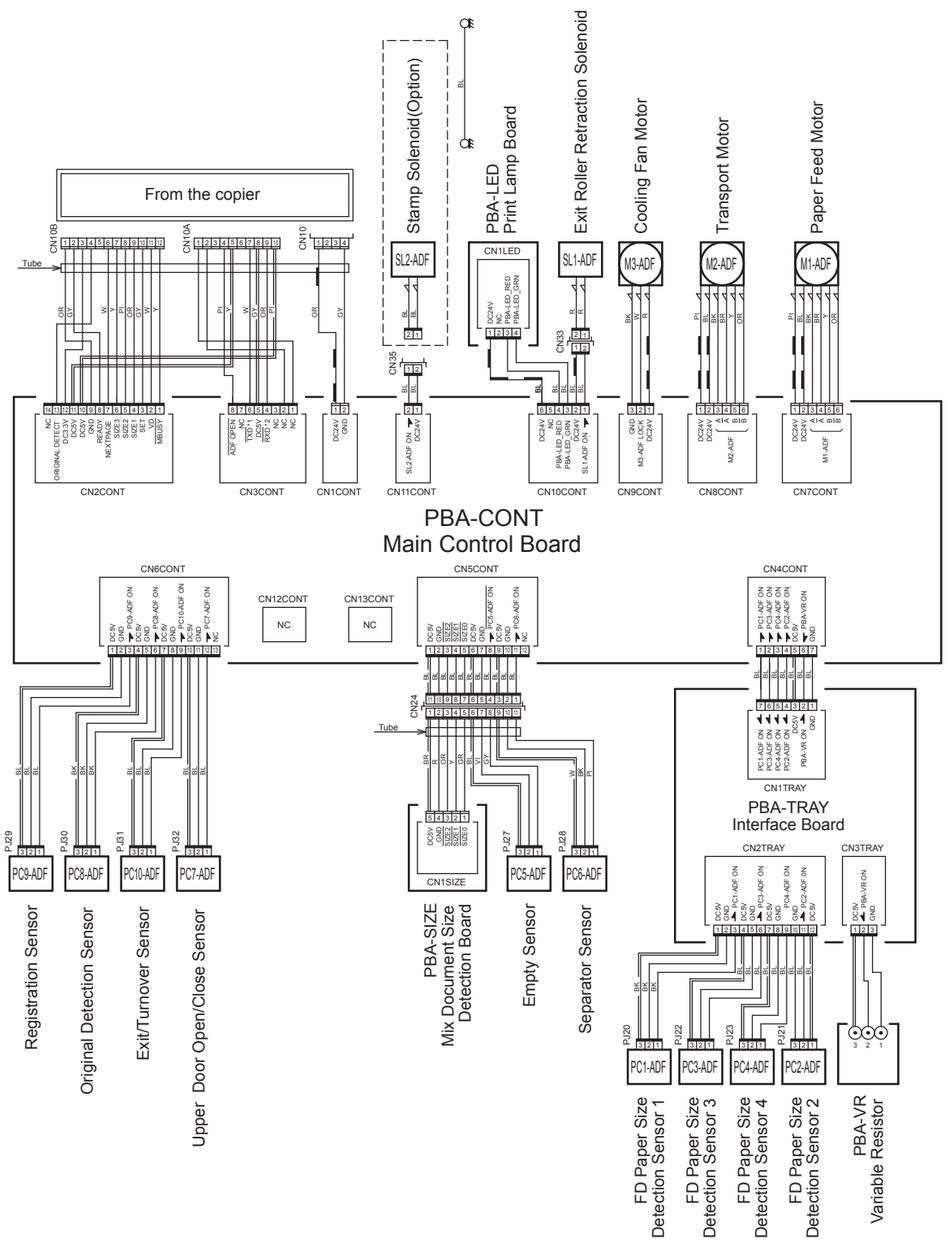
Dec.2008

DF-620 Overall wiring diagram




KONICA MINOLTA

KONICA MINOLTA

PARTS GUIDE MANUAL

JUNE 2009

bizhub 222/bizhub 282/bizhub 362
bizhub 7728
A11U011

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 ♣ means that there are exclusive parts for each destination.
Please check the appropriate destination when you order.

6 Revision Mark
Marked as ▲ 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.

パーツガイドマニュアルのご案内

サービス部品をご発注の際には、下記に示す “パーツガイドマニュアルの活用にあたって”をご参照の上、正しい部品番号にてお願い致します。

パーツガイドマニュアルの活用にあたって

1 部品発注の際には、掲載されている部品番号の桁数を確認し、掲載されている桁数で発注願います。

2 この製品に使用されているネジ、ナット、ワッシャー、止め輪、ピンなどは、リストの右側の Standard parts 欄に a,b,c,……で表示し、イラストにも a,b,c,……表示してあります。

3 製品の安全性を維持する為に、製品に使用される特定の部品を「重要保安部品」として設定しています。

4 重要保安部品の部品番号は、″SP00−****″ と記載されていますので、部品交換時は、サービスマニュアル記載の分解・組み立ての注意事項に従って作業をして下さい。
また、指定以外の部品は一切使用しないで下さい。

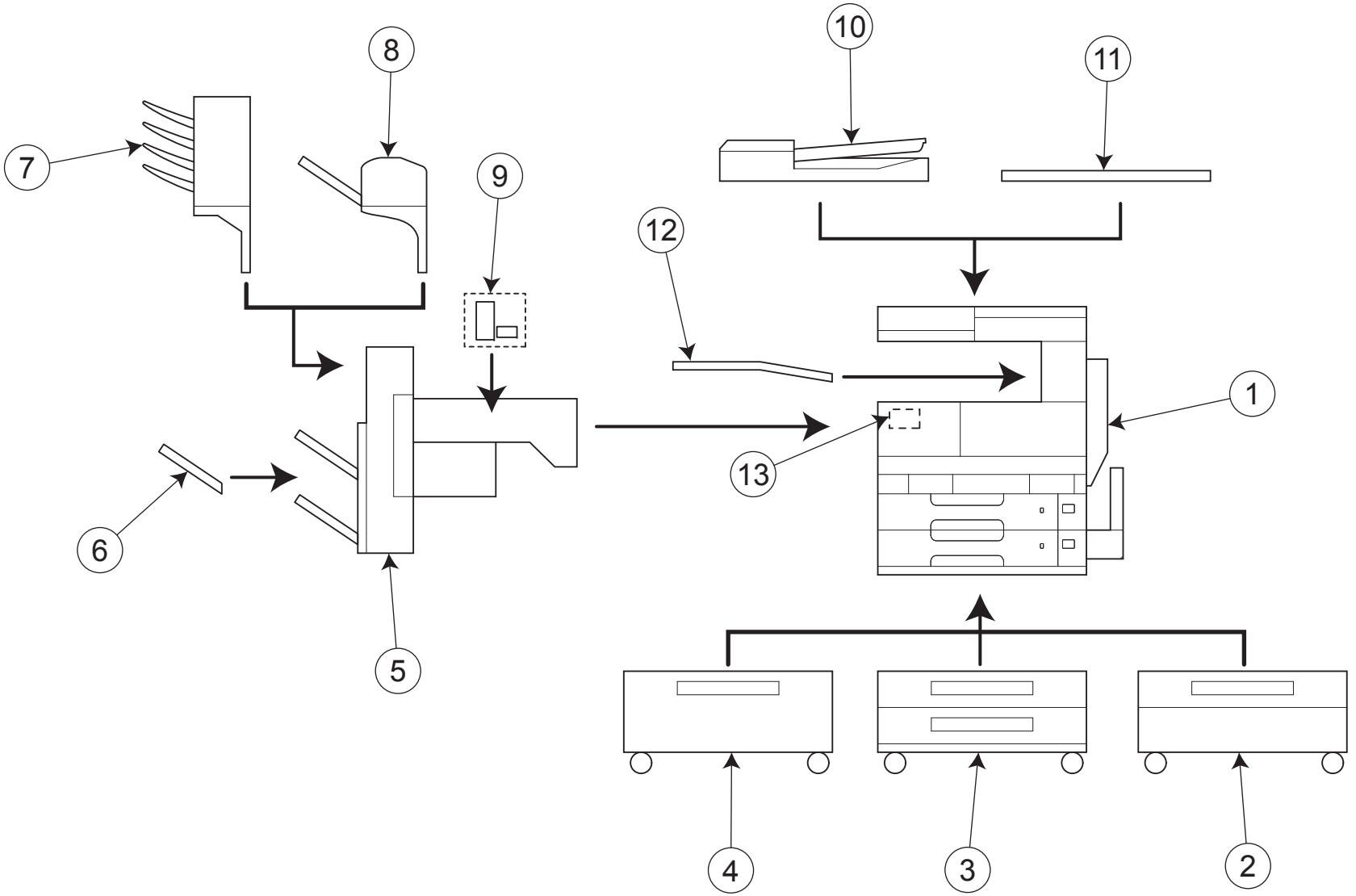
5 本文に ♣ が表示されている部品は、仕向け地毎に専用部品がある事を意味しています。
オーダーされる時は、仕向け地を確認して下さい。

6 改訂記号について
イラスト上に▲印が表示されている部分は、改訂された事を表します。

7 版権所有 （無断転載及び無断引用の禁止）
本パーツガイドマニュアルについては、機密保持等その扱いには十分注意して下さい。万一取り扱いを誤った場合には、法律で処罰されることがあります。

12/05/2008

SYSTEM OUTLINE



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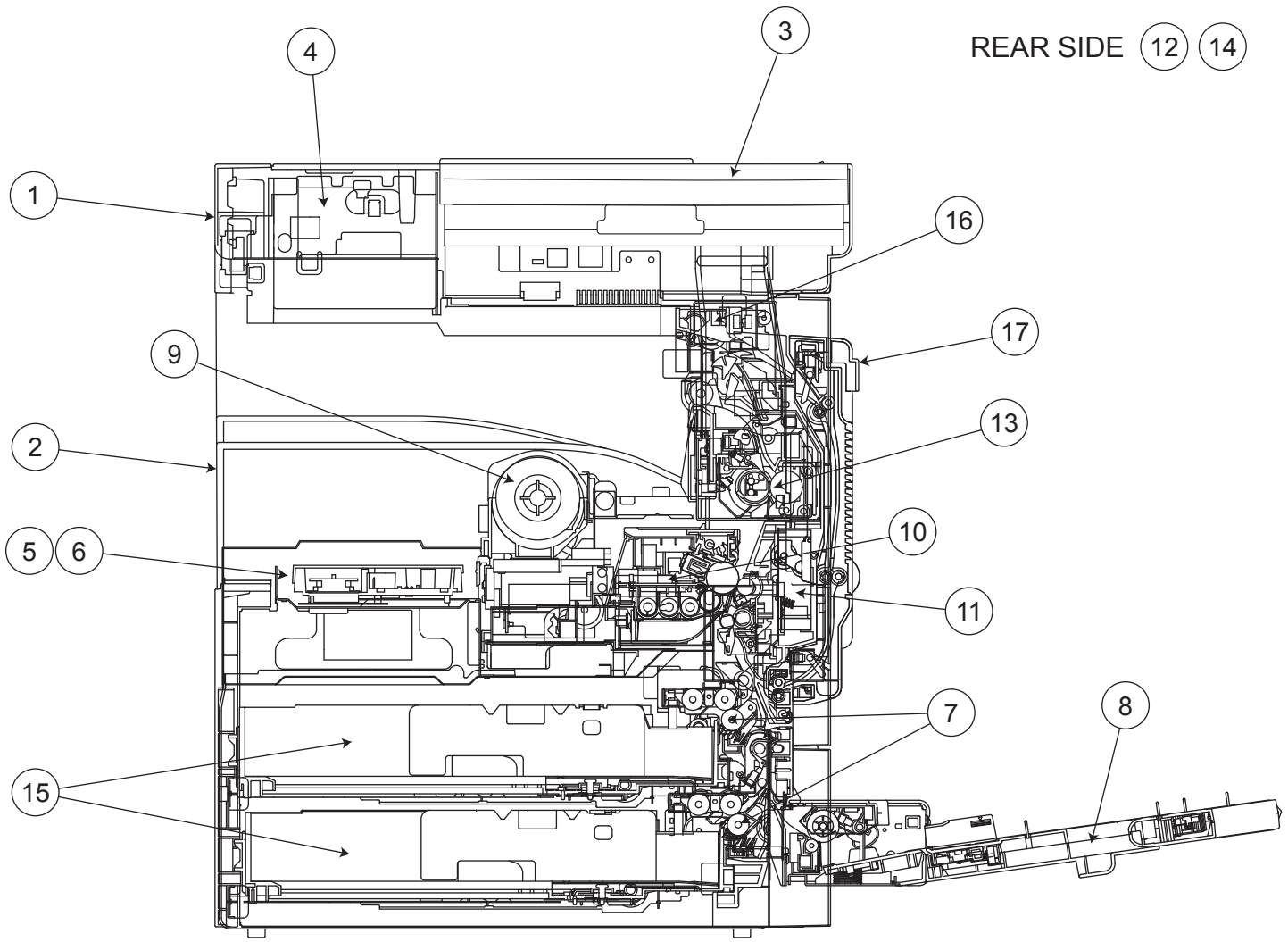
1	DIGITAL MFP B/W	bizhub 222/bizhub 282/bizhub 362/bizhub 7728
2	PAPER FEEDER	PC-108
3	PAPER FEEDER	PC-206
4	PAPER FEEDER	PC-407
5	SORTER/FINISHER	FS-530
6	OTHER OPTION	OT-602
7	SORTER/FINISHER	MT-502
8	SORTER/FINISHER	SD-507
9	PUNCH UNIT	PU-501
10	DOCUMENT FEEDER	DF-620
11	OTHER OPTION	OC-510
12	STACKER	JS-502
13	FAX CONTROLLER	FK-503

DIAGRAMS OF MAIN PARTS SECTION



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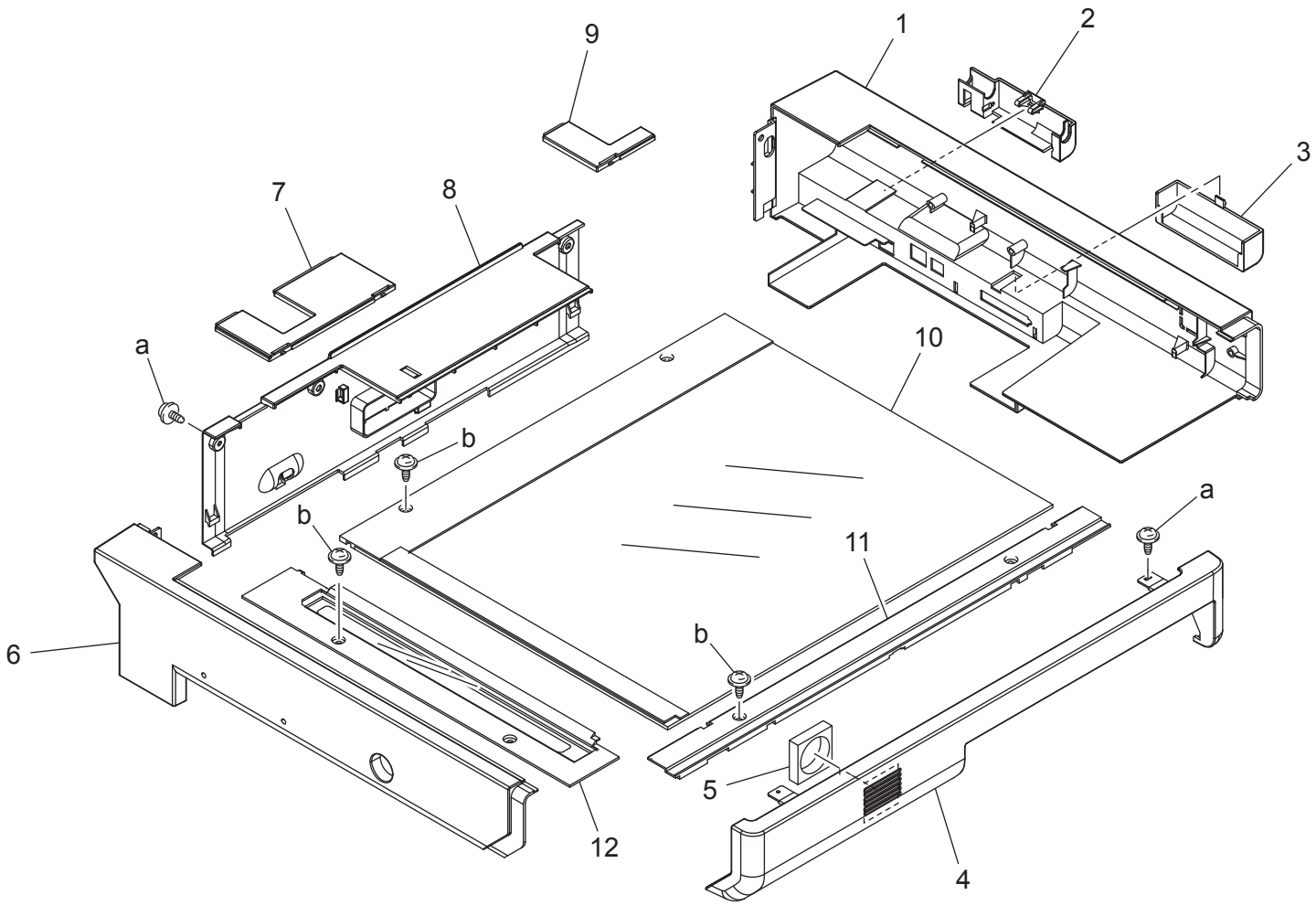
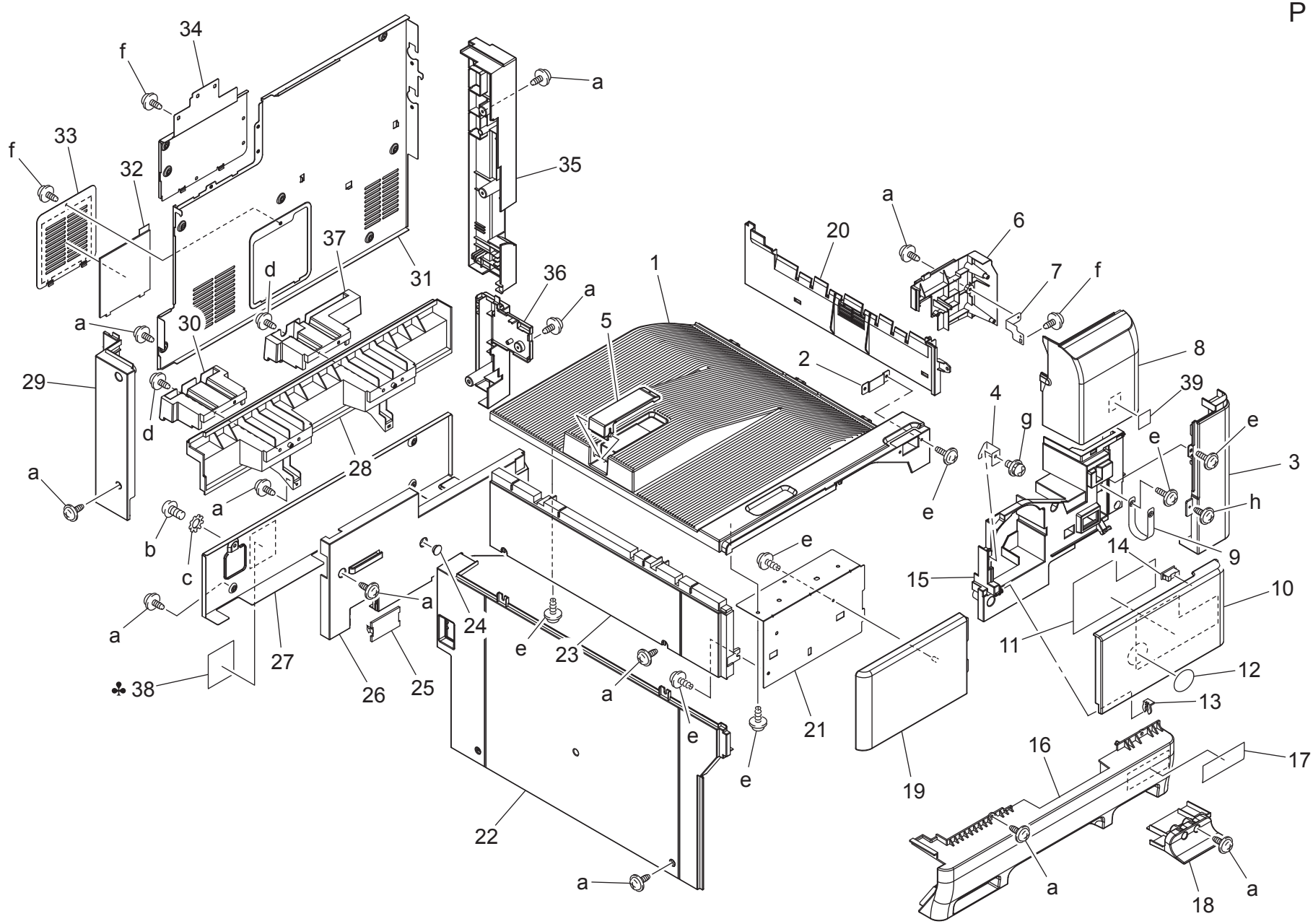
IR COVER



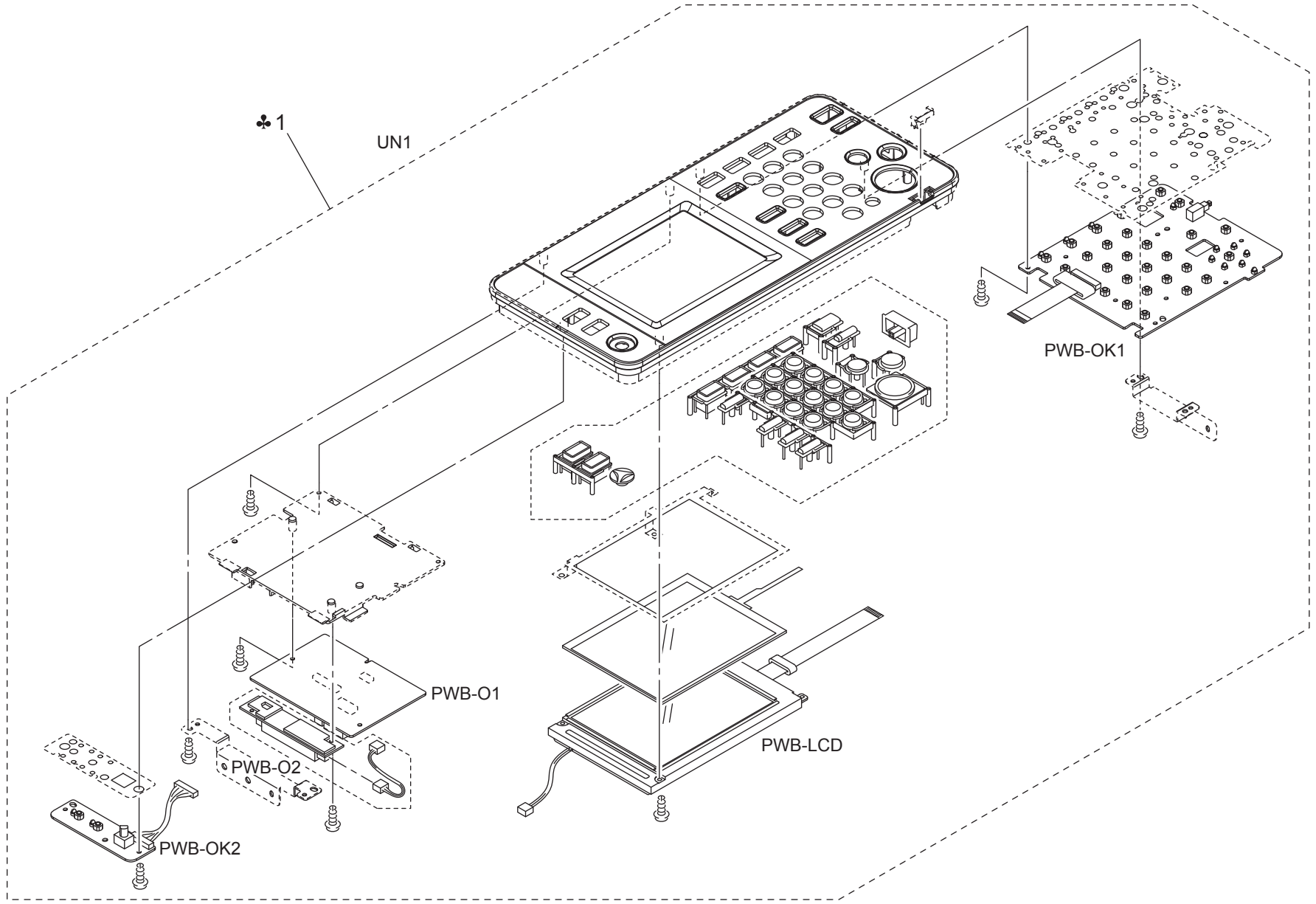
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A11U 1645 00	Right Cover	カバー（ＢＳ・右）		C	1	a-V137 0308 03
2	A11U 1649 00	Cover	カバー（ＢＳ・ＬＡＮ）		C	1	b-V137 0308 04
3	A11U 1648 00	Cover	カバー（ＢＳ・ＣＦ）		C	1	
4	A11U 1641 00	Front Cover	カバー（ＢＳ・前）		C	1	
5	4030 1515 01	SEAL	シール		C	1	
6	A11U 1643 00	Left Cover	カバー（ＢＳ・左）		C	1	
7	A11U 1646 00	Cover	カバー（ＥＤＨ　ひんじ左）		C	1	
8	A11U 1644 00	Rear Cover	カバー（ＢＳ・後）		C	1	
9	A11U 1647 00	Cover	カバー（ＥＤＨ　ひんじ右）		C	1	
10	4551 3002 00	ORIGINAL GLASS ASSY	原稿ガラス ＡＳＳＹ		C	1	
11	4551 3003 00	COVER	カバー		C	1	
12	4551 3001 00	ORIGINAL GLASS ASSY	原稿ガラス ＡＳＳＹ		C	1	



bizhub 222/bizhub 282/bizhub 362/bizhub 7728

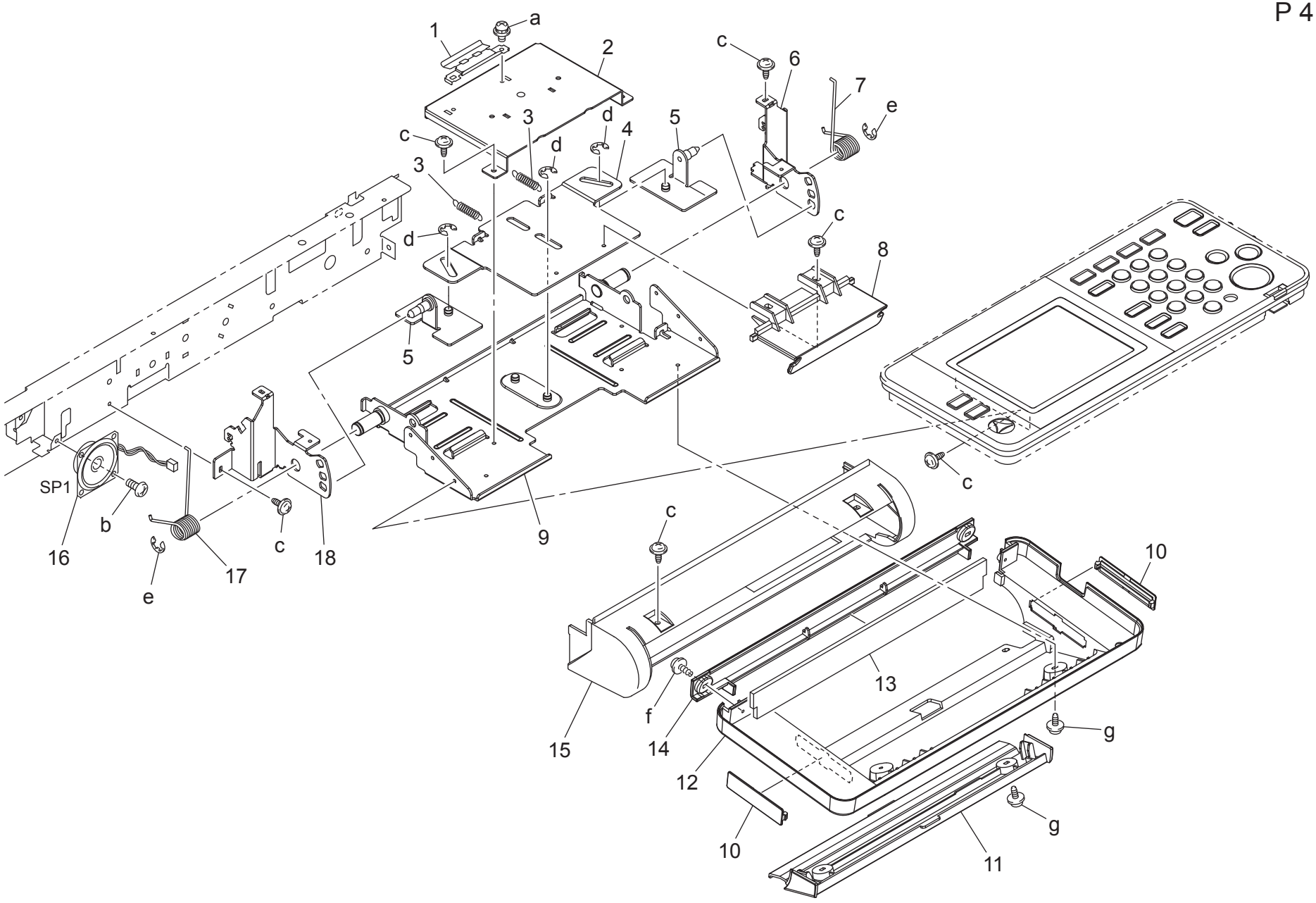
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A11U 1612 00	Rear Cover	後カバー（内側）		C	1	a-V137 0308 03
2	4030 1025 02	BRACKET	取付板		D	1	b-V118 0308 03
3	A11U 1609 00	Cover	カバー（前支柱 C）		C	1	c-V209 0300 03
4	4030 5397 01	STOPPER	ストッパ		D	1	d-V137 0310 03
5	A0RA 1727 00	Regulating Plate	規制板		C	1	e-V153 0308 03
6	A11U 1616 00	Cover	カバー（前支柱後 A）		C	1	f-V137 0306 03
7	4030 2311 01	BRACKET	取付板		D	1	g-V116 0316 03
8	A11U 1608 00	Cover	カバー（前支柱 B）		C	1	h-V144 0308 03
9	A11U 1660 00	Band	バンド		C	1	
10	A11U 1601 00	Cover	カバー（前・開閉）		C	1	
11	A11U 9413 00	Label	ラベル（トナー交換操作）		C	1	
12	A00J 9455 00	Logo Mark	ロゴマーク		C	1	
13	1033 4402 03	STOPPER RING	トメリング		C	1	
14	4030 1040 02	CATCH	キャッチ		D	1	
15	A11U 1604 00	Cover	カバー（前支柱 A）		C	1	
16	A11U 1602 01	Cover	カバー（下）		C	1	
17	A11U 9422 00	Label bizhub 362	ラベル（ｂｉｚｈｕｂ ３６２）	{bizhub 362}	C	1	
17	A11V 9423 00	Label bizhub 282	ラベル（ｂｉｚｈｕｂ ２８２）	{bizhub 282}	C	1	
17	A11W 9424 00	Label bizhub 222	ラベル（ｂｉｚｈｕｂ ２２２）	{bizhub 222}	C	1	
17	A11V 9425 00	Label bizhub 7728	ラベル（ｂｉｚｈｕｂ ７７２８）	{bizhub 7728}	C	1	
18	A11U 1605 01	Cover	カバー（前　取っ手）		C	1	
19	A11U 1603 00	Front Cover	前カバー（左）		C	1	
20	A11U 1618 00	Cover	カバー（排紙口）		C	1	
21	4030 1023 02	TRAY	トレイ		D	1	
22	A11U 1607 00	Left Cover	左カバー（下）		C	1	
23	A11U 1622 00	Tray	トレイ（排紙・左）		C	1	
24	A02E 1678 00	Cover	蓋		C	1	
25	A11U 1626 00	Cover	カバー（目かくし）		C	1	
26	A11U 1612 00	Rear Cover	後カバー（内側）		C	1	
27	4030 1011 02	REAR COVER	後カバー		C	1	
28	A11U 1610 00	Rear Cover	後カバー（取手）		C	1	
29	A11U 1606 00	Left Cover	左カバー（後上）		C	1	
30	A0R5 1762 00	Handle	取手		D	1	
31	4040 1009 03	Rear Cover	後カバー		D	1	
32	4040 2093 01	TONER FILTER	トナーフィルタ		B	1	
33	4040 1029 01	REAR COVER	後カバー		C	1	
34	4040 1028 01	REAR COVER	後カバー		D	1	
35	A11U 1614 00	Right Cover	右カバー（後上 A）		C	1	
36	A0R5 1715 00	Cover	カバー		C	1	
37	A11U 1613 00	Handle	取手（指かかり）		D	1	
38	4037 7406 01	LABEL EARTH CAUTION	ラベル アース注意	C,D1,D3,E,F2,G1,I,K	C	1	
39	A011 9462 00	Label Emperon	ラベル　Ｅｍｐｅｒｏｎ		D	1	

CONTROL PANEL

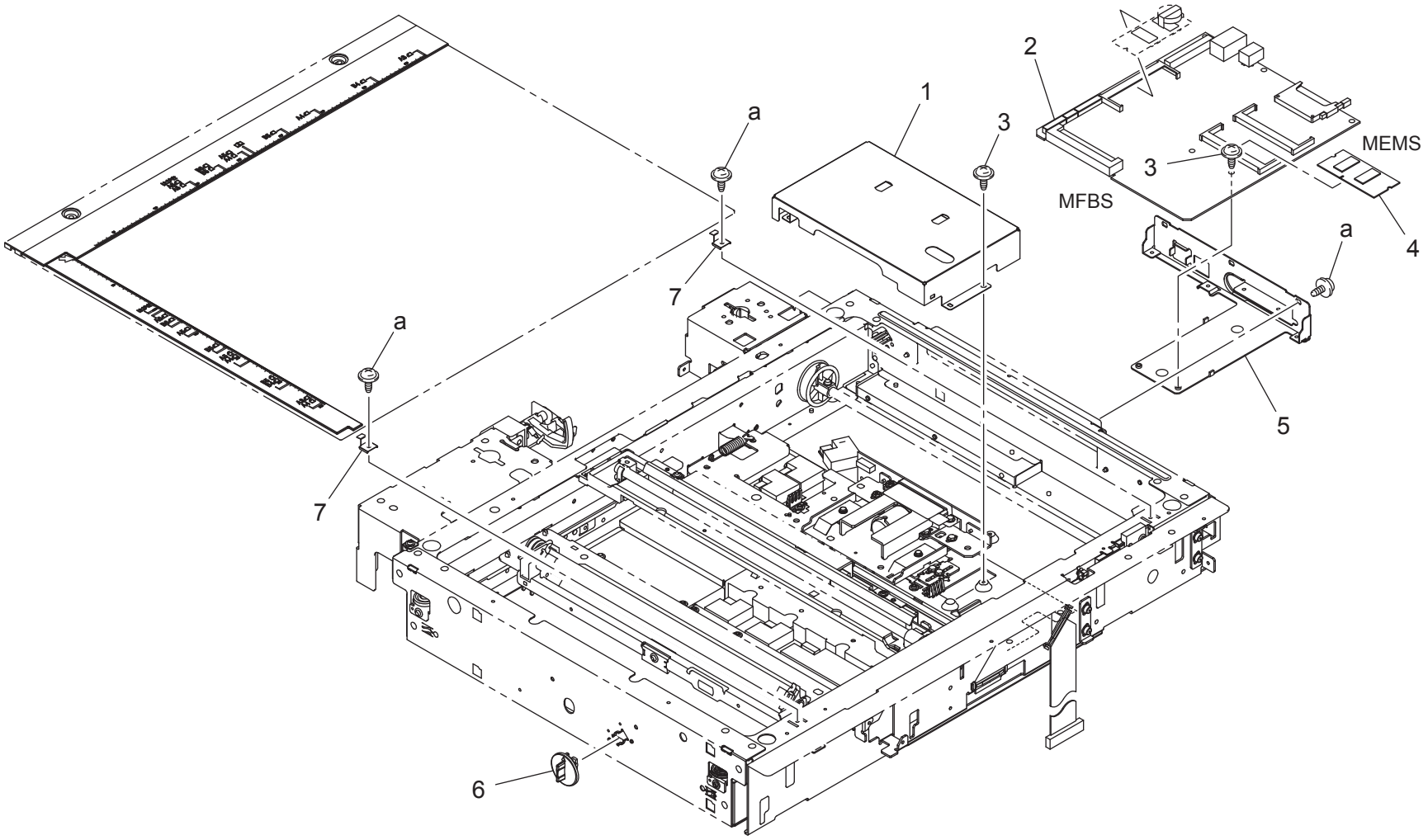


Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A11U M701 00	Panel assembly	操作パネル ＡＳＳＹ （ＫＭ、北米）	B,D1,D3,E,F1,F2,G1,G2, I,K	I	1	
1	A11U M702 00	Panel assembly	操作パネル ＡＳＳＹ （ＫＭ、欧州）	C	I	1	
1	A11U M703 00	Panel assembly	操作パネル ＡＳＳＹ （ＫＭ、中国）	J	I	1	
1	A11U M704 00	Panel assembly	操作パネル ＡＳＳＹ （ＫＭ、台湾）	H	I	1	

CONTROL PANEL



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 1391 01	PLATE SPRING	板ばね		D	1	a-V116 0306 03 b-V136 0308 03 c-V137 0308 03 d-V217 0500 01 e-V217 0800 01 f-V153 0308 03 g-V137 0310 03
2	4030 1390 04	BRACKET	取付板		D	1	
3	4581 1389 01	TENSION SPRING	引張コイルばね		C	2	
4	4030 1382 01	COUPLING	連結板		D	1	
5	4030 1385 01	POSITIONING PLATE	位置決め板		D	2	
6	4040 1384 01	HOLD PLATE	保持板		C	1	
7	4030 1387 01	TORSION SPRING	ねじりコイルばね		C	1	
8	A11U 1925 00	Lever	レバー		C	1	
9	4030 1381 02	BRACKET	取付板		D	1	
10	A11U 1635 00	Cover	カバー（パネル側面）		C	2	
11	A11U 1634 00	Cover	カバー（操作パネル下３）		C	1	
12	A11U 1631 00	Cover	カバー（操作パネル下１）		C	1	
13	4040 1055 01	SEAL	シール		C	1	
14	A11U 1633 00	Cover	カバー（操作パネル下２）		C	1	
15	A11U 1632 00	Cover	カバー（操作パネル・取付部）		C	1	
16	4040 M401 00	LOUDSPEAKER	スピーカ		D	1	
17	4030 1386 01	TORSION SPRING	ねじりコイルばね		C	1	
18	4040 1383 01	HOLD PLATE	保持板		D	1	


1
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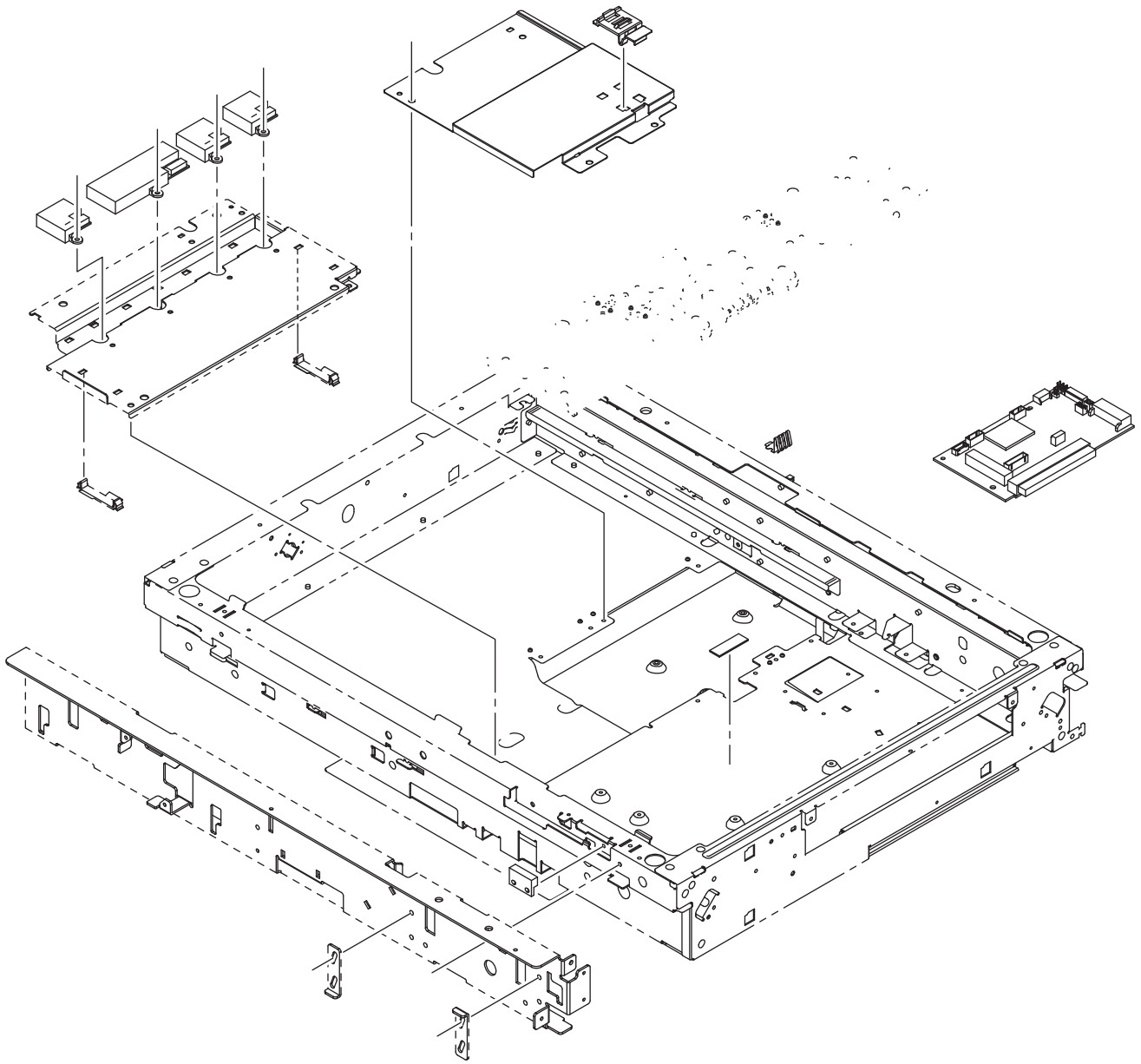
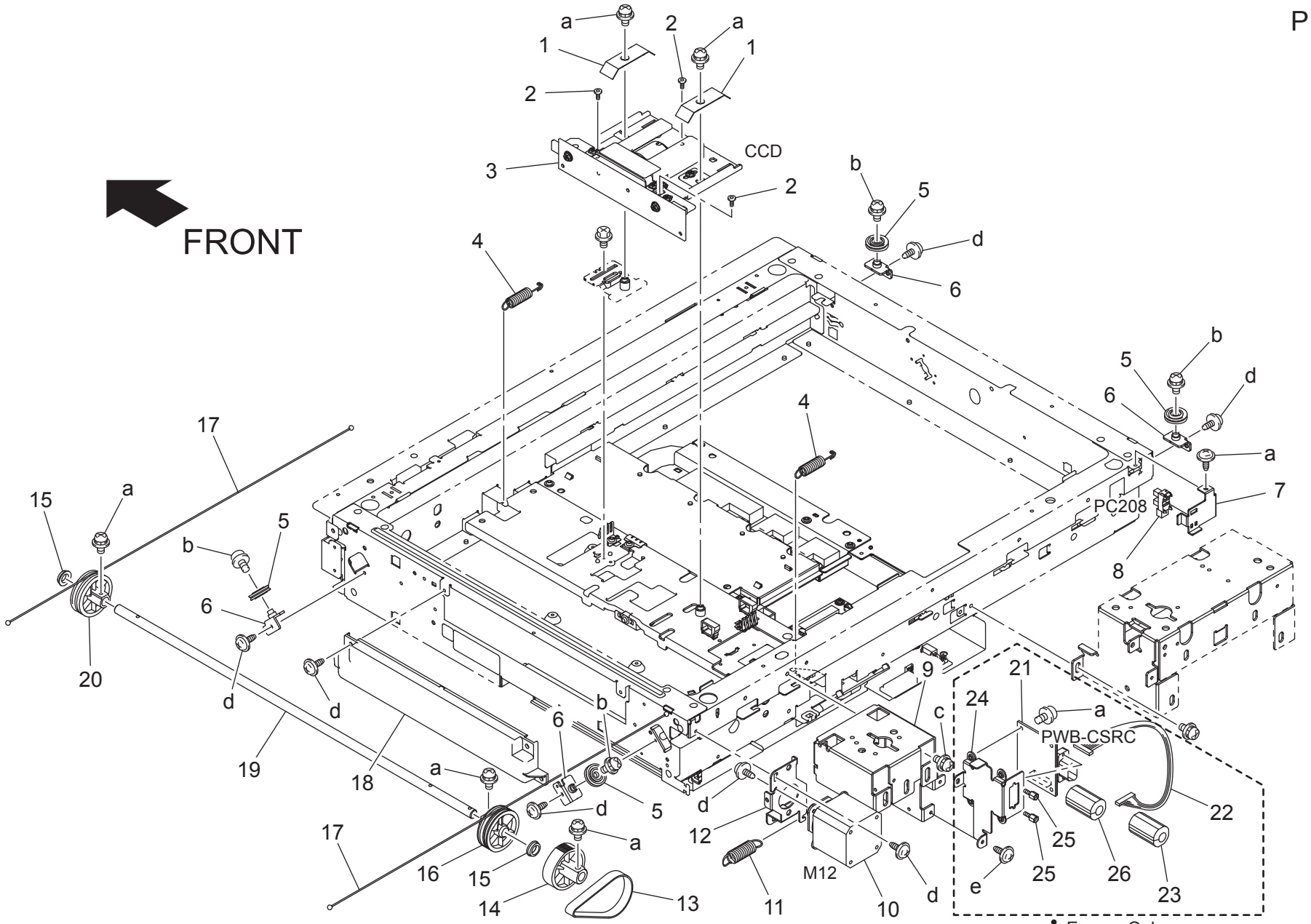
MEMS
MFBS

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4551 2019 01	SHIELD	シールド		D	1	a-V137 0306 03
2	4551 R900 00	MFBS2	ＭＦＢＳ ２		I	1	
3	4551 2046 01	SCREW	ねじ		C	6	
4	4551 2039 01	MEMS	ＭＥＭＳ		I	1	
5	4551 2045 01	BRACKET	取付板		C	1	
6	4551 2018 01	LEVER	レバー		C	1	
7	4384 1006 01	PLATE SPRING	板ばね		C	2	

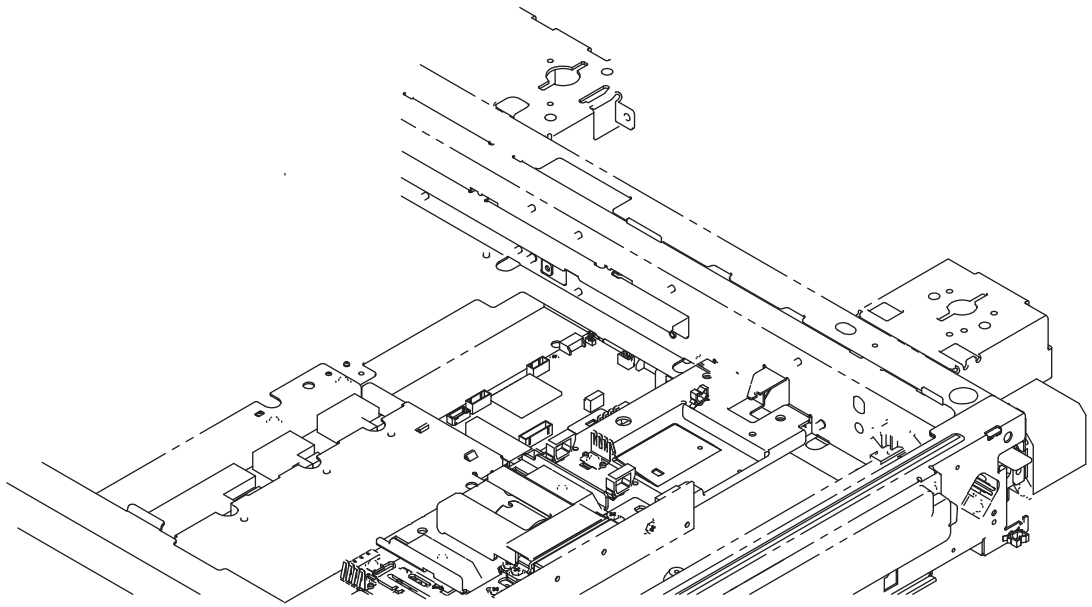
OPTICAL SECTION



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4551 2025 01	HOLDER	ホルダ		C	1	a-V137 0306 03
2	4551 2020 01	SHIELD	シールド		D	1	
3	4551 2022 01	PLATE SPRING	板ばね	C,D1,D3,E,F1,F2,G1,H,I ,J,K	D	3	
4	4551 2030 01	PLATE SPRING	板ばね	C,D1,D3,E,F1,F2,G1,H,I ,J,K	D	1	
5	4551 2033 01	BCRS	ＢＣＲＳ	{bizhub 362}	I	1	
5	4551 2034 01	BCRS	ＢＣＲＳ	{bizhub 282/222/7728}	I	1	
6	4384 1030 01	SOLID STATE SWITCH	反射型フォトスイッチ		C	1	
7	4384 1030 01	SOLID STATE SWITCH	反射型フォトスイッチ	(Option)	C	3	
8	4551 2008 01	SHEET	シート		C	1	
9	4551 2010 01	REED SWITCH	リードスイッチ		C	1	
10	4384 1031 01	SOLID STATE SWITCH	反射型フォトスイッチ		C	1	
11	4384 1030 01	SOLID STATE SWITCH	反射型フォトスイッチ	C,D1,D3,E,F1,F2,G1,H,I ,J,K (Option Metric)	C	1	
12	4384 1030 01	SOLID STATE SWITCH	反射型フォトスイッチ	C,D1,D3,E,F1,F2,G1,H,I ,J,K (Metric)	C	1	
12	4384 1030 01	SOLID STATE SWITCH	反射型フォトスイッチ	B,G2 (Option Inch)	C	1	
13	4551 2046 01	SCREW	ねじ		C	3	

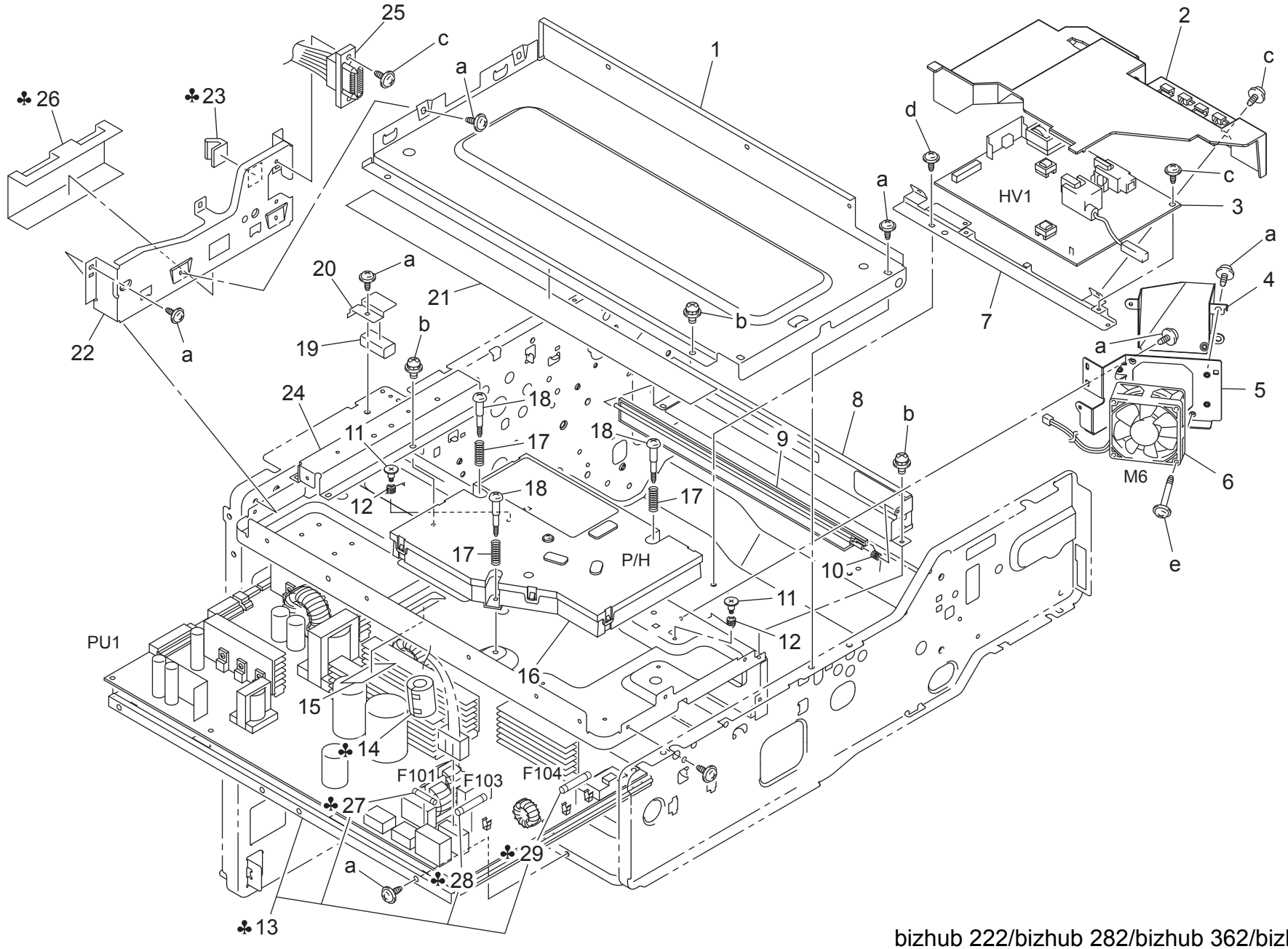

FRONT
CCD
PC208
PWB-CSRC
M12
✣ Europe Only

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4384 1063 01	PLATE SPRING	板ばね		C	2	a-V116 0308 03
2	4384 1102 01	TAPPING SCREW	タッピングネジ		D	3	b-V116 0304 03
3	4551 2003 01	LENS ASSY	レンズ ＡＳＳＹ		I	1	c-V116 0406 03
4	4384 1022 01	TENSION SPRING	引張コイルばね		C	2	d-V137 0306 03
5	4551 2014 01	PULLEY	プーリ		C	4	e-V137 0308 03
6	4384 1068 01	PULLEY BRACKET(1)	取付板		D	4	
7	4384 1061 01	SNS BRACKET	取付板		D	1	
8	4551 2059 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	
9	4384 1058 01	HINGE BRACKET(R)	取付板		D	1	
10	4551 2013 01	MOTOR	モータ		B	1	
11	4384 1023 01	TENSION SPRING	引張コイルばね		C	1	
12	4384 1070 01	MOTOR BRACKET	取付板		D	1	
13	4384 1033 01	TIMING BELT	タイミングベルト		C	1	
14	4384 1024 01	PULLEY	プーリ		C	1	
15	4384 1021 01	BALL BEARING	ボールベアリング		B	2	
16	4384 1019 01	PULLEY	プーリ		C	1	
17	4551 2028 01	WIRE	ワイヤ		C	2	
18	4551 2027 01	COVER	カバー		C	1	
19	4384 1046 01	SHAFT	シャフト		D	1	
20	4384 1092 01	PULLEY	プーリ		C	1	
21	4040 0110 01	PWB ASSY	基板 ＡＳＳＹ	C	C	1	
22	4040 6832 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ	C	D	1	
23	9326 1910 31	FERRITE CORE	フェライトコア	C	D	1	
24	4040 2130 01	BRACKET	取付板	C	D	1	
25	4025 2283 01	SCREW	ねじ	C	D	2	
26	9326 1910 21	FERRITE CORE	フェライトコア	C	D	1	



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4384 1062 01	WIRE BRACKET	取付板		D	2	a-V153 0308 03
2	4551 2004 01	XENON	キセノンランプ		C	1	b-V116 0304 03
3	4551 2023 01	REFLECTOR	反射板		C	1	c-V137 0306 03
4	4551 2029 01	PLATE SPRING	板ばね		D	6	
5	4551 2017 01	SLIDER	スライダー		C	5	
6	4551 2026 01	FFC CLAMP	ＦＦＣ クランプ		D	1	
7	4551 2007 01	PLATE SPRING	板ばね		D	1	
8	4551 2005 01	MIRROR	ミラー		C	1	
9	4551 2012 01	PWB ASSY	基板 ＡＳＳＹ		C	1	
10	4551 2006 01	MIRROR	ミラー		C	2	
11	4551 2016 01	PULLEY	プーリ		C	2	
12	4551 2024 01	GUIDE	ガイド		D	1	
13	4551 2015 01	PLATE SPRING	板ばね		D	1	
14	4551 2021 01	BRACKET	取付板		C	1	
15	4384 1044 01	TENSION SPRING	引張コイルばね		C	1	
16	4384 1045 01	ARM	アーム		C	1	
17	4551 2059 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	
18	4384 1036 01	PHOTO INTERRUPTER ASSY	フォトインタラプター ＡＳＳＹ		C	1	
19	4551 2009 01	CUSHION	クッション		C	1	
20	4551 2047 01	SCREW	ねじ		C	3	
21	4551 2001 01	CARRIAGE 1 ASSY	ミラー ＡＳＳＹ １		I	1	
22	4551 2002 01	CARRIAGE 2 ASSY	ミラー ＡＳＳＹ ２		C	1	

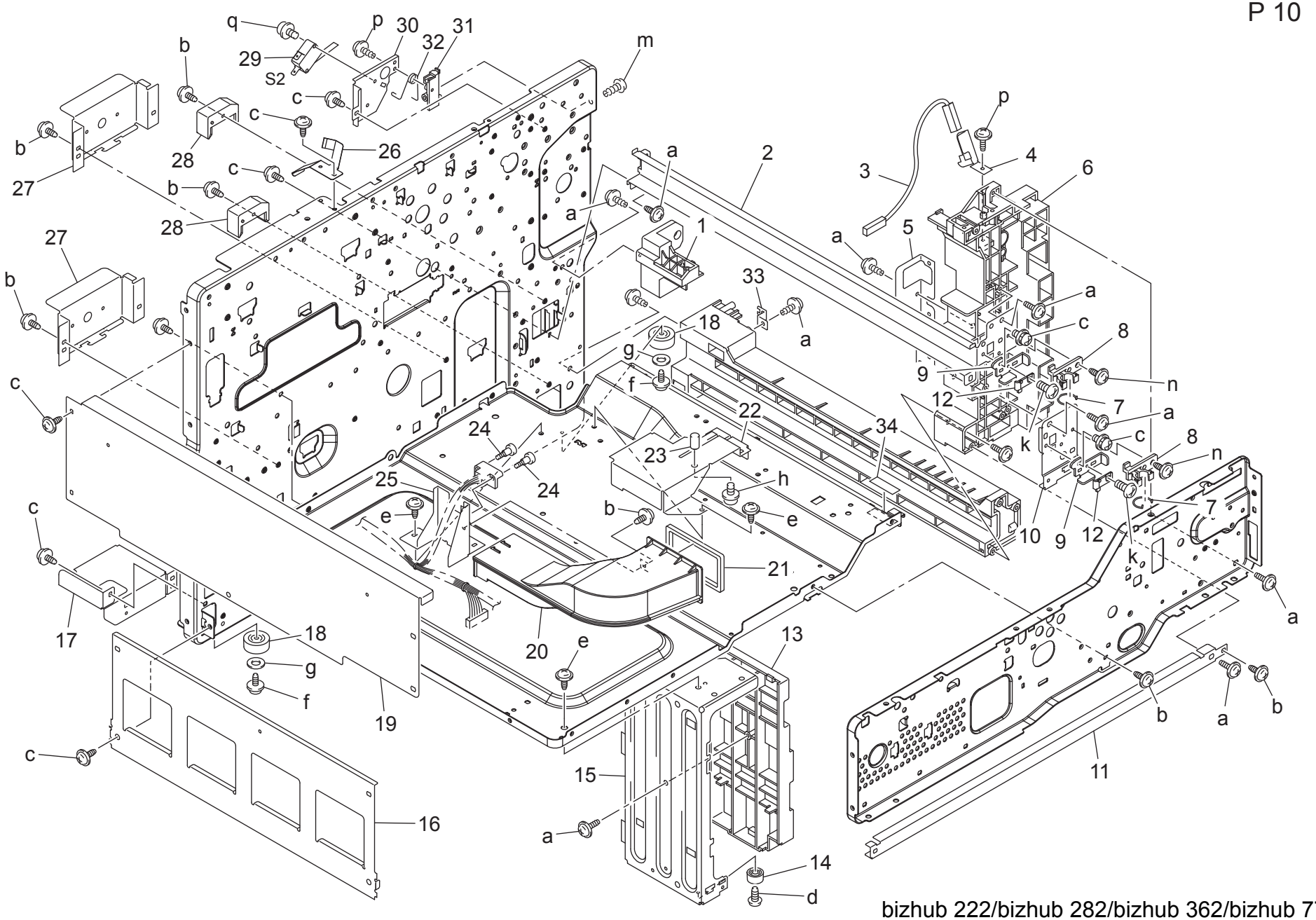
POWER UNIT



bizhub 222/bizhub 282/bizhub 362/bizhub 7728

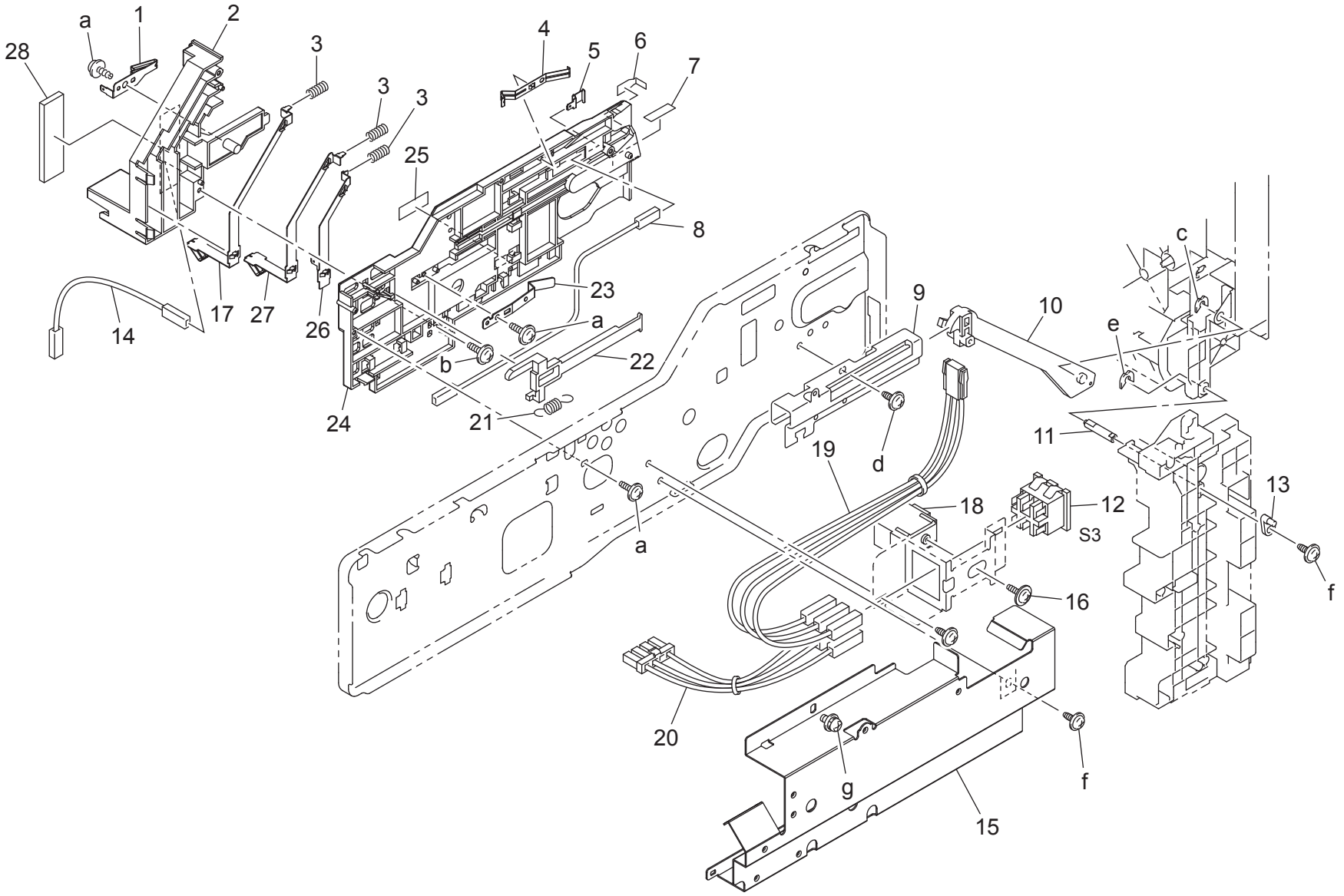
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2017 01	BRACKET	取付板		D	1	a-V137 0306 03
2	4040 2101 02	COVER	カバー		D	1	b-V116 0306 03
3	4040 6203 01	HV TRANSFORMER	高圧ユニット		I	1	c-V137 0308 03
4	4040 2139 01	DUCT	ダクト		D	1	d-V144 0308 03
5	4040 2109 02	BRACKET	取付板		D	1	e-V137 0330 03
6	4040 M100 00	FAN MOTOR	ファンモータ		C	1	
7	4030 2040 01	BRACKET	取付板		D	1	
8	4030 2004 02	BRACKET	取付板		D	1	
9	4030 2036 01	SHUTTER	シャッタ		D	1	
10	4011 2034 02	TORSION SPRING	ねじりコイルばね		C	1	
11	4011 5925 02	SHOULDER SCREW	段ねじ		C	2	
12	4030 2049 01	TORSION SPRING	ねじりコイルばね		C	2	
13	4040 6201 01	POWER SUPPLY	直流安定化電源	B,F1,G2,H	I	1	
13	4040 6202 02	POWER SUPPLY	直流安定化電源	C,D1,D3,E,F2,G1,I,J,K	I	1	
14	0866 7801 01	FERRITE CORE	フェライトコア	C, D1, D3, E, F2, G1, H, I, J, K	D	1	
15	4040 2064 01	GUIDE	ガイド		C	1	
16	4040 0751 00	P/H ASSY	Ｐ／Ｈ	{bizhub 362}	I	1	
16	4041 0751 00	P/H ASSY	Ｐ／Ｈ	{bizhub 282/222/7728}	I	1	
17	4128 1978 01	PRESSURE SPRING	圧縮コイルばね		C	3	
18	4128 1979 01	SHOULDER SCREW	段ねじ		C	3	
19	4030 6757 01	ELECTRICALLY CONDUCTIVE MATERIAL	導電材料		C	1	
20	4030 2119 01	SHIELD	シールド		D	1	
21	4040 1036 01	SHIELD PLATE	遮光材		C	1	
22	4030 2018 01	BRACKET	取付板		D	1	
23	9384 4300 21	ELECTRICALLY CONDUCTIVE MATERIAL	導電材料	C, D1, D3, E, F2, G1, H, I, J, K	C	1	
24	4030 2034 01	REINFORCE PLATE	補強板		D	1	
25	4030 6816 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
26	4030 2120 01	GUIDE	ガイド	C, D1, D3, E, F2, G1, H, I, J, K	C	1	
27	4040 7801 01	FUSE	電流ヒューズ	B,F1,G2,H	C	1	
27	4040 7804 01	FUSE	電流ヒューズ	C,D1,D3,E,F2,G1,I,J,K	C	1	
28	4040 7802 01	FUSE	電流ヒューズ	B,F1,G2,H	C	1	
28	4040 7805 01	FUSE	電流ヒューズ	C,D1,D3,E,F2,G1,I,J,K	C	1	
29	4040 7803 01	FUSE	電流ヒューズ	B,F1,G2,H	C	1	
29	4040 7805 01	FUSE	電流ヒューズ	C,D1,D3,E,F2,G1,I,J,K	C	1	

FRAME SECTION



bizhub 222/bizhub 282/bizhub 362/bizhub 7728

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A0R5 1137 00	Holder	ホルダ		D	1	a-V153 0410 03
2	4040 5602 00	RAIL	レール		C	1	b-V137 0308 03
3	4030 6843 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	c-V137 0306 03
4	1164 2155 01	CONTACT	接点		C	1	d-V135 0310 03
5	4030 2010 01	BRACKET	取付板		D	1	e-V144 0308 03
6	A0R5 1126 00	Support Part	支持部材		D	1	f-V137 0310 03
7	4348 6206 00	Stop ring	止め輪		D	2	g-V207 0300 01
8	4040 6205 00	Holder	ホルダ		D	2	h-V116 0306 03
9	4040 5601 00	STOPPER	ストッパ		C	2	k-V136 0308 03
10	4040 5603 00	BRACKET	取付板		D	1	m-V149 0308 03
11	4030 2007 01	REINFORCE PLATE	補強板		D	1	n-V137 0408 03
12	4040 5600 00	GUIDE	ガイド		C	2	p-V153 0308 03
13	4030 2008 02	RAIL	レール		D	1	q-V116 0316 03
14	4030 2081 01	SPACER	スペーサ		D	1	
15	4030 2005 02	REINFORCE PLATE	補強板		D	1	
16	4030 2006 01	REINFORCE PLATE	補強板		D	1	
17	4030 2042 02	BRACKET	取付板		D	1	
18	4030 2080 01	RUBBER FOOT	ゴム足		D	2	
19	4030 2016 01	REINFORCE PLATE	補強板		D	1	
20	4040 0163 01	DUCT	ダクト		D	1	
21	4040 2094 01	SEAL	シール		C	1	
22	4030 2079 02	BRACKET	取付板		D	1	
23	4040 2078 01	PIN	ピン		C	1	
24	1079 2219 01	SHOULDER SCREW	段ねじ		C	2	
25	4030 2012 02	BRACKET	取付板		D	1	
26	4030 2162 01	EARTH GROUND	アース		C	1	
27	4030 2062 01	BRACKET	取付板		D	2	
28	4030 2009 01	GUIDE	ガイド		D	2	
29	9J06 M601 00	MICRO SWITCH	マイクロスイッチ		C	1	
30	4030 2116 01	BRACKET	取付板		D	1	
31	1164 2051 01	GUIDE	ガイド		D	1	
32	4011 2037 01	TORSION SPRING	ねじりコイルばね		C	1	
33	4030 2011 01	BRACKET	取付板		D	1	
34	1129 7303 01	LABEL HI-VOL CAUTION	ラベル　高圧注意		D	1	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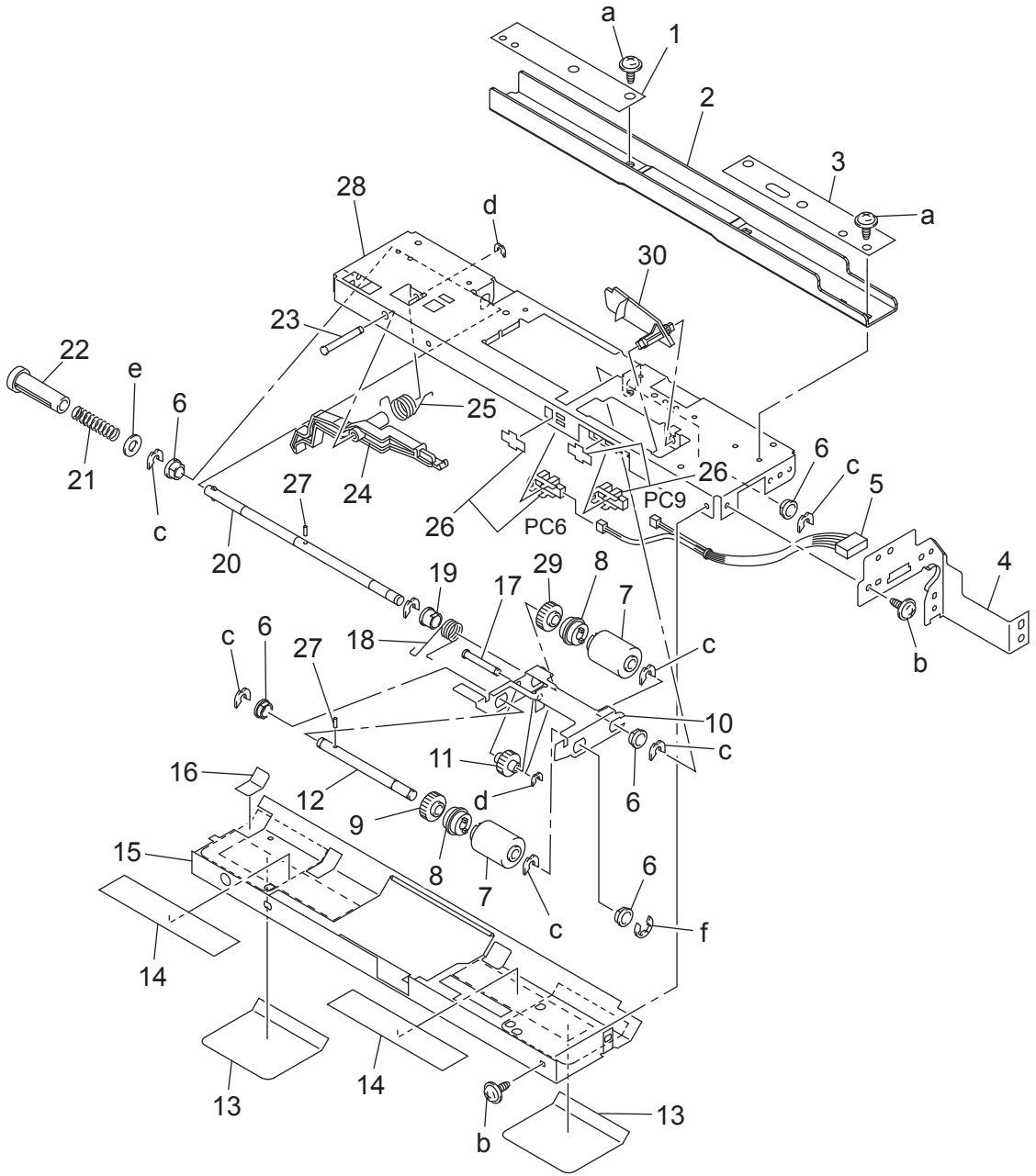
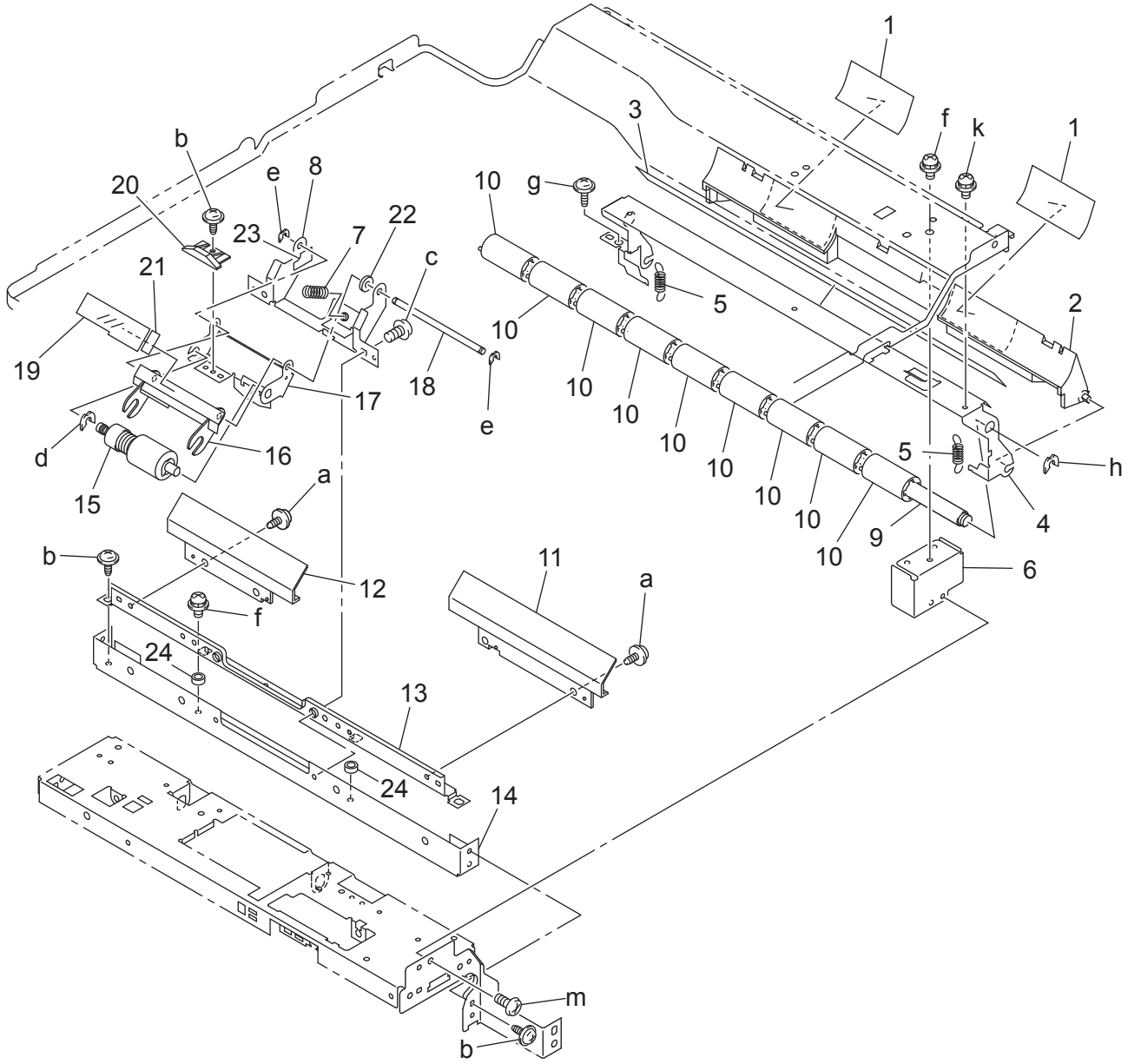
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2114 01	CONTACT	接点		C	1	a-V153 0308 03
2	4030 2102 01	HOLDER	ホルダ		D	1	b-V153 0310 03
3	4011 2134 01	PRESSURE SPRING	圧縮コイルばね		C	3	c-V218 0600 86
4	1165 2142 01	EARTH GROUND	アース		D	1	d-V144 0308 03
5	1165 2153 01	CONTACT	接点		C	1	e-V218 0300 86
6	4011 2047 01	SEAL	シール		C	1	f-V137 0306 03
7	4030 7316 01	LABEL	ラベル		D	1	g-V116 0308 03
8	4030 6844 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
9	1164 2310 01	GUIDE PLATE	取付板		D	1	
10	1164 2316 01	LEVER	レバー		C	1	
11	4011 2010 01	SHAFT	シャフト		D	1	
12	4040 M600 00	Micro switch	マイクロスイッチ		C	1	
13	1164 2007 12	JOINT	レバー		C	1	
14	4030 6842 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
15	A11U 1323 01	Bracket	取付板		D	1	
16	4109 2003 01	SHOULDER SCREW	段ねじ		C	1	
17	4030 2115 01	CONTACT	接点		C	1	
18	4030 2118 01	LEVER	レバー		C	1	
19	4040 6854 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
20	4040 6853 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
21	4011 2035 01	TENSION SPRING	引張コイルばね		C	1	
22	1165 2040 02	LEVER	レバー		D	1	
23	1164 2021 02	PLATE SPRING	板ばね		C	1	
24	4030 2019 02	GUIDE	ガイド		D	1	
25	1129 7303 01	LABEL HI-VOL CAUTION	ラベル　高圧注意		D	1	
26	4030 2112 01	CONTACT	接点		C	1	
27	4030 2113 01	CONTACT	接点		C	1	
28	4040 2160 01	SEAL	シール		C	1	

PAPER TAKE-UP SECTION



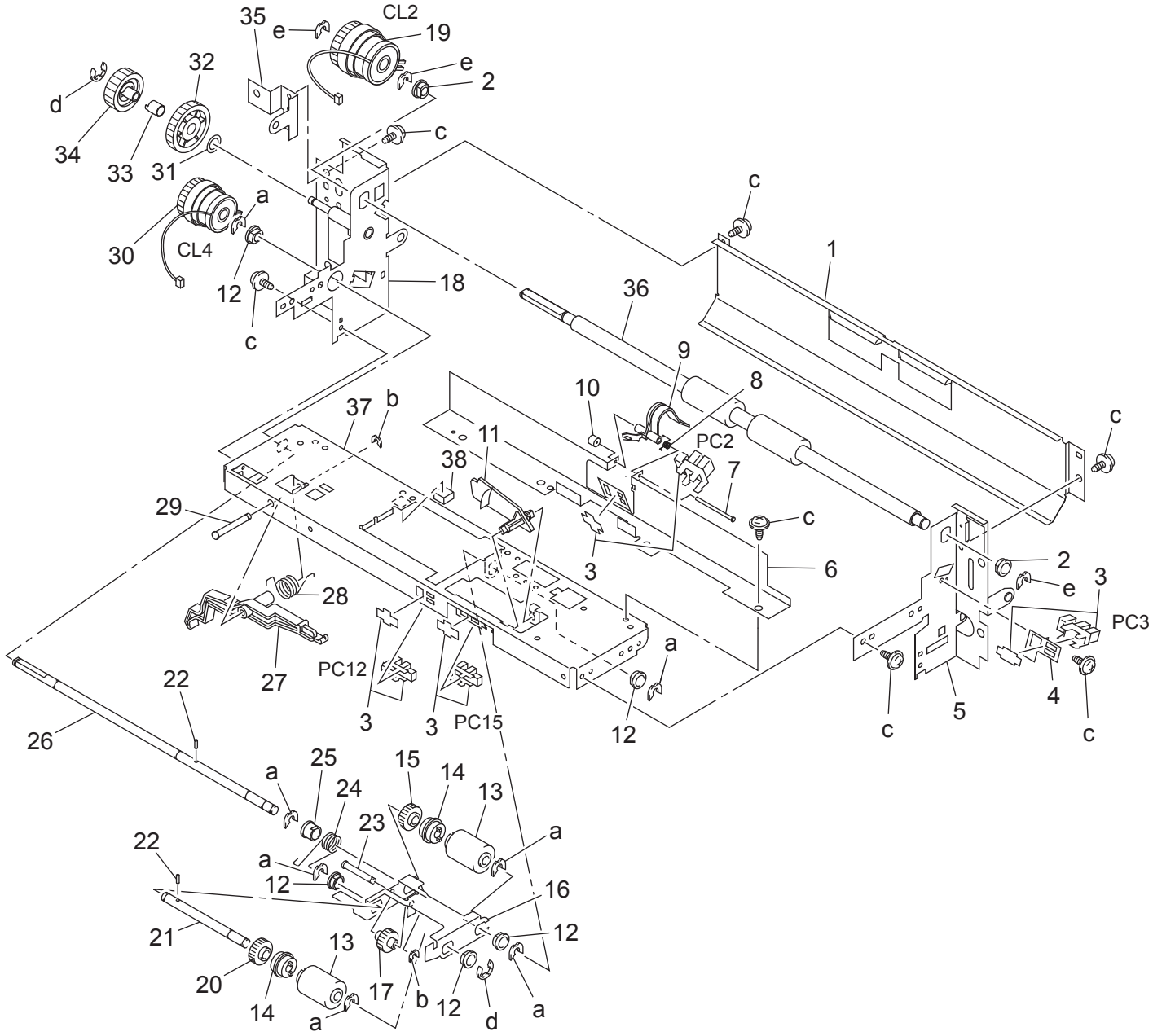
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3087 01	REINFORCE PLATE	補強板		D	1	a-V137 0308 03
2	4030 3084 01	REINFORCE PLATE	補強板		D	1	b-V137 0306 03
3	4030 3086 01	REINFORCE PLATE	補強板		D	1	c-V218 0400 86
4	4030 3041 02	FRAME	フレーム		D	1	d-V218 0300 86
5	4030 6811 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	e-V206 0600 01
6	4131 3003 01	BUSHING	軸受		C	5	f-V217 0400 01
7	4030 3005 01	ROLLER	ローラ		A	2	
8	4030 3034 01	CLUTCH	クラッチ		C	2	
9	4425 3016 01	GEAR 32T	ギヤ　３２Ｔ		C	1	
10	4030 3002 02	HOLDER	ホルダ		C	1	
11	4030 3008 01	GEAR 29T	ギヤ　２９Ｔ		C	1	
12	4030 3003 01	SHAFT	シャフト		D	1	
13	4030 3036 01	GUIDE	ガイド		C	2	
14	4030 3088 01	WEIGHT	重り		C	2	
15	4030 3023 03	GUIDE PLATE	ガイド板		D	1	
16	4030 3085 01	COVER	カバー		C	1	
17	4040 3097 01	SHAFT	シャフト		D	1	
18	4030 3030 01	TORSION SPRING	ねじりコイルばね		C	1	
19	1065 3086 01	BUSHING	シ゛クウケ		C	1	
20	4030 3004 01	SHAFT	シャフト		C	1	
21	A00J 5894 00	PRESSURE SPRING	アッシュクスフ゜リンク゛		C	1	
22	1052 4412 01	JOINT	シ゛ョイント		C	1	
23	4040 3096 01	SHAFT	シャフト		D	1	
24	4030 3011 03	LEVER	レバー		C	1	
25	4030 3012 01	TORSION SPRING	ねじりコイルばね		C	1	
26	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	2	
27	1067 2501 01	PIN	ヒ゜ン		C	2	
28	4030 3001 03	FRAME	フレーム		D	1	
29	4425 3013 01	GEAR 30T	ギヤ　３０Ｔ		C	1	
30	4030 3016 12	ACTUATOR	アクチュエータ		C	1	

PAPER TAKE-UP SECTION

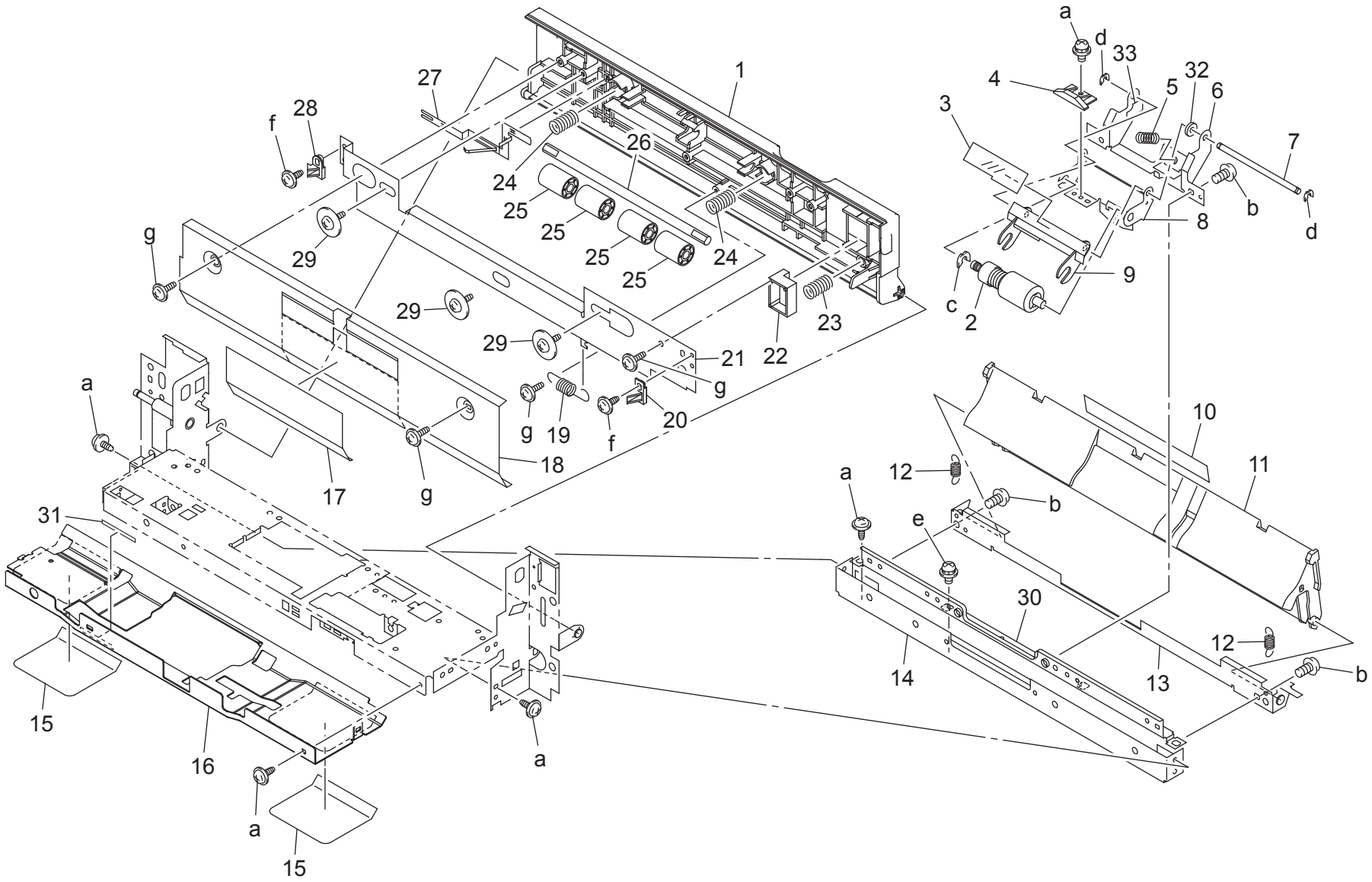


Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3108 01	GUIDE	ガイド		C	2	a-V137 0308 03
2	4030 3032 03	GUIDE	ガイド		C	1	b-V137 0306 03
3	4030 3104 01	GUIDE	ガイド		C	1	c-V136 0308 03
4	4030 3103 02	BRACKET	取付板		D	1	d-V218 0400 86
5	4030 3125 01	TENSION SPRING	引張コイルばね		C	2	e-V218 0300 86
6	4030 3044 01	BRACKET	取付板		D	1	f-V116 0308 03
7	4030 3017 03	PRESSURE SPRING	圧縮コイルばね		C	1	g-V153 0308 03
8	4030 3014 01	BRACKET	取付板		D	1	h-V218 0600 86
9	4030 3101 01	SHAFT	シャフト		D	1	k-V116 0306 03
10	4658 3513 01	ROLLER	ローラ		C	9	m-V136 0408 03
11	4030 3026 02	GUIDE	ガイド		D	1	
12	4030 3027 02	GUIDE	ガイド		D	1	
13	4030 3037 01	REINFORCE PLATE	補強板		D	1	
14	4030 3025 02	BRACKET	取付板		D	1	
15	4030 0151 01	SEPARATION ROLLER ASSY	分離ローラ ＡＳＳＹ		A	1	
16	4030 3077 01	GUIDE	ガイド		D	1	
17	4030 3013 01	HOLDER	ホルダ		C	1	
18	4030 3039 01	SHAFT	シャフト		D	1	
19	4030 3079 01	GUIDE	ガイド		C	1	
20	4030 3078 01	LEVER	レバー		C	1	
21	4030 3080 01	GUIDE	ガイド		C	1	
22	4040 5610 00	Spacer	スペーサ		D	1	
23	4040 5612 00	Spacer	スペーサ		D	1	
24	26NA 2030 0	SEPARATE ROCKING COLLAR	分離揺動カラー		C	2	

PAPER TAKE-UP SECTION



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3112 02	GUIDE PLATE	ガイド板		D	1	a-V218 0400 86
2	4131 3532 02	BUSHING	軸受		C	2	b-V218 0300 86
3	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	4	c-V137 0306 03
4	4030 3128 01	BRACKET	取付板		D	1	d-V217 0400 01
5	4030 3042 02	FRAME	フレーム		D	1	e-V218 0600 86
6	4030 3018 01	BRACKET	取付板		C	1	
7	1200 5212 04	PIN	ヒ゜ン		D	1	
8	4030 3031 01	TORSION SPRING	ねじりコイルばね		C	1	
9	4030 3019 02	ACTUATOR	アクチュエータ		C	1	
10	1134 3041 01	COLLAR	カラー		D	1	
11	4030 3016 12	ACTUATOR	アクチュエータ		C	1	
12	4131 3003 01	BUSHING	軸受		C	5	
13	4030 3005 01	ROLLER	ローラ		A	2	
14	4030 3034 01	CLUTCH	クラッチ		C	2	
15	4425 3013 01	GEAR 30T	ギヤ　３０Ｔ		C	1	
16	4030 3002 02	HOLDER	ホルダ		C	1	
17	4030 3008 01	GEAR 29T	ギヤ　２９Ｔ		C	1	
18	4030 R706 00	FRAME ASSY	フレーム ＡＳＳＹ		D	1	
19	9J06 M201 00	CLUTCH	クラッチ		C	1	
20	4425 3016 01	GEAR 32T	ギヤ　３２Ｔ		C	1	
21	4030 3003 01	SHAFT	シャフト		D	1	
22	1067 2501 01	PIN	ヒ゜ン		C	2	
23	4040 3097 01	SHAFT	シャフト		D	1	
24	4030 3030 01	TORSION SPRING	ねじりコイルばね		C	1	
25	1065 3086 01	BUSHING	シ゛クウケ		C	1	
26	4030 3022 01	SHAFT	シャフト		D	1	
27	4030 3011 03	LEVER	レバー		C	1	
28	4030 3012 01	TORSION SPRING	ねじりコイルばね		C	1	
29	4040 3096 01	SHAFT	シャフト		D	1	
30	9322 1500 12	CLUTCH	クラッチ		C	1	
31	4030 3092 01	WASHER	ワッシャ		D	1	
32	4030 3064 01	GEAR 33T	ギヤ　３３Ｔ		C	1	
33	4030 3069 01	SLEEVE	スリーブ		D	1	
34	4030 3068 01	GEAR 26T	ギヤ　２６Ｔ		C	1	
35	4030 3063 01	BRACKET	取付板		D	1	
36	4030 3021 01	ROLLER	ローラ		C	1	
37	4030 3010 04	Frame	フレーム		C	1	
38	50GA 4006 00	CUSHION	防振材		C	1	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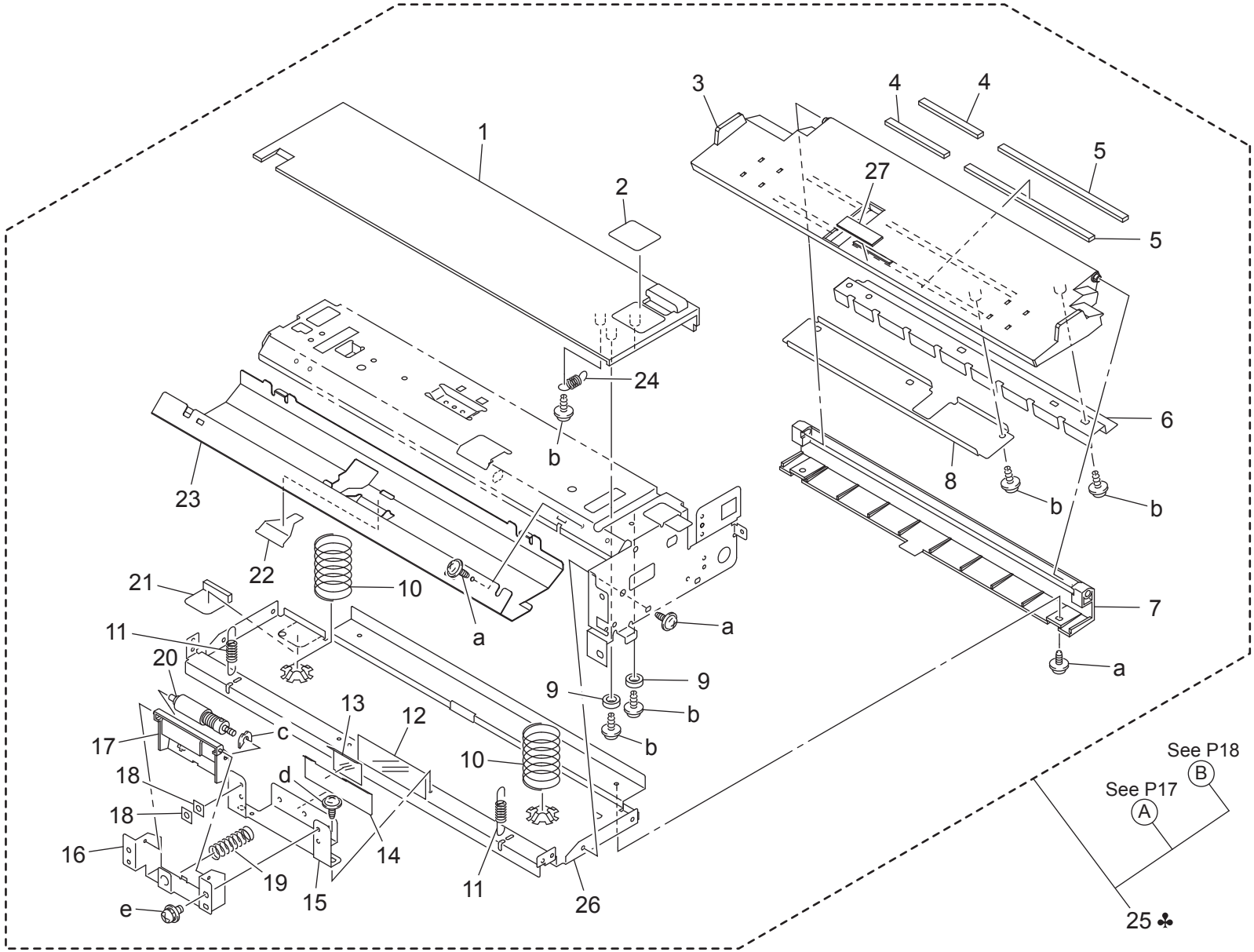
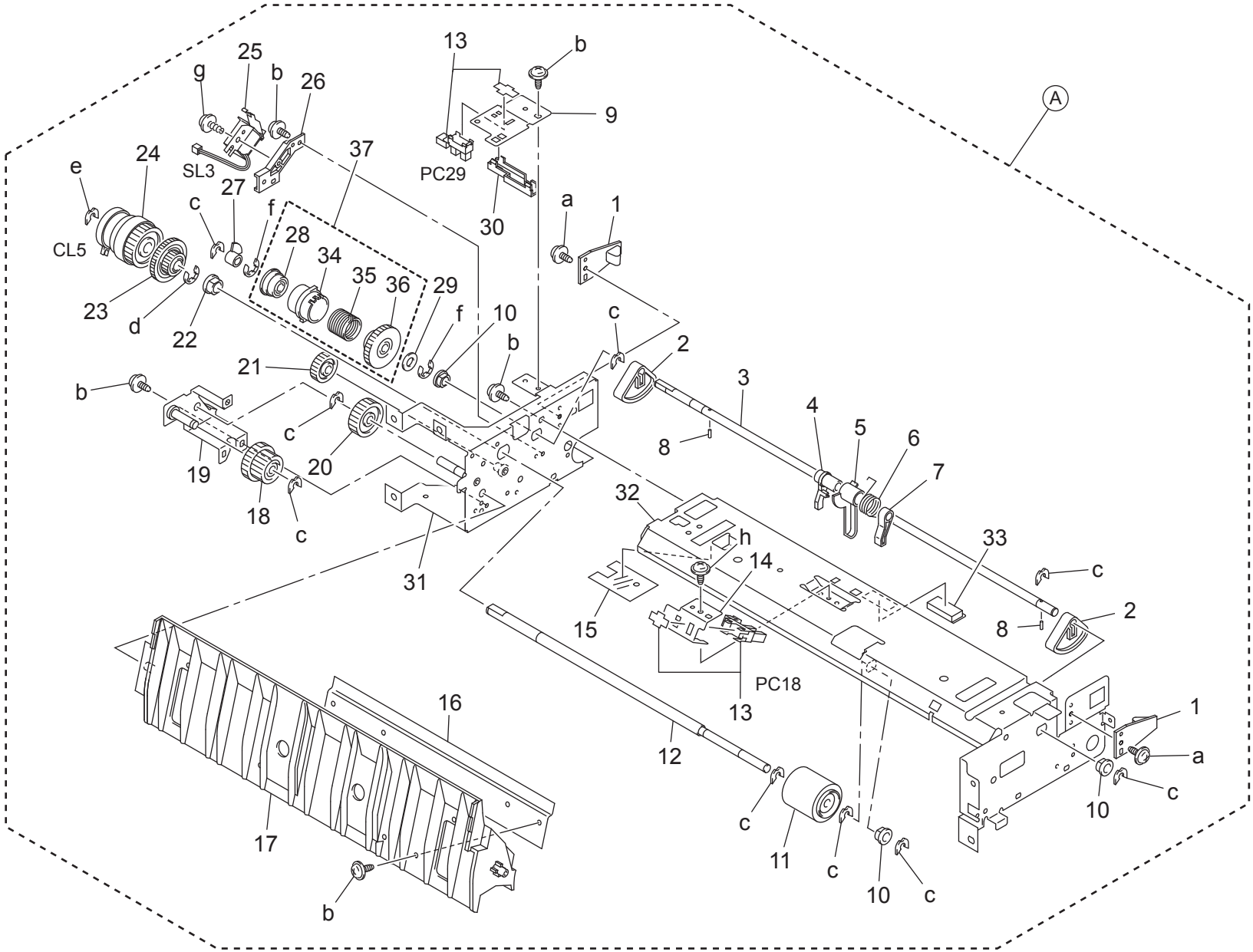
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A0R5 5611 00	Door	扉		C	1	a-V137 0306 03
2	4030 0151 01	SEPARATION ROLLER ASSY	分離ローラ ＡＳＳＹ		A	1	b-V136 0308 03
3	4030 3079 01	GUIDE	ガイド		C	1	c-V218 0400 86
4	4030 3078 01	LEVER	レバー		C	1	d-V218 0300 86
5	4030 3017 03	PRESSURE SPRING	圧縮コイルばね		C	1	e-V116 0308 03
6	4030 3014 01	BRACKET	取付板		D	1	f-V137 0308 03
7	4030 3039 01	SHAFT	シャフト		D	1	g-V153 0308 03
8	4030 3013 01	HOLDER	ホルダ		C	1	
9	4030 3077 01	GUIDE	ガイド		D	1	
10	4030 3105 01	GUIDE	ガイド		C	1	
11	4030 3124 03	GUIDE	ガイド		D	1	
12	4030 3125 01	TENSION SPRING	引張コイルばね		C	2	
13	4030 3129 03	BRACKET	取付板		D	1	
14	4030 3025 02	BRACKET	取付板		D	1	
15	4030 3036 01	GUIDE	ガイド		C	2	
16	4030 3095 01	GUIDE PLATE	ガイド板		C	1	
17	4030 3107 01	GUIDE	ガイド		C	1	
18	4030 3114 02	GUIDE PLATE	ガイド板		D	1	
19	4030 3116 01	TENSION SPRING	引張コイルばね		C	1	
20	4030 3135 01	LEVER	レバー		C	1	
21	4030 3117 02	BRACKET	取付板		D	1	
22	A0R5 5630 00	Handle	取手		C	1	
23	1149 3454 01	PRESSURE SPRING	圧縮コイルばね		C	1	
24	4030 3123 01	PRESSURE SPRING	圧縮コイルばね		C	2	
25	4030 3122 01	ROLL	ころ		C	4	
26	4030 3121 01	SHAFT	シャフト		D	1	
27	4030 3134 03	EARTH GROUND	アース		C	1	
28	4030 3115 01	LEVER	レバー		C	1	
29	4163 5293 01	SCREW	ねじ		C	3	
30	4030 3037 01	REINFORCE PLATE	補強板		D	1	
31	50GA 4007 00	FILM	スペーサ		C	1	
32	4040 5610 00	Spacer	スペーサ		D	1	
33	4040 5612 00	Spacer	スペーサ		D	1	

BYPASS SECTION



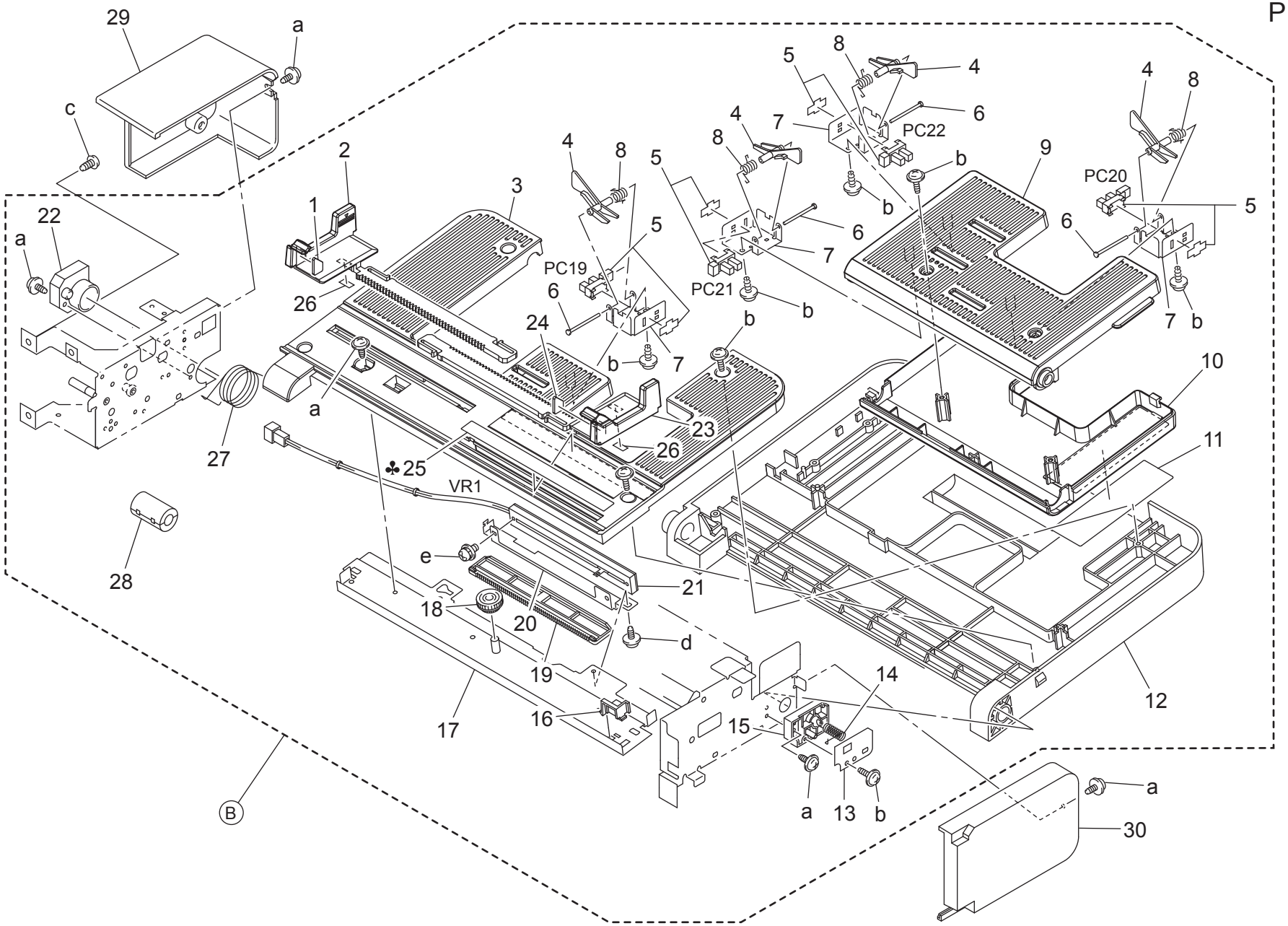
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A0R5 6042 00	Cover /Upper	カバー／上		D	1	a-V137 0308 03
2	A0R5 9421 01	Label	ラベル		C	1	b-V153 0308 03
3	A0R5 6009 00	Lifting Plate	押上げ板		D	1	c-V218 0300 86
4	4030 3476 01	SEAL	シール		C	2	d-V144 0308 03
5	4030 3477 01	SEAL	シール		C	2	e-V116 0306 03
6	4030 3484 01	WEIGHT	重り		D	1	
7	A0R5 6025 00	Holder	ホルダ		D	1	
8	4030 3456 01	REINFORCE PLATE	補強板		D	1	
9	4030 3481 01	COLLAR	カラー		C	2	
10	4030 3457 03	PRESSURE SPRING	圧縮コイルばね		C	2	
11	4030 3428 01	TENSION SPRING	引張コイルばね		C	2	
12	4030 3489 01	SEAL	シール		C	1	
13	4030 3403 01	GUIDE	ガイド		C	1	
14	4030 3402 01	GUIDE PLATE	ガイド板		C	1	
15	4030 3474 01	BRACKET	取付板		D	1	
16	4030 3404 01	BRACKET	取付板		D	1	
17	4131 3053 02	HOLDER	ホルダ		D	1	
18	4030 3492 01	SPACER	スペーサ		C	2	
19	4030 3475 01	PRESSURE SPRING	圧縮コイルばね		C	1	
20	4034 0151 01	SEPARATION ROLLER	分離ローラ		A	1	
21	4030 3448 01	CUSHION	クッション		C	1	
22	4040 3495 01	GUIDE	ガイド		C	1	
23	4040 3496 01	GUIDE	ガイド		D	1	
24	4030 3438 01	TENSION SPRING	引張コイルばね		C	1	
25	A11U R701 00	Manual Feed Tray Unit	マルチ手差しユニット	B,G2	S	1	
25	A11U R702 00	Manual Feed Tray Unit	マルチ手差しユニット	C,D1,D3,E,F1,F2,G1,H,I ,J,K	S	1	
26	4030 3424 01	BRACKET	取付板		D	1	
27	4687 3281 01	FRICTION SHEET	摩擦板		C	1	

BYPASS SECTION



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3430 01	LEVER	レバー		C	2	a-V144 0308 03
2	4030 3417 01	CAM	カム		C	2	b-V137 0308 03
3	4030 3416 02	SHAFT	シャフト		D	1	c-V218 0400 86
4	4030 3464 01	HOLDER	ホルダ		D	1	d-V217 0600 01
5	4030 3444 01	ACTUATOR	アクチュエータ		C	1	e-V218 0600 86
6	4030 3445 01	TORSION SPRING	ねじりコイルばね		C	1	f-V217 0400 01
7	4030 3465 01	HOLDER	ホルダ		D	1	g-V153 0308 03
8	1067 2502 01	PIN	ヒ゜ン		D	2	h-V137 0306 03
9	4030 3479 01	BRACKET	取付板		D	1	
10	4030 3093 01	BUSHING	軸受		C	3	
11	4131 3001 01	ROLLER	ローラ		A	1	
12	4030 3434 01	SHAFT	シャフト		D	1	
13	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	2	
14	4040 3443 01	BRACKET	取付板		D	1	
15	4030 3447 01	GUIDE	ガイド		C	1	
16	4030 3427 01	REINFORCE PLATE	補強板		D	1	
17	4030 3401 13	HOLDER	ホルダ		D	1	
18	4030 3441 01	GEAR 20/25T	ギヤ　２０／２５Ｔ		C	1	
19	4030 R708 00	BRACKET ASSY	取付板ＡＳＳＹ		D	1	
20	1075 2565 01	GEAR 25T	ギヤ　２５Ｔ		C	1	
21	1300 3322 17	GEAR 20T	ギヤ　２０Ｔ		C	1	
22	4658 3517 01	BUSHING	軸受		C	1	
23	4030 3467 01	GEAR 16/30T	ギヤ　１６／３０Ｔ		C	1	
24	9J06 M201 00	CLUTCH	クラッチ		C	1	
25	9J06 M200 00	SOLENOID	フラッパーソレノイド		C	1	
26	4030 3422 01	HOLDER	ホルダ		D	1	
27	4030 3478 02	SHIELD PLATE	遮光板		D	1	
28	4131 3007 02	DRUM	ドラム		D	1	
29	4131 4128 01	WASHER	ワッシャ		C	1	
30	4030 3429 02	MEMBER	押え材		D	1	
31	4030 R707 00	BRACKET ASSY	取付板ＡＳＳＹ		C	1	
32	4030 3432 07	BRACKET	取付板		C	1	
33	4040 3497 01	CUSHION	防振材		C	1	
34	4030 3420 02	RATCHET	ラチェット		C	1	
35	4030 3419 01	TORSION SPRING	ねじりコイルばね		B	1	
36	4131 3004 02	GEAR 30T	ギヤ　３０Ｔ		C	1	
37	4040 R705 00	CLUTCH	給紙クラッチ		B	1	

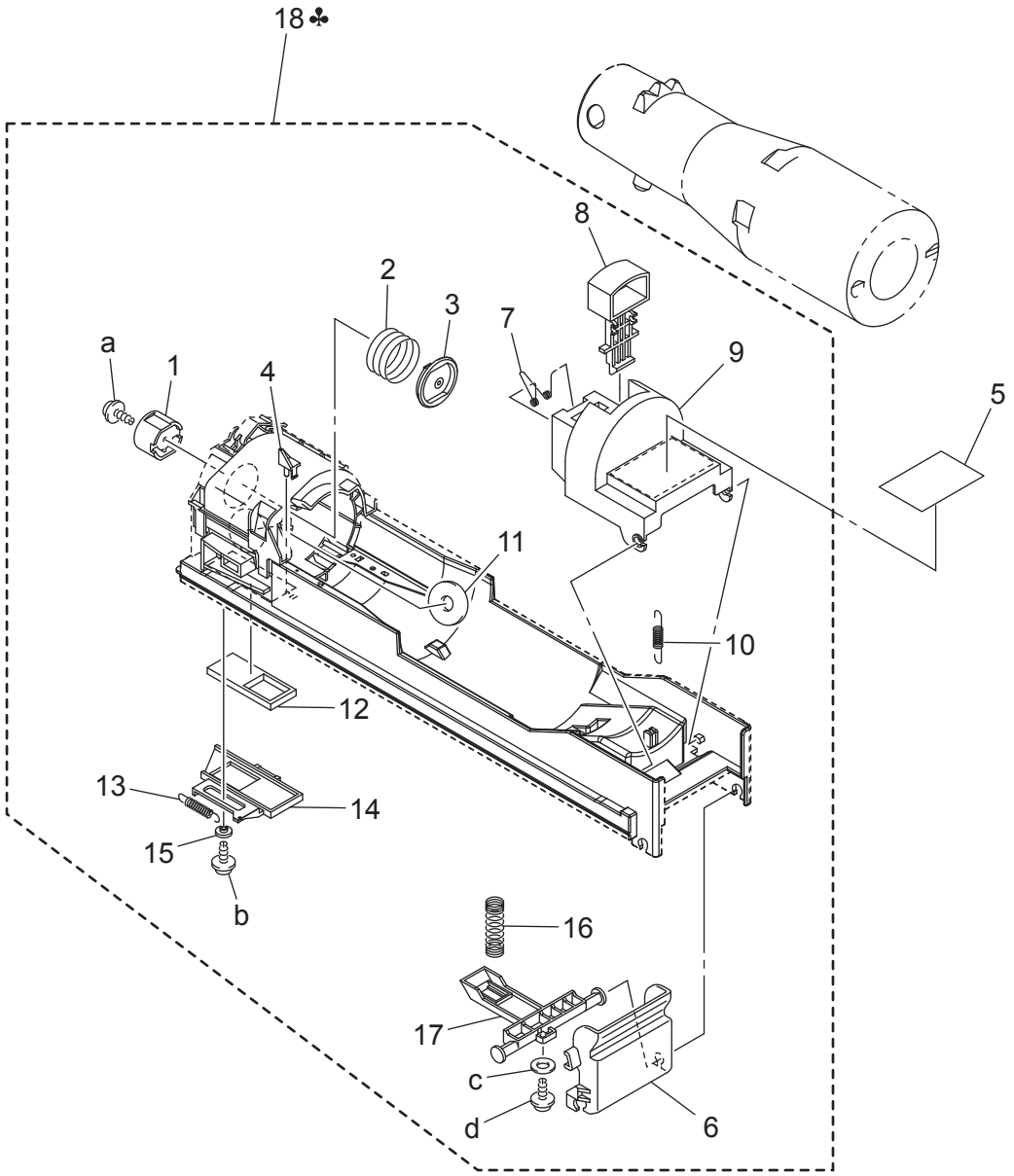
BYPASS SECTION



bizhub 222/bizhub 282/bizhub 362/bizhub 7728

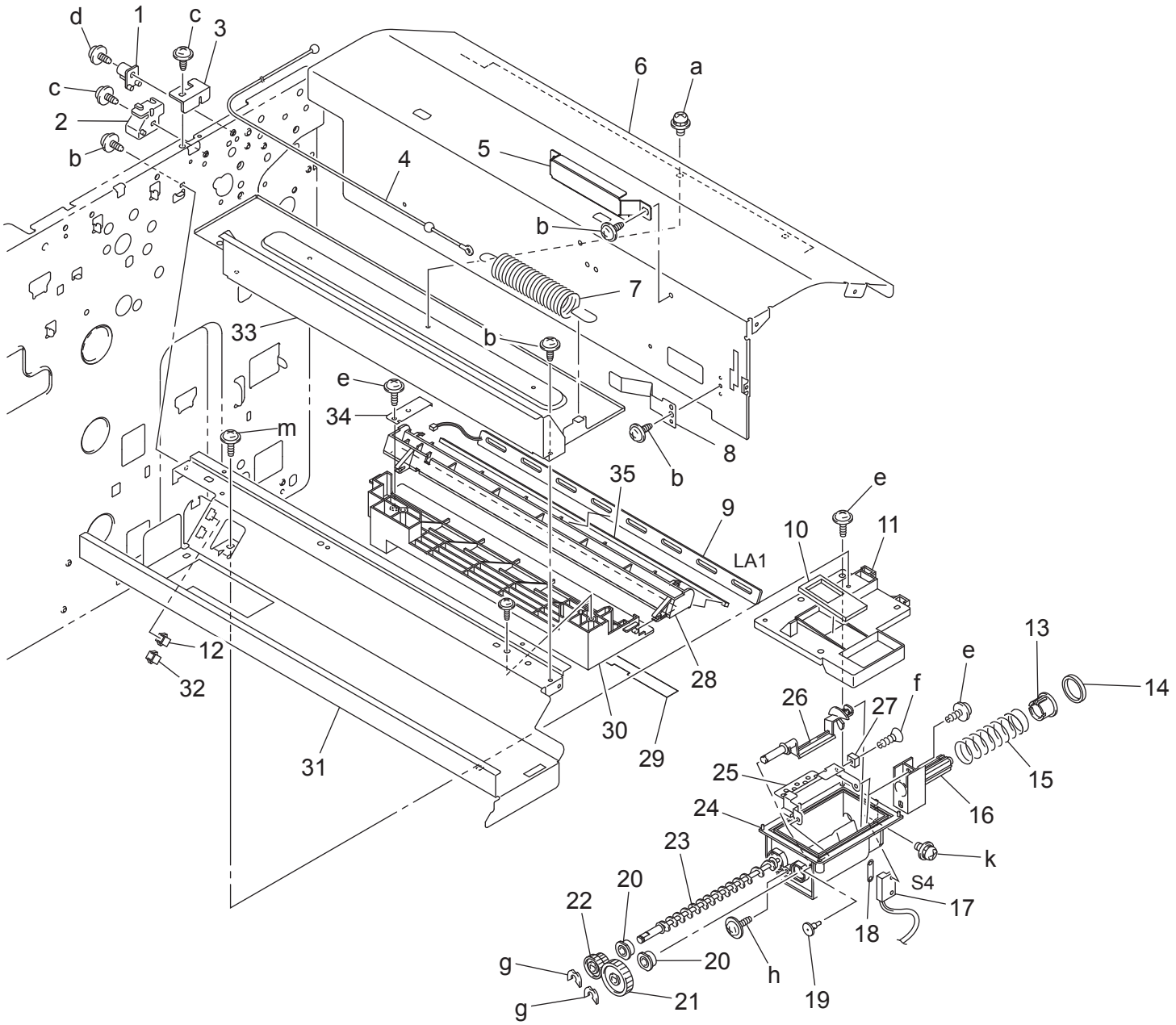
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3486 01	BRAKE	ブレーキ材		C	1	a-V137 0308 03
2	A0R5 6011 00	Regulating Plate	規制板		C	1	b-V153 0308 03
3	A0R5 6066 00	Cover	カバー		C	1	c-V136 0408 03
4	4030 3415 02	ACTUATOR	アクチュエータ		C	4	d-V137 0306 03
5	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	4	e-V116 0306 03
6	1134 3042 02	SHAFT	シャフト		D	4	
7	4030 3414 01	BRACKET	取付板		D	4	
8	4030 3446 01	TORSION SPRING	ねじりコイルばね		C	4	
9	A0R5 6023 00	Tray	トレイ		C	1	
10	A0R5 6059 00	Cover	カバー		C	1	
11	4030 7309 02	LABEL TRAY CAUTION	ラベル		C	1	
12	A0R5 6008 00	Tray	トレイ		C	1	
13	4030 3437 01	BRACKET	取付板		D	1	
14	4030 3435 01	TORSION SPRING	ねじりコイルばね		C	1	
15	4030 3473 02	HOLDER	ホルダ		D	1	
16	4030 3463 01	STOPPER	ストッパ		D	1	
17	4030 0216 05	BRACKET ASSY	取付板 ＡＳＳＹ		D	1	
18	4030 3412 01	GEAR 13/18T	ギヤ　１３／１８ Ｔ		C	1	
19	4030 3460 02	RACK	ラック		C	1	
20	4030 3455 02	BRACKET	取付板		D	1	
21	4037 6899 01	RESISTOR	テイコウキ		D	1	
22	4030 3472 01	HOLDER	ホルダ		D	1	
23	A0R5 6010 00	Regulating Plate	規制板		C	1	
24	4030 3487 01	BRAKE	ブレーキ材		C	1	
25	4030 7307 02	SCALE METRIC	スケール　メトリック	C,D1,D3,E,F1,F2,G1,H,I ,J,K	D	1	
25	4030 7308 02	SCALE INCH	スケール　インチ	B,G2	C	1	
26	4131 4623 04	CLEANING PAD	クリーニングパッド		C	2	
27	4030 3436 01	TORSION SPRING	ねじりコイルばね		C	1	
28	9326 1910 31	FERRITE CORE	フェライトコア		D	1	
29	A0R5 6026 00	Cover	カバー		C	1	
30	A0R5 6108 01	Cover /Front	カバー／前		C	1	

HOPPER SECTION



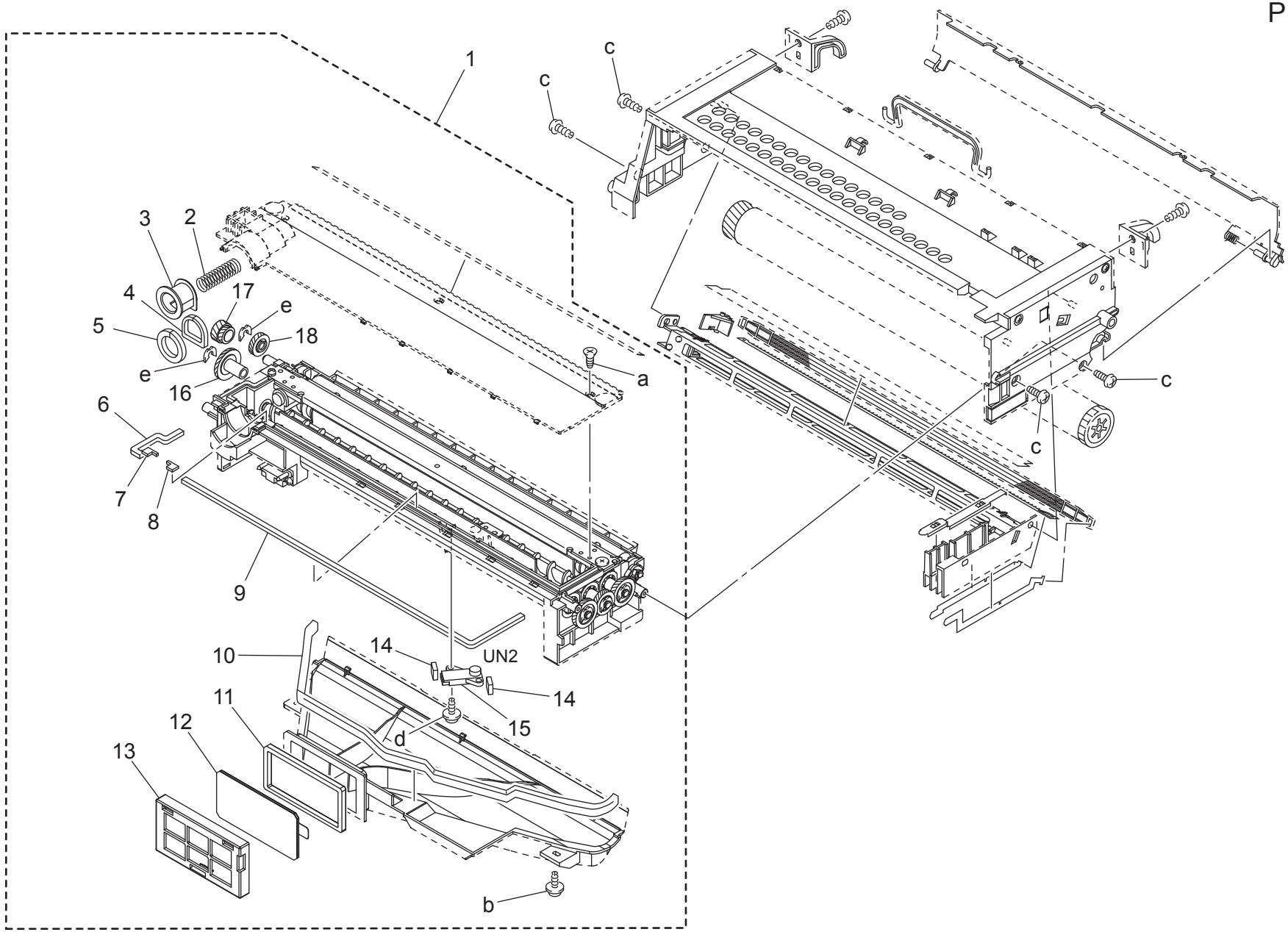
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 5317 01	JOINT	ジョイント		C	1	a-V153 0308 03
2	4040 5318 01	PRESSURE SPRING	圧縮コイルばね		C	1	b-V145 0312 03
3	4040 5319 01	COLLAR	カラー		C	1	c-V207 0600 01
4	4040 5322 01	STOPPER	ストッパ	{bizhub 362}	C	1	d-V153 0410 03
5	4040 7375 01	LABEL TONER TYPE	ラベル トナータイプ	{bizhub 362}	C	1	
5	4041 7377 01	LABEL TONER TYPE	ラベル トナータイプ	{bizhub 282/222/7728}	C	1	
6	4030 5389 01	HANDLE	取手		C	1	
7	4030 5394 01	TORSION SPRING	ねじりコイルばね		C	1	
8	4030 5393 01	HANDLE	取手		C	1	
9	4030 5391 01	STOPPER	ストッパ		D	1	
10	4030 5392 01	TENSION SPRING	引張コイルばね		C	1	
11	1165 5327 03	SEAL	シール		C	1	
12	4030 5384 01	SEAL	シール		C	1	
13	4030 5386 01	TENSION SPRING	引張コイルばね		C	1	
14	4030 5383 02	SHUTTER	シャッタ		D	1	
15	4030 5398 01	COLLAR	カラー		D	1	
16	4030 5390 01	PRESSURE SPRING	圧縮コイルばね		C	1	
17	4030 5395 01	PAWL	爪		C	1	
18	4040 0769 00	HOPPER UNIT	ホッパー	B,G2 {bizhub 362}	I	1	
18	4040 0772 00	HOPPER UNIT	ホッパー	B,G2 {bizhub 282/222}	I	1	
18	4040 0773 00	HOPPER UNIT	ホッパー	C,D1,D3,E,F1,F2,G1,H,I ,J,K {bizhub 362}	I	1	
18	4040 0775 00	HOPPER UNIT	ホッパー	C,D1,D3,E,F1,F2,G1,H,I ,J,K {bizhub 282/222/7 728}	I	1	

HOPPER SECTION



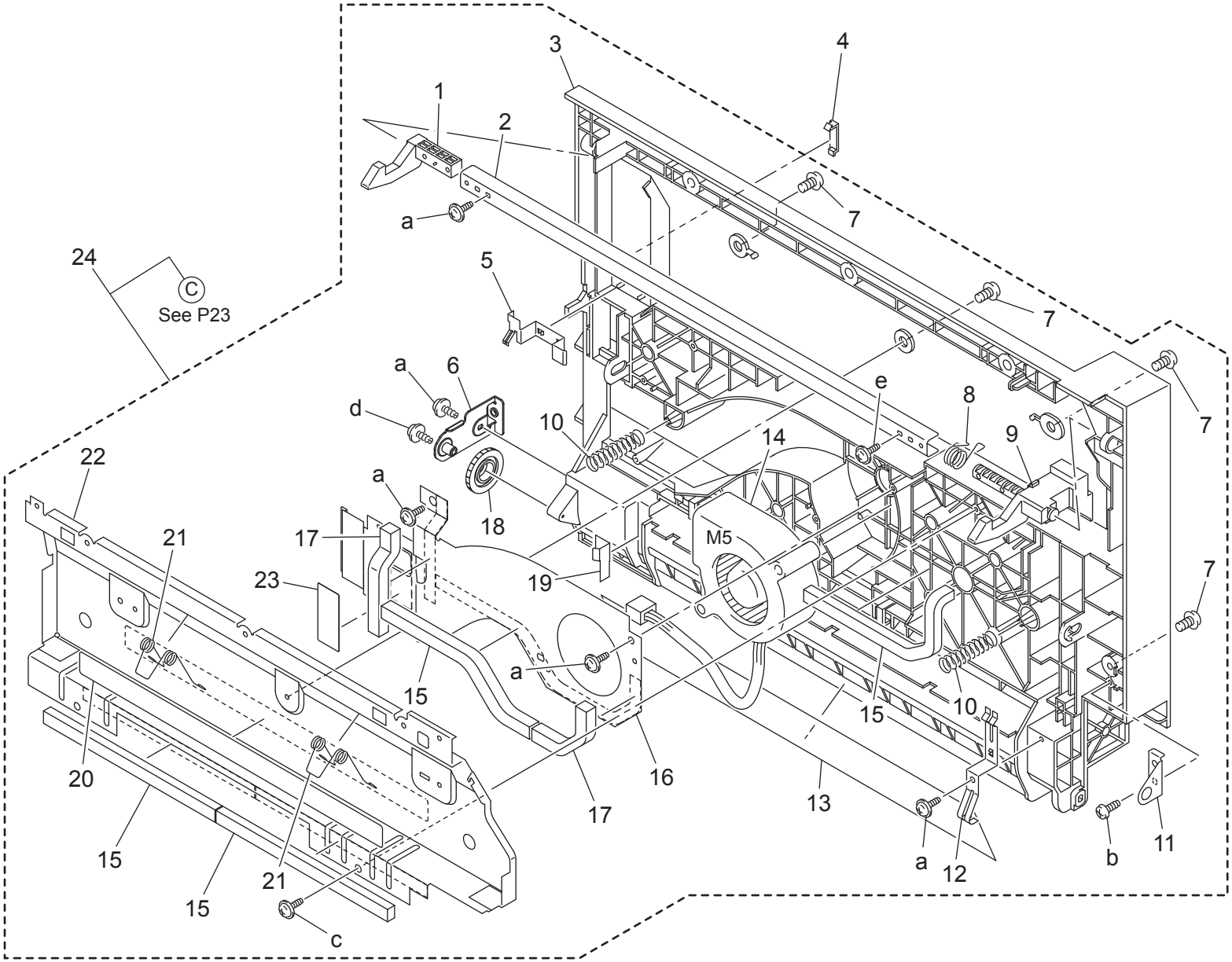
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2043 01	GUIDE	ガイド		D	1	a-V116 0308 03
2	1164 2050 01	GUIDE	ガイド		D	1	b-V137 0306 03
3	4030 2046 01	STOPPER	ストッパ		D	1	c-V137 0308 03
4	4030 2047 01	WIRE	ワイヤ		C	1	d-V137 0320 03
5	4040 2056 01	RAIL	レール		D	1	e-V153 0308 03
6	4030 1019 02	COVER	カバー		D	1	f-V112 0308 21
7	4030 2045 01	TENSION SPRING	引張コイルばね		C	1	g-V218 0400 86
8	4030 5396 01	PLATE SPRING	板ばね		C	1	h-1250 2301 01
9	9351 1200 12	INCANDESCENT LAMP	白熱ランプ		C	1	k-V116 0310 03
10	4030 5385 02	SEAL	シール		C	1	m-V153 0310 03
11	4030 5361 03	REGULATING PLATE	粉煙防止板		C	1	
12	V818 6000 14	PLUG HOUSING	角型プラグコネクタ		D	1	
13	1165 5308 01	SHUTTER	シャッタ		D	1	
14	1165 5319 01	SEAL	シール		C	1	
15	1165 5309 02	PRESSURE SPRING	圧縮コイルばね		C	1	
16	4030 5365 01	DUCT	ダクト		D	1	
17	9334 2710 11	SWITCH	スイッチ		C	1	
18	4011 5339 01	PLATE NUT	板ナット		D	1	
19	4011 5338 01	PIN	ピン		D	1	
20	4163 5102 01	BUSHING	軸受		C	2	
21	4030 5378 01	GEAR 28T	ギヤ　２８Ｔ		C	1	
22	4030 5379 01	GEAR 14/19T	ギヤ　１４／１９Ｔ		C	1	
23	4030 0152 03	SCREW ASSY	搬送羽根 ＡＳＳＹ		C	1	
24	4030 5360 01	HOUSING	ハウジング		D	1	
25	4030 5364 01	DETECTING PLATE	検出板		D	1	
26	4030 0153 03	STIRRING PLATE ASSY	撹拌板 ＡＳＳＹ		C	1	
27	9326 2900 06	MAGNET	マク゛ネット		D	1	
28	1165 4305 02	HOLDER	ホルダ		D	1	
29	1165 4310 01	SEAL	シール		C	1	
30	4030 2055 01	HOLDER	ホルダ		D	1	
31	4030 2050 02	BRACKET	取付板		D	1	
32	V818 6000 11	PLUG HOUSING	角型プラグコネクタ		D	1	
33	4030 2051 02	GUIDE	ガイド		D	1	
34	1165 4308 02	PLATE SPRING	板ばね		C	1	
35	1165 4307 01	SEAL	シール		C	1	

DEVELOPING UNIT



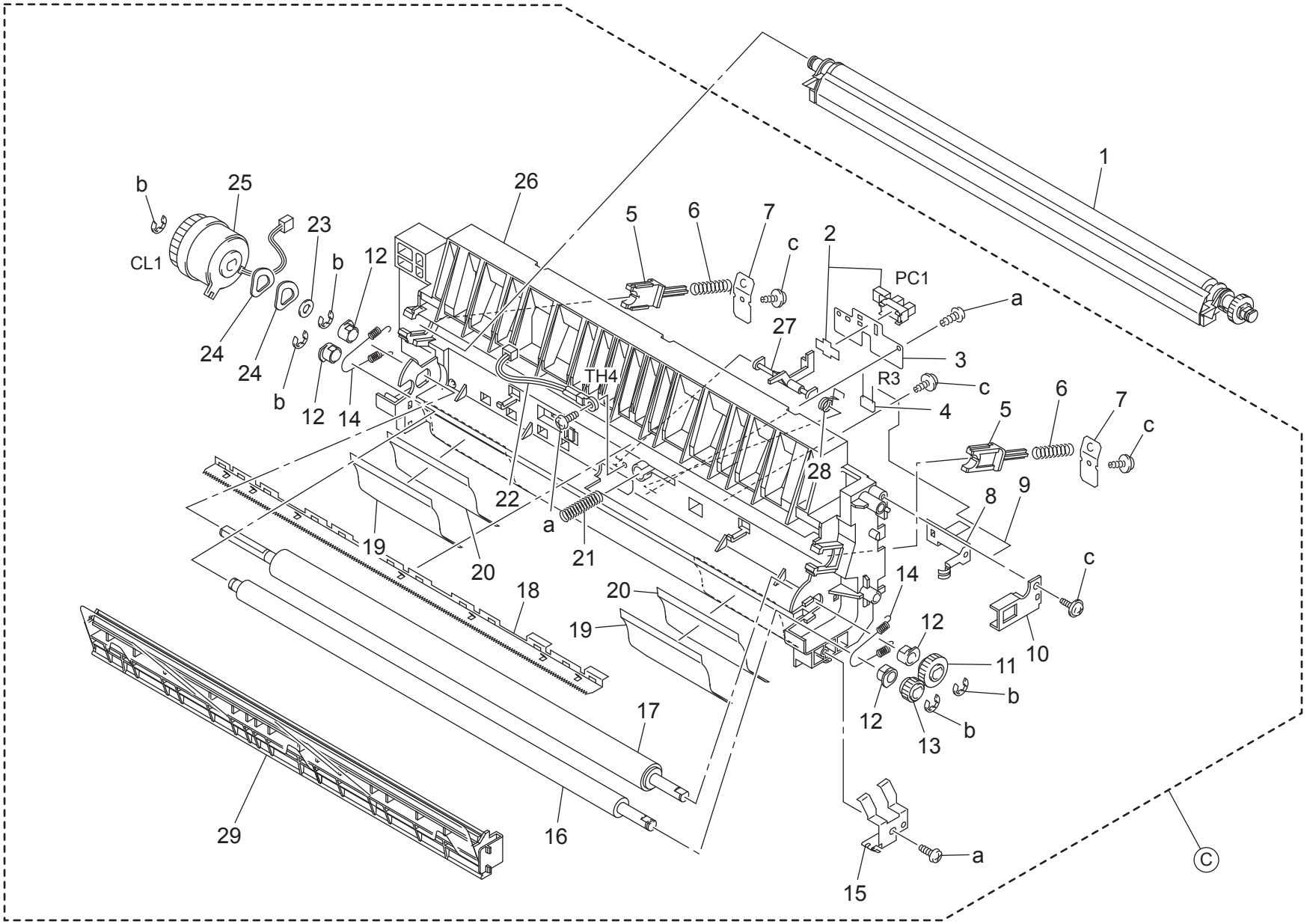
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 0752 00	DEVELOPING UNIT	現像ユニット		B	1	a-V112 0306 21
2	4163 5210 02	PRESSURE SPRING	圧縮コイルばね		C	1	b-V153 0308 03
3	4163 5205 01	SHUTTER	シャッタ		D	1	c-V149 0308 04
4	4163 5208 01	SEAL	シール		C	1	d-V153 0306 03
5	4163 5238 01	SEAL	シール		C	1	e-V218 0400 86
6	4163 5209 01	SEAL	シール		C	1	
7	4163 5240 01	SEAL	シール		C	1	
8	4163 5239 01	SEAL	シール		C	1	
9	4163 5207 01	SEAL	シール		C	1	
10	4040 5211 01	SEAL	シール		C	1	
11	4040 5223 01	SEAL	シール		C	1	
12	4040 5217 01	TONER FILTER	トナーフィルタ		A	1	
13	4040 5222 01	COVER	カバー		C	1	
14	4040 5216 01	SEAL	シール		C	2	
15	4040 6040 01	PWB ASSY	基板ＡＳＳＹ		I	1	
16	4163 5224 01	GEAR 20T	ギヤ　２０Ｔ		C	1	
17	4163 5222 01	GEAR 14T/12T	ギヤ　１４Ｔ／１２Ｔ		C	1	
18	4163 5223 01	GEAR 19T	ギヤ　１９Ｔ		C	1	

PAPER TRANSPORT SECTION

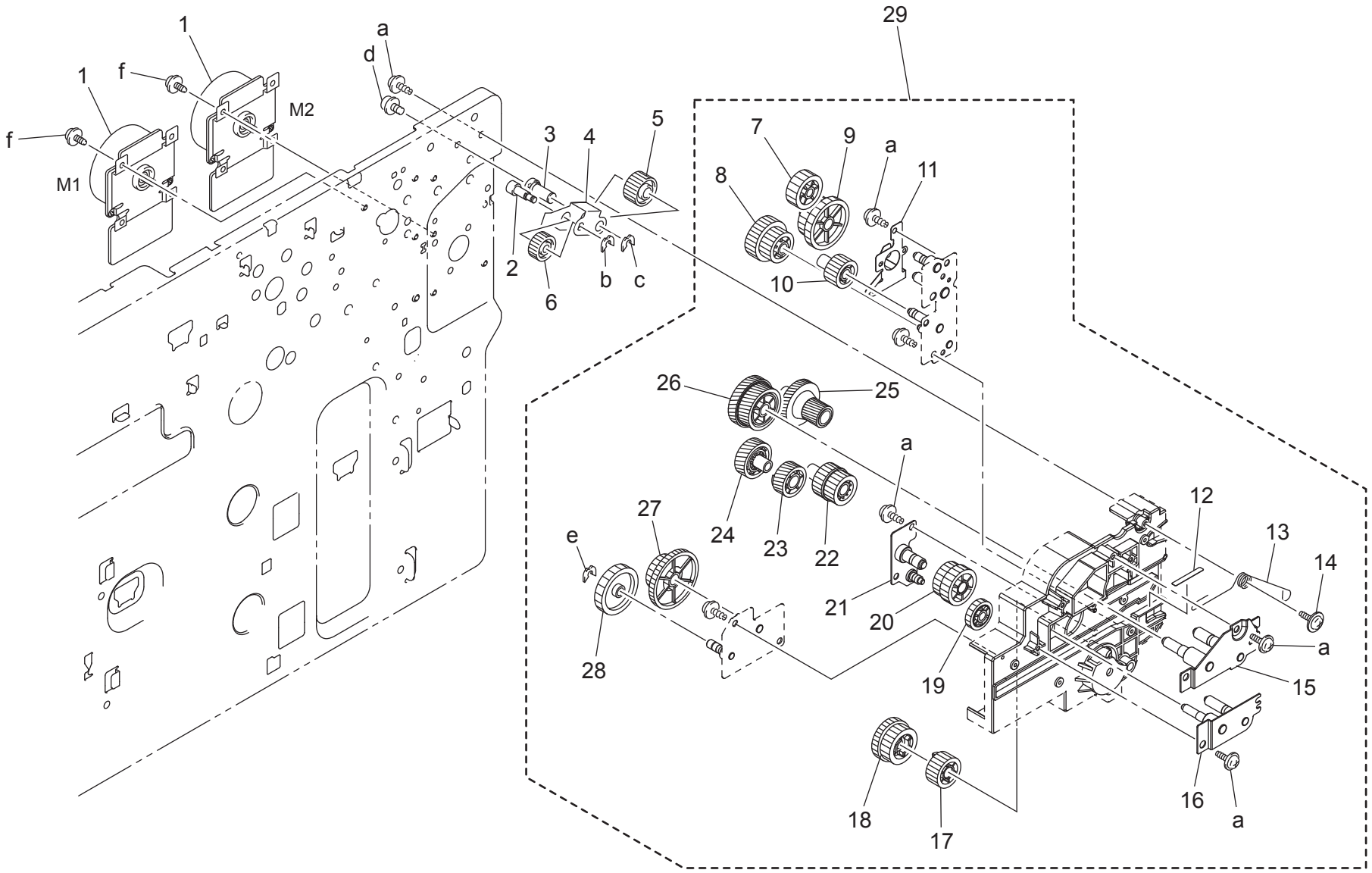


Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2022 01	PAWL	爪		C	1	a-V153 0308 03
2	4030 2023 01	BRACKET	取付板		D	1	b-V145 0308 03
3	A11U 7106 00	Right Cover	右カバー（扉）		C	1	c-V153 0410 03
4	A11U 1628 00	Cover	カバー		D	1	d-V153 0316 03
5	4030 2024 02	EARTH GROUND	アース		C	1	e-V153 0310 03
6	4030 R713 00	BRACKET ASSY	取付板 ＡＳＳＹ		D	1	
7	4002 2581 01	SCREW	ねじ		C	4	
8	4030 2013 01	TORSION SPRING	ねじりコイルばね		C	1	
9	A0R5 8221 00	Lock Claw /Front	ロック爪／前		C	1	
10	4011 3515 01	PRESSURE SPRING	圧縮コイルばね		C	2	
11	4011 2024 01	BRACKET	取付板		D	1	
12	1164 4219 02	TERMINAL	ターミナル		C	1	
13	4012 3524 12	GUIDE	ガイド		C	1	
14	9313 1100 33	FAN MOTOR	ファンモータ		C	1	
15	4030 3520 01	SEAL	シール		C	4	
16	4030 3517 01	BRACKET	取付板		D	1	
17	4030 3518 01	SEAL	シール		C	2	
18	4030 2549 01	GEAR 21T	ギヤ ２１Ｔ		C	1	
19	4011 3508 01	GUIDE	ガイド		C	1	
20	4138 5866 01	LABEL HI-TEMP CAUTION	ラベル 高温注意		D	1	
21	4030 2052 02	TORSION SPRING	ねじりコイルばね		C	2	
22	4030 2025 01	REINFORCE PLATE	補強板		D	1	
23	4030 3527 01	INSULATING MEMBER	絶縁材		C	1	
24	A11U R703 00	Paper Transport Unit	転写搬送ユニット		S	1	

PAPER TRANSPORT SECTION



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 R725 00	TRANSFER ROLLER UNIT	転写ローラユニット		A	1	a-V145 0308 03
2	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	b-V217 0500 01
3	1164 3529 01	BRACKET	取付板		D	1	c-V153 0308 03
4	9455 3078 01	RESISTOR	固定抵抗器		D	1	
5	1164 4206 02	BUSHING	軸受		C	2	
6	4030 4207 01	PRESSURE SPRING	圧縮コイルばね		C	2	
7	1164 4209 02	CONTACT	接点		C	2	
8	4011 4217 01	CONTACT	接点		C	1	
9	4030 4220 01	CONTACT	接点		C	1	
10	1164 4218 01	HOLDER	ホルダ		D	1	
11	1164 3508 01	GEAR 18T	ギヤ　１８Ｔ		B	1	
12	1164 3549 01	BUSHING	軸受		B	4	
13	1164 3515 01	GEAR 13T	ギヤ　１３Ｔ		B	1	
14	1164 3513 01	TENSION SPRING	引張コイルばね		C	2	
15	1164 3514 02	EARTH GROUND	アース		C	1	
16	4011 3509 01	ROLLER	ローラ		C	1	
17	4011 3510 01	ROLLER	ローラ		C	1	
18	1164 4202 04	NEUTRALIZING NEEDLE	除電針		D	1	
19	4030 3506 01	GUIDE	ガイド		C	2	
20	4030 3505 01	GUIDE	ガイド		C	2	
21	4030 4213 02	PRESSURE SPRING	圧縮コイルばね		C	1	
22	9372 2710 22	THERMISTOR	サーミスタ		B	1	
23	4011 3512 01	WASHER	ワッシャ		C	1	
24	4011 3020 01	WASHER	ワッシャ		C	2	
25	9322 1000 81	CLUTCH	クラッチ		C	1	
26	4030 3501 08	HOLDER	ホルダ		C	1	
27	4030 3504 01	ACTUATOR	アクチュエータ		C	1	
28	1164 3527 02	TORSION SPRING	ねじりコイルばね		C	1	
29	4040 0778 00	PAPER DUST REMOVER	紙紛除去クリーナ		A	1	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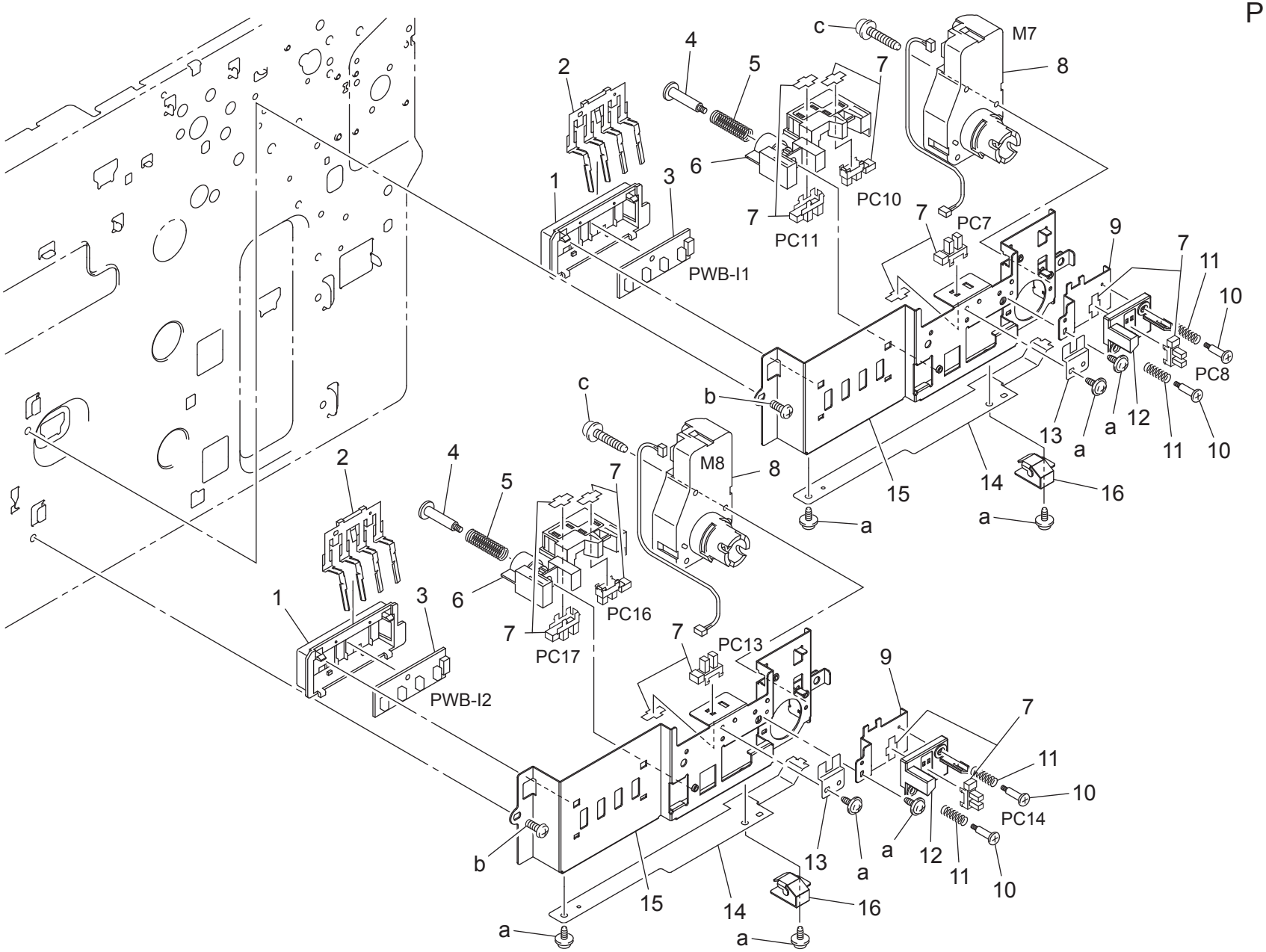
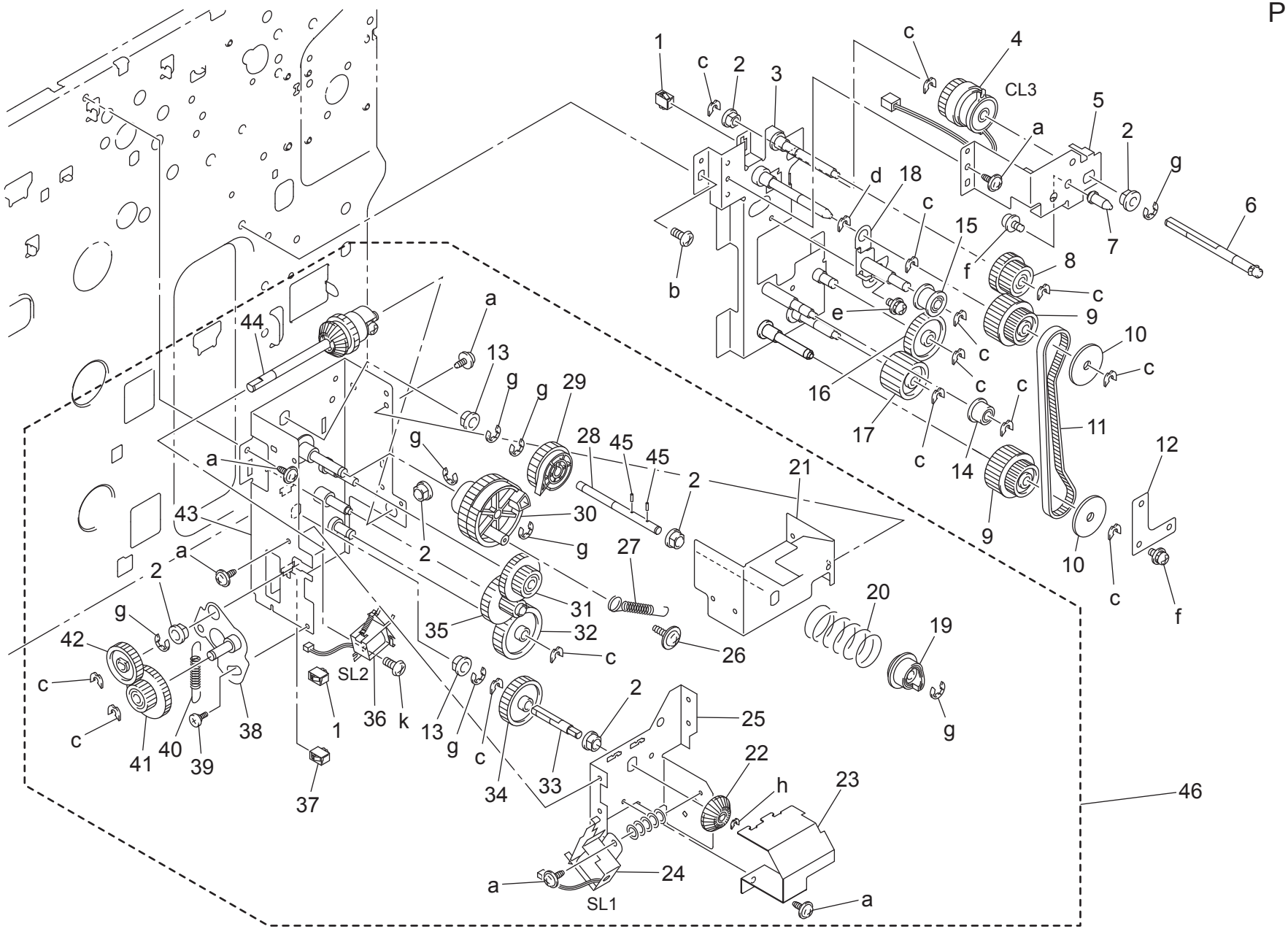
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	9314 2400 31	MOTOR	ブラシレスモータ		B	2	a-V153 0308 03
2	4030 2524 01	SHAFT	シャフト		D	1	b-V218 0300 86
3	4030 2523 01	SHAFT	シャフト		D	1	c-V218 0600 86
4	4030 2525 01	BRACKET	取付板		D	1	d-V116 0308 03
5	4030 2517 01	GEAR 21T	ギヤ　２１Ｔ		C	1	e-V218 0400 86
6	4030 2518 01	GEAR 18T	ギヤ　１８Ｔ		C	1	f-V144 0306 03
7	4030 2516 01	GEAR 24T	ギヤ　２４Ｔ		C	1	
8	4040 2551 01	GEAR 29/56T	ギヤ　２９／５６Ｔ		C	1	
9	4030 2515 01	GEAR 28/49T	ギヤ　２８／４９Ｔ		C	1	
10	4040 2552 01	GEAR 26T	ギヤ　２６Ｔ		C	1	
11	4030 2530 02	PLATE SPRING	板ばね（アース板）		C	1	
12	4030 7316 01	LABEL	ラベル		D	1	
13	4030 2531 01	SPRING	ばね		C	1	
14	4163 5293 01	SCREW	ねじ		C	1	
15	4030 R709 00	BRACKET ASSY	取付板ＡＳＳＹ		D	1	
16	4030 R710 00	BRACKET ASSY	取付板ＡＳＳＹ		D	1	
17	4040 2545 01	GEAR 29T	ギヤ　２９Ｔ		C	1	
18	4040 2546 01	GEAR 20/56T	ギヤ　２０／５６Ｔ		C	1	
19	4030 2535 01	GEAR 27T	ギヤ　２７Ｔ		C	1	
20	4030 2526 01	GEAR 32/35T	ギヤ　３２／３５Ｔ		C	1	
21	4030 R712 00	BRACKET ASSY	取付板ＡＳＳＹ		D	1	
22	4030 2512 01	GEAR 19/44T	ギヤ　１９／４４Ｔ		C	1	
23	4030 2511 01	GEAR 42T	ギヤ　４２Ｔ		C	1	
24	4030 2510 01	GEAR 49T	ギヤ　４９Ｔ		C	1	
25	4030 2506 01	GEAR 23/60T	ギヤ　２３／６０Ｔ		C	1	
26	4030 2505 01	GEAR 58/67T	ギヤ　５８／６７Ｔ		C	1	
27	4030 2542 01	GEAR 24/81T	ギヤ　２１／８１Ｔ		C	1	
28	1165 2592 01	GEAR 34T	ギヤ　３４Ｔ		C	1	
29	4040 0777 00	DRIVE UNIT	駆動ユニット		C	1	

DRIVE SECTION



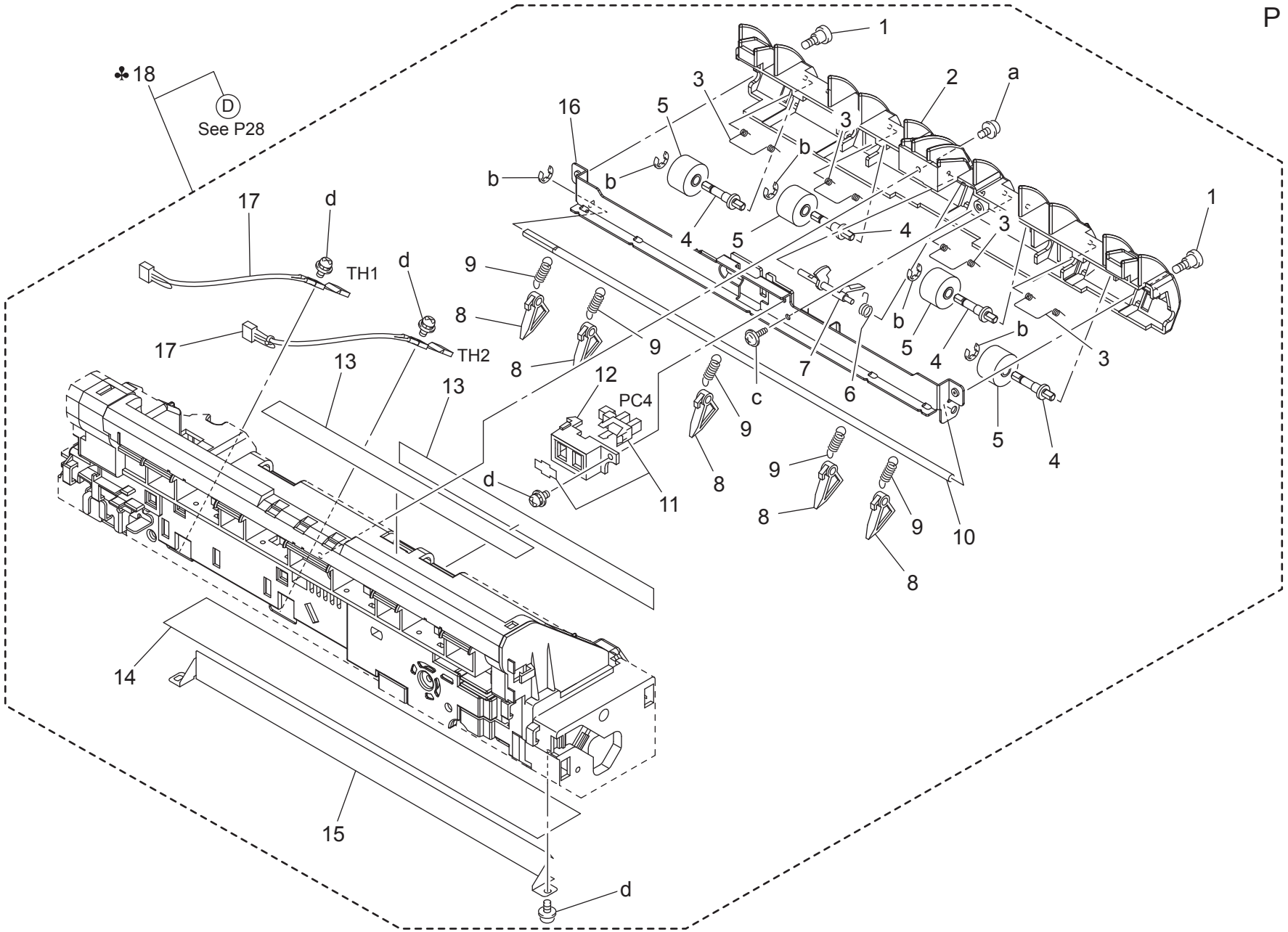
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4011 3012 01	HOLDER	ホルダ		D	2	a-V137 0306 03
2	4030 3091 01	LEVER	レバー		C	2	b-V136 0408 03
3	4037 0104 01	PWB ASSY	基板 ＡＳＳＹ		C	2	c-V116 0330 03
4	4002 3131 01	SHOULDER SCREW	段ねじ		C	2	
5	4002 3110 01	PRESSURE SPRING	圧縮コイルばね		C	2	
6	4030 3047 02	HOLDER	ホルダ		D	2	
7	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	8	
8	9J06 M103 00	MOTOR	マグネットモータ		B	2	
9	4030 3208 02	BRACKET	取付板		D	2	
10	4030 3224 02	SHOULDER SCREW	段ねじ		C	4	
11	4030 3081 01	PRESSURE SPRING	圧縮コイルばね		C	4	
12	4030 3083 01	HOLDER	ホルダ		D	2	
13	4030 3048 02	BRACKET	取付板		D	2	
14	4030 3049 01	BRACKET	取付板		D	2	
15	4030 3046 03	BRACKET	取付板		D	2	
16	50GA 6271 01	LIFTING STAY	押上げステー		C	2	

DRIVE SECTION



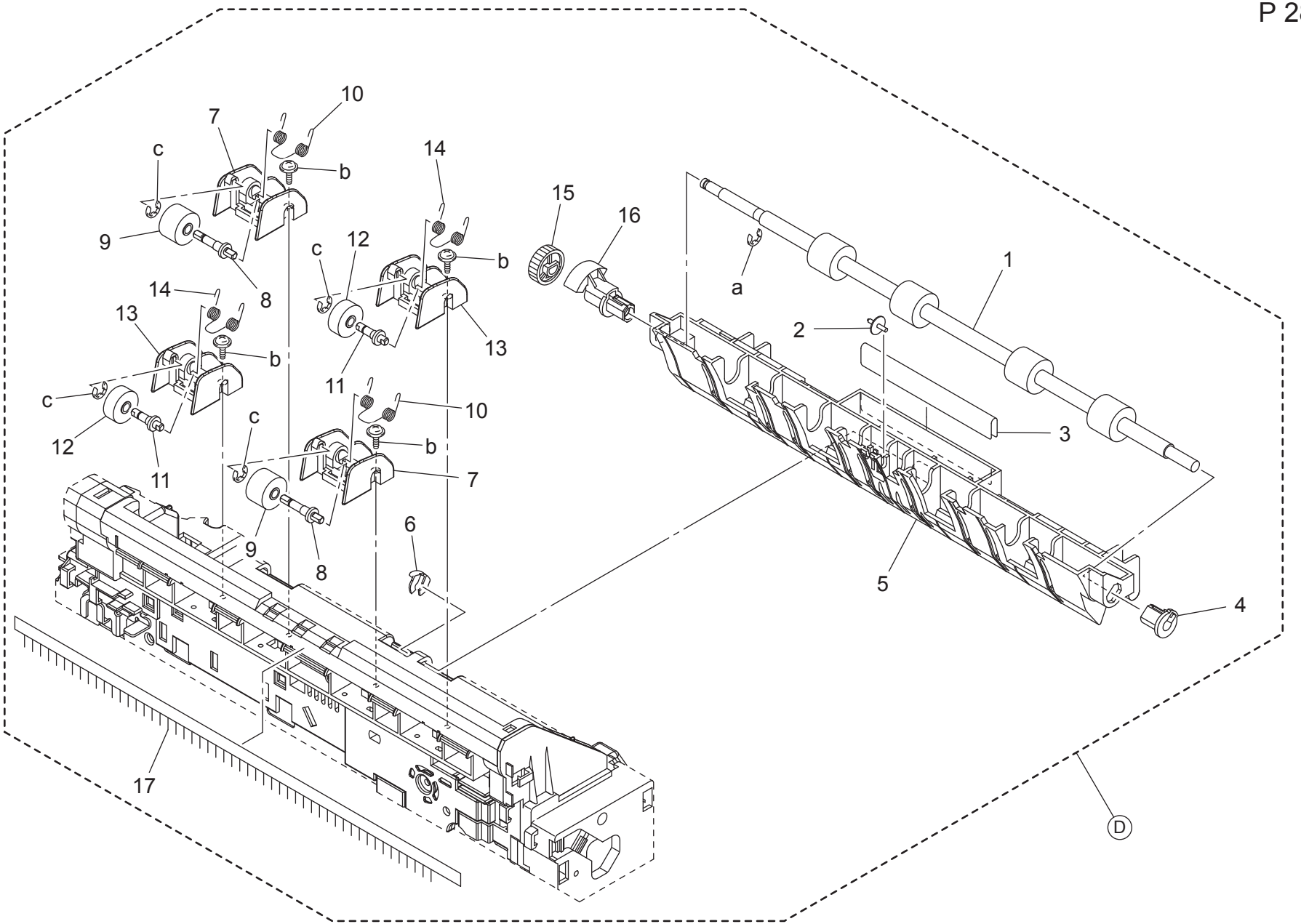
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	V818 6000 14	PLUG HOUSING	角型プラグコネクタ		D	2	a-V137 0306 03
2	4131 3003 01	BUSHING	軸受		C	6	b-V136 0408 03
3	4030 R720 00	BRACKET ASSY	取付板 ＡＳＳＹ		C	1	c-V218 0400 86
4	9322 1500 12	CLUTCH	クラッチ		C	1	d-V218 0600 86
5	4030 3051 01	BRACKET	取付板		D	1	e-V116 0308 03
6	4030 3057 01	SHAFT	シャフト		D	1	f-V116 0306 03
7	4030 3067 01	SHAFT	シャフト		D	1	g-V217 0400 01
8	4030 3071 01	GEAR 19/33T	ギヤ １９／３３Ｔ		C	1	h-V218 0300 86
9	4030 3053 01	PULLEY 28/36T	プーリ ２８／３６Ｔ		C	2	k-V143 0306 03
10	4030 3055 01	COLLAR	カラー		C	2	
11	4030 3054 01	TIMING BELT 324L	タイミングベルト ３２４Ｌ		C	1	
12	4030 3052 01	BRACKET	取付板		D	1	
13	1134 3043 01	BUSHING	軸受		C	2	
14	1067 2513 01	PULLEY	フ゜ーリー		C	1	
15	1155 2518 01	PULLEY	フ゜ーリー		C	1	
16	4030 3060 01	GEAR 30T	ギヤ ３０Ｔ		C	1	
17	4030 3059 01	GEAR 24T	ギヤ ２４Ｔ		C	1	
18	4030 R705 00	BRACKET ASSY	取付板 ＡＳＳＹ		C	1	
19	4030 5330 03	JOINT	ジョイント		C	1	
20	4030 5374 01	PRESSURE SPRING	圧縮コイルばね		C	1	
21	4030 5355 02	BRACKET	取付板		D	1	
22	1165 5311 01	GEAR 24T	ギヤ ２４Ｔ		C	1	
23	4030 5331 01	COVER	カバー		D	1	
24	4040 M200 00	SOLENOID	フラッパーソレノイド		C	1	
25	4030 5332 01	BRACKET	取付板		D	1	
26	4163 5293 01	SCREW	ねじ		C	1	
27	4030 5373 01	TENSION SPRING	引張コイルばね		C	1	
28	4030 5372 01	SHAFT	シャフト		D	1	
29	4030 5369 02	GEAR 29T	ギヤ ２９Ｔ		C	1	
30	4030 5368 02	GEAR 37/42T	ギヤ ３７／４２Ｔ		C	1	
31	4030 5367 01	GEAR 17/40T	ギヤ １７／４０Ｔ		C	1	
32	1165 2592 01	GEAR 34T	ギヤ ３４Ｔ		C	1	
33	4030 5371 01	SHAFT	シャフト		D	1	
34	4030 5370 01	GEAR 40T	ギヤ ４０Ｔ		C	1	
35	4030 5376 01	GEAR 14/30T	ギヤ １４／３０Ｔ		C	1	
36	9J06 M200 00	SOLENOID	フラッパーソレノイド		C	1	
37	V818 6000 33	CONNECTOR 2P	角型プラグハウジング		D	1	
38	4030 R715 00	BRACKET ASSY	取付板 ＡＳＳＹ		D	1	
39	4030 5377 01	SHOULDER SCREW	段ねじ		C	1	
40	4030 5324 01	TENSION SPRING	引張コイルばね		C	1	
41	4030 5328 01	GEAR 17/32T	ギヤ １７／３２Ｔ		C	1	
42	4030 5334 01	GEAR 25T	ギヤ ２５Ｔ		C	1	
43	4030 R714 00	BRACKET ASSY	取付板 ＡＳＳＹ		C	1	
44	4030 0154 05	GEAR ASSY	ギヤ ＡＳＳＹ		C	1	
45	1067 2501 01	PIN	ヒ゜ン		C	2	
46	4040 0768 00	HOPPER DRIVE UNIT	ホッパー駆動		C	1	

FUSING SECTION

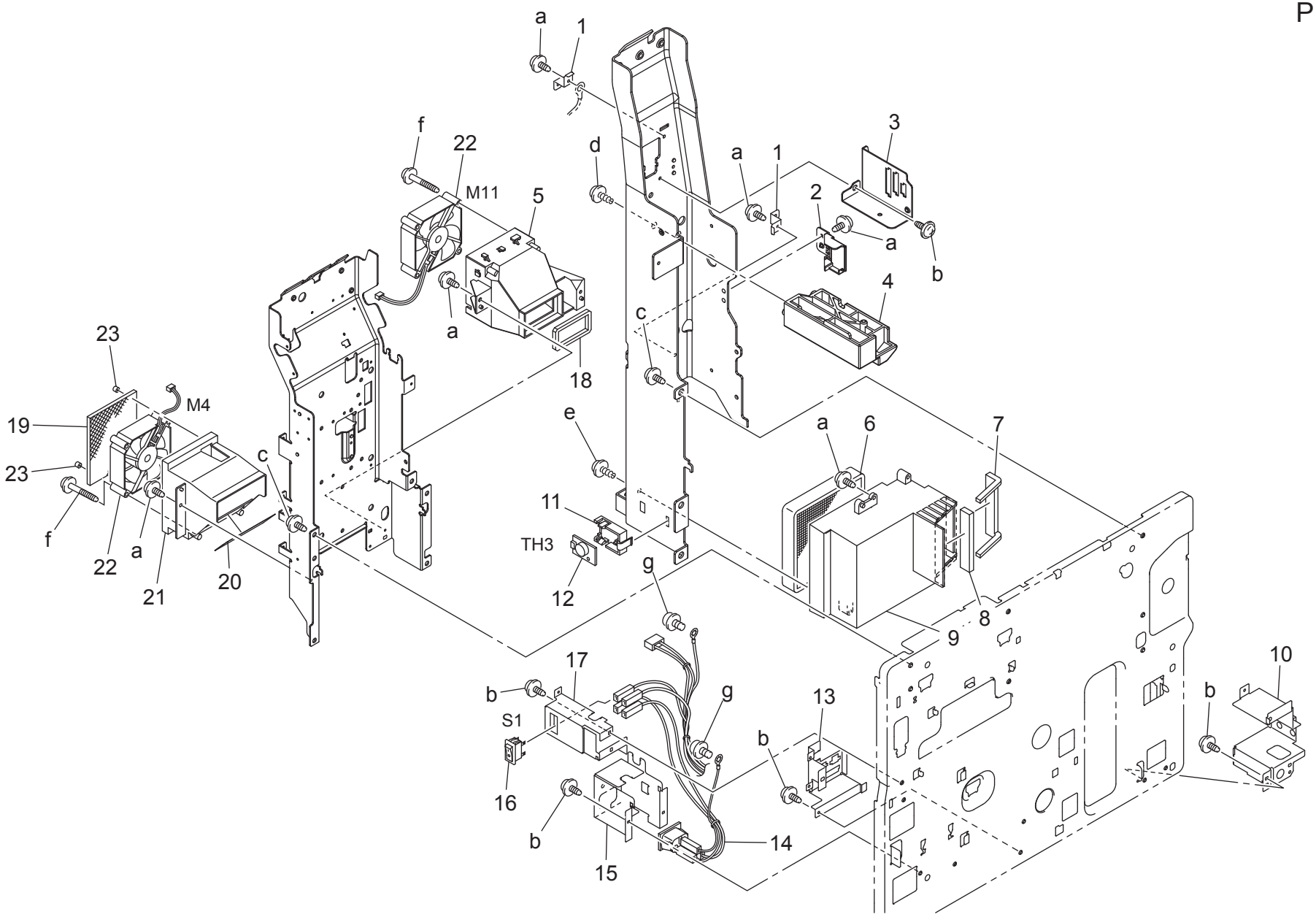


Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 5827 01	SHOULDER SCREW	段ねじ		C	2	a-V116 0310 03
2	4030 5752 03	GUIDE	ガイド		D	1	b-V217 0300 01
3	4030 5807 01	TORSION SPRING	ねじりコイルばね		C	4	c-V153 0308 03
4	4030 5856 01	SHAFT	シャフト		D	4	d-V116 0308 03
5	4030 5805 03	ROLL	ころ		C	4	
6	4030 5810 02	TORSION SPRING	ねじりコイルばね		C	1	
7	4030 5809 02	ACTUATOR	アクチュエータ		C	1	
8	4040 5755 01	SEPARATOR	分離爪		C	5	
9	4030 5717 01	TENSION SPRING	引張コイルばね		C	5	
10	4030 5753 01	SHAFT	シャフト		D	1	
11	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	
12	4030 5808 02	HOLDER	ホルダ		D	1	
13	4138 5866 01	LABEL HI-TEMP CAUTION	ラベル 高温注意		D	2	
14	4030 5705 01	THERMAL INSULATOR	断熱材		C	1	
15	4030 5713 02	GUIDE PLATE	ガイド板		D	1	
16	4030 5750 03	BRACKET	取付板		D	1	
17	4040 0901 01	THERMISTOR KIT	サーミスタキット		C	2	
18	4040 R710 00	FUSING UNIT 120V	定着ユニット　１２０Ｖ	B,F1,G2	A	1	
18	4040 R711 00	FUSING UNIT 230V	定着ユニット　２３０Ｖ	C,D1,D3,E,F2,G1,I,J,K	A	1	
18	4040 R712 00	FUSING UNIT 110V	定着ユニット　１１０Ｖ	H	A	1	

FUSING SECTION



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 5803 01	ROLLER	ローラ		C	1	a-V217 0400 01
2	4030 5841 01	ROLL	ころ		C	1	b-V153 0310 03
3	4030 7340 01	PROTECTION	保護材		D	1	c-V217 0300 01
4	4030 5811 01	BUSHING	軸受		C	1	
5	4030 5825 02	GUIDE	ガイド		D	1	
6	1164 3065 01	STOPPER RING	トメリング		D	1	
7	4030 5843 02	HOLDER	ホルダ		D	2	
8	4030 5856 01	SHAFT	シャフト		D	2	
9	4030 5805 03	ROLL	ころ		C	2	
10	4030 5806 01	TORSION SPRING	ねじりコイルばね		C	2	
11	4030 5857 01	SHAFT	シャフト		D	2	
12	4030 5854 01	ROLL	ころ		C	2	
13	4030 5855 01	HOLDER	ホルダ		D	2	
14	4030 5858 01	TORSION SPRING	ねじりコイルばね		C	2	
15	4030 5813 01	GEAR 18T	ギヤ　１８Ｔ		C	1	
16	4030 5834 02	BUSHING	軸受		C	1	
17	4040 5823 01	NEUTRALIZING BRUSH	除電ブラシ		D	1	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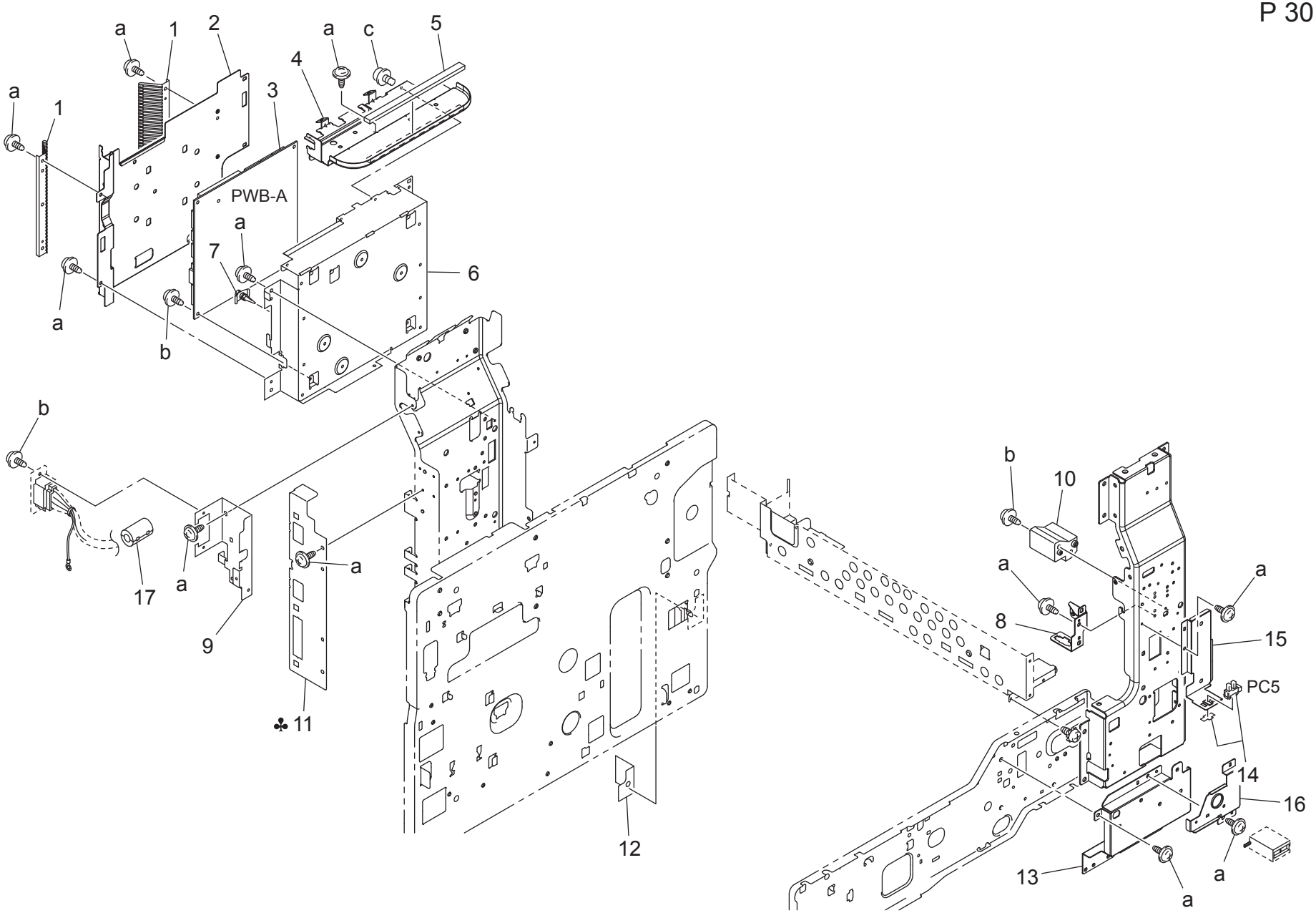
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2312 01	BRACKET	取付板		D	2	a-V137 0308 03
2	4040 2138 01	COVER	カバー		D	1	b-V137 0306 03
3	4030 2307 01	BRACKET	取付板		D	1	c-V137 0408 03
4	4030 2306 02	HOLDER	ホルダ		D	1	d-V153 0410 03
5	4040 2092 01	DUCT	ダクト		D	1	e-V153 0408 03
6	4011 2031 01	OZONE FILTER	オゾンフィルタ		A	1	f-V153 0335 03
7	4030 3523 02	CUSHION	クッション		C	1	g-V116 0408 03
8	4030 3524 01	CUSHION	クッション		C	1	
9	4030 3519 12	DUCT	ダクト		D	1	
10	4030 2039 02	BRACKET	取付板		D	1	
11	4040 2103 01	HOLDER	ホルダ		D	1	
12	9372 5400 11	HUMIDITY CONVERTION EL.	湿度変換素子		C	1	
13	4030 2133 01	BRACKET	取付板		D	1	
14	4030 6852 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
15	4030 2131 02	BRACKET	取付板		D	1	
16	0990 6304 02	SWITCH	スイッチ		C	1	
17	4030 2150 01	BRACKET	取付板		D	1	
18	4040 2095 01	SEAL	シール		C	1	
19	4030 2107 01	FILTER	フィルタ		C	1	
20	4040 2065 01	GUIDE	ガイド		C	1	
21	4030 2108 01	DUCT	ダクト		D	1	
22	9313 1100 42	FAN MOTOR	ファンモータ		C	2	
23	4658 3047 01	COLLAR	カラー		C	2	



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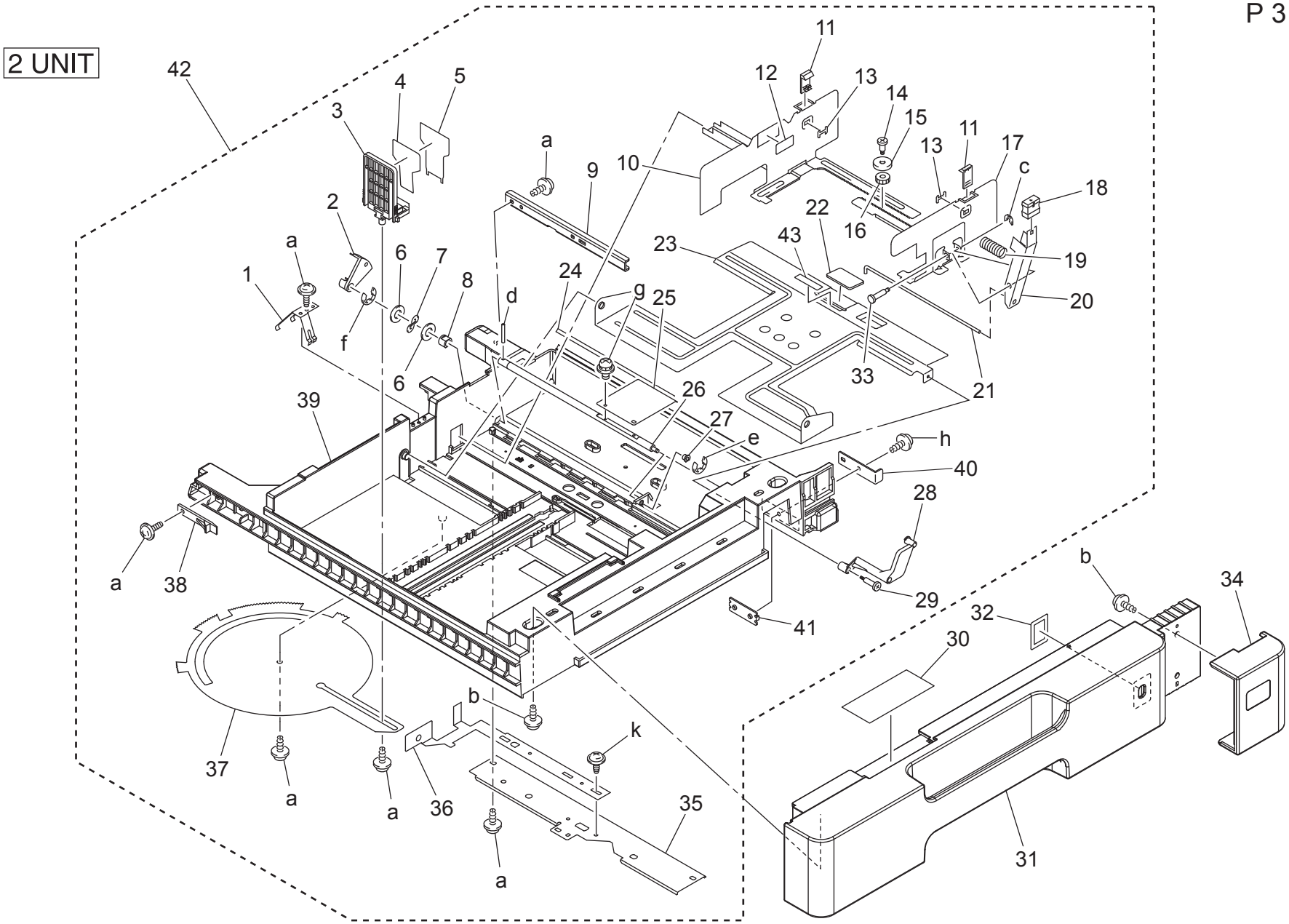
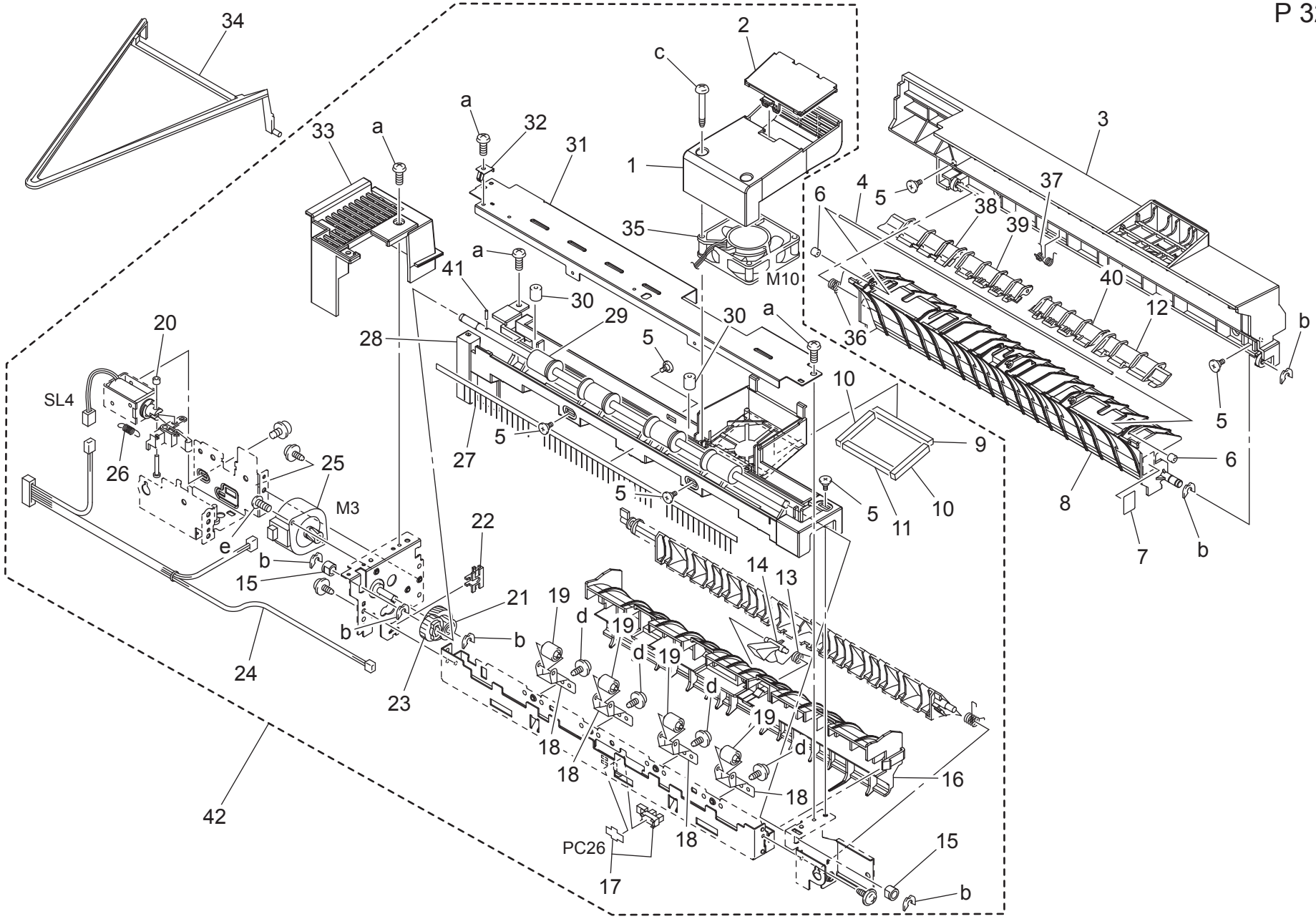
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 2161 01	EARTH GROUND	アース		C	2	a-V137 0306 03
2	4030 2111 03	SHIELD	シールド		D	1	b-V137 0308 03
3	A11U H001 02	PWB assembly(PWB-A ASSY)	基板 ＡＳＳＹ		I	1	c-V116 0308 03
4	4040 2159 01	BRACKET	取付板		D	1	
5	9384 4500 11	ELECTRICALLY CONDUCTIVE MATERIAL	導電材料		C	1	
6	4030 2110 01	BRACKET	取付板		D	1	
7	V502 0100 26	SUPPORT	ＰＣＢ サポート		D	3	
8	4040 2304 01	BRACKET	取付板		C	1	
9	4030 2135 01	BRACKET	取付板		D	1	
10	4030 2305 01	HOLDER	ホルダ		D	1	
11	4030 2125 01	BRACKET	取付板	B,G2	D	1	
11	4030 2126 01	BRACKET	取付板	C,D1,D3,E,F1,F2,G1,H,I ,J,K	D	1	
12	4040 2063 01	GUIDE	ガイド		C	1	
13	A11U 1360 00	Bracket	取付板（取手・前・右）		D	1	
14	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	
15	A11U 1322 00	Bracket	取付板（扉センサー）		D	1	
16	A11U 1329 01	Bracket	取付板（トータルカウンタ）		D	1	
17	9326 1910 31	FERRITE CORE	フェライトコア		D	1	



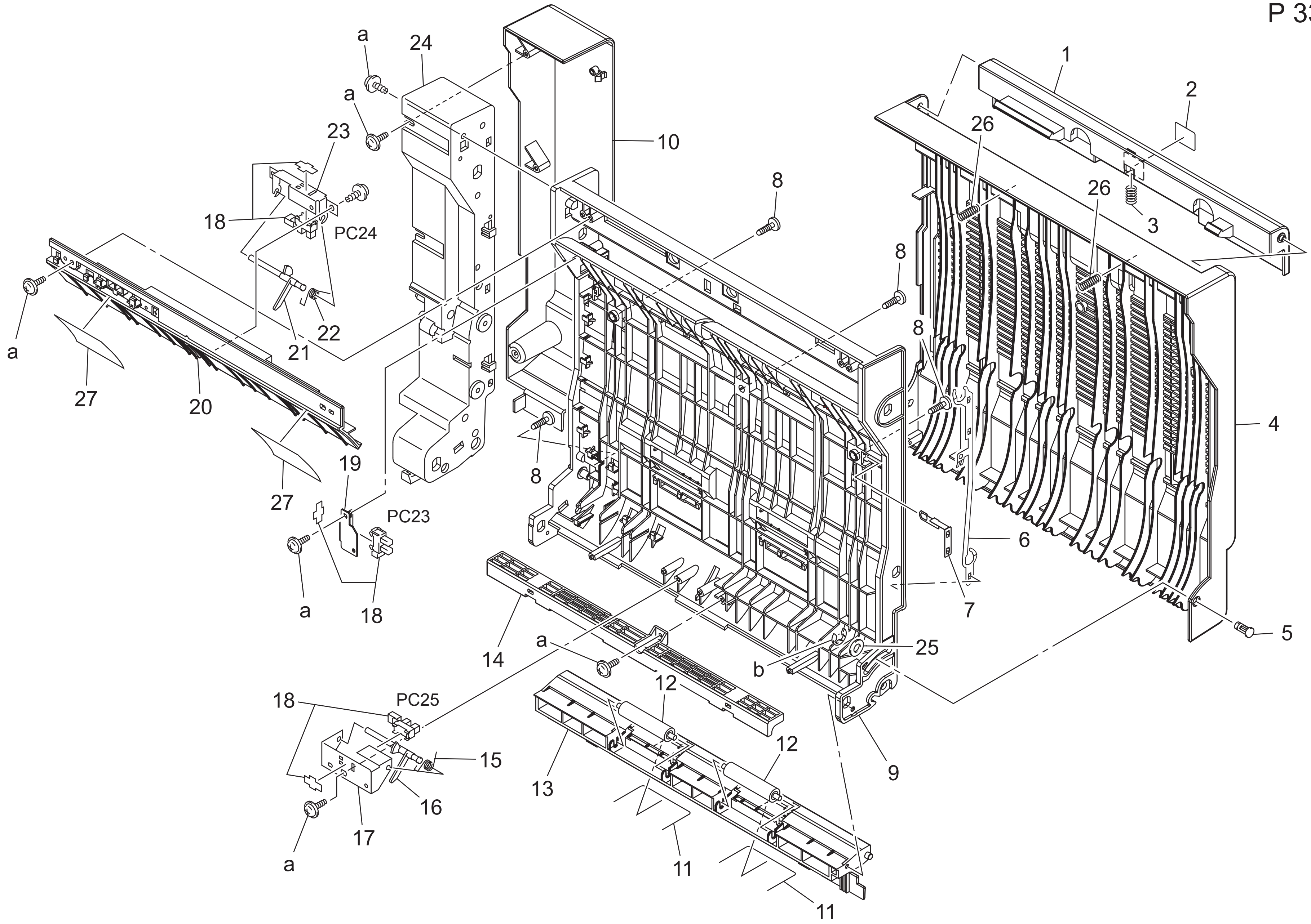
bizhub 222/bizhub 282/bizhub 362/bizhub 7728

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 3223 03	Earth ground	アース		C	2	a-V153 0308 03
2	4030 3207 01	ACTUATOR	アクチュエータ		C	2	b-V153 0410 03
3	4037 3213 12	REGULATING PLATE	規制板（後）		C	2	c-V218 0300 86
4	4030 3227 01	GUIDE	ガイド		C	2	d-V232 3025 09
5	4030 3228 12	GUIDE	ガイド		C	2	e-V217 0300 01
6	4011 3021 01	WASHER	ワッシャ		C	4	f-V217 0600 01
7	4011 3020 01	WASHER	ワッシャ		C	2	g-V116 0308 03
8	1274 3603 01	BUSHING	ジクウケ		C	2	h-V137 0310 03
9	4030 3229 02	REINFORCE PLATE	補強板		D	2	k-V144 0406 03
10	4030 3212 01	REGULATING PLATE	規制板		C	2	
11	4658 3048 01	GUIDE	ガイド		C	4	
12	4002 7306 01	LABEL CARRYING CAPACITY	ラベル　積載量		C	2	
13	4658 3049 01	STOPPER	ストッパ		C	4	
14	4030 3214 02	SHOULDER SCREW	段ねじ		C	2	
15	4030 3215 01	GUIDE	ガイド		D	2	
16	4658 3012 01	GEAR 14T	ギヤ　１４Ｔ		C	2	
17	4030 3211 02	REGULATING PLATE	規制板		C	2	
18	4037 3204 01	KNOB	つまみ		C	2	
19	4498 3825 01	PRESSURE SPRING	圧縮コイルばね		C	2	
20	4128 3823 01	LEVER	レバー		C	2	
21	4030 3217 01	SHAFT	シャフト		D	2	
22	4030 3226 01	FRICTION SHEET	摩擦板		C	2	
23	4030 3203 01	LIFTING PLATE	押上板		C	2	
24	4030 3222 03	GUIDE	ガイド		C	2	
25	4030 3206 01	LEVER	レバー		D	2	
26	4030 3205 01	SHAFT	シャフト		D	2	
27	0992 3014 01	BUSHING	ジクウケ		C	2	
28	A0R5 6221 00	Detecting Lever	検出レバー		C	2	
29	4030 3224 02	SHOULDER SCREW	段ねじ		C	2	
30	A0R5 9490 00	Label	ラベル （ペーパー補給）		C	2	
31	A0R5 1641 00	Cover	カバー		C	2	
32	A0R5 6299 00	Seal	シール		C	2	
33	4498 3826 01	SHAFT	シャフト		D	2	
34	A0R5 1651 00	Cover /Right	カバー／右		C	2	
35	4030 3218 01	BRACKET	取付板		D	2	
36	4030 3216 01	BRACKET	取付板		D	2	
37	4002 3108 01	LEVER	レバー		C	2	
38	4498 3469 01	STOPPER	ストッパ		D	2	
39	4030 3201 09	Cassette	カセット		C	2	
40	4030 6214 00	Stopper	ストッパ		C	2	
41	4030 6215 00	Plate nut	板ナット		C	2	
42	A0R5 A620 02	CASSETTE ASSY	カセット ＡＳＳＹ		S	2	
43	A00J 6234 00	FRICTION PLATE	摩擦板		C	2	

TURNOVER UNIT



Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A11U 8205 00	Duct	ダクト（中）		D	1	a-V136 0308 03
2	A11U 8206 00	Duct	ダクト（蓋）		D	1	b-V218 0400 86
3	A11U 8204 00	Door	扉		C	1	c-V153 0335 03
4	4030 3829 01	SHAFT	シャフト		D	1	d-V137 0306 03
5	4011 5852 02	SHOULDER SCREW	段ねじ		C	6	e-V135 0308 03
6	1134 3041 01	COLLAR	カラー		D	2	
7	4030 7342 01	LABEL	ラベル		D	1	
8	4030 3806 02	GUIDE	ガイド		D	1	
9	4030 3837 01	SEAL	シール		C	1	
10	4030 3838 02	SEAL	シール		C	2	
11	4030 3839 01	SEAL	シール		C	1	
12	4030 3814 01	GUIDE	ガイド		D	1	
13	4030 3819 01	TORSION SPRING	ねじりコイルばね		C	1	
14	4030 3818 02	ACTUATOR	アクチュエータ		C	1	
15	1139 3169 01	BUSHING	軸受		C	2	
16	4030 3805 02	GUIDE	ガイド		D	1	
17	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	1	
18	4030 3817 01	PLATE SPRING	板ばね		C	4	
19	4426 4411 02	ROLL	ロール		C	4	
20	1200 2105 02	COLLAR	カラー		D	1	
21	4030 3821 01	Gear 16/49T	ギヤ　１６／４９Ｔ		C	1	
22	4030 3823 01	BUSHING	軸受		D	1	
23	4030 3826 01	Gear 19T	ギヤ　１９Ｔ		C	1	
24	4030 6824 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
25	9314 1200 91	MOTOR	パルスモータ		C	1	
26	4030 3810 01	TENSION SPRING	引張コイルばね		C	1	
27	4040 3833 02	NEUTRALIZING BRUSH	除電ブラシ		D	1	
28	A11U 8203 00	Cover	カバー（上）		D	1	
29	4030 3815 01	ROLLER	ローラ		C	1	
30	4498 3388 01	COLLAR	カラー		C	2	
31	4030 3802 01	FRAME	フレーム		D	1	
32	4030 3834 01	EARTH GROUND	アース		C	1	
33	A0R5 8820 00	Cover /Upper	カバー／上		D	1	
34	A0RA 1704 00	Guide	ガイド		D	1	
35	4040 M100 00	FAN MOTOR	ファンモータ		C	1	
36	4030 3824 01	TORSION SPRING	ねじりコイルばね		C	1	
37	4030 3825 02	TORSION SPRING	ねじりコイルばね		C	1	
38	4030 3811 01	GUIDE	ガイド		D	1	
39	4030 3812 01	GUIDE	ガイド		D	1	
40	4030 3813 01	GUIDE	ガイド		D	1	
41	4131 2536 02	PIN	ピン		C	1	
42	A11U R704 00	Turnover Unit	反転ユニット		C	1	


1
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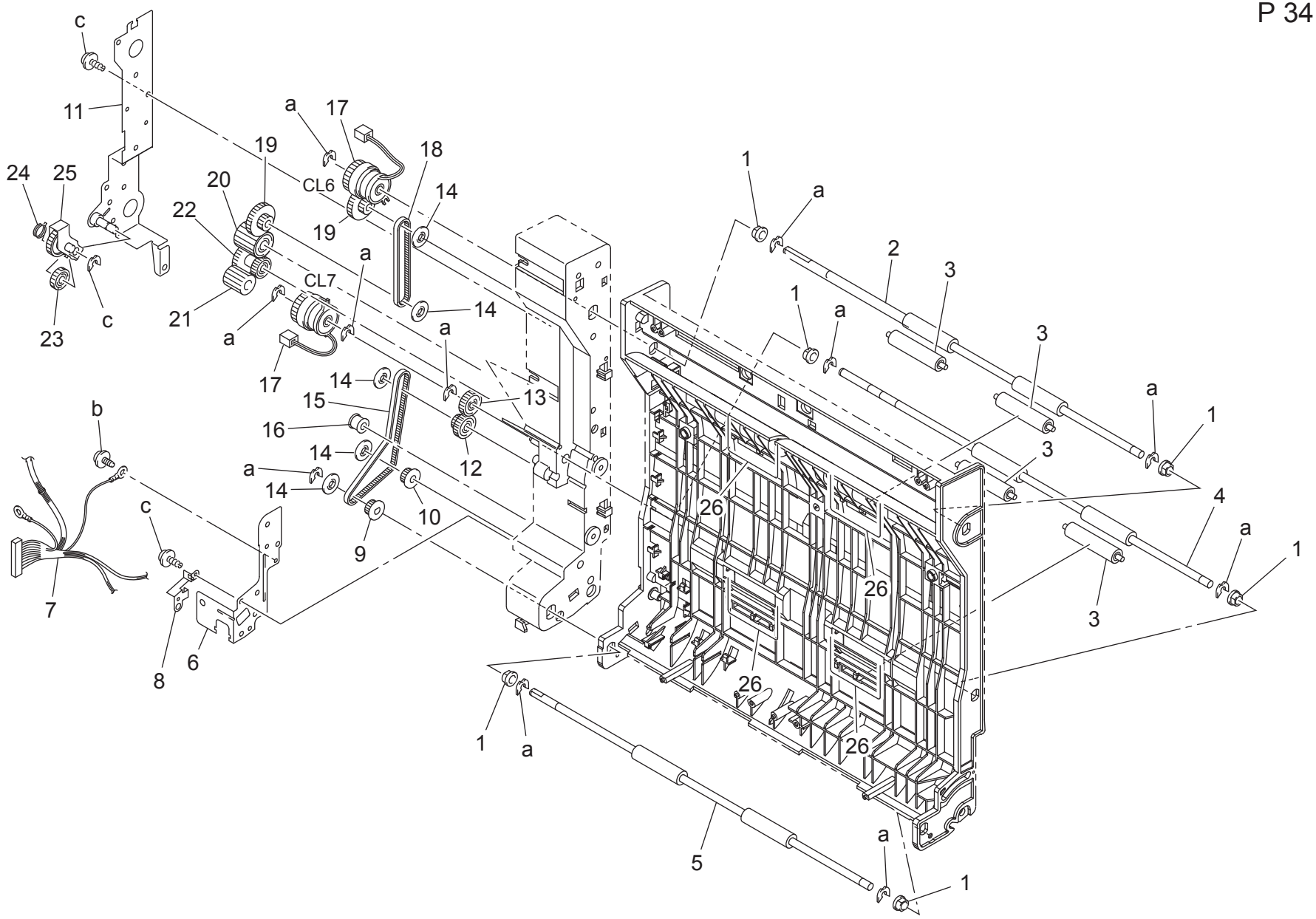
27
a
b
PC23
PC24
PC25

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A0R5 8251 00	Lever	レバー		C	1	a-V153 0308 03
2	A0R5 9421 01	Label	ラベル		C	1	b-V217 0400 01
3	4661 3106 01	PRESSURE SPRING	圧縮コイルばね		C	1	
4	A11U 8130 00	Cover	カバー		D	1	
5	A11U 8150 00	Pin	ピン（カバー開閉規制）		D	1	
6	4040 3759 01	EARTH GROUND	アース		D	1	
7	4030 3735 01	EARTH GROUND	アース		C	1	
8	4030 3710 01	SHOULDER SCREW	段ねじ		C	4	
9	A11U 8129 00	Base Frame	台板		D	1	
10	A11U 8137 00	Cover	カバー（駆動）		C	1	
11	4497 3114 01	MEMBER	押え材		C	2	
12	4497 3116 01	ROLL	ころ		C	2	
13	A11U 8135 00	Guide	ガイド（下）		D	1	
14	4030 3703 01	GUIDE	ガイド		D	1	
15	4030 3741 03	TORSION SPRING	ねじりコイルばね		C	1	
16	4030 3740 01	ACTUATOR	アクチュエータ		C	1	
17	4030 3742 01	BRACKET	取付板		D	1	
18	4037 0906 01	PHOTO INTERRUPTER	フォトインタラプター		B	3	
19	4030 3752 01	BRACKET	取付板		D	1	
20	A0R5 8206 00	Guide /Upper	ガイド／上		C	1	
21	4030 3737 01	ACTUATOR	アクチュエータ		C	1	
22	4030 3738 03	TORSION SPRING	ねじりコイルばね		C	1	
23	4030 3739 01	BRACKET	取付板		D	1	
24	4030 3711 02	BASE FRAME	台板		D	1	
25	4661 3155 01	WASHER	ワッシャ		D	1	
26	4030 3755 01	PRESSURE SPRING	圧縮コイルばね		C	2	
27	4030 3760 01	GUIDE	ガイド		C	2	

DUPLEX UNIT


c
11
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c
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CL6
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18
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17
14
15
16
14
a
14
13
12
10
9
b
c
7
8
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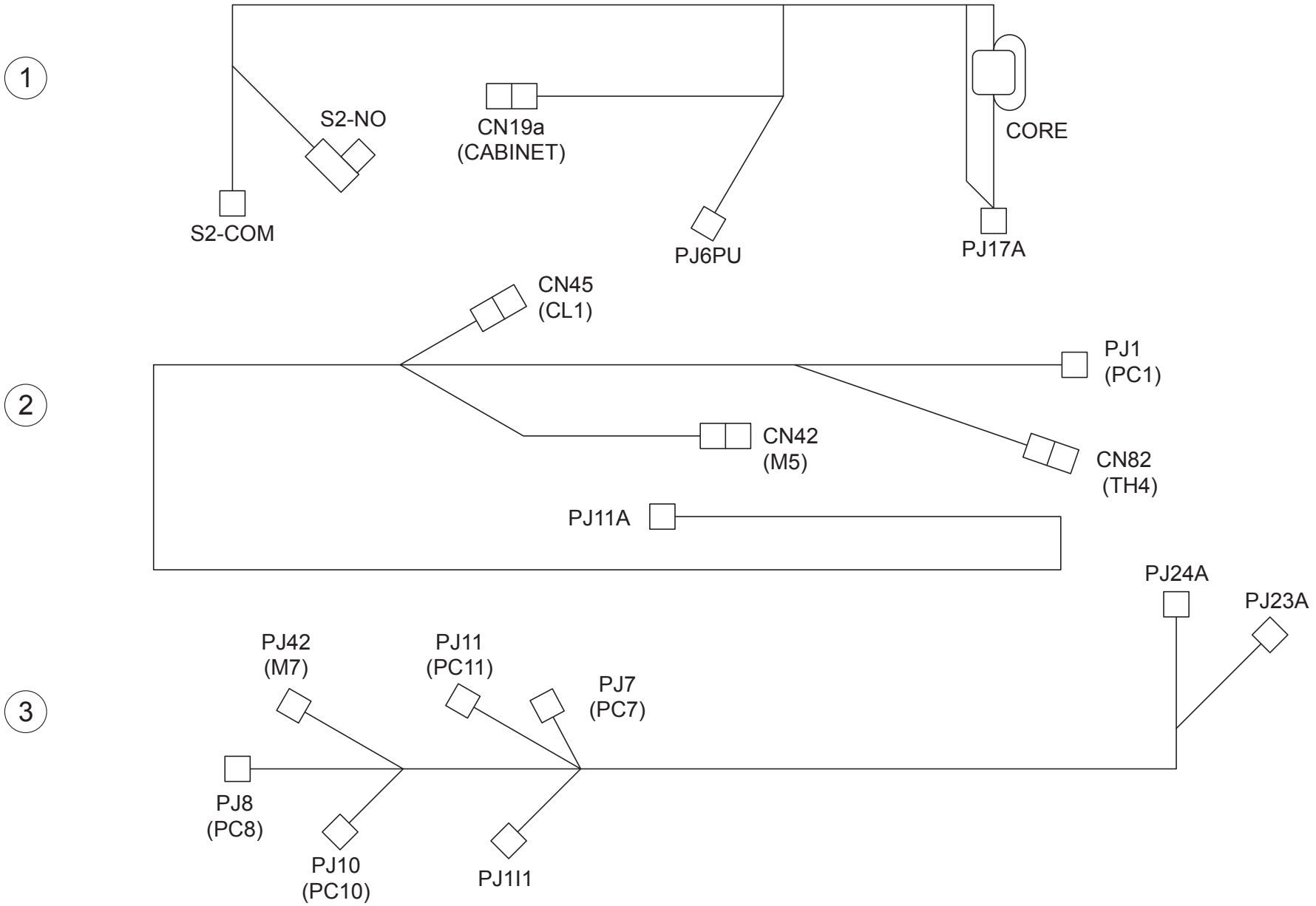
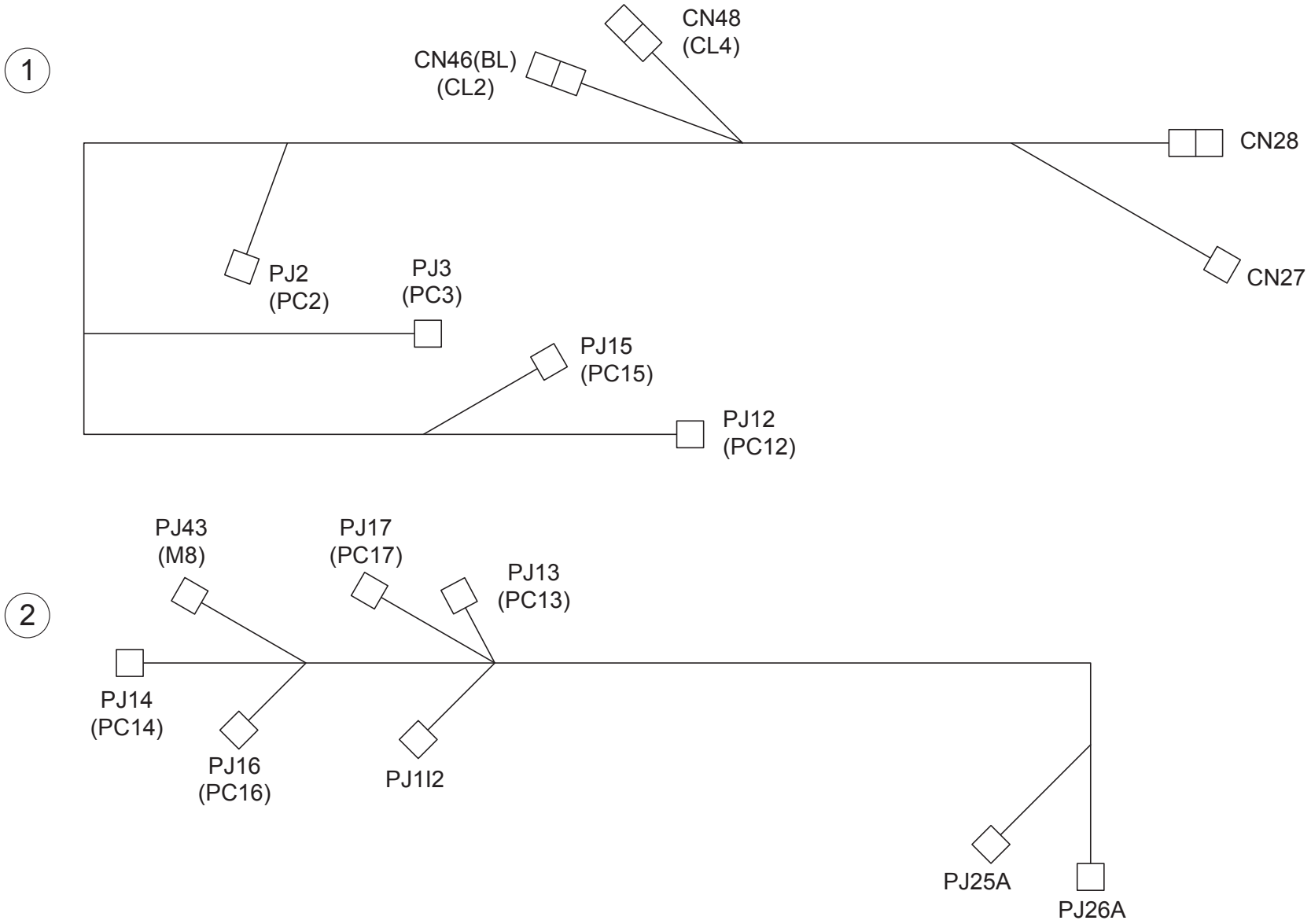
a
3
3
a
1
4
a
1
3
3
26
26
26
26
1
a
5
a
1

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	0928 3033 01	BUSHING	シ゛クウケ		C	6	a-V218 0400 86
2	4030 3707 01	ROLLER	ローラ		C	1	b-V137 0306 03
3	4497 3116 01	ROLL	ころ		C	4	c-V153 0308 03
4	4030 3708 01	ROLLER	ローラ		C	1	
5	4030 3709 01	ROLLER	ローラ		C	1	
6	4030 3736 01	BRACKET	取付板		D	1	
7	4030 6823 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		C	1	
8	4040 3758 01	EARTH GROUND	アース		D	1	
9	4030 3750 01	PULLEY	プーリ		C	1	
10	4030 3745 01	PULLEY	プーリ		C	1	
11	4030 R719 00	BRACKET ASSY	取付板 ＡＳＳＹ		D	1	
12	4030 3744 01	PULLEY	プーリ		C	1	
13	4030 3743 02	Gear 18T	ギヤ　１８Ｔ		C	1	
14	4030 3749 01	COLLAR	カラー		C	5	
15	4030 3746 01	TIMING BELT 270L	タイミングベルト　２７０Ｌ		C	1	
16	4657 3714 01	ROLL	ころ		C	1	
17	9322 1500 12	CLUTCH	クラッチ		C	2	
18	4030 3747 01	TIMING BELT 180L	タイミングベルト　１８０Ｌ		C	1	
19	4030 3748 01	PULLEY	プーリ		C	2	
20	4030 3726 01	Gear 20T	ギヤ　２０Ｔ		C	1	
21	4030 3713 01	Gear 15T	ギヤ　１５Ｔ		C	1	
22	4030 3725 01	Gear 16/24T	ギヤ　１６／２４Ｔ		C	1	
23	4030 3729 01	GEAR	ギヤ		C	1	
24	4030 3733 03	TORSION SPRING	ねじりコイルばね		C	1	
25	4030 R718 00	LEVER ASSY	レバー ＡＳＳＹ		C	1	
26	4497 3114 01	MEMBER	押え材		C	4	


1
S2-NO
S2-COM
CN19a
(CABINET)
PJ6PU
CORE
PJ17A
2
CN45
(CL1)
PJ1
(PC1)
CN42
(M5)
CN82
(TH4)
PJ11A
3
PJ24A
PJ23A
PJ42
(M7)
PJ11
(PC11)
PJ7
(PC7)
PJ8
(PC8)
PJ10
(PC10)
PJ1I1

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 6807 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
2	4030 6809 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
3	4030 6810 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	


1
CN48
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CN46(BL)
(CL2)
CN28
CN27
PJ2
(PC2)
PJ3
(PC3)
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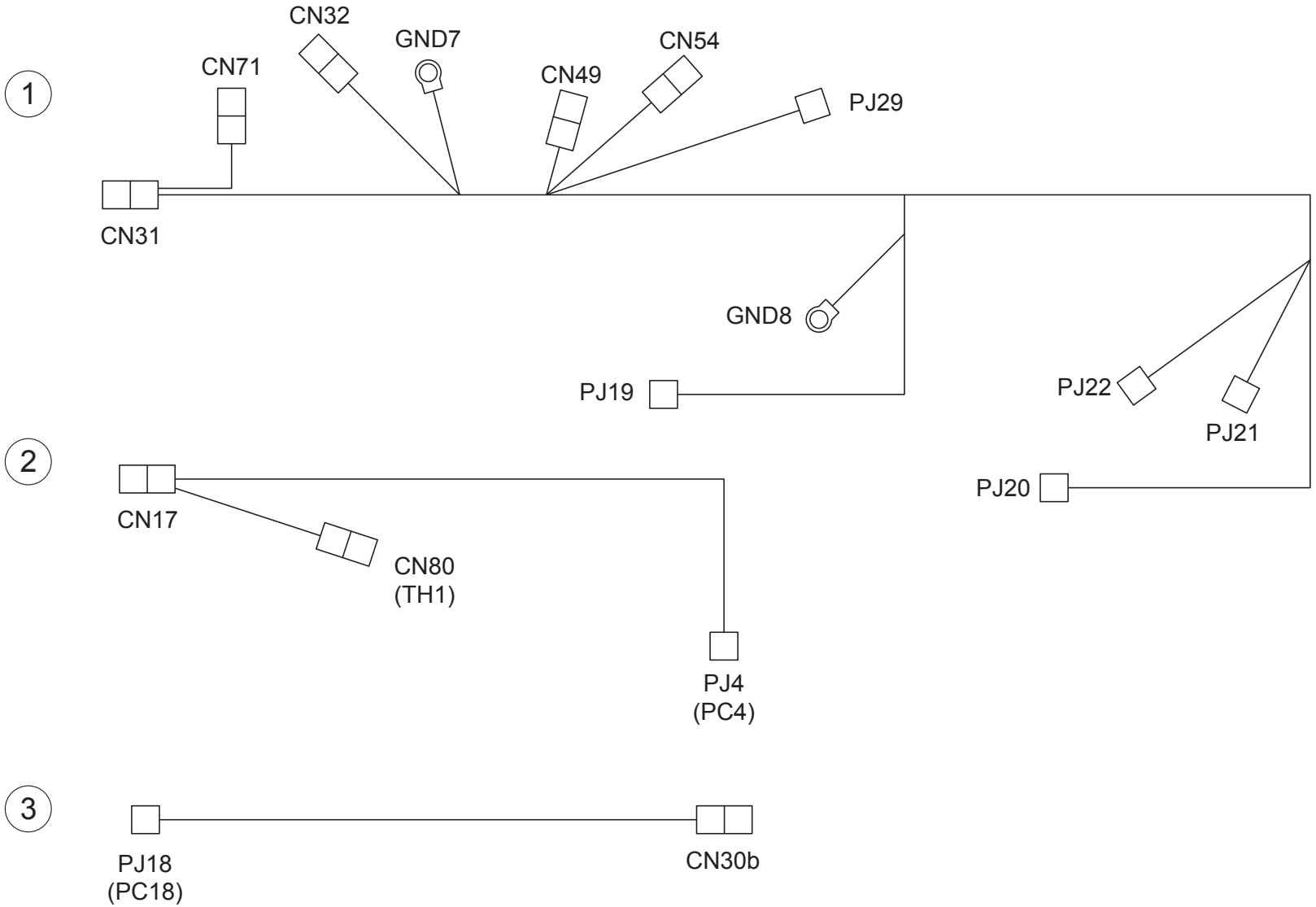
(PC15)
PJ12
(PC12)
2
PJ43
(M8)
PJ17
(PC17)
PJ13
(PC13)
PJ14
(PC14)
PJ16
(PC16)
PJ1I2
PJ25A
PJ26A

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 6812 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
2	4030 6813 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	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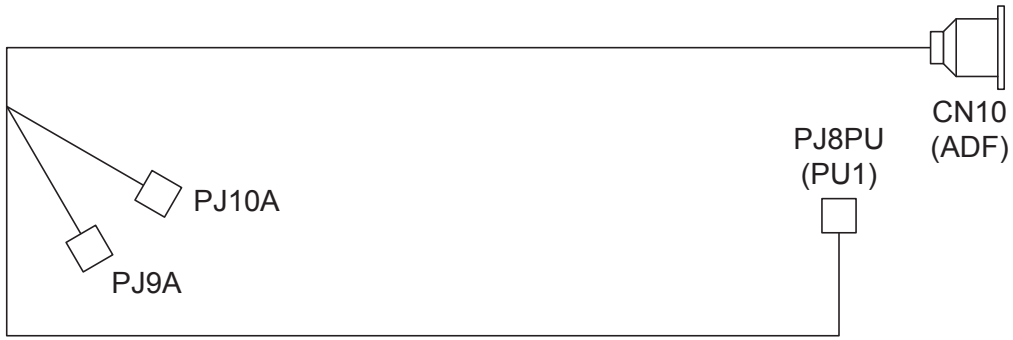
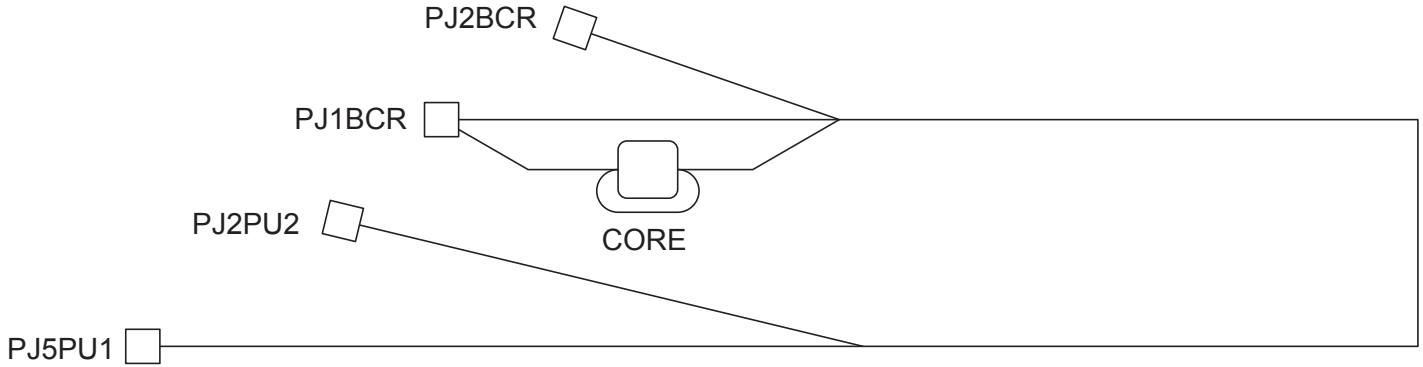
CN32
GND7
CN54
CN71
CN49
PJ29
CN31
GND8
PJ19
PJ22
PJ21
PJ20
2
CN17
CN80
(TH1)
PJ4
(PC4)
3
PJ18
(PC18)
CN30b

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4030 6814 03	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		C	1	
2	4030 6817 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
3	4030 6818 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	

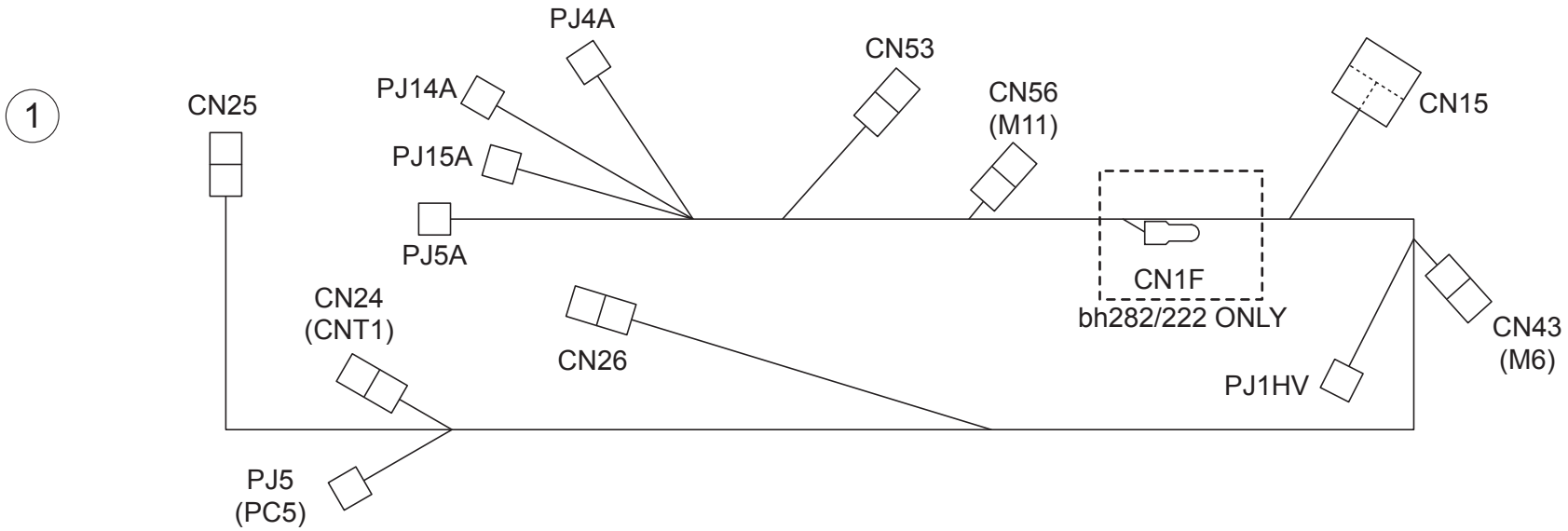
1

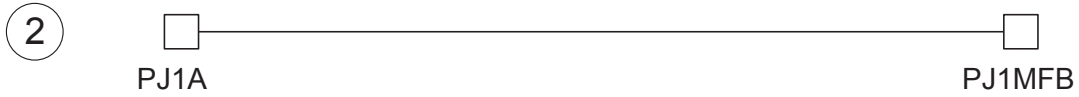

CN10
(ADF)
PJ8PU
(PU1)
PJ10A
PJ9A

2

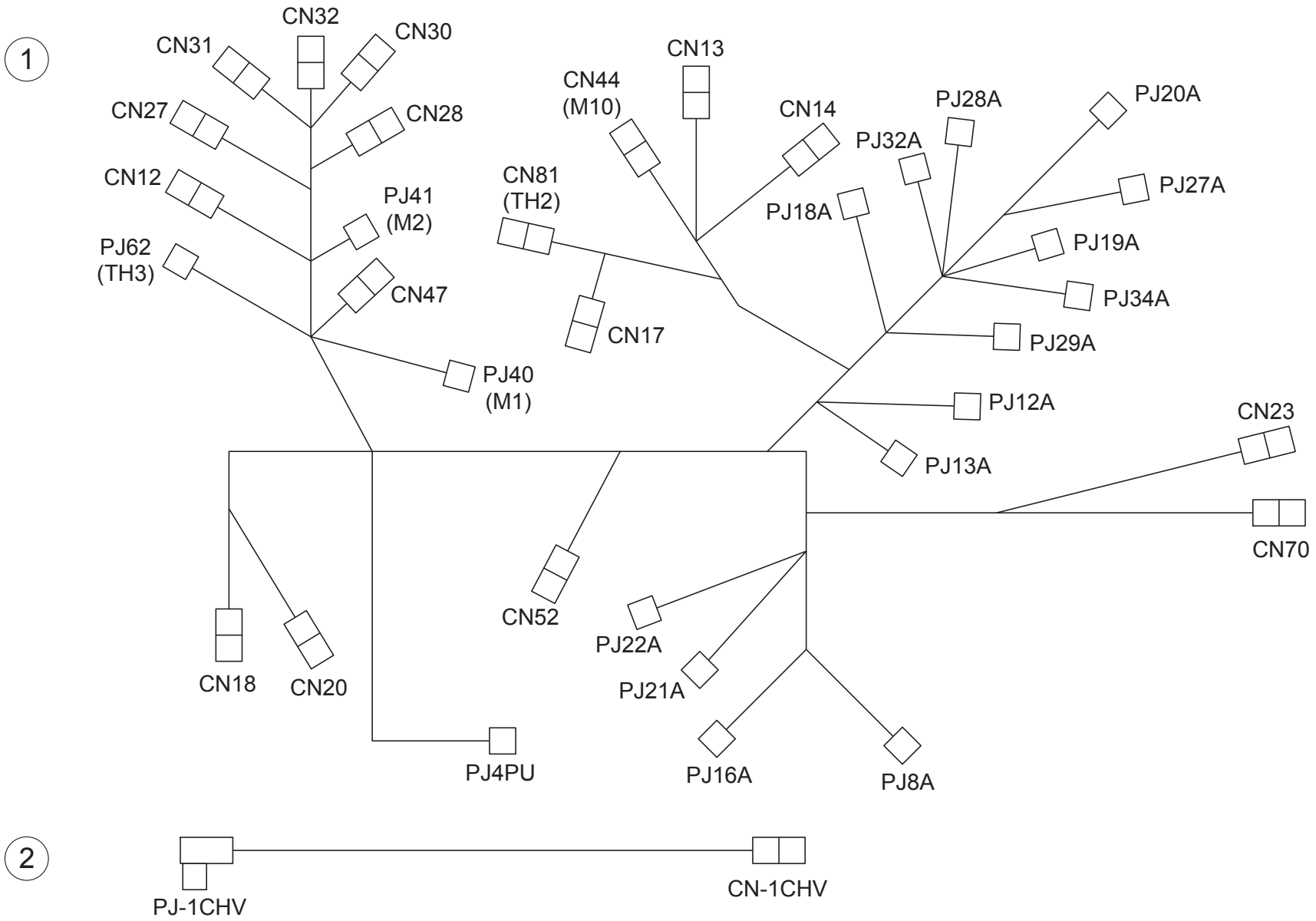

PJ2BCR
PJ1BCR
PJ2PU2
CORE
PJ5PU1

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 6815 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		C	1	
2	4040 6819 02	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	

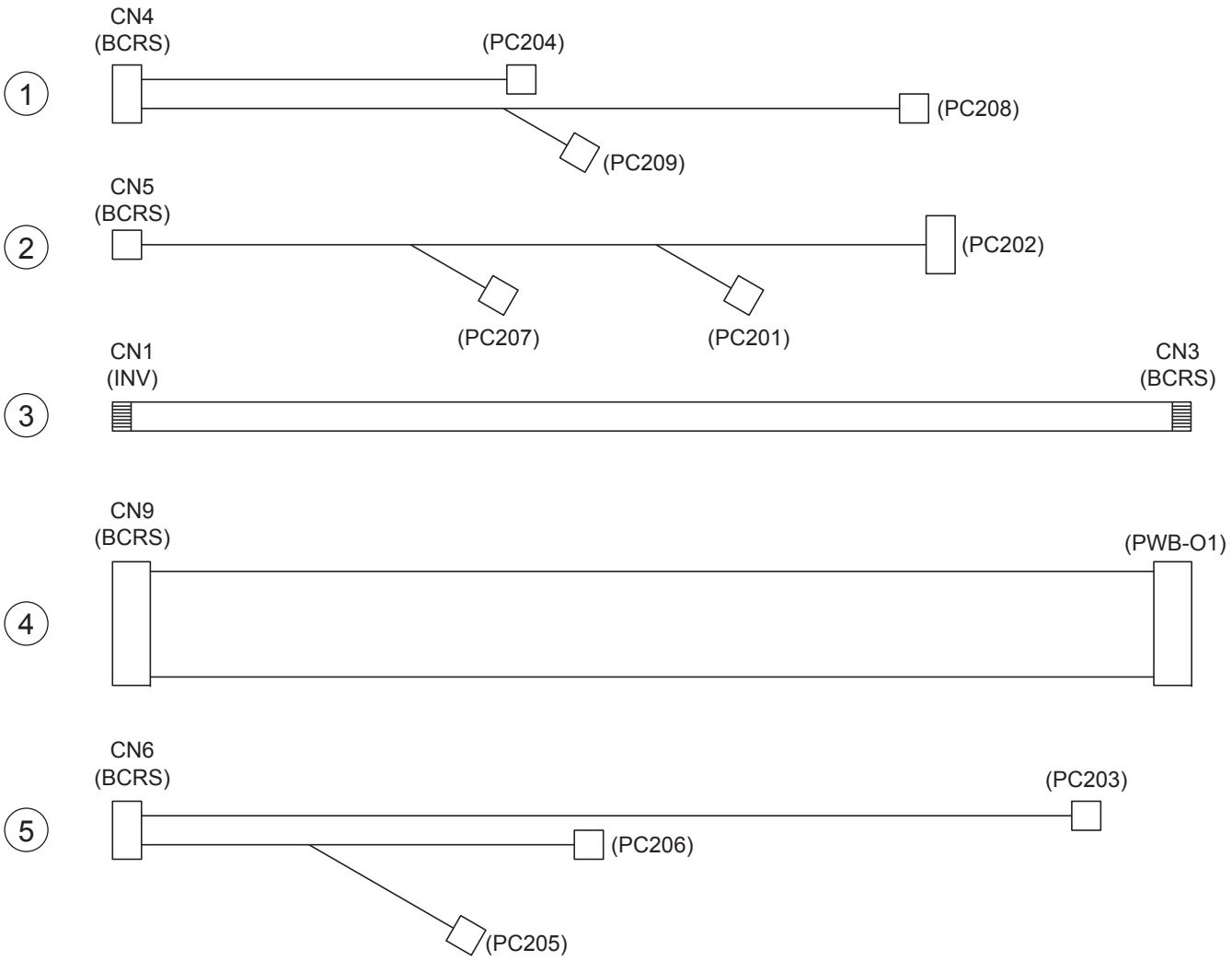

1
CN25
PJ4A
PJ14A
PJ15A
PJ5A
CN53
CN56
(M11)
CN15
CN1F
bh282/222 ONLY
CN43
(M6)
PJ1HV
CN24
(CNT1)
CN26
PJ5
(PC5)


2
PJ1A
PJ1MFB

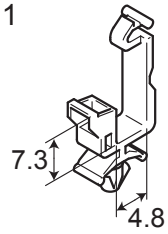
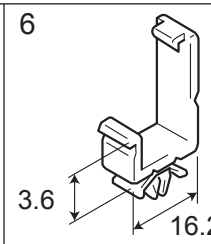
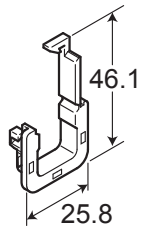
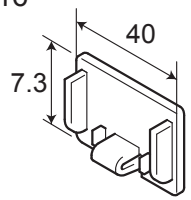
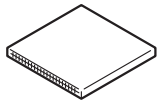
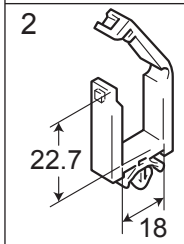
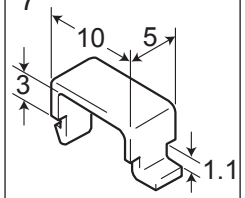
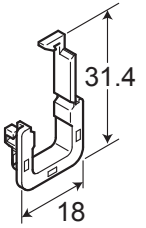
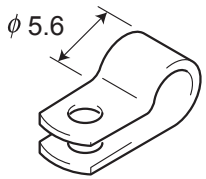
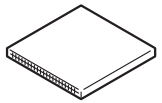
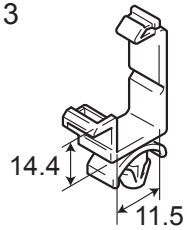
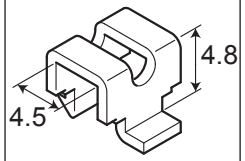
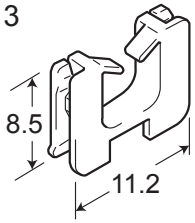
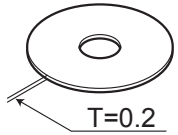
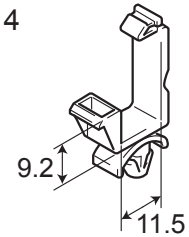
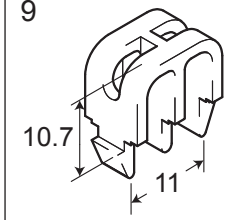
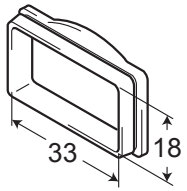
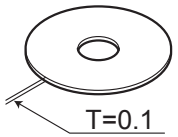
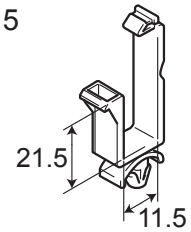
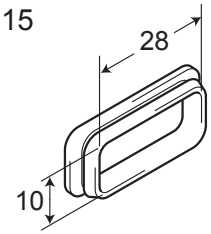
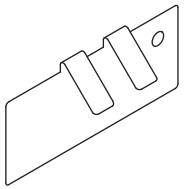
Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	A11U N101 00	HV Power source harness /1	高圧電源束線／１	{bizhub 362}	D	1	
1	A11U N104 00	HV Power source harness /4	高圧電源束線／４	{bizhub 282/7728}	D	1	
1	A11U N105 00	HV Power source harness /5	高圧電源束線／５	{bizhub 222}	D	1	
2	4040 6804 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	


1
CN32
CN31
CN30
CN27
CN28
CN12
PJ41
(M2)
PJ62
(TH3)
CN47
PJ40
(M1)
CN44
(M10)
CN13
CN14
CN81
(TH2)
CN17
PJ18A
PJ32A
PJ28A
PJ20A
PJ27A
PJ19A
PJ34A
PJ29A
PJ12A
PJ13A
CN23
CN70
CN52
PJ22A
PJ21A
PJ16A
PJ8A
CN18
CN20
PJ4PU
2
PJ-1CHV
CN-1CHV

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4040 6808 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ	{bizhub 362/282/7728}	D	1	
1	4040 6833 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ	{bizhub 222}	D	1	
2	4040 6841 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	

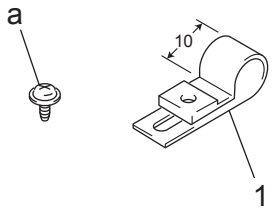

CN4
(BCRS)
(PC204)
1
(PC208)
(PC209)
CN5
(BCRS)
2
(PC202)
(PC207)
(PC201)
CN1
(INV)
CN3
(BCRS)
3
CN9
(BCRS)
(PWB-O1)
4
CN6
(BCRS)
(PC203)
5
(PC206)
(PC205)

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	4551 2037 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
2	4551 2035 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
3	4551 2011 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
4	4551 2036 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ		D	1	
5	4551 2058 01	WIRE HARNESS ASSY	ハーネス ＡＳＳＹ	(Option)	D	1	

1 	6 	11 	16 	21 	26	31	36
2 	7 	12 	17 ✤ 	22 ✤ 	27	32	37
3 	8 	13 	18 	23	28	33	38
4 	9 	14 	19 	24	29	34	39
5 	10 	15 	20 	25	30	35	40

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	V500 0100 20	Saddle	ミニロッキングワイヤーサドル		D		
2	V500 0100 19	saddle	ロッキングワイヤーサドル		D		
3	V500 0100 07	saddle	ロッキングワイヤーサドル		D		
4	V500 0100 05	saddle	ロッキングワイヤーサドル		D		
5	V500 0100 13	saddle	ロッキングワイヤーサドル		D		
6	V500 0200 10	clip	コードクリップ（M）		D		
7	1053 4812 01	CORD CLAMP	コート゛オサエ		D		
8	4011 5788 01	CORD CLAMP	コード押え		D		
9	4030 5853 01	CORD CLAMP	コード押え		D		
10	V501 0100 01	band	結束バンド		D		
11	V570 0100 32	holder	エッジホルダー		D		
12	V570 0100 31	holder	エッジホルダー		D		
13	V570 0100 21	Saddle	エッジサドル		D		
14	1038 4006 01	INSULATING MEMBER	絶縁材		D		
15	1050 4805 01	INSULATING MEMBER	絶縁材		D		
16	V650 0500 01	CN COVER	ミニ ＣＴ ラティスコネクタダストカバー		D		
17	V500 0200 18	clamp	導電クランプ	C	D		
18	4030 2054 01	SPACER (WHITE)	スペーサ（白）		C	1	
19	4030 2053 01	SPACER (BLACK)	スペーサ（黒）		C	1	
20	4040 7901 01	JIG THERMISTOR	治具　サーミスタ		S	1	
21	A11U R911 00	JIG MEMORY CARD (ENGINE)	治具メモリーカード		S	1	
22	A11U R903 00	JIG MEMORY CARD (MSC)	治具メモリーカード	B,G2	S	1	
22	A11U R904 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C	S	1	
22	A11U R905 00	JIG MEMORY CARD (MSC)	治具メモリーカード	D1,D3,E,F2,G1,H,I,J,K{bizhub 362/282}	S	1	
22	A11U R906 00	JIG MEMORY CARD (MSC)	治具メモリーカード	F1	S	1	
22	A11U R907 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (French/German/Italian/Spanish/Chinese/Korean/Cantonese/Dutch/Portugal)	S	1	
22	A11U R908 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (Norwegian/Swedish/Finish/Polish/Hungarian/Czech)	S	1	
22	A11U R909 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (Turkish/Greek/Russian/Romanian/Slovakian)	S	1	
22	A11U R912 00	JIG MEMORY CARD (MSC)	治具メモリーカード	{bizhub7728}	S	1	
22	A11U R913 00	JIG MEMORY CARD (MSC)	治具メモリーカード	B,G2 (Phase2.0)	S	1	
22	A11U R914 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (Phase2.0)	S	1	
22	A11U R915 00	JIG MEMORY CARD (MSC)	治具メモリーカード	D1,D3,E,F2,G1,H,I,J,K{bizhub 362/282/222}(Phase2.0)	S	1	
22	A11U R916 00	JIG MEMORY CARD (MSC)	治具メモリーカード	F1(Phase2.0)	S	1	
22	A11U R917 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (French/German/Italian/Spanish/Chinese/Korean/Cantonese/Dutch/Portugal)(Phase2.0)	S	1	
22	A11U R918 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (Norwegian/Swedish/Finish/Polish/Hungarian/Czech)(Phase2.0)	S	1	
22	A11U R919 00	JIG MEMORY CARD (MSC)	治具メモリーカード	C (Turkish/Greek/Russian/Romanian/Slovakian)(Phase2.0)	S	1	
22	A11U R924 00	JIG MEMORY CARD (MSC)	治具メモリーカード	{bizhub7728}(Phase2.0)	S	1	
22	A11U R910 00	JIG MEMORY CARD (MSC)	治具メモリーカード	(Arabia/Persian)	S	1	

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
22	A11U R920 00	JIG MEMORY CARD (MSC)	治具メモリーカード	F2(Arabia/Persian)(Phase2.0)	S	1	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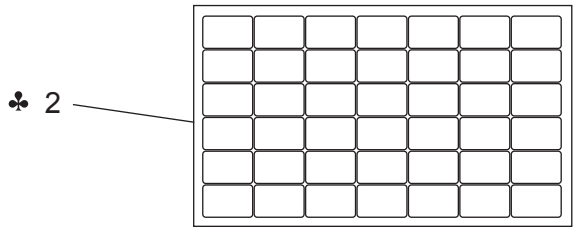
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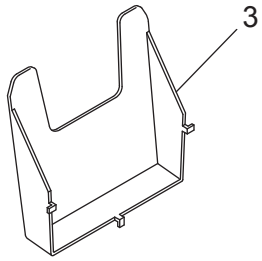
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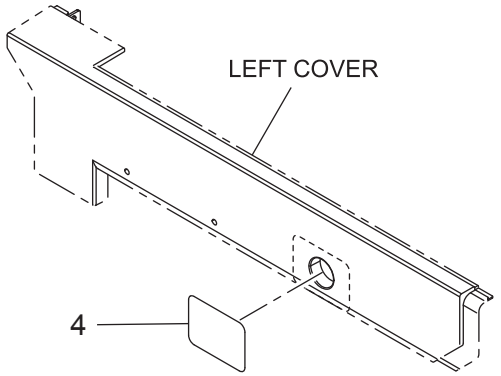
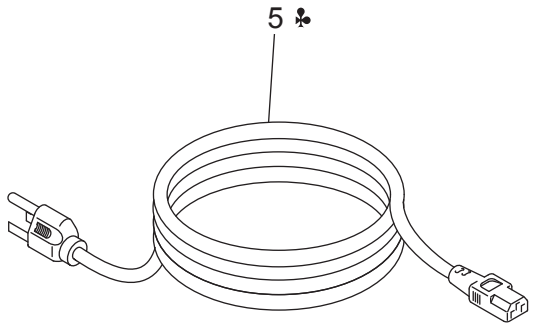

LEFT COVER
4


5 ♣

Key	Part No.	Description		Destinations	Class	QTY	Standard parts
1	9384 1600 11	P-CLIP 10D	コート゛オサエ		D	1	a-V137 0308 03
2	A0R5 9434 01	Label	ラベル	C,D1,D3,E,F1,F2,G1,H,I ,J,K (Metric)	C	1	
2	A0R5 9435 01	Label	ラベル	B,G2 (Inch)	C	1	
3	A11U 9551 00	Holder	ホルダ		C	1	
4	A11U 9429 00	Label	ラベル（目隠し）		C	1	
5	4040 N300 00	POWER CORD /110V	電源コード／１１０Ｖ	H	D	1	
5	9381 4300 31	POWER CORD	プラグ付電源コード	J	D	1	
5	9381 4300 41	POWER CORD	プラグなし電源コード	D1,D3,E,F2,G1,I,K	C	1	
5	9381 4101 31	POWER CORD	プラグ付電源コード	B,G2	C	1	

● 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	Bypass	Feed Roller	1	300K	4131300101		P17-11	
2		Separation Roller Assy	1	300K	4034015101		P16-20	
3	Tray 1	Feed Roller	1	300K	4030300501		P12-7	*4
4		Pick-up Roller	1	300K	4030300501		P12-7	*4
5		Separation Roller Assy	1	300K	4030015101		P13-15	*4
6	Tray 2	Feed Roller	1	300K	4030300501		P14-13	*4
7		Pick-up Roller	1	300K	4030300501		P14-13	*4
8		Separation Roller Assy	1	300K	4030015101		P15-2	*4
9	Transport section	Registration Roller Bearing	4	900K	1164354901		P23-12	
10		Registration Roller Gear 1	1	900K	1164350801		P23-11	T = 18
11		Registration Roller Gear 2	1	900K	1164351501		P23-13	T = 13
12		Paper Dust Remover	1	150K	4040077800		P23-29	
13	Fusing Section	Fusing Unit	1	450K	4040R71000	B,G2,F1	P27-18	120V
14		Fusing Unit	1	450K	4040R71100	C,D,F2,G1,I,J,K	P27-18	230V
15		Fusing Unit	1	450K	4040R71200	H	P27-18	110V
16	Transfer Section	Transfer Roller Unit	1	150K	4040R72500		P23-1	
17	Process Section	Photo Conductor Unit	1	100K	-	bizhub 362	-	*2
18			1	80K	-	bizhub 282/7728	-	*2
19			1	65K	-	bizhub 222	-	*2
20		Developer	1	100K	-	bizhub 362	-	
21			1	80K	-	bizhub 282/7728	-	
22			1	65K	-	bizhub 222	-	
23		Developing Unit	1	400K	4040075200	bizhub 362	P21-1	*3
24			1	320K	4040075200	bizhub 282/7728	P21-1	*3
25			1	260K	4040075200	bizhub 222	P21-1	*3
26		Toner Filter (Developing Unit)	1	100K	4040521701	bizhub 362	P21-12	*2
27			1	80K	4040521701	bizhub 282/7728	P21-12	*2
28			1	65K	4040521701	bizhub 222	P21-12	*2
29		Toner Filter (Main body)	1	400K	4040209301	bizhub 362	P2-32	*3
30			1	320K	4040209301	bizhub 282/7728	P2-32	*3
31			1	260K	4040209301	bizhub 222	P2-32	*3
32		Ozone Filter	1	300K	4011203101		P29-6	

*1: Actual durable cycle is the Special Parts Counter value.

*2: The Photo Conductor Unit and Toner Filter (Developing Unit) should be replaced with new ones at the some time.

*3: The Developing Unit and Toner Filter (Main body) should be replaced with new ones at the same time.

*4: Replace those three parts at the same time.

メンテナンスリスト

●ページ / キーナンバーのないものは､アフターサービス部品ではありません。

No.	区分	ＰＭ 部品名称	サイクル （K=1,000）		部品番号	仕向地	頁 / キー	備考
			員数	交換				
1	手差し	給紙ローラ	1	300K	4131300101		P17-11	
2		分離ローラ Assy	1	300K	4034015101		P16-20	
3	トレイ１	給紙ローラ	1	300K	4030300501		P12-7	*4
4		ピックアップローラ	1	300K	4030300501		P12-7	*4
5		分離ローラ Assy	1	300K	4030015101		P13-15	*4
6	トレイ２	給紙ローラ	1	300K	4030300501		P14-13	*4
7		ピックアップローラ	1	300K	4030300501		P14-13	*4
8		分離ローラ Assy	1	300K	4030015101		P15-2	*4
9	搬送部	レジストローラ軸受	4	900K	1164354901		P23-12	
10		レジストローラギア　1	1	900K	1164350801		P23-11	T = 18
11		レジストローラギア　2	1	900K	1164351501		P23-13	T = 13
12		紙紛除去クリーナ	1	150K	4040077800		P23-29	
13	定着部	定着ユニット	1	450K	4040R71000	B,F1,G2	P27-18	120V
14		定着ユニット	1	450K	4040R71100	C,D1,D3,E,F2,G1,I,J,K	P27-18	230V
15		定着ユニット	1	450K	4040R71200	H	P27-18	110V
16	転写部	転写ローラユニット	1	150K	4040R72500		P23-1	
17	プロセス部	感光体ユニット	1	100K	-	bizhub 362	-	*2
18			1	80K	-	bizhub 282/7728	-	*2
19			1	65K	-	bizhub 222	-	*2
20		現像剤	1	100K	-	bizhub 362	-	
21			1	80K	-	bizhub 282/7728	-	
22			1	65K	-	bizhub 222	-	
23		現像ユニット	1	400K	4040075200	bizhub 362	P21-1	*3
24			1	320K	4040075200	bizhub 282/7728	P21-1	*3
25			1	260K	4040075200	bizhub 222	P21-1	*3
26		トナーフィルタ（現像ユニット側）	1	100K	4040521701	bizhub 362	P21-12	*2
27			1	80K	4040521701	bizhub 282/7728	P21-12	*2
28			1	65K	4040521701	bizhub 222	P21-12	*2
29		トナーフィルタ（本体側）	1	400K	4040209301	bizhub 362	P2-32	*3
30			1	320K	4040209301	bizhub 282/7728	P2-32	*3
31			1	260K	4040209301	bizhub 222	P2-32	*3
32		オゾンフィルタ	1	300K	4011203101		P29-6	

*1:　交換サイクルの数値は、固定パーツカウンタの値である。

*2:　感光体ユニットとトナーフィルタ（現像ユニット側）は同時交換する。

*3:　現像ユニットとトナーフィルタ（本体側）は同時交換する。

*4:　３点同時交換する。

DESTINATION

Destination No.		Destinations		V	Hz	Model No.
A	A1	JAPAN				
	A2	JAPAN				
B		USA, CANADA		120	60	A11U-011/ A11V-011/ A11W-011
C		EUROPEAN TYPE		220-240	50/60	A11U-021/ A11V-021/ A11W-021
D	D1	S.E ASIA TYPE	THAILAND, SRI LANKA, SINGAPORE, MALAYSIA, HONG KONG, PAKISTAN, INDIA, BANGLADESH, INDONESIA	220-240	50/60	A11U-041/ A11V-041
	D3	OCEANIA TYPE	AUSTRALIA, NEW ZEALAND	220-240	50/60	A11U-041/ A11V-041/ A11W-051
E		PHILIPPINES		220-240	50/60	A11U-041/ A11V-041
F	F1	SAUDI ARABIA		127	60	A11U-0M1/ A11V-0M1
	F2	SAUDI ARABIA		220-240	50/60	A11U-041/ A11V-041
G	G1	C.S AMERICA		220-240	50/60	A11U-041/ A11V-041
	G2	C.S AMERICA		120	60	A11U-011/ A11V-011/ A11W-011
H		TAIWAN		110	60	A11U-071/ A11V-071

Destination No.	Destinations	V	Hz	Model No.
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	A11U-041/ A11V-041
J	CHINA	220-240	50/60	A11U-081/ A11V-081/ A11V-082
K	KOREA	220-240	50/60	A11U-041/ A11V-041