KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

magicolor® 5430 DL
magicolor® 5440 DL
magicolor® 5450

2005.04
KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 3.0

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**

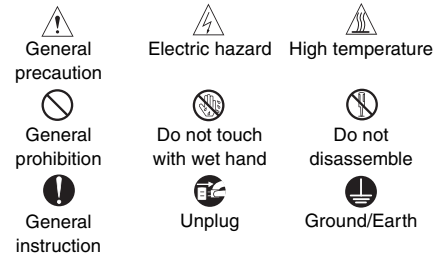
⚠ **CAUTION: Action having a possibility of suffering a slight wound, medium trouble, and property damage**

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.



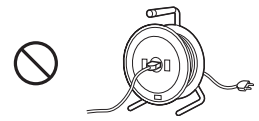
SAFETY WARNINGS

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

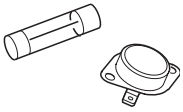
KONICA MINOLTA brand products are renowned for their high reliability. This reliability is achieved through high-quality design and a solid service network.
Product design is a highly complicated and delicate process where numerous mechanical, physical, and electrical aspects have to be taken into consideration, 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.

⚠ DANGER : PROHIBITED ACTIONS

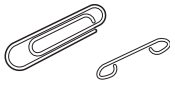
- Using any cables or power cord not specified by KMBT.



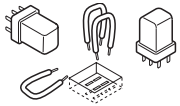
- Using any fuse or thermostat not specified by KMBT. Safety will not be assured, leading to a risk of fire and injury.



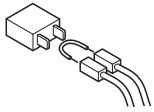
- Disabling fuse functions or bridging fuse terminals with wire, metal clips, solder or similar object.



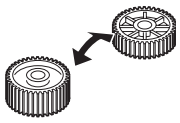
- Disabling relay functions (such as wedging paper between relay contacts)



- 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] 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

⚠ WARNING: Wall Outlet

- Check that mains voltage is as specified. 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.

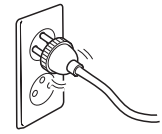
- If two or more power cords can be plugged into the wall outlet, the total load must not exceed the rating of the wall outlet.

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

⚠ WARNING: Power Plug and Cord

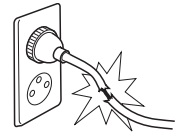
- Make sure the power cord is plugged in the wall outlet securely.

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



- Check whether the 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.

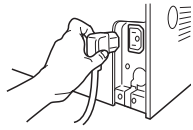


- When using the power cord (inlet type) that came with this product, be sure to observe the following precautions:

  a. Make sure the connector is securely inserted in the inlet on the left side panel of the product.

  b. If the power cord or sheath is damaged, replace with a new power cord (with plugs on both ends) specified by KMBT.

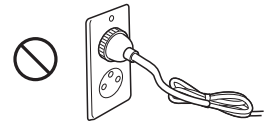
  If the power cord (inlet type) is not connected to the product securely, a contact problem may lead to increased resistance, overheating, and risk of fire.



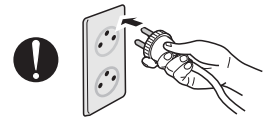
⚠ WARNING: Power Plug and Cord

- 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.

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

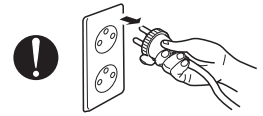


- Check whether dust is collected around the power plug and wall outlet.
  Using the power plug and wall outlet without removing dust may result in fire.



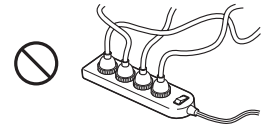
- Do not insert the power plug into the wall outlet with a wet hand.
  The risk of electric shock exists.

- 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.

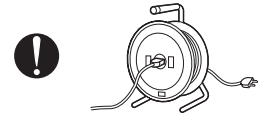


⚠ WARNING: Wiring

- 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.



⚠ WARNING: Wiring

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

  The use of an adapter leads to the product connecting to inadequate power supply (voltage, current capacity, grounding), and may result in fire or electrical shock. If proper wall outlet in not available, the customer shall ask qualified electrician for the installation.

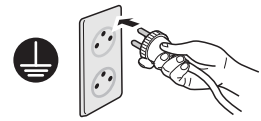
- For the product which power plug is not attached.

  Attach power plug adequate for the product's rated voltage and input current before the installation. The power plug shall meet the requirements of safety regulation for the region, and shall have grounding terminal.

⚠ WARNING: Ground Connection

- 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.



2. Installation Requirements

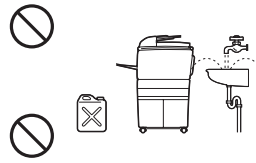
⚠ WARNING: Prohibited Installation Places

- 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.

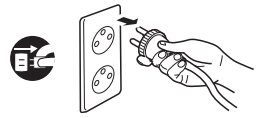
  A risk of fire and electric shock exists.



⚠ WARNING: When not Using the Product for a long time

- 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.

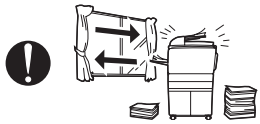


⚠ CAUTION: Ventilation

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

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

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



⚠ CAUTION: Stability

- Be sure to lock the caster stoppers.

  In the case of an earthquake and so on, the product may slide, leading to a injury.

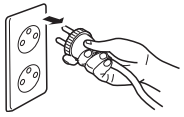
⚠ CAUTION: Inspection before Servicing

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

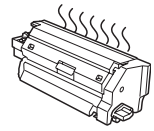
- Before conducting an inspection, be sure to disconnect the power plugs from the product and options.

  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.

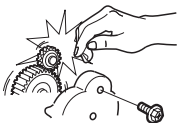
  You may get burnt.



⚠ WARNING: Work Performed with the Product Powered On

- 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.

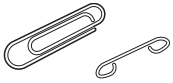
⚠ WARNING: Safety Checkpoints

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

  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.

- 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.

⚠ WARNING: Safety Checkpoints

- Before disassembling or adjusting the write unit (P/H unit) incorporating a laser, make sure that the power cord has been disconnected.

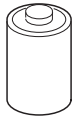
  The laser light can enter your eye, leading to a risk of loss of eyesight.

- 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.

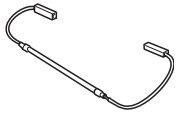
- When replacing a lithium battery, replace it with a new lithium battery specified in the Parts Guide Manual. Dispose of the used lithium battery using the method specified by local authority.

  Improper replacement can cause explosion.



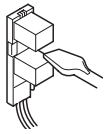
- After replacing a part to which AC voltage is applied (e.g., optical lamp and fixing lamp), be sure to check the installation state.

  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.

- 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.

⚠ WARNING: HANDLING OF CONSUMABLES

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

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

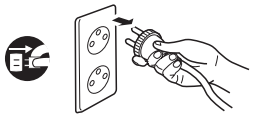
- Never throw the used cartridge and toner into fire.

  You may be burned due to dust explosion.

⚠ CAUTION: HANDLING OF SERVICE MATERIALS

- Unplug the power cord from the wall outlet.

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



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

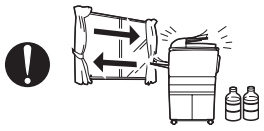
  A risk of fire exists.

- 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.



[3] 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] CONCLUSION

1. Safety of users and customer engineers depends highly on accurate maintenance and administration. Therefore, safety can be maintained by the appropriate daily service work conducted by the customer engineer.
2. When performing service, each product on the site must be tested for safety. The customer engineer must verify the safety of parts and ensure appropriate management of the equipment.

[5] Laser Safety

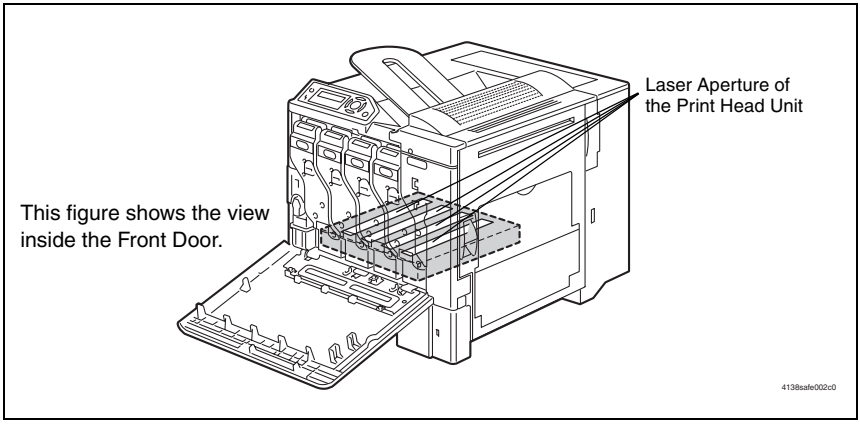
- This is a digital machine certified as a class 1 laser product. There is no possibility of danger from a laser, provided the machine is serviced according to the instruction in this manual.

5.1 Internal Laser Radiation

semiconductor laser	
Maximum power of the laser diode	15 mW
Maximum average radiation power (*)	7.2 µW
Wavelength	770-800 nm

*:at laser aperture of the Print Head Unit

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



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 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	15 mW
Wavelength	770-800 nm

All Areas

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

semiconductor laser	
Maximum power of the laser diode	15 mW
Wavelength	770-800 nm

Denmark

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

halvlederlaser	
Laserdiodens højeste styrke	15 mW
bølgelængden	770-800 nm

Finland, Sweden

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

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

puolijohdelaser	
Laserdiodin suurin teho	15 mW
aallonpituus	770-800 nm

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

halvledarlaser	
Den maximala effekten för laserdioden	15 mW
våglängden	770-800 nm

VARO!
- **Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättomälle lasersäteilylle. Älä katso säteeseen.**

VARNING!
- **Osynlig laserstråining när denna del är öppnad och spärren är urkopplad. Betrakta ej stråien.**

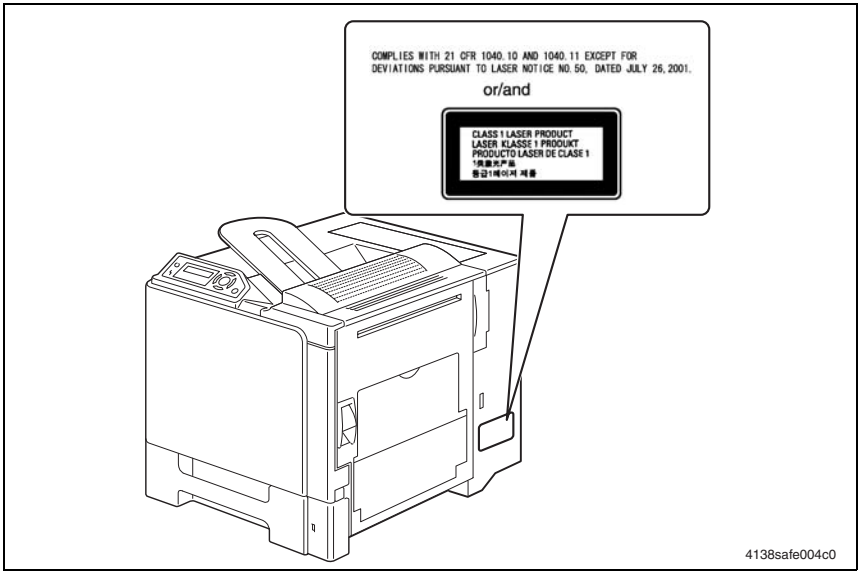
Norway

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

halvleder laser	
Maksimal effekt till laserdiode	15 mW
bølgelengde	770-800 nm

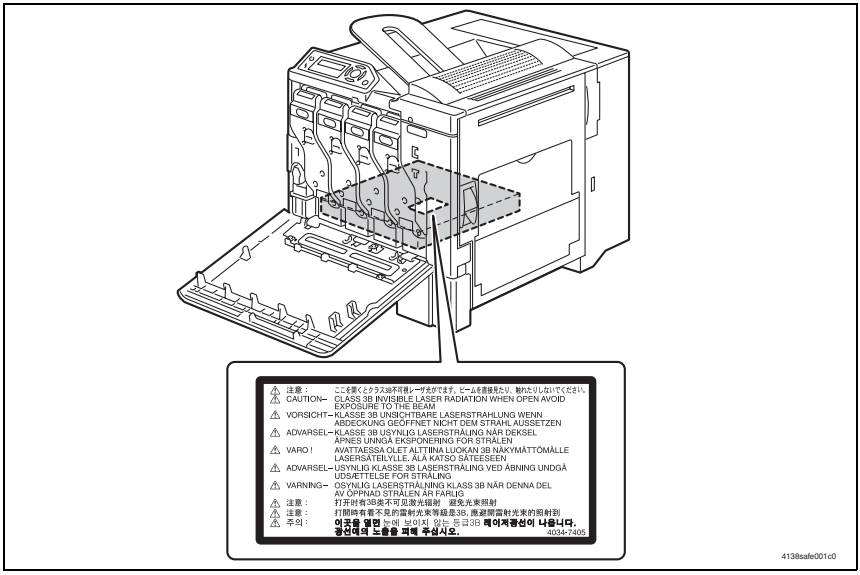
5.2 Laser Safety Label

- A laser safety label is attached to the 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.

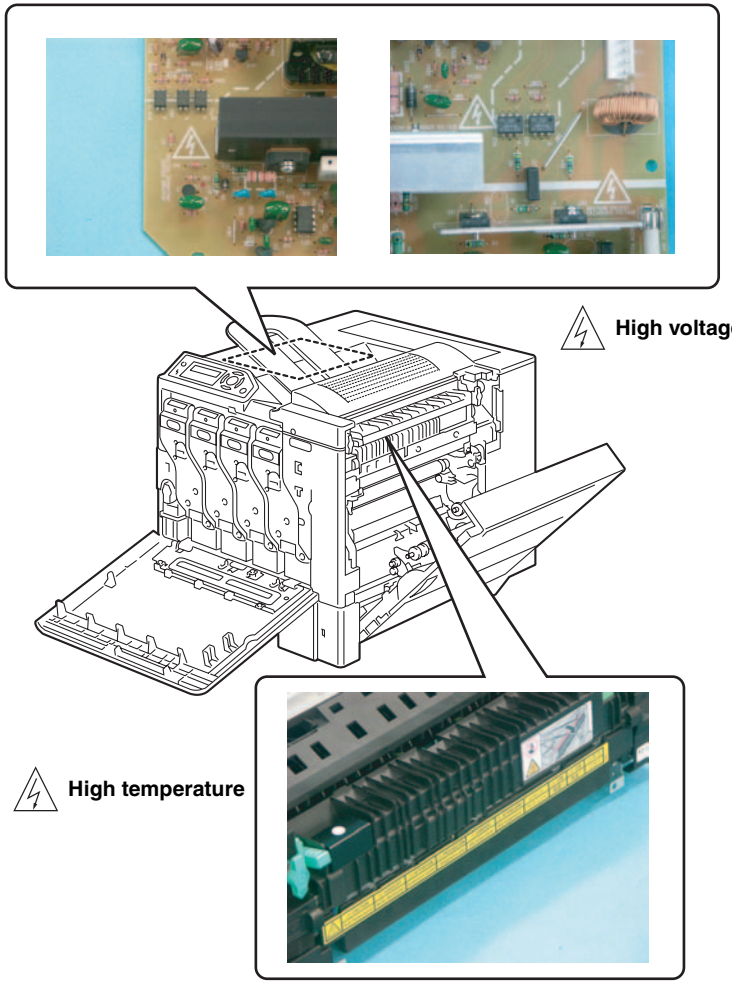


5.4 PRECAUTIONS FOR HANDLING THE LASER EQUIPMENT

- 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 printer OFF.
- If the job requires that the printer be left ON, take off your watch and ring and wear laser protective goggles.
- A highly reflective tool can be dangerous if it is brought into the laser beam path. Use utmost care when handling tools on the user's premises.
- The Print Head are not to be disassembled or adjusted in the field. Replace the Unit or Assembly including the Control Board. Therefore, remove the Laser Diode, and do not perform Control Board trimmer adjustment.

WARNING INDICATIONS ON THE MACHINE

Caution labels shown are attached in some areas on/in the machine.
When accessing these areas for maintenance, repair, or adjustment, special care should be taken to avoid burns and electric shock.



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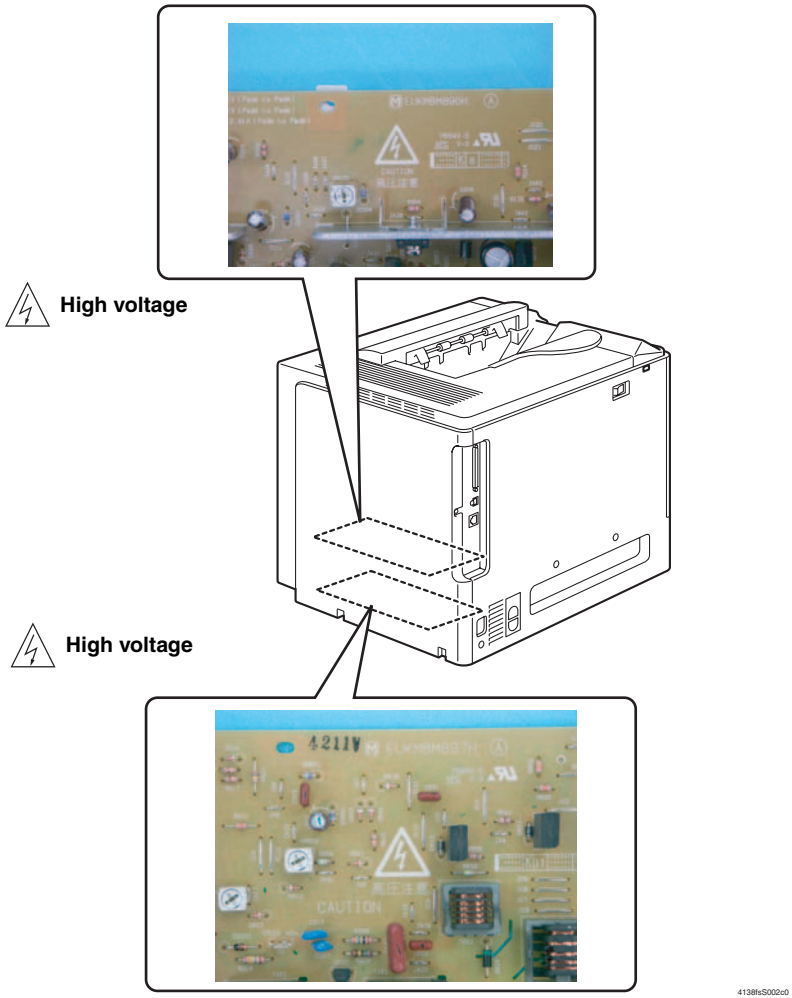

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KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

magicolor® 5430 DL
magicolor® 5440 DL
magicolor® 5450
Main Unit

2005.04
KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 3.0

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I Outline

II Maintenance

III Adjustment/Setting

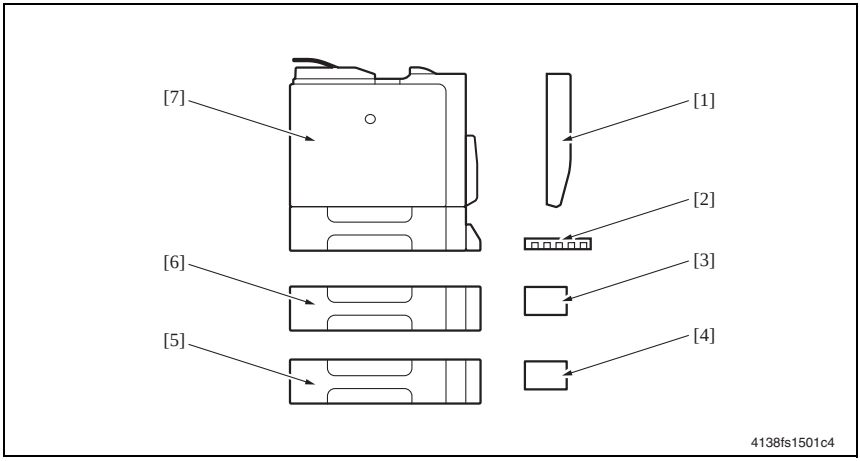
IV Troubleshooting

V Appendix

I Outline

1. System configuration

System Front View



[1]	Duplex Option	[5]	Optional Lower Feeder Unit
[2]	Optional DIMM	[6]	Optional Lower Feeder Unit
[3]	Optional Camera Direct Photo Print Card (magicolor 5440 DL only)	[7]	Main Unit
[4]	Optional Hard Disk Drive (HDD)t (magicolor 5450 only)		

2. Product Specifications

2.1 Type

Type	Desktop tandem full-color laser beam printer
Printing System	Semiconductor laser and electrostatic image transfer to plain paper
Exposure System	4 laser diode and polygon mirror
PC Drum Type	OPC (organic photo conductor)
Photoconductor Cleaning	Blade cleaning system
Print Density	magicolor 5430 DL/5440 DL 2400 x 600 dpi x 1 bit, 1200 x 600 dpi x 1 bit, 600 x 600 dpi x 1 bit
	magicolor 5450 600 x 600 dpi x 4 bit
Paper Feeding System	magicolor 5430 DL One-way system (Tray 1: 250 sheets) * Expandable up to a three-way system by adding optional Lower Feeder Units (up to two)
	magicolor 5440 DL Two-way system (Tray 1: 500 sheets, Manual Feed Tray: 100 sheets) * Expandable up to a four-way system by adding optional Lower Feeder Units (up to two)
	magicolor 5450 Two-way system (Tray 1: 100 sheets, Tray 2: 500 sheets) * Expandable up to a four-way system by adding optional Lower Feeder Units (up to two)
Developing System	Single-element developing system
Charging System	DC comb electrode Scorotron system
Image Transfer System	Intermediate transfer belt system
Paper Separating System	Curvature separation + charge-neutralizing system
Fusing System	Belt fusing
Paper Exit System	Face down (Output Tray capacity: 250 sheets)

2.2 Functions

Warm-up Time	Average: 30 sec. or less (at ambient temperature of 23° C/73.4° F and rated source voltage)
System Speed	152 mm/sec (Plain Paper)
First-Page-Out-Time (Plain Paper)	1-sided: 14.2 seconds; 2-sided: 22.3 seconds (A4) 1-sided: 14.1 seconds; 2-sided: 22.3 seconds (Letter)
Print Speed (Plain Paper)	magicolor 5430 DL 1-sided: 20 pages/min; 2-sided: 11.5 pages/min (A4) 1-sided: 21 pages/min; 2-sided: 11.8 pages/min (Letter) * When feeding the paper from Tray1
	magicolor 5440 DL 1-sided: 25.6 pages/min; 2-sided: 12.3 pages/min (A4) 1-sided: 27 pages/min; 2-sided: 12.5 pages/min (Letter) * When feeding the paper from Tray1
	magicolor 5450 1-sided: 25.6 pages/min; 2-sided: 12.3 pages/min (A4) 1-sided: 27 pages/min; 2-sided: 12.5 pages/min (Letter) * When feeding the paper from Tray 2
Custom Paper Sizes	magicolor 5430 DL Paper width: 92 to 216 mm (3.6 to 8.5 inch) (Tray 1) Paper length: 148 to 297 mm (5.8 to 11.7 inch) (Tray 1)
	magicolor 5440 DL Paper width: 92 to 216 mm (3.6 to 8.5 inch) (Manual Feed Tray) Paper length: 148 to 356 mm (5.8 to 14.0 inch) (Manual Feed Tray)
	magicolor 5450 Paper width: 92 to 216 mm (3.6 to 8.5 inch) (Tray 1) Paper length: 148 to 355.6 mm (5.8 to 14.0 inch) (Tray 1)
Media Types	magicolor 5430 DL Tray 1 • Plain paper (60 to 90 g/m^2 / 16 to 24 lb) • Recycled paper (60 to 90 g/m^2 / 16 to 24 lb) • OHP transparencies • Thick stock 1 (91 to 150 g/m^2/ 24 to 40 lb) • Thick stock 2 (151 to 210 g/m^2/ 41 to 56 lb) • Postcards • Double postcards (Print before folding) • Envelopes • Letterhead • Labels

Media Types	magicolor 5440 DL Tray 1 • Plain paper (60 to 90 g/m^2 / 16 to 24 lb) • Recycled paper (60 to 90 g/m^2 / 16 to 24 lb) Manual Feed Tray • Plain paper (60 to 90 g/m^2 / 16 to 24 lb) • Recycled paper (60 to 90 g/m^2 / 16 to 24 lb) • OHP transparencies • Thick stock 1 (91 to 150 g/m^2/ 24 to 40 lb) • Thick stock 2 (151 to 210 g/m^2/ 41 to 56 lb) • Postcards • Double postcards (Print before folding) • Envelopes • Letterhead • Labels
	magicolor 5450 Tray 1 • Plain paper (60 to 90 g/m^2 / 16 to 24 lb) • Recycled paper (60 to 90 g/m^2 / 16 to 24 lb) • OHP transparencies • Thick stock 1 (91 to 150 g/m^2/ 24 to 40 lb) • Thick stock 2 (151 to 210 g/m^2/ 41 to 56 lb) • Postcards • Double postcards (Print before folding) • Envelopes • Letterhead • Labels Tray 2 (Manual Feed Tray) • Plain paper (60 to 90 g/m^2 / 16 to 24 lb) • Recycled paper (60 to 90 g/m^2 / 16 to 24 lb)
Tray Capacities	magicolor 5430 DL Plain paper and recycled paper: 250 sheets (Tray 1) Letterhead: 150 sheets (Tray 1) Transparencies, thick stock 1, thick stock 2, postcards, double postcards, and labels: 20 sheets (Tray 1) Envelopes: 10 sheets (Tray 1)
	magicolor 5440 DL Plain paper and recycled paper: 500 sheets (Tray 1) Plain paper and recycled paper: 100 sheets (Manual Feed Tray) Transparencies, thick stock 1, thick stock 2, postcards, double postcards, letterhead, and labels: 20 sheets (Manual Feed Tray) Envelopes: 10 sheets (Manual Feed Tray)
	magicolor 5450 Plain paper and recycled paper: 100 sheets (Tray 1) Transparencies, thick stock 1, thick stock 2, postcards, double postcards, letterhead, and labels: 20 sheets (Tray 1) Envelopes: 10 sheets (Tray 1) Plain paper and recycled paper: 500 sheets (Tray 2)

Interfaces	magicolor 5430 DL/5440 DL • USB 2.0 (High-Speed) compliant • 10 Base-T/100 Base-TX (IEEE 802.3) Ethernet • The magicolor 5440 DL also has a Host USB port, which supports Camera Direct Photo Printing from PictBridge-enabled cameras when an optional Camera Direct Photo Print Card is installed.
	magicolor 5450 • Parallel (IEEE 1284) Support only an ECP mode • USB 2.0 (High-Speed) compliant • 10 Base-T/100 Base-TX/1000 Base-T (IEEE 802.3) Ethernet
CPU	magicolor 5430 DL/5440 DL ARM9 956EJ-S 200 MHz
Standard memory	magicolor 5450 Motorola PowerPC 7447A 667 MHz
	magicolor 5430 DL/5440 DL 64 MB (Expandable up to a 576 MB)
Hard disk	magicolor 5450 256 MB (Expandable up to a 1024 MB)

Lower Feeder Unit: Only plain paper and recycled paper weighing 60 to 90 g/m^2 (16 to 24 lb) can be loaded.
Duplex Option: Only plain paper and recycled paper weighing 60 to 90 g/m^2 (16 to 24 lb) can be fed through the unit.

☞ For details, see the Service Manual for each option.

2.3 Maintenance

Machine Durability	400,000 prints or 5 years, whichever comes first

2.4 Machine Specifications

Power Requirements Voltage:	AC 110 to 127 V AC 220 to 240 V
Frequency:	50/60 Hz ± 3 Hz
Max Power Consumption	1250 W
Dimensions	420 mm (W) x 520 mm (D) x 440 mm (H) 16.5 inch (W) x 20.5 inch (D) x 17.3 inch (H)
Weight	magicolor 5430 DL Approx. 30 kg (66.25 lb) without TC
	magicolor 5440 DL/5450 Approx. 31 kg (66.25 lb) without TC
Operating Noise	During standby : 39 dB (A) or less During printing : 54 dB (A) or less

2.5 Operating Environment

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

NOTE

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

II Maintenance

1. Periodic Check

NOTE

- **Be sure to note that the feed trays are named differently depending upon the printer model.**

magicolor 5430 DL / 5440 DL	magicolor 5450
MANUAL FEED TRAY	TRAY 1
TRAY 1	TRAY 2
TRAY 2	TRAY 3
TRAY 3	TRAY 4

- **The following procedures use the magicolor 5430 DL/5440 DL tray names.**

1.1 Service schedule

Guaranteed period (5 years or 400,000 prints)

Per cycle × number of prints		× 10,000 prints			Number of times
		20	30	40	
Main Unit	Upon each call (200,000)	●		●	2
	300,000		●		1
Lower Feeder Unit	300,000		●		1

1.2 Maintenance Items

1.2.1 Parts to be replaced by users (CRU)

No	Class	Part to be replaced	Number of prints	Clean	Replace	Description
1	Processing section	Standard Toner Cartridge * (TC Y/TC M/TC C/ TC K)	6,000 (MP **)		●	
2		High-Capacity Toner Cartridge * (TC Y/TC M/TC C/ TC K)	12,000 (MP **)		●	
2		Ozone Filter******	120,000		●	
3	Tray 1/ Media feed section	Feed Roller	When malfunction occurs	●		
4	Manual feed section (magicolor 5440 DL/ 5450 only)	Feed Roller	When malfunction occurs	●		
5	Image Transfer section	Transfer Belt Unit	120,000 (MP **)		●	
			100,000 (2P/J***)			
6		Transfer Roller******	12,000		●	
7		Waste Toner Bottle (magicolor 5430 DL)	32,000 (K****)		●	
			8,000 (Y,M,C,K*****)			
		Waste Toner Bottle (magicolor 5440 DL/5450)	40,000 (K****)		●	
			10,000 (Y,M,C,K*****)			

* : The life of the Toner Cartridge furnished with the machine at the time of shipment is 3,000 printed pages
** : Continuous printing
*** : 2 pages/job
**** : When printed in black only
***** : When printed in color only
****** : The Transfer Roller and Ozone Filter are available as a kit and must be replaced at the same time

1.2.2 Parts to be Replaced by a Service Engineer (FRU)

No	Class	Part to be replaced	Number of prints	Clean	Replace	Description
1	Fusing section	Fusing Unit	150,000 (MP *)		●	
			130,000 (2P/J**)			
2	Tray 1/ Media feed section	Feed Roller	300,000		●	
3	Manual Feed section (magicolor 5440 DL/5450 only)	Feed Roller	300,000		●	
4	Lower Feeder Unit	Feed Roller	300,000		●	

* : Continuous printing
** : 2 pages/job

1.3 Maintenance parts

- To ensure that the machine produces good prints and to extend its service life, it is recommended that the maintenance jobs described in this schedule be carried out as instructed.
- Replace with reference to the numeric values displayed on the Life counter.
- Maintenance conditions are based on A4 or Letter, Standard mode and Preheat OFF.

A. Main Unit

No	Class	Maintenance parts	Clean	Replace	Description	Ref.Page in this manual
1	Tray 1	Feed Roller	When necessary to prevent media jams	300,000		☞ 2-6
2	Manual Feed Tray (magicolor 5440 DL/ 5450 only)	Feed Roller	When necessary to prevent media jams	300,000		☞ 2-7
3	Fusing section	Fusing Unit	-	150,000 (MP *)		☞ 2-19
				130,000 (2P/J**)		

* : Continuous printing
** : 2 pages/job

B. Option

No	Class	Maintenance parts	Clean	Replace	Descriptions	Ref.Page in this manual
1	Lower Feeder Unit	Feed Roller	When necessary to prevent media jams	300,000		☞ See the Service Manual for the Lower Feeder Unit.

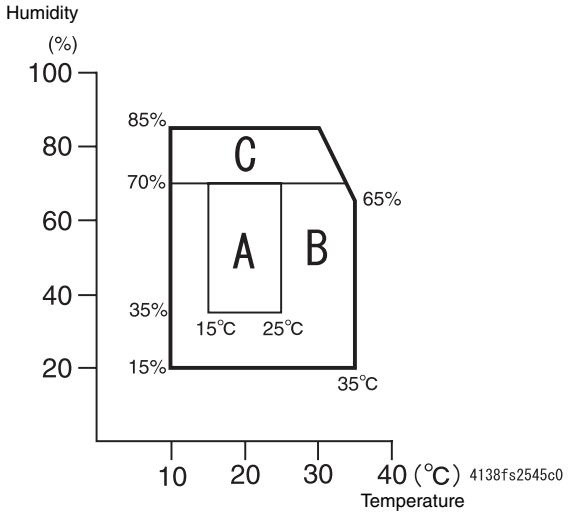
1.4 Concept of parts life

	Description	Near Life Value	Life Value
Waste Toner Bottle (magicolor 5430 DL)	• Detected by the waste toner full sensor. • A waste toner full condition is detected when about 4,000* monochrome printed pages are produced or about 1,000* color printed pages are produced after a waste toner near full condition has been detected.	Monochrome : 28,000 prints	Monochrome : 32,000 prints
		Color: 7,000 prints	Color: 8,000 prints
Waste Toner Bottle (magicolor 5440 DL/5450)		Monochrome : 36,000 prints	Monochrome : 40,000 prints
		Color: 9,000 prints	Color: 10,000 prints
Fusing Unit	The period of time through which the Fusing Motor has been energized is counted.	120,000 prints (Continuous printing)	150,000 prints (Continuous printing)
		104,000 prints (2P/J)	130,000 prints (2P/J)
Ozone Filter	-	-	120,000 prints
Transfer Roller	A corresponding number of printed pages is counted.	96,000 prints	120,000 prints
Transfer Belt Unit	The period of time through which the Transfer Belt Unit has been turned is counted.	80,000 prints	100,000 prints
Toner Cartridge shipped with the machine C,M,Y,K	• The period of time through which the Toner Supply Motor has been energized is counted. • A function is available that allows setting to be made to enable or disable printing during a toner empty condition.	2,250 prints *	3,000 prints *
		2,060 prints **	2,750 prints **
		1,800 prints ***	2,400 prints ***
		1,650 prints ****	2,200 prints****
Standard Toner Cartridge C,M,Y,K		5,100 prints *	6,000 prints *
		4,675 prints **	5,500 prints **
		3,840 prints ***	4,800 prints ***
		3,520 prints ****	4,400 prints ****
High-Capacity Toner Cartridge C,M,Y,K (For exchange: magicolor 5440 DL/5450 only)		10,200 prints *	12,000 prints*
		9,350 prints **	11,000 prints **
		8,160 prints ***	9,600 prints ***
		7,480 prints ****	8,800 prints ****

* : Continuous printing under the environment shown as A (See next page)
** : 2 pages printing/job (2P/J) under the environment shown as A (See next page)
*** : Continuous printing under the environment shown as B/C (See next page)
**** : 2 Pages printing/job (2P/J) under the environment shown as B/C (See next page)

A. Conditions for Life Specifications Values

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

Item	Description
Job Type	2 consecutive pages (2 pages/job)
Media Size	A4 or Letter
Original Density	C/W ratio = 5% each color
Operating Environment	

1.5 Maintenance Procedure (Periodic Parts Check)

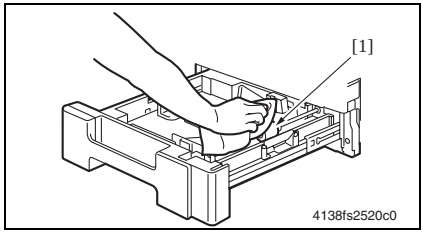
NOTE

- **The alcohol referred to in the following procedures is isopropyl alcohol.**
- **Be sure to note that the feed trays are named differently depending upon the printer model.**

magicolor 5430 DL / 5440 DL	magicolor 5450
MANUAL FEED TRAY	TRAY 1
TRAY 1	TRAY 2

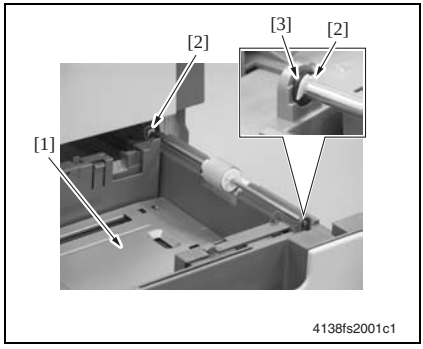
- **The following procedures use the magicolor 5430 DL/5440 DL tray names.**

1.5.1 Feed Roller (Tray 1)



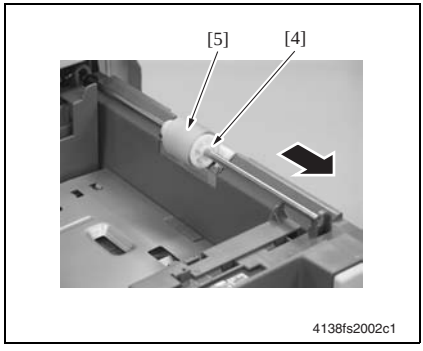
A. Cleaning Procedure

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

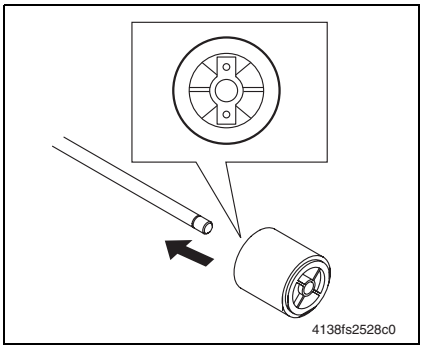


B. Replacement Procedure

1. Slide out Tray 1.
2. Lock the Paper Lift Plate [1].
3. Snap off two C-clips [2] and remove the bearing [3] at the front.



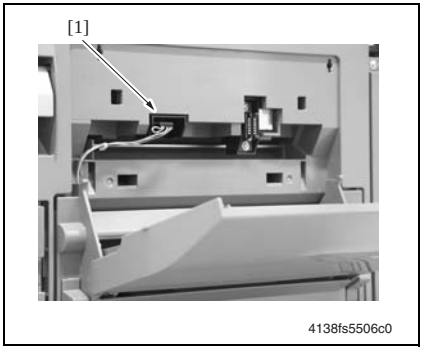
4. Snap off the C-clip [4] and remove the Feed Roller [5].



NOTE

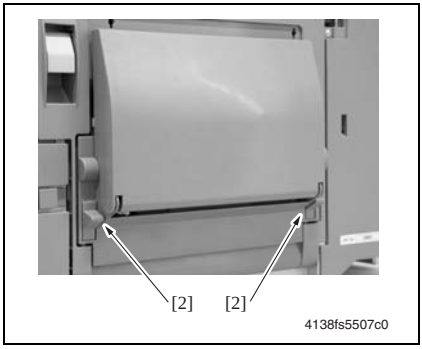
- **When reinstalling the Feed Roller, make sure that it is mounted in the direction shown in the illustration on the left.**

1.5.2 Feed Roller (Manual Feed Tray) (magicolor 5440 DL/5450 only)

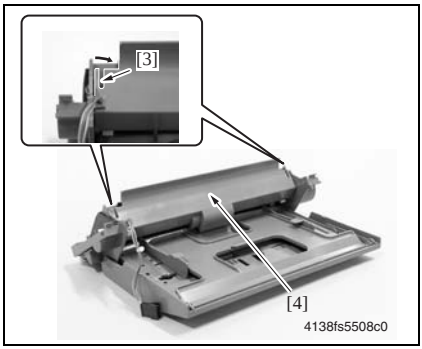


A. Cleaning Procedure

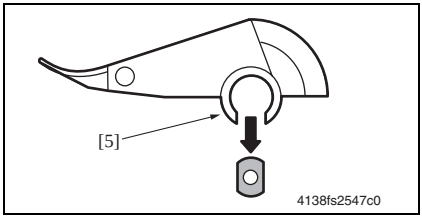
1. Open the Manual Feed Tray.
2. Remove the Connector Cover.
3. Disconnect the connector [1].



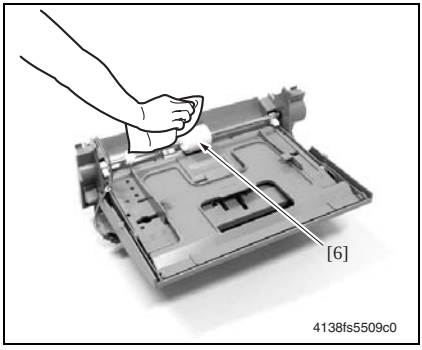
4. Move two Lock Levers [2] down.
5. Remove the Manual Feed Tray.



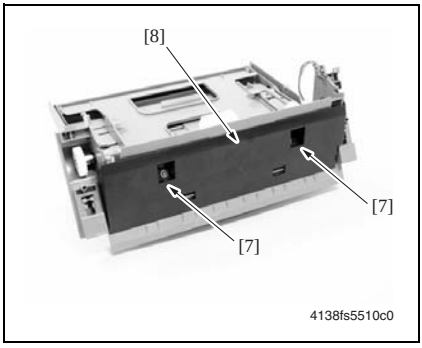
6. Press two pins [3] in, and lift the Feed Roller Cover [4] upward to remove it.



NOTE
Make sure that the bearing goes all the way into both of [5] shown on the left when installing the Feed Roller Cover.

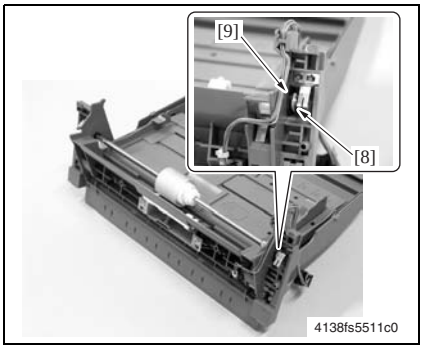


7. Using a soft cloth dampened with alcohol, wipe the Feed Roller [6] clean of dirt.

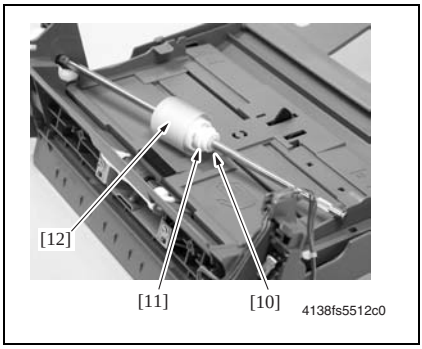


B. Replacement Procedure

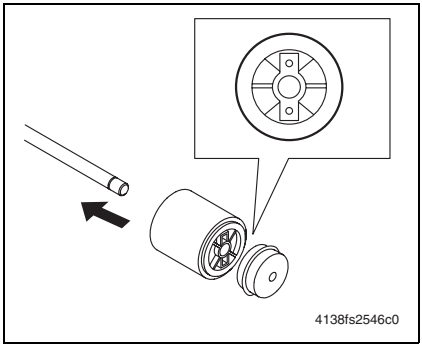
1. Remove the Manual Feed Tray. (See Cleaning procedure 1 to 5)
2. Remove the Feed Roller Cover (See Cleaning procedure 6)
3. Remove the two screws [7].
4. Remove the Cover [8].



5. Snap off C-clip [8] and remove the bearing [9] at the front.



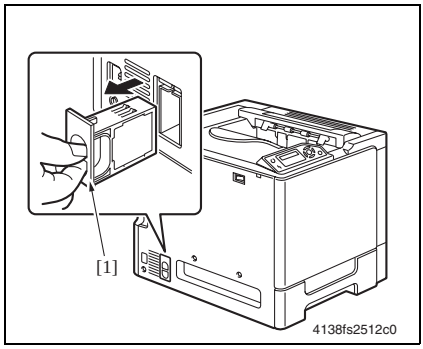
6. Snap off the C-clip [10] and then remove the Clutch [11] and the Feed Roller [12].



NOTE

- **When reinstalling the Feed Roller and the Clutch, make sure that it is mounted in the direction shown in the illustration on the left.**

1.5.3 Ozone Filter

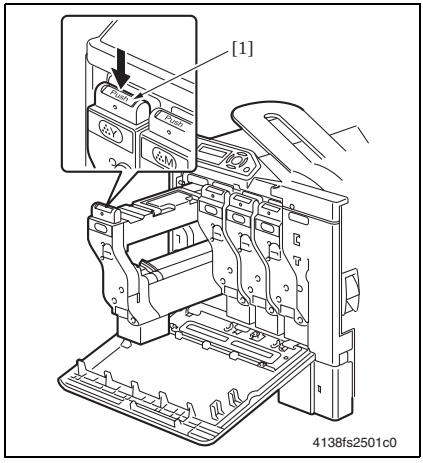


A. Replacement Procedure

1. Hold onto the handle of the Ozone Filter [1] and slide it out of the machine.
2. Install a new Ozone Filter in the machine.
3. Replace the Transfer Roller.

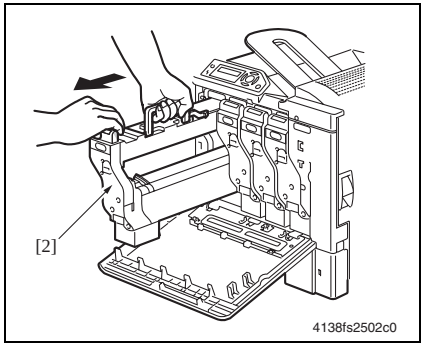
☞ 2-15

1.5.4 Toner Cartridge (C/M/Y/Bk)

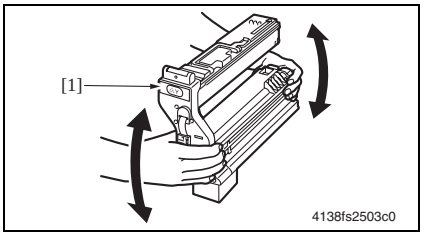


A. Removal Procedure

1. Open the Front Door.
2. Press the “Push” mark [1] on the Toner Cartridge and slide out the Toner Cartridge.



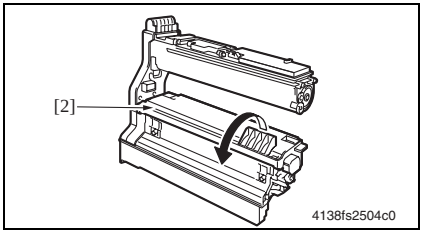
3. Holding the Toner Cartridge [2] as shown in the illustration on the left, slide it out of the machine.



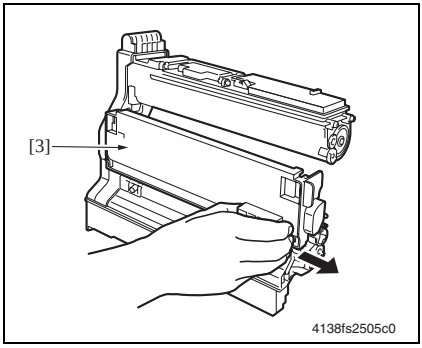
B. Reinstallation Procedure

1. Take the Toner Cartridge out of its plastic bag.

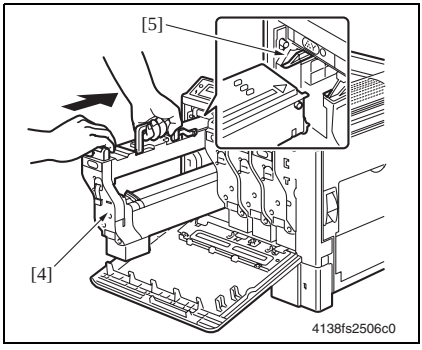
2. Tilt the Toner Cartridge [1] as shown in the illustration on the left and shake it slowly two times.



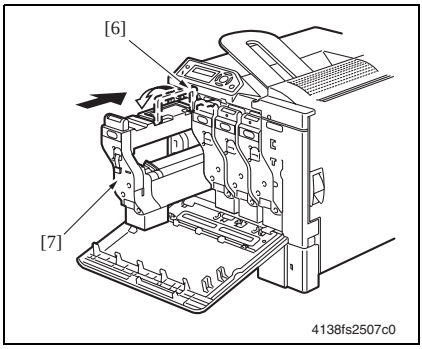
3. Open the Photo Conductor Cover [2].



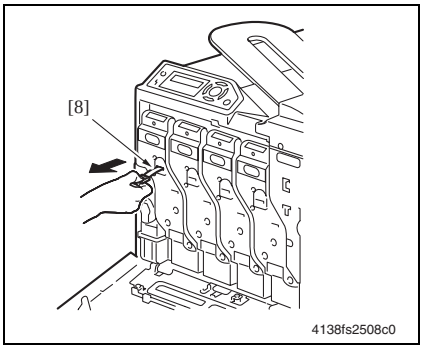
4. Slide the Photo Conductor Cover [3] off the cartridge.



5. Holding the Toner Cartridge [4] at the location shown in the illustration on the left, insert it along the rail [5] until it hits against a stopper.



6. Fold down the handle [6] and slide the Toner Cartridge [7] all the way into the machine.

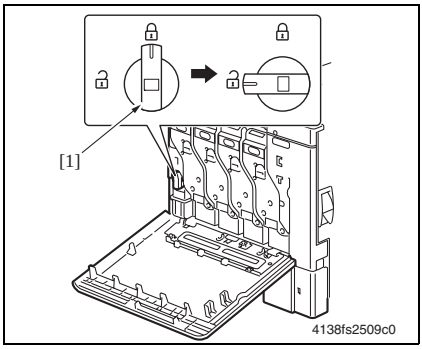


7. Pull off the protective film [8].
8. Close the Front Door.

NOTE

- **When removing or reinstalling the Toner Cartridge while it is being used or after it has been used up, do not hold it or place it upside down, as spilled toner could result.**

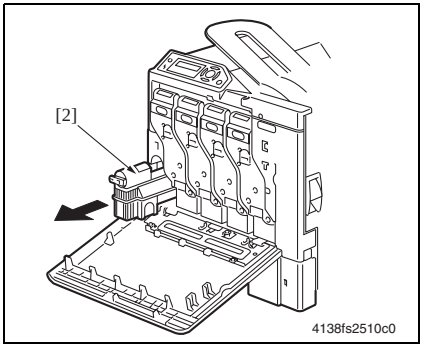
1.5.5 Waste Toner Bottle



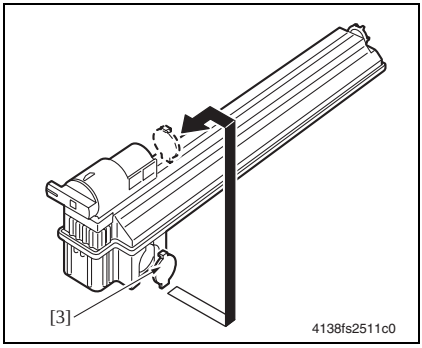
A. Replacement Procedure

1. Open the Front Door.

2. Turn the lever [1] to unlock the Waste Toner Bottle.



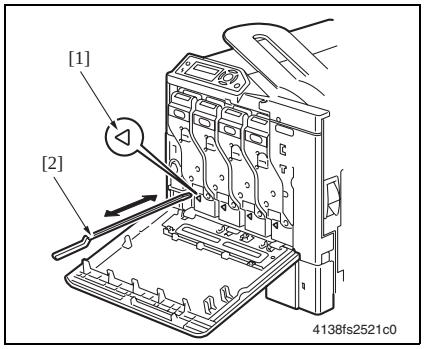
3. Remove the Waste Toner Bottle [2].



4. Remove the cap [3] from the side face of the Waste Toner Bottle and fit it at the location shown in the illustration on the left.

5. To reinstall, reverse the order of removal.

1.5.6 Cleaning the Laser Irradiation Section



A. Cleaning Procedure

1. Open the Front Door.

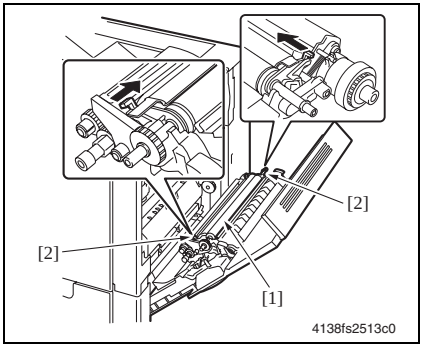
2. Align the edge of the Laser lens cleaning tool [2] with the marker [1] (at four places) of the Toner Cartridge. Insert the tool [2] and make two to three reciprocating motions to clean the laser irradiation section.

NOTE

- **For cleaning, do not use any tool other than the specified Laser Lens Cleaning Tool.**

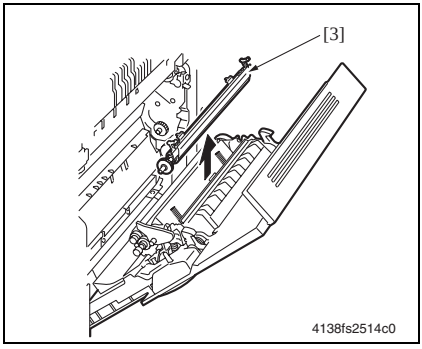
1.6 Replacing Units

1.6.1 Replacing the Transfer Roller



A. Replacement Procedure

1. Open the Right Door.
2. Press the locks [2] located at the front and rear ends of the Transfer Roller [1] inward to unlock the Transfer Roller [1].



3. Holding the levers, remove the Transfer Roller [3].
4. To reinstall, reverse the order of removal.
5. Replacing the Ozone Filter.

☞ 2-10

6. From the Menu, select ENGINE → ENGINE SERVICE → RESET COUNTER TRANSFER ROLLER. Execute this function to reset the Transfer Unit counter value. (magicolor 5430 DL/5440 DL)

☞ For details, see “III. Adjustment/ Setting.”

7. From the Menu, select From the Menu, select QUALITY MENU → SUPPLIES → REPLACE → TRANS. ROLLER. Execute this function to reset the Transfer Unit counter value. (magicolor 5450)

☞ For details, see “III. Adjustment/ Setting.”

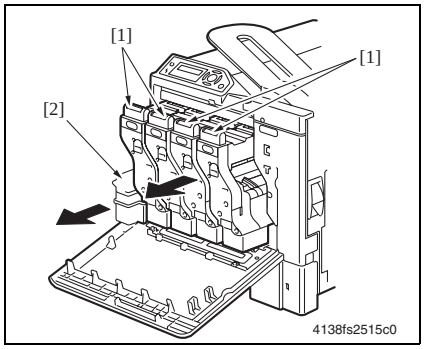
8. From the Menu, select ENGINE → ENGINE SERVICE → COLOR CARIBRATION and execute this function. (magicolor 5430 DL/5440 DL)

☞ For details, see “III. Adjustment/ Setting.”

9. From the Menu, select QUALITY MENU → CARIBRATION → AIDC PROCESS and execute this function. (magicolor 5450)

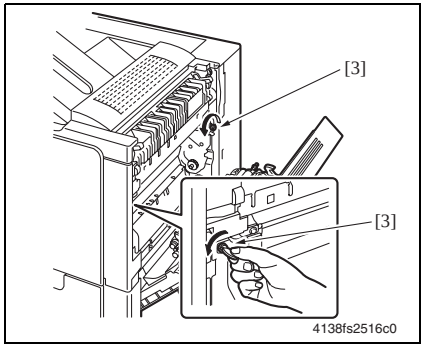
☞ For details, see “III. Adjustment/Setting.”

1.6.2 Replacing the Transfer Belt Unit

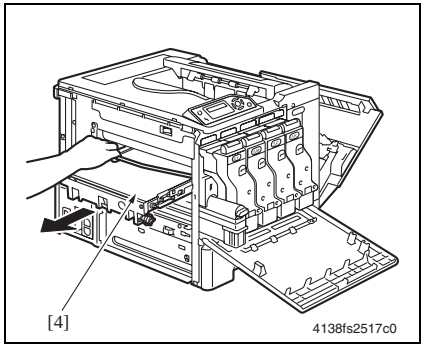


A. Replacement Procedure

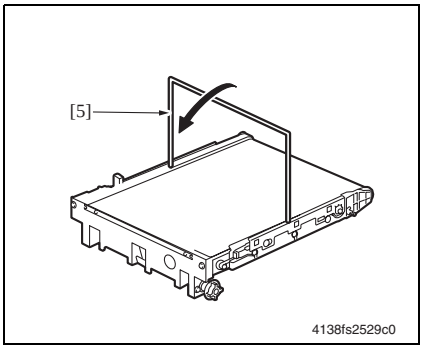
1. Turn OFF the Power Switch.
2. Open the Front Door.
3. Slide out the Toner Cartridge [1] and Waste Toner Bottle [2] about 10 cm.



4. Open the Right Door.
5. Loosen two screws [3] and unlock the Transfer Belt Unit.

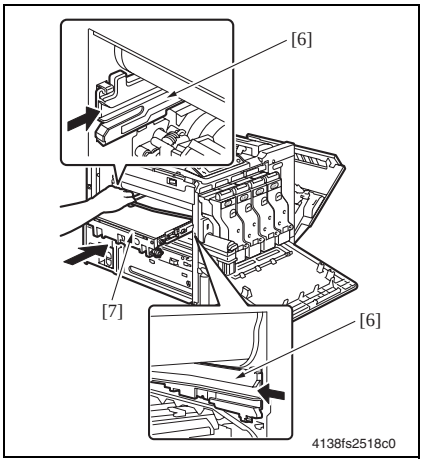


6. Remove the Left Cover.
☞ 2-31
7. Slide out the Transfer Belt Unit [4].



NOTE

- **Lower the handle [5] of the Transfer Belt Unit in the direction shown in the illustration on the left.**



8. Prepare a new Transfer Belt Unit.

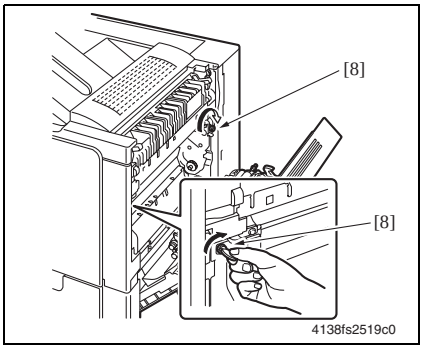
NOTE

- **Use care not to touch the belt of the Transfer Belt Unit.**

9. Insert the Transfer Belt Unit [7] along the rail [6].

NOTE

- **When inserting the unit, use care not to allow the docking gear to hit against the rail or other mechanism to prevent damage.**



10. Tighten the two screws [8] to secure the Transfer Belt Unit in position.
11. Reinstall the Left Cover.
12. Close the Right Door.
13. Reinstall the Waste Toner Bottle.
14. Reinstall the Toner Cartridge.
15. Close the Front Door.
16. Turn ON the Power Switch.
17. From the Menu, select ENGINE → ENGINE SERVICE → RESET COUNTER TRANSFER BELT. Execute this function to reset the Transfer Belt Unit counter value. (magicolor 5430 DL/5440 DL)

☞ For details, see “III. Adjustment/ Setting.”

18. From the Menu, select QUALITY MENU → SUPPLIES → REPLACE → TRANS. BELT. Execute this function to reset the Transfer Belt Unit counter value. (magicolor 5450)

☞ For details, see “III. Adjustment/ Setting.”

19. From the Menu, select ENGINE → ENGINE SERVICE → COLOR CALIBRATION and execute this function. (magicolor 5430 DL/5440 DL)

☞ For details, see “III. Adjustment/ Setting.”

20. From the Menu, select QUALITY MENU → CALIBRATION → AIDC PROCESS and execute this function.

☞ For details, see “III. Adjustment/ Setting.”

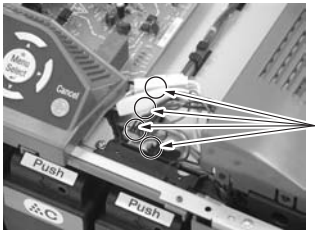
1.6.3 Replacing the Fusing Unit

NOTE

- **Before replacing the Fusing Unit, make sure that it has sufficiently cooled down.**

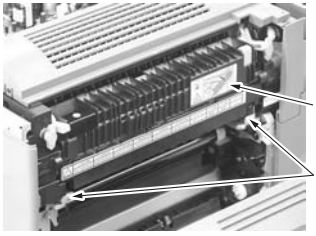
1. Turn OFF the Power Switch, unplug the power cord from the power outlet, and let the machine to stand idle for about 20 min.
2. Open the Front Door.
3. Remove the Upper Front Cover.

☞ 2-30



4138fs2003c1

4. Disconnect the four connectors [1]. (magicolor 5430 DL/5440 DL)
5. Disconnect the five connectors [1]. (magicolor 5450)



4138fs2004c1

6. Open the Right Door.
7. Remove two screws [2] and the Fusing Unit.
8. Install the new Fusing Unit.
9. From the SERVICE mode, select RESET COUNTER FUSER UNIT. Then, execute this function to reset the Fusing Unit counter value. (magicolor 5430 DL/5440 DL)

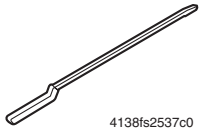
☞ For details, see “III. Adjustment/ Setting.”

10. From the Menu, select QUALITY MENU → SUPPLIES → REPLACE → FUSER UNIT. Then, execute this function to reset the Fusing Unit counter value. (magicolor 5450)

☞ For details, see “III. Adjustment/ Setting.”

2. Service tool

2.1 CE Tool list

Tool name	Shape	Personnel	Remarks
Laser Lens Cleaning Tool	 4138fs2537c0	1	

2.2 Consumable Parts

2.2.1 Toner Cartridge (TC) (as an individual part)

Part name	Life expectancy
Standard-Capacity Toner Cartridge - Black (K)	6,000 prints
Standard-Capacity Toner Cartridge - Yellow (Y)	6,000 prints
Standard-Capacity Toner Cartridge - Magenta (M)	6,000 prints
Standard-Capacity Toner Cartridge - Cyan (C)	6,000 prints

☞ For the predetermined conditions, see 2-5.

NOTE

- **The life of the Toner Cartridges furnished with the machine at the time of shipment is 3000 pages.**

2.2.2 Waste Toner Bottle

Part name	Life expectancy
Waste Toner Bottle	Monochrome: 32,000 prints
	Color: 8,000 prints

☞ For the predetermined conditions, see 2-5.

2.2.3 Maintenance Kit

A Maintenance Kit is not available.

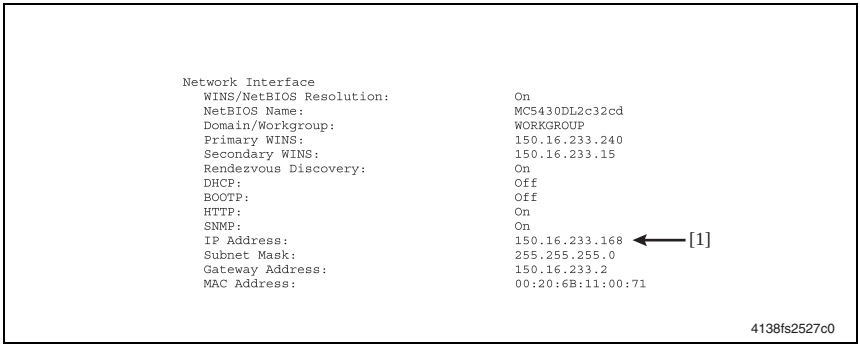
3. Firmware Upgrade

3.1 Print Control Board (PWB-P) Firmware Upgrading

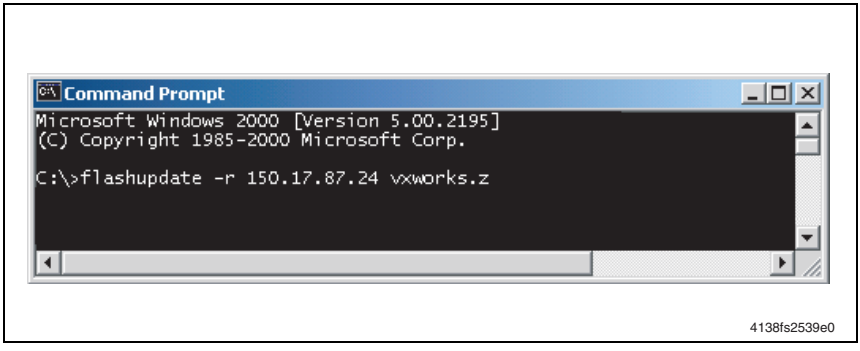
3.1.1 Upgrade procedure (magicolor 5430 DL/5440 DL)

1. Connect the machine to the PC using an Ethernet cable.
2. From the Menu, select SPECIAL PAGES → PRINT CONFIG PAGE and execute the function. Then, check the IP address [1] of the machine.

☞ For how to execute “PRINT CONFIG PAGE,” see “III Adjustment/Setting.”



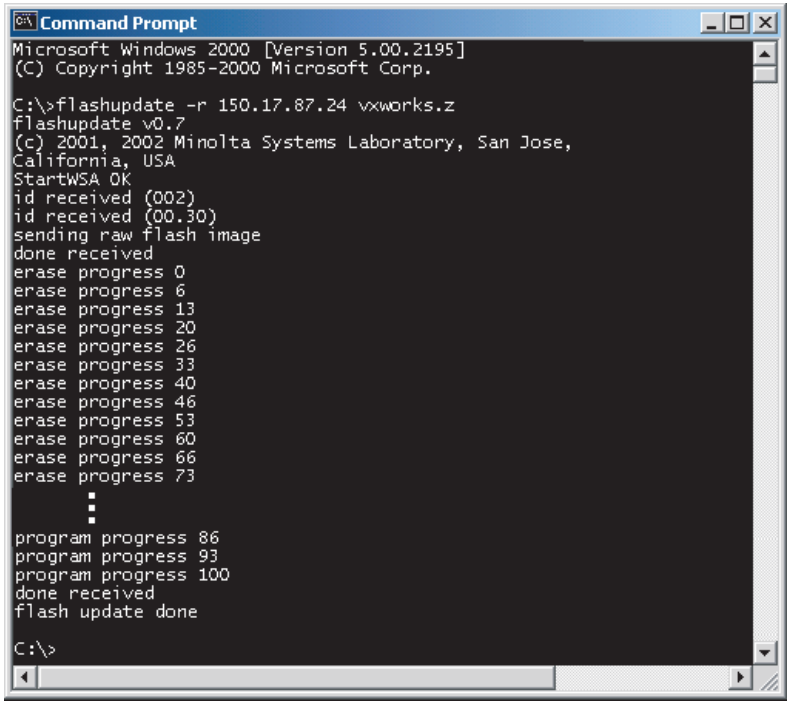
3. Copy the firmware data and upgrading program to any directory on the PC.
4. Start the Command Prompt and go to the directory in which the firmware data is stored.
5. Execute the “flashupdate” command to start the transfer of firmware data. (The screen shown below indicates that the firmware data resides on the C drive.)



Data to be upgraded	Command
Application	flashupdate -r XXX.XXX.XXX.XXX vxworks.z
BOOT	flashupdate -b XXX.XXX.XXX.XXX ******.flt

XXX.XXX.XXX.XXX : IP address of the machine
****** : Firmware data file name

6. Check the Command Prompt display on the progress of upgrade procedure.



4138fs2540e0

NOTE

- **NEVER turn the printer Power Switch OFF and ON until the message "flash update done" appears on the Command Prompt display.**

7. After the firmware upgrade procedure has been completed, turn the printer OFF and then ON again.

8. Check that the controller firmware version number has been upgraded.

☞ For how to check the firmware version number, see "III. Adjustment/Setting."

3.1.2 Upgrade procedure (magicolor 5450)

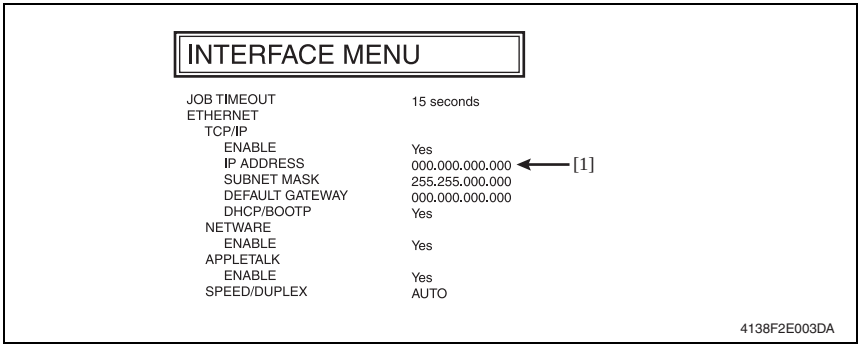
A. How to upgrade using the Network Interface

1. Connect the machine to the PC using an Ethernet cable.

NOTE
- **For connections via a HUB, use a straight cable.**
- **For direct connections between the printer and PC, use the crossover cable.**
- **For PCs that support 1000BASE-T (Gigabit Ethernet), use a 1000BASE-T-enabled Ethernet cable (over category 5e.) If a cable that is not compatible with 1000BASE-T is used, communication may not be made correctly.**
- **Check that printing is available over the network.**

2. From the Menu, select PRINT MENU → CONFIGURATION PG and execute the function. Then, check the IP address [1] of the machine.

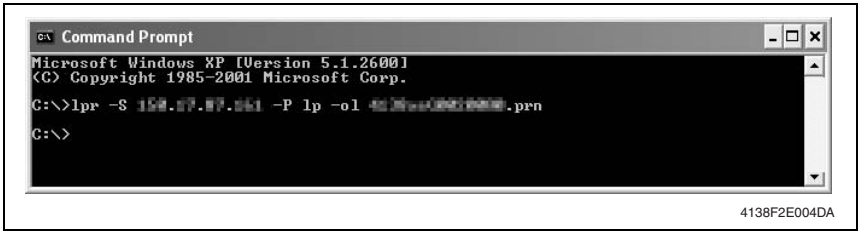
☞ For how to execute "CONFIGURATION PG," see "III Adjustment/Setting."



3. Copy the firmware data and upgrading program to any directory on the PC.

4. Start the Command Prompt and go to the directory in which the firmware data is stored.

5. Execute the following command to start the transfer of the firmware data to the printer. (The screen shown below indicates that the firmware data resides on the C drive.)



Data to be upgraded	Command
FW upgraded data	> lpr -S XXX.XXX.XXX.XXX -P lp -o l 4138**********.prn

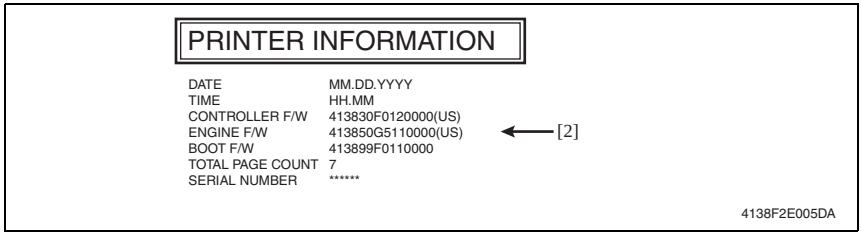
XXX.XXX.XXX.XXX : IP address of the machine
****** : File name of FW upgrade data

6. Wait until all of the data is sent.
   While the data is being sent, “FIRMWARE UPDATE” and “PROCESSING” are alternately displayed on the screen.

NOTE
- **NEVER turn the printer Power Switch OFF and ON while data is being sent.**

7. After the data has finished being sent, the message “REBOOTING” appears in the control panel message display and the printer restarts.
8. After the printer has restarted, check that a “READY” message is displayed.
9. From the Menu, select PRINT MENU → CONFIGURATION PG and execute the function. Then, check that the firmware [2] has been upgraded.

☞ For how to execute “CONFIGURATION PG,” see “III Adjustment/Setting.”

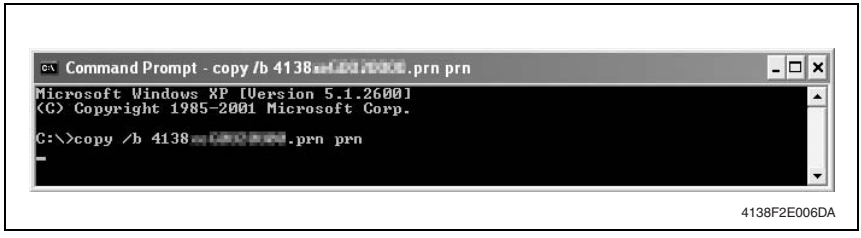


B. How to upgrade using the Parallel Interface

1. Connect the machine to the PC using a parallel cable.

NOTE
- **Check that printing is available through the parallel cable.**

2. Copy the firmware data and upgrading program to any directory on the PC.
3. Start the Command Prompt and go to the directory in which the firmware data is stored.
4. Execute the following command to start the transfer of the firmware data to the printer. (The screen shown below indicates that the firmware data resides on the C drive.)



Data to be upgraded	Command
FW upgraded data	> copy /b 4138**********.prn prn

******: File name of FW upgrade data

5. Wait until all of the data is sent. (This takes approximately 2 minutes.)
   While the data is being sent, “FIRMWARE UPDATE” and “PROCESSING” are alternately displayed on the screen.

NOTE

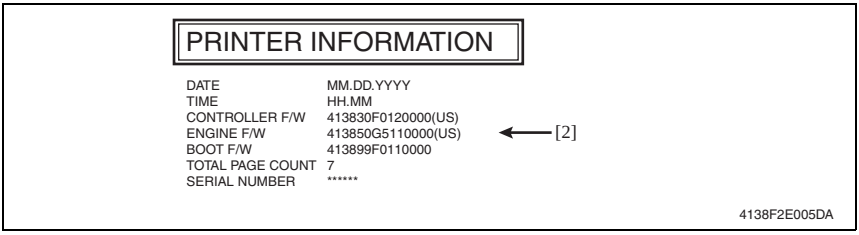
- **NEVER turn the printer Power Switch OFF and ON while data is being sent.**

6. After the data has finished being sent, the following message appears on the screen of the Command Prompt.

4138F2E007DA

7. A “REBOOTING” message appears in the control panel message display, and the printer restarts.
8. After the printer has restarted, check that a “READY” message is displayed.
9. From the Menu, select PRINT MENU → CONFIGURATION PG and execute the function. Then, check that the firmware [2] has been upgraded.

☞ For how to execute “CONFIGURATION PG,” see “III Adjustment/Setting.”



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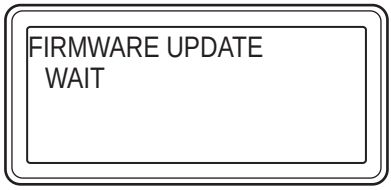
C. What to do if the firmware upgrade fails

- **Use the following procedure if the firmware upgrade process is suspended for any reason. (The printer cannot start until the firmware upgrade process completes correctly.)**

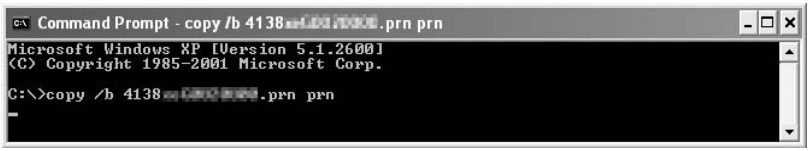
1. Turn OFF the Main switch of the printer.
2. Connect the machine to the PC using a parallel cable.
3. Turn ON the Main switch of the printer while holding down the Down Arrow key▽. Continue holding down the Down Arrow key until the printer starts and “INITIALIZING” is displayed.

4. Check that the “FIRMWARE UPDATE/WAIT” message is displayed.



4138F2E008DA

5. Copy the firmware data and upgrading program to any directory on the PC.
6. Start the Command Prompt and go to the directory in which the firmware data is stored.
7. Execute the following command to start the transfer of the firmware data to the printer. (The screen shown below indicates that the firmware data resides on the C drive.)



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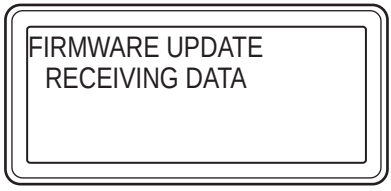
Data to be upgraded	Command
FW upgraded data	> copy /b 4138**********.prn prn

******: File name of FW upgrade data

8. Wait until all of the data is sent. (This takes approximately 2 minutes.)
While the data is being sent, “FIRMWARE UPDATE” and “RECEIVING DATA” are alternately displayed on the screen.



4138F2E009DA

NOTE

- **Never turn the printer power switch OFF and ON while data is being sent.**

9. After the data has finished being sent, the following message appears on the screen of the Command Prompt.

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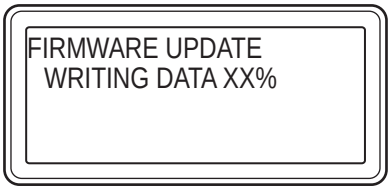
10. Then the firmware upgrade starts. Wait until all the upgrade procedure is complete.

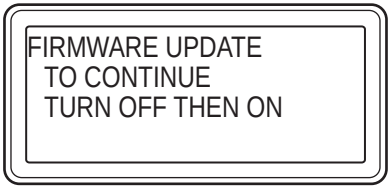


4138F2E010DA

NOTE

- **Never turn the printer Power Switch OFF and ON while the firmware is being upgraded.**

11. After the firmware upgrade is complete, “FIRMWARE UPDATE TO CONTINUE TURN OFF THEN ON” is displayed.



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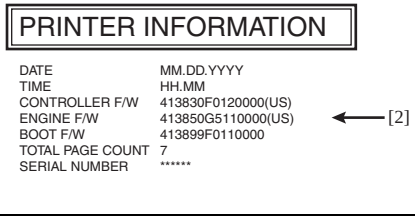
12. Turn the printer’s Main Switch OFF and then ON.
13. After the printer has restarted, check that a “READY” message is displayed.
14. From the Menu, select PRINT MENU → CONFIGURATION PG and execute the function. Then, check that the firmware [2] has been upgraded.

☞ For how to execute “CONFIGURATION PG,” see “III Adjustment/Setting.”



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4. Other

4.1 Disassembly/Adjustment-Prohibited Items

A. Paint-locked screws

NOTE
- **Paint-locked screws show that the assembly or unit secured can only be adjusted or set at the factory and should not be adjusted, set, or removed in the field.**

B. Red-painted screws

NOTES
- **When the screws are removed, the red paint is coated on the points where readjustment is required.**
- **Once a red-painted screw is removed or loosened, you should make the adjustment. Accordingly, check the adjustment items in this manual and make the necessary adjustments. Note that when two or more screws are used on the part in question, only one representative screw may be marked with red paint.**

C. Variable resistors on the board

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

D. Removal of PWBs

NOTES
- **When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.**
- **The removal procedures given in the following sections 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 first.**

4.2 Names of Feed Trays

NOTE
- **Be sure to note that the feed trays are named differently depending upon the printer model.**

magicolor 5430 DL / 5440 DL	magicolor 5450
MANUAL FEED TRAY	TRAY 1
TRAY 1	TRAY 2

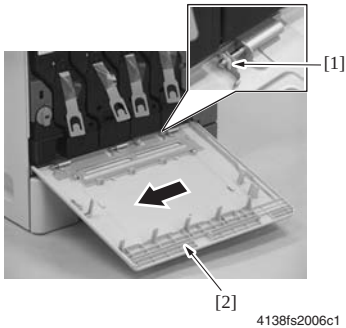
- **The following procedures use the magicolor 5430 DL/5440 DL tray names.**

4.3 Disassembly/Assembly list (Other parts)

No	Section	Part name	Ref.Page
1	Exterior parts	Front Door	☞ 2-30
2		Upper Front Cover	☞ 2-30
3		Right Front Cover	☞ 2-30
4		Left Cover	☞ 2-31
5		Rear Cover	☞ 2-31
6		Rear Right Cover	☞ 2-32
7		Exit Tray	☞ 2-32
8		Tray 1	☞ 2-33
9		Manual Feed Tray (magicolor 5440 DL/5450 only)	☞ 2-33
10	Boards and etc.	HDD Unit (magicolor 5450 only)	☞ 2-34
11		Print Control Board (magicolor 5430 DL/5440 DL only)	☞ 2-35
12		Print Control Board (magicolor 5450 only)	☞ 2-36
13		Backup Battery (magicolor 5450 only)	☞ 2-37
14		Mechanical Control Board	☞ 2-38
15		Toner Level Sensor Board	☞ 2-44
16		Low Voltage Unit	☞ 2-41
17		High Voltage Unit/1	☞ 2-42
18		High Voltage Unit/2	☞ 2-43
19		Control Panel	☞ 2-34
20	Unit	PH Unit	☞ 2-46
21	Other Parts	PWB Box/1	☞ 2-47
22		PWB Box/2	☞ 2-48
23		Developing Motor/Y,M,C	☞ 2-48
24		Color PC Drum Motor	☞ 2-48
25		Intermediate Transport Motor	☞ 2-50
26		Fusing Motor	☞ 2-50
27		Developing Motor /K	☞ 2-49
28		Toner Supply Motor/Y,M	☞ 2-49
29		Toner Supply Motor/C,K	☞ 2-49
30		Tray 1 Paper Feed Clutch	☞ 2-54
31		Manual Feed Tray Paper Feed Clutch (magicolor 5440 DL/5450 only)	☞ 2-58
32		Synchronizing Roller Clutch	☞ 2-50
33		Pressure/Retraction Clutch /1st Image Transfer	☞ 2-53
34		Pressure/Retraction Clutch /2nd Image Transfer	☞ 2-51
35		Temperature/ humidity Sensor	☞ 2-63
36		AIDC Sensor	☞ 2-64
37		Camera Direct Photo Print Card (Option: magicolor 5440 DL only)	☞ 2-65

4.4 Disassembly/Assembly Procedure

4.4.1 Front Door, Upper Front Cover, and Right Front Cover



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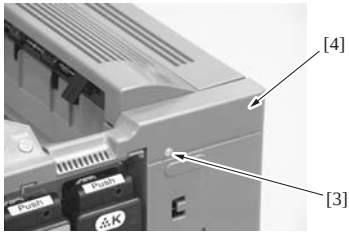
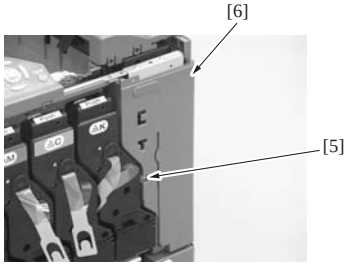
1. Open the Front Door.
2. Remove the C-clip [1].
3. Slide the Front Door [2] to the left off the machine.



4138fs2007c0

4. Remove the screw [3] and Upper Front Cover [4].



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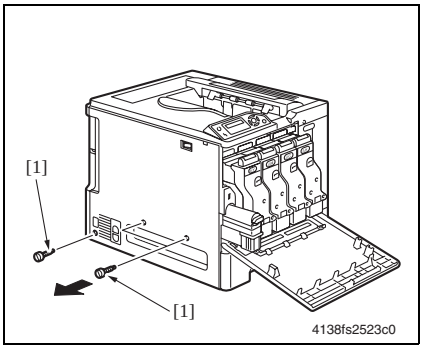
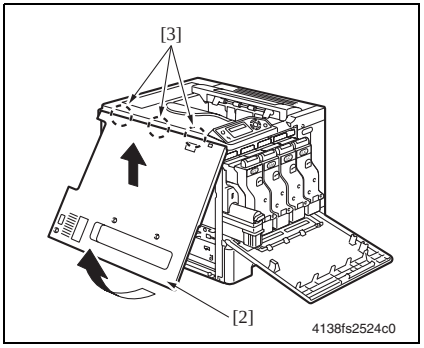
5. Remove the screw [5] and Right Front Cover [6].

4.4.2 Left Cover



1. Open the Front Door.
2. Remove the three screws [1].

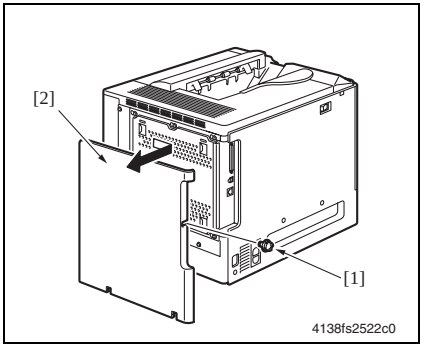


3. Remove the Left Cover [2].

NOTE

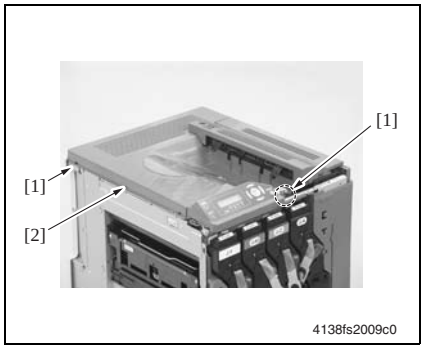
- **Remove the Left Cover as shown in the illustration on the left, taking care not to damage the three tabs [3] on the upper edge of the Left Cover.**

4.4.3 Rear Cover



1. Remove the screw [1].
2. Slide the Rear Cover [2] in the direction shown in the illustration on the left off the machine.

4.4.4 Exit Tray



1. Open the Front Door.
2. Remove the Upper Front Cover.

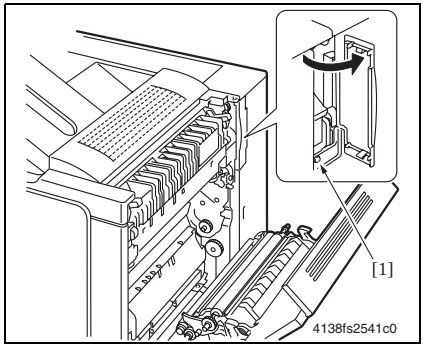
☞ 2-30

3. Remove the Left Cover.

☞ 2-31

4. Remove two screws [1] and the Exit Tray [2].

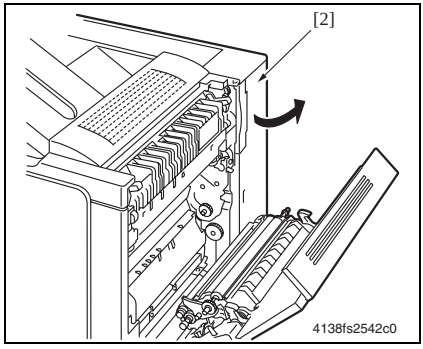
4.4.5 Rear Right Cover



1. Open the Right Door.
2. Remove the Rear Cover.

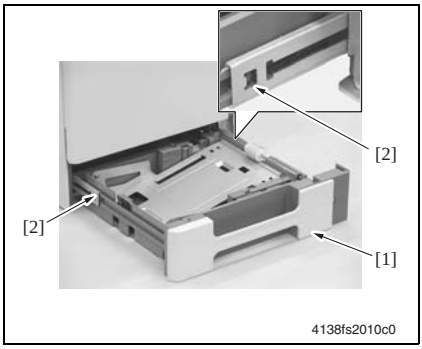
☞ 2-31

3. Open the cover and remove the screw [1].



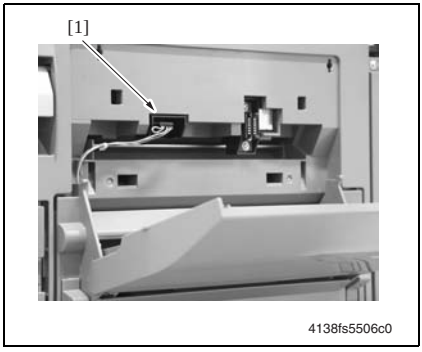
4. Remove the Rear Right Cover [2].

4.4.6 Tray 1

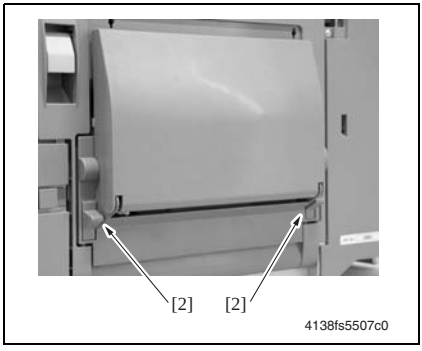


1. Slide out Tray 1 [1].
2. Pressing the tabs [2] on both sides, remove Tray 1 [1].

4.4.7 Manual Feed Tray (magicolor 5440 DL/5450 only)



1. Open the Manual Feed Tray.
2. Remove the Connector Cover.
3. Disconnect the connector [1].

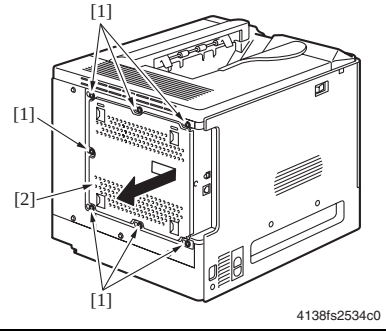


4. Move two Lock Levers [2] down.
5. Remove the Manual Feed Tray.

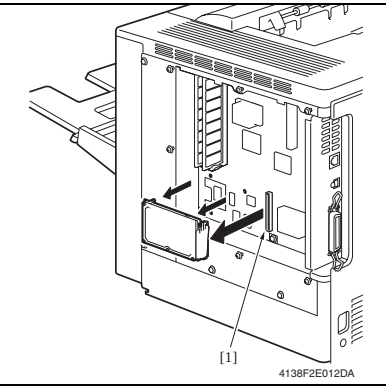
4.4.8 Control Panel (PWB-OP)

1. Remove the Upper Front Cover.
☞ 2-30
2. Remove the Left Cover.
☞ 2-31
3. Remove the Rear Cover.
☞ 2-31
4. Remove the Exit Tray.
☞ 2-32
5. Remove two screws [1] and the Control Panel [2].
6. Disconnect the connector.

4.4.9 Hard Disk Unit (HDD) (magicolor 5450 only)

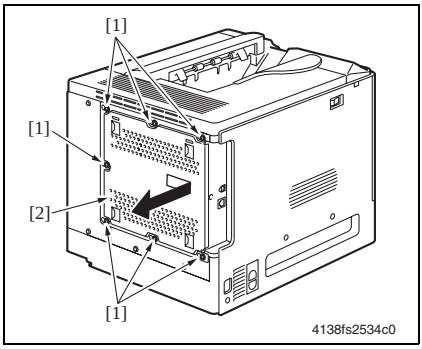


1. Remove the Rear Cover.
☞ 2-31
2. Remove seven screws [1] and the Print Control Board protective shield [2].

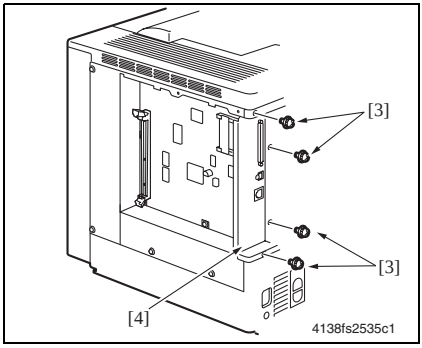


3. Remove the HDD unit.
4. Remove the connector [1] of the HDD unit.

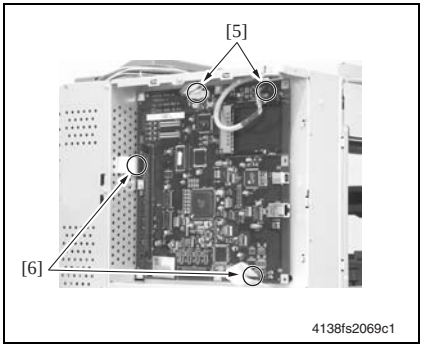
4.4.10 Print Control Board (PWB-P) (magicolor 5430 DL/5440 DL)



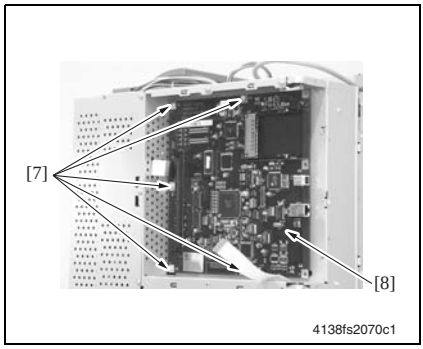
1. Remove the Rear Cover.
☞ 2-31
2. Remove seven screws [1] and the Print Control Board protective shield [2].



3. Remove the Left Cover.
☞ 2-31
4. Remove four screws [3].



5. Disconnect the two connectors [5] on the Print Control Board.
6. Disconnect the two flat cables [6] from the Print Control Board.



7. Remove five screws [7] and the Print Control Board [8].

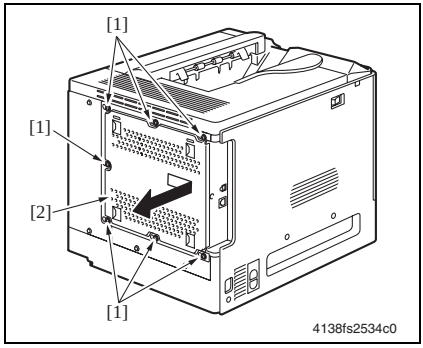
NOTE

- **When the Print Control Board is replaced, upgrade the Firmware to the latest version.**

☞ 2-21

8. Remove three screws and the interface protective cover [4].

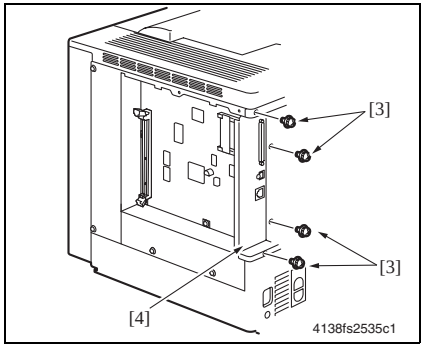
4.4.11 Print Control Board (PWB-P) (magicolor 5450)



1. Remove the Rear Cover.

☞ 2-31

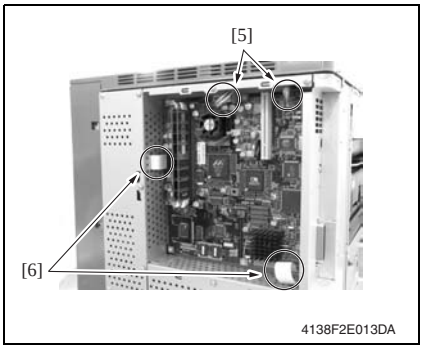
2. Remove seven screws [1] and the Print Control Board protective shield [2].



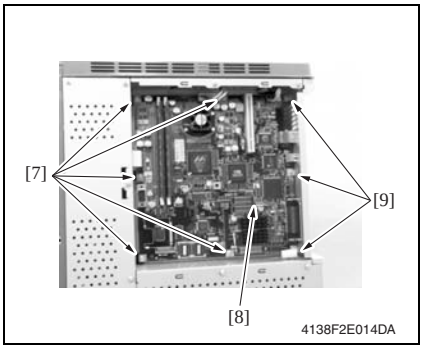
3. Remove the Left Cover.

☞ 2-31

4. Remove four screws [3].



5. Disconnect the two connectors [5] on the Print Control Board.
6. Disconnect the two flat cables [6] from the Print Control Board.



7. Remove five screws [7] and the Print Control Board [8].

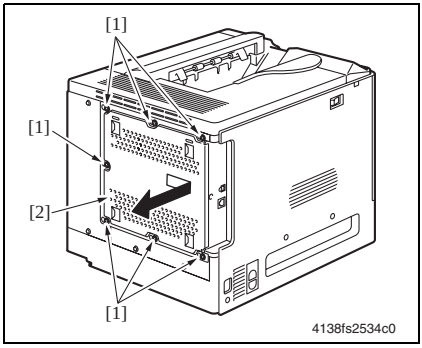
NOTE
- **When the Print Control Board is replaced, upgrade the Firmware to the latest version.**

☞ 2-23

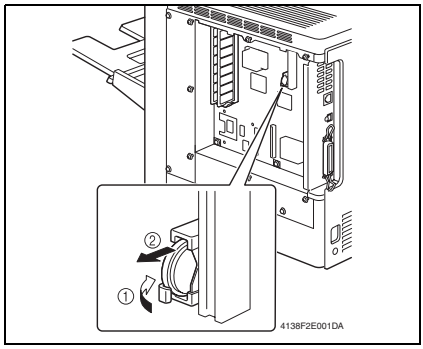
8. Remove three screws [9] and the interface protective cover [4].

4.4.12 Backup Battery (magicolor 5450 only)

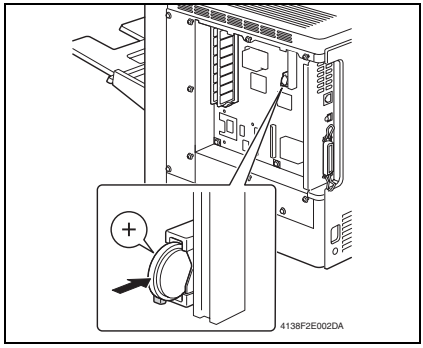
NOTE
- **There is a risk of explosion if the battery is replaced with another one of an incorrect type. Dispose of used batteries according to the instructions.**
- **It is very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the removal of PWBs on page 2-28. In addition, always handle circuit boards by the edges only.**



1. Remove the Rear Cover.
☞ 2-31
2. Remove seven screws [1] and the Print Control Board protective shield [2].



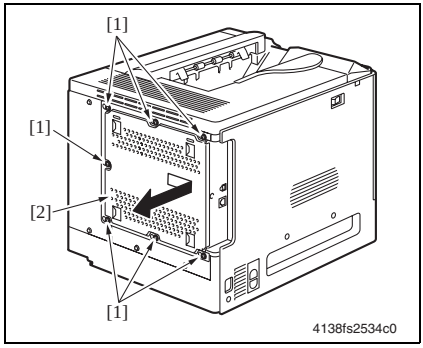
3. Remove the hook, and then remove the backup battery.



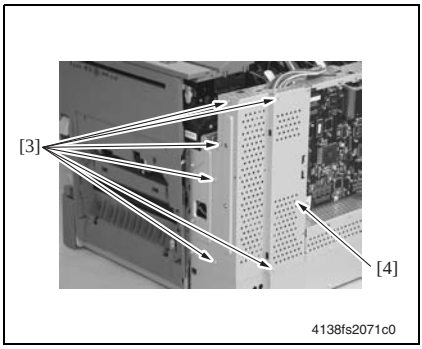
4. Insert a new backup battery.

NOTE
When inserting the new backup battery, be sure that the + side faces toward the left.

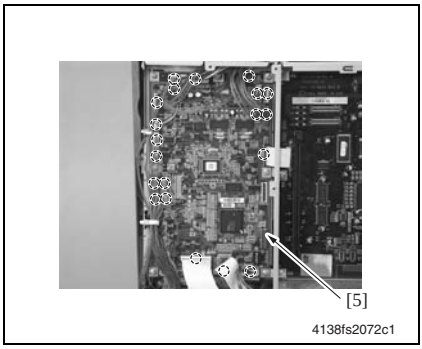
4.4.13 Mechanical Control Board (PWB-A)



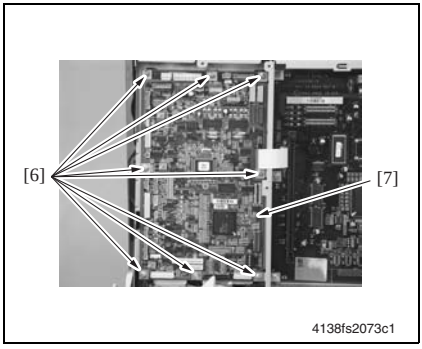
1. Remove the Rear Cover.
☞ 2-31
2. Remove the Rear Right Cover.
☞ 2-32
3. Remove seven screws [1] and the Print Control Board protective shield [2].



4. Remove six screws [3] and the Mechanical Control Board protective shield [4].



5. Disconnect all connectors and flat cables from the Mechanical Control Board [5].

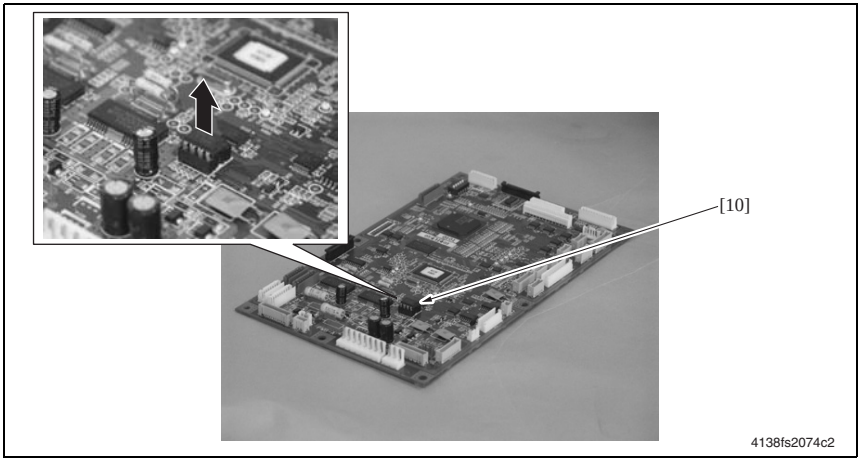


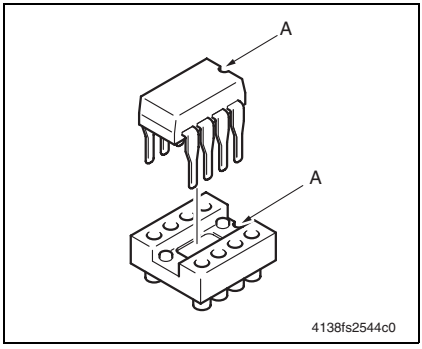
6. Remove eight screws [6] and the Mechanical Control Board [7].

7. Remove Parameter Chip (IC15) [10] from the Mechanical Control Board.

NOTE

- **When the Mechanical Control Board (PWB-A) has been replaced, be sure to remount Parameter Chip (IC15). Unmount Parameter Chip (IC15) from the old Mechanical Control Board and mount it on the new Mechanical Control Board.**





NOTE

- **When mounting Parameter Chip (IC15), make sure the notches ("A") are precisely lined up.**

4.4.14 Low Voltage Unit (LV)

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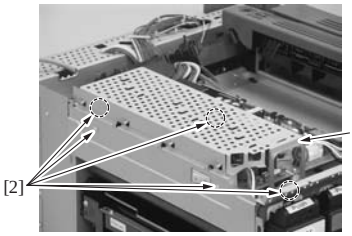
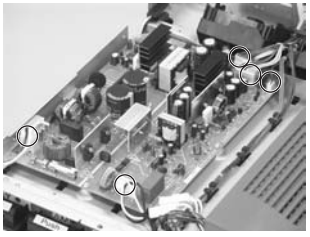
1. Remove the Exit Tray.
☞ 2-32
2. Remove the Left Cover.
☞ 2-31
3. Remove the Control Panel.
☞ 2-34
4. Remove the cable [1] of the Control Panel.



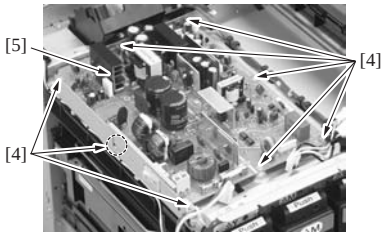
4138fs2014c0

5. Remove five screws [2] and the Low Voltage Unit protective cover [3].



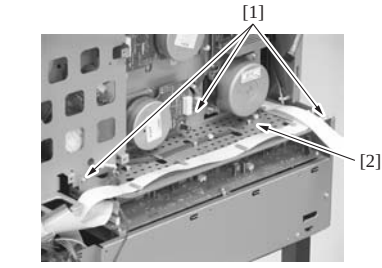
4138fs2015c0

6. Disconnect all connectors from the Low Voltage Unit.

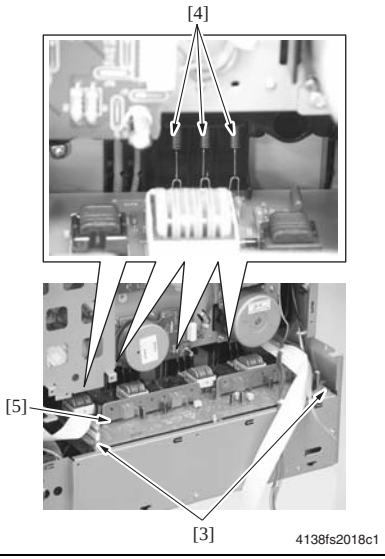


7. Remove eight screws [4] and the Low Voltage Unit [5].

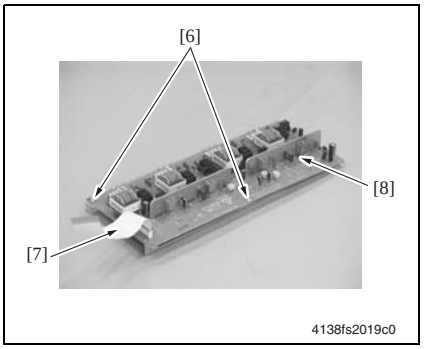
4.4.15 High Voltage Unit /1 (HV1)



1. Remove PWB Box/1.
☞ 2-47
2. Remove three screws [1] and the Harness Plate [2].

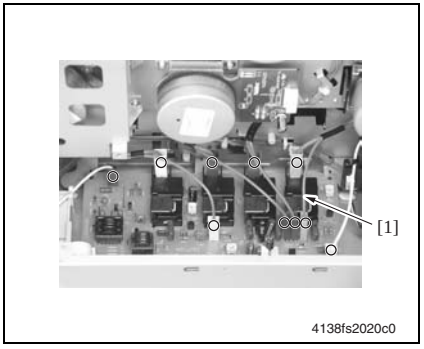


3. Remove two screws [3], 12 springs [4], and the High Voltage Unit/1 Assy [5].

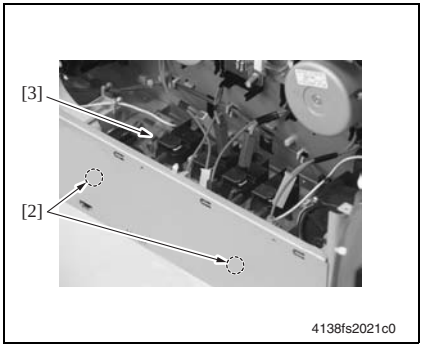


4. Remove two screws [6], the flat cable [7], and High Voltage Unit/1 [8].

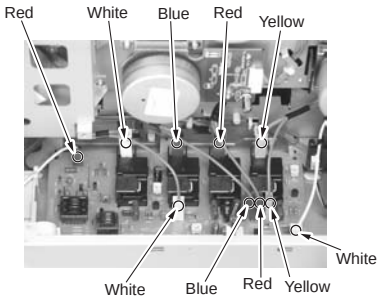
4.4.16 High Voltage Unit /2 (HV2)



1. Remove High Voltage Unit/1.
☞ 2-42
2. Disconnect all connectors and flat cables from High Voltage Unit/2 [1].



3. Remove two screws [2] and High Voltage Unit/2 [3].



Precautions for Reinstallation

- **When reinstalling High Voltage Unit/2, make sure that each color connector is in the correct position, as shown in the illustration on the left.**

4.4.17 Toner Level Sensor Board (PWB-D)

1. Open the Front Door.
2. Remove the Toner Cartridge and Waste Toner Bottle.
3. Remove the Upper Front Cover and Right Front Cover.

☞ 2-30

4. Remove the Control Panel.

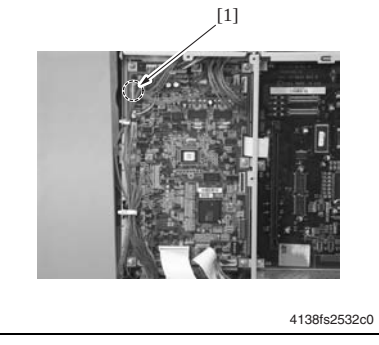
☞ 2-34

5. Remove the Exit Tray.

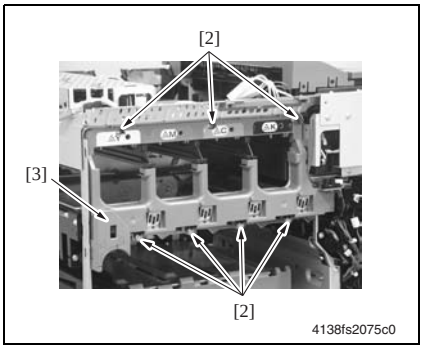
☞ 2-32

6. Remove the Mechanical Control Board protective shield.

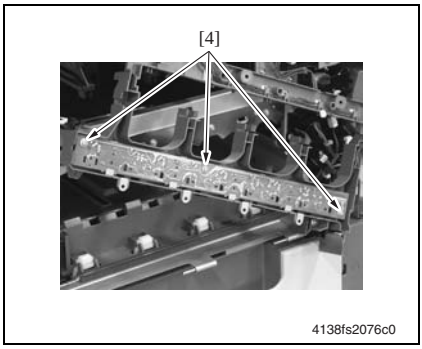
☞ Steps 1 to 4 on p.2-38 “Mechanical Control Board”



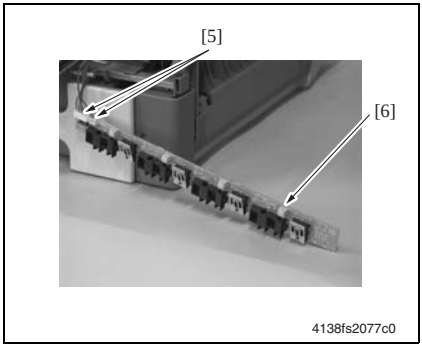
7. Disconnect one connector (PJ13A) [1] from the Mechanical Control Board.



8. Remove seven screws [2] and the Toner Level Sensor Board Assy [3].



9. Remove three screws [4].



10. Disconnect two connectors [5] and remove the Toner Level Sensor Board [6].

4.4.18 PH Unit

NOTE

- **Do not replace the PH Unit while the machine power turned ON. The laser beam that may be emitted can blind you.**
- **Do not attempt to disassemble or adjust the PH Unit. The laser beam that may be emitted can blind you.**

NOTE

- **The magicolor 5430 DL/5440 DL uses a different PH unit than does the magicolor 5450 (although the replacement procedures are identical). When replacing the PH unit, be sure to use the PH unit for the appropriate model. Using the incorrect PH unit will adversely affect image quality.**

1. Open the Front Door.
2. Remove the Toner Cartridges (C, M, Y, and Bk).

NOTE

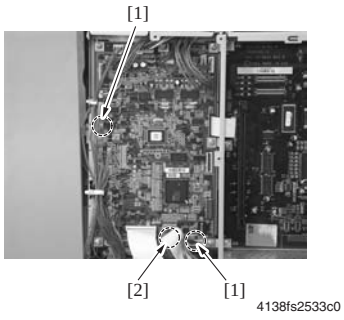
- **After the TC has been removed, be sure to place it in its black vinyl packing bag or in a dark place.**
- **After the Photo Conductor has been removed, cover it with the light-shielding cloth, and do not allow the it to remain outside the printer for a long time.**

3. Remove the Waste Toner Bottle.
4. Remove the Transfer Belt Unit.

☞ 2-16

5. Remove the Left Cover and Rear Cover.

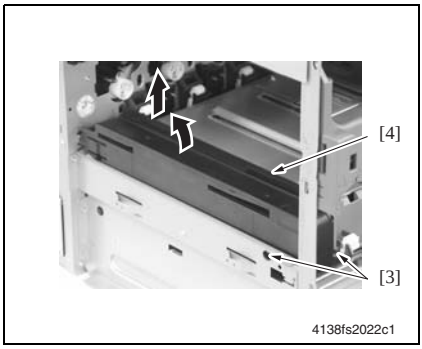
☞ 2-31



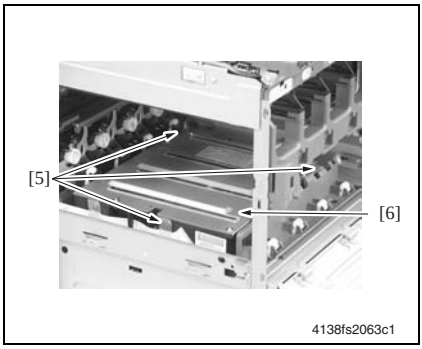
6. Remove PWB Box/1.

☞ 2-47

7. Disconnect two connectors (PJ22A, PJ38A) [1] and the flat cable (PJ23A) [2] from the Mechanical Control Board.

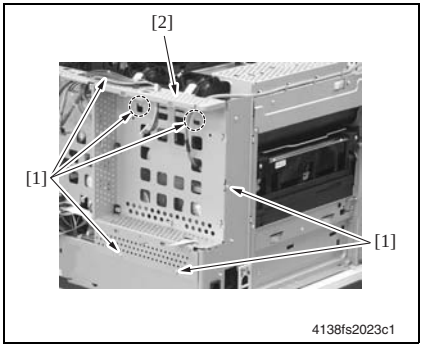


8. Unhook two tabs [3] and remove the Waste Toner Bottle Guide [4].



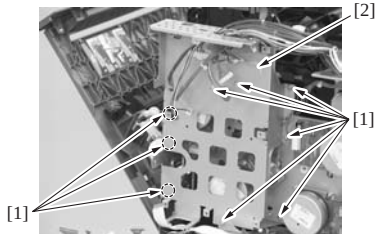
9. Remove three shoulder screws [5] and the PH Unit [6].

4.4.19 PWB Box/1



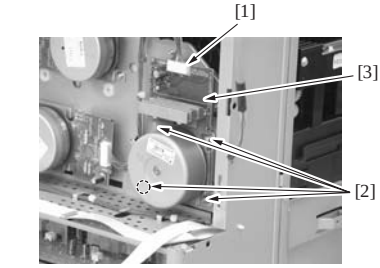
1. Remove the Print Control Board.
☞ 2-35
2. Remove the Mechanical Control Board.
☞ 2-38
3. Remove the Exit Tray.
☞ 2-32
4. Remove six screws [1] and PWB Box/1 [2].

4.4.20 PWB Box/2



1. Remove the Print Control Board.
☞ 2-35
2. Remove the Mechanical Control Board.
☞ 2-38
3. Remove PWB Box/1.
☞ 2-47
4. Remove nine screws [1] and PWB Box/2 [2].

4.4.21 Developing Motor /Y, M, C (M1)

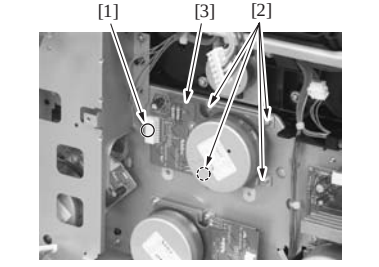


1. Remove PWB Box/1.
☞ 2-47
2. Disconnect the connector [1], and remove four screws [2] and the Developing Motor/Y,M,C [3].

NOTE

- **When installing the Developing Motor /Y, M, C, try to insert it straight, and take care not to damage the gears.**

4.4.22 Color PC Drum Motor (M2)

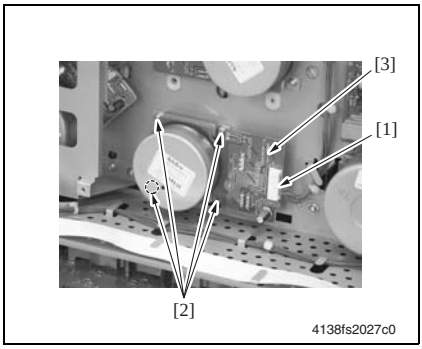


1. Remove PWB Box/1.
☞ 2-47
2. Disconnect the connector [1], and remove four screws [2] and the Color PC Drum Motor [3].

NOTE

- **When installing the Color PC Drum Motor, try to insert it straight, and take care not to damage the gears.**

4.4.23 Developing Motor /K (M5)

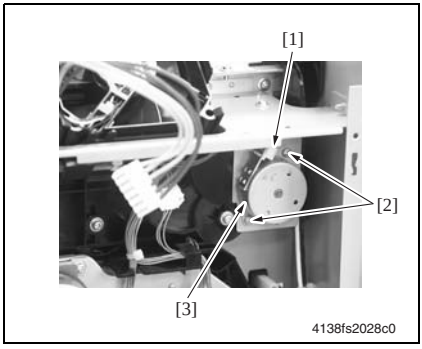


1. Remove PWB Box/1.
☞ 2-47
2. Disconnect the connector [1], and remove four screws [2] and the Developing Motor/K [3].

NOTE

- **When installing the Developing Motor /K, try to insert it straight, and take care not to damage the gears.**

4.4.24 Toner Supply Motor /Y, M (M6)

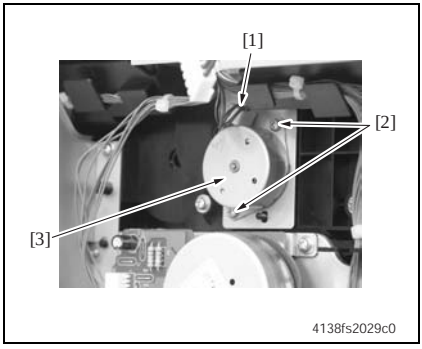


1. Remove PWB Box/1.
☞ 2-47
2. Disconnect the connector [1], and remove two screws [2] and the Toner Supply Motor/Y,M [3].

NOTE

- **When installing the Toner Supply Motor /Y, M, try to insert it straight, and take care not to damage the gears.**

4.4.25 Toner Supply Motor /C, K (M7)

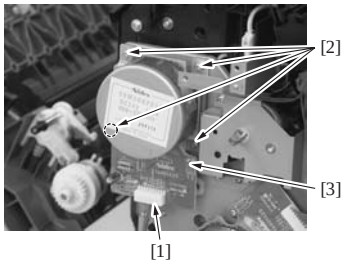


1. Remove PWB Box/1.
☞ 2-47
2. Disconnect the connector [1], and remove two screws [2] and the Toner Supply Motor/C,K [3].

NOTE

- **When installing the Toner Supply Motor /C, K, try to insert it straight, and take care not to damage the gears.**

4.4.26 Fusing Motor (M4)

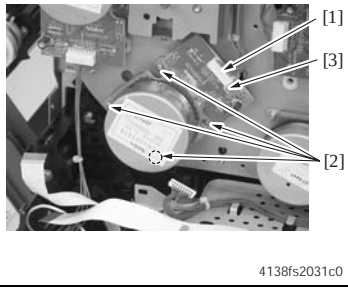


1. Remove PWB Box/1.
☞ 2-47
2. Remove PWB Box/2.
☞ 2-48
3. Disconnect the connector [1], and remove four screws [2] and the Fusing Motor [3].

NOTE

- **When installing the Fusing Motor, try to insert it straight, and take care not to damage the gears.**

4.4.27 Intermediate Transport Motor (M3)

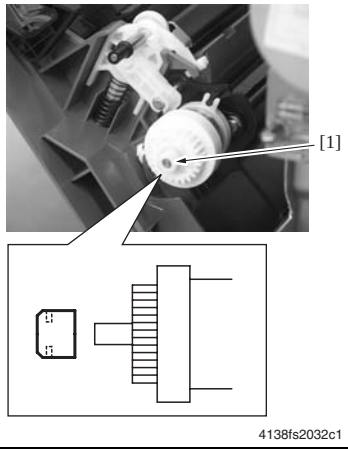


1. Remove PWB Box/1.
☞ 2-47
2. Remove PWB Box/2.
☞ 2-48
3. Disconnect the connector [1], and remove four screws [2] and the Intermediate Transport Motor [3].

NOTE

- **When installing the Intermediate Transport Motor, try to insert it straight, and take care not to damage the gears.**

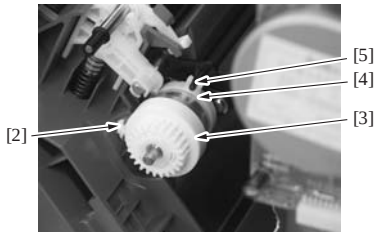
4.4.28 Synchronizing Roller Clutch (CL2)



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

Precautions for Reinstallation

- **When reinstalling the bearing, make sure that the rib on the inside of the bearing faces as shown in the illustration on the left.**



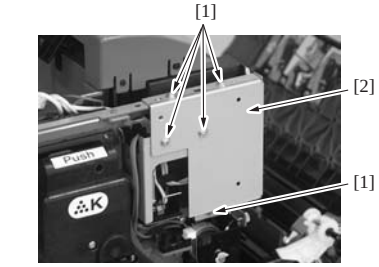
4138fs2034c0

3. Disconnect the connector [2] and remove the Synchronizing Roller Clutch [3].

Precautions for Reinstallation

- **When reinstalling the Synchronizing Roller Clutch, make sure that the protrusion [4] on the Synchronizing Roller Clutch fits into the locking slot [5].**

4.4.29 Pressure/Retraction Clutch /2nd Image Transfer (CL5)

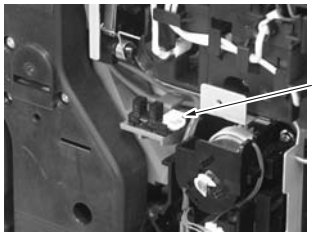


4138fs2035c0

1. Open the Front Door.
2. Remove the Right Front Cover.
☞ 2-30
3. Open the Right Door.
4. Remove five screws [1] and the connector cover [2].

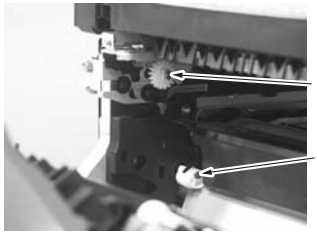
4138fs2036c0

5. Disconnect six connectors.



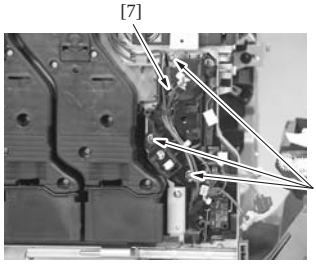
4138fs2037c0

6. Remove the Front Door Sensor (PC22) [3].



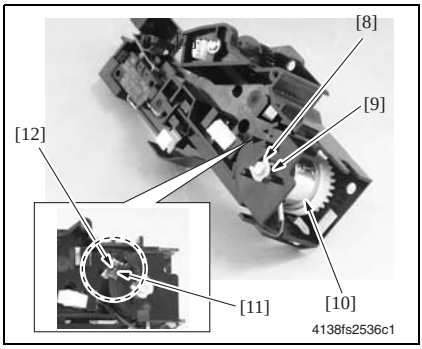
4138fs2038c0

7. Remove Gear/1 [4] and Gear/2 [5].



4138fs2039c0

8. Remove three screws [6] and the 2nd Image Transfer Pressure/ Retraction Drive Assy [7].

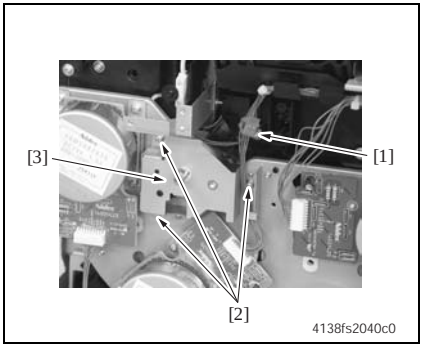


9. Snap off the C-clip [8], and remove the bearing [9] and the Pressure/ Retraction Clutch/2nd Image Transfer [10].

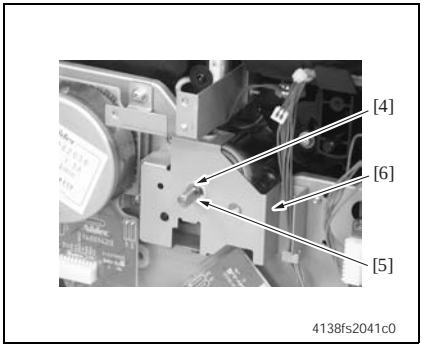
Precautions for Reinstallation

- **When reinstalling the bearing and Pressure/Retraction Clutch/2nd Image Transfer, make sure that the protrusion [11] on the Pressure/ Retraction Clutch/2nd Image Transfer fits into the locking slot [12].**

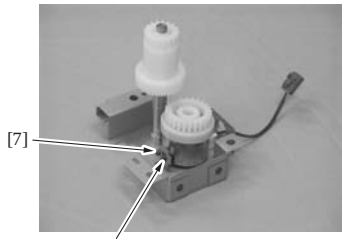
4.4.30 Pressure/Retraction Clutch /1st Image Transfer (CL4)



1. Remove PWB Box/1.
☞ 2-47
2. Remove PWB Box/2
☞ 2-48
3. Disconnect the connector [1], remove three screws [2], and pull out the Pressure/Retraction Clutch/1st Image Transfer Assy [3].



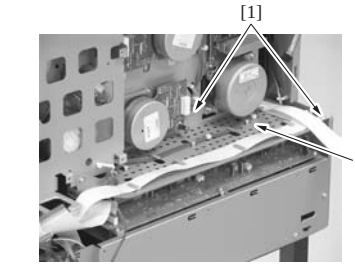
4. Snap off the E-ring [4], and remove the bearing [5] and the Pressure/ Retraction Clutch/1st Image Transfer [6].



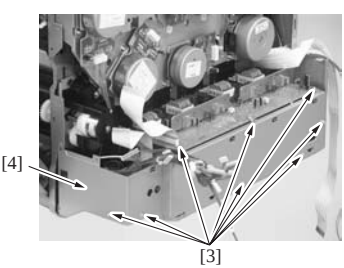
Precautions for Reinstallation

- **When reinstalling the bearing and Pressure/Retraction Clutch/1st Image Transfer, make sure that the protrusion [7] on the Pressure/ Retraction Clutch/1st Image Transfer fits into the locking slot [8].**

4.4.31 Tray 1 Paper Feed Clutch (CL1)



1. Remove PWB Box/1.
☞ 2-47
2. Remove PWB Box/2.
☞ 2-48
3. Remove two screws [1] and the Harness Plate [2].

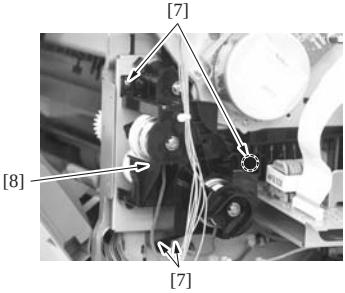


4. Remove eight screws [3] and the High Voltage Unit/1 mounting plate [4].

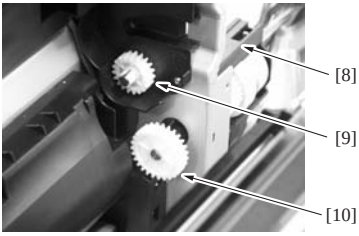
5. Disconnect the white connector [5] and the blue connector [6].

Precautions for Removing the Connector

- **The blue connector [6] is only on the magicolor 5440 DL/5450.**



6. Remove four screws [7].



7. Remove the Gear [9] and the Gear [10].

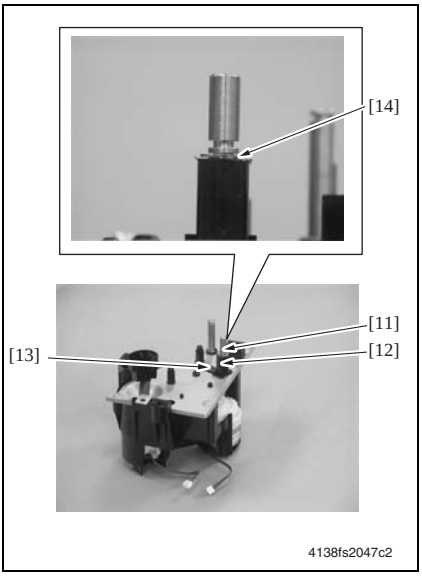
NOTE

- **Gear [10] is only on the magicolor 5440 DL/5450.**

Precautions for Reinstallation

- **When the Tray 1 Paper Feed Clutch is reinstalled, replace the gears that have been removed, as these gears could have been damaged.**

8. Remove the Paper Feed and Conveyance Assy [8].



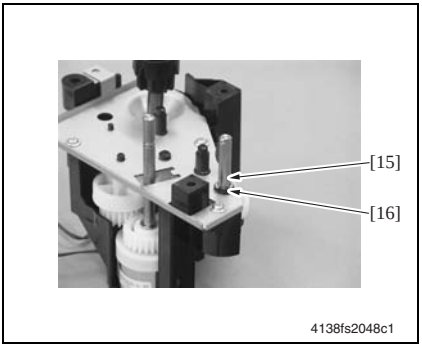
9. Snap off the E-ring [11] and remove the bearing [12] and spring [13].

Precautions for Removing the E-ring

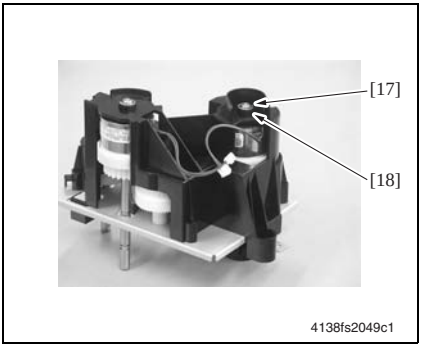
- **The E-ring [11], the bearing [12], and spring [13] are on the magicolor 5440 DL/5450 only.**

Precautions for Reinstallation

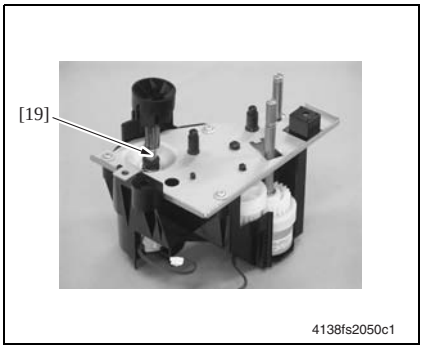
- **Fit the E-ring to the lower groove [14] of the two grooves in the shaft.**



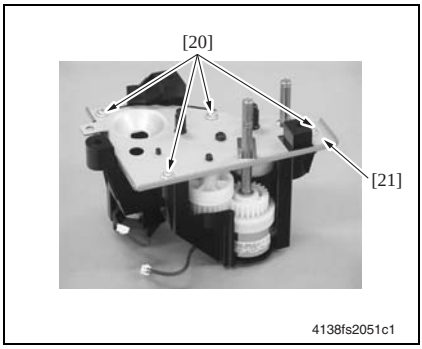
10. Snap off the E-ring [15] and remove the bearing [16].



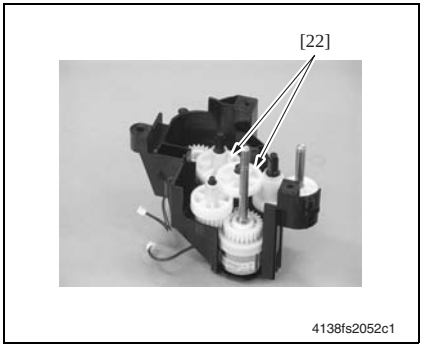
11. Snap off the E-ring [17] and remove the bearing [18].



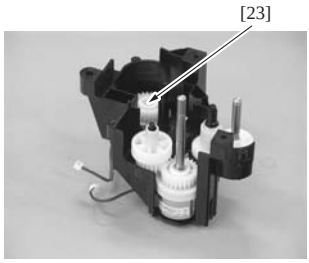
12. Remove the Shaft [19].



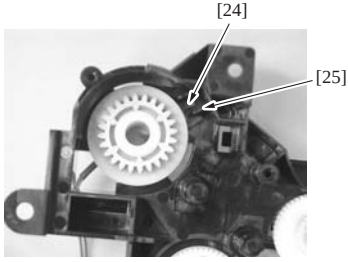
13. Remove four screws [20] and the Paper Feed and Conveyance Assy holding metal plate [21].



14. Remove two gears [22].



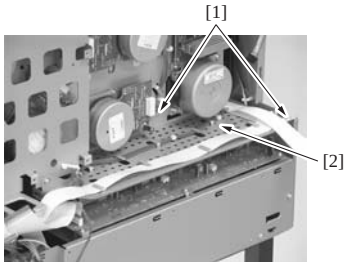
15. Remove the Tray 1 Paper Feed Clutch [23].



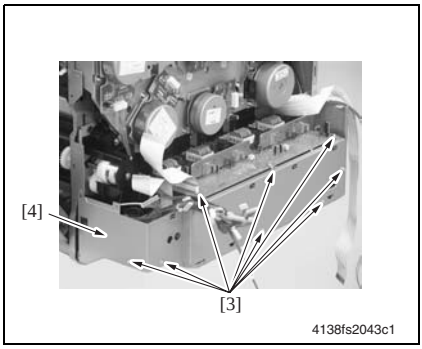
Precautions for Reinstallation

- **When reinstalling the Tray1 Paper Feed Clutch, make sure that the protrusion [24] on the Tray 1 Paper Feed Clutch fits into the locking slot [25].**
- **Pass the harness of the Tray 1 Paper Feed Clutch through the location shown in the picture on the left.**

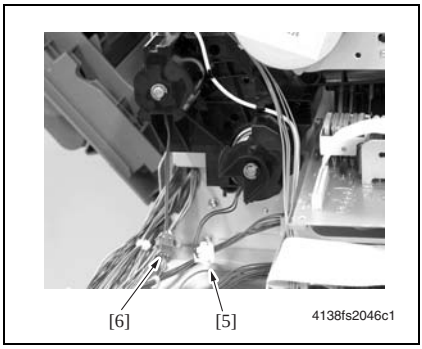
4.4.32 Manual Feed Tray Paper Feed Clutch (CL3) (magicolor 5440 DL/5450 only)



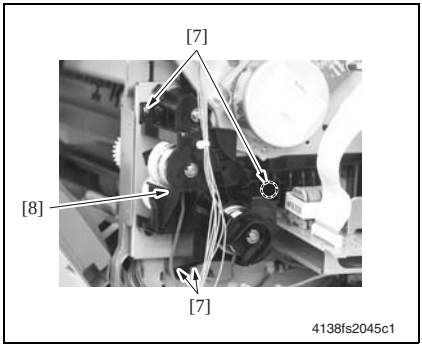
1. Remove PWB Box/1.
☞ 2-47
2. Remove PWB Box/2.
☞ 2-48
3. Remove two screws [1] and remove the Harness Plate [2].



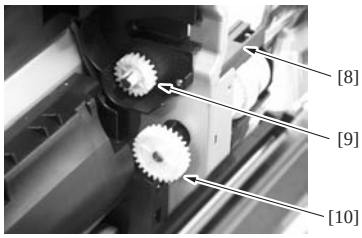
4. Remove eight screws [3] and the High Voltage Unit/1 mounting plate [4].



5. Disconnect the white connector [5] and the blue connector [6].



6. Remove four screws [7].



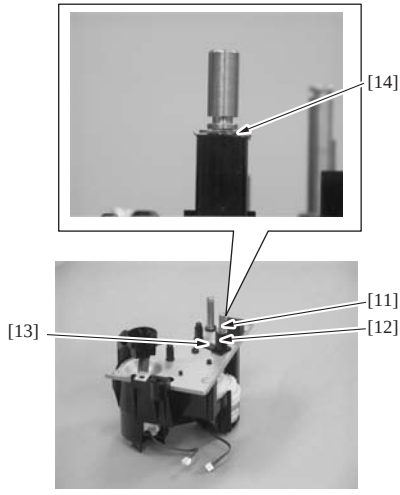
4138fs2543c1

7. Remove the Gear [9] and the Gear [10].

Precautions for Reinstallation

- **When the Tray 1 Paper Feed Clutch is reinstalled, replace the gears that have been removed, as these gears could have been damaged.**

8. Remove the Paper Feed and Conveyance Assy [8].

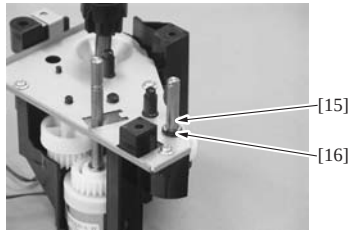


4138fs2047c2

9. Snap off the E-ring [11] and remove the bearing [12] and spring [13].

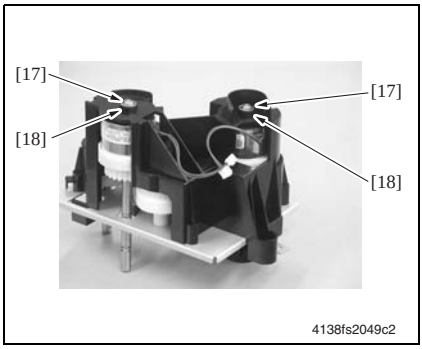
Precautions for Reinstallation

- **When reinstalling the E-ring, fit it to the lower groove [14] of the two grooves in the shaft.**

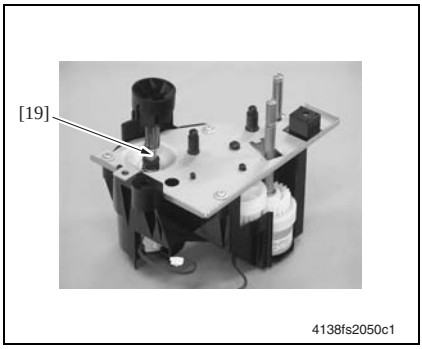


4138fs2048c1

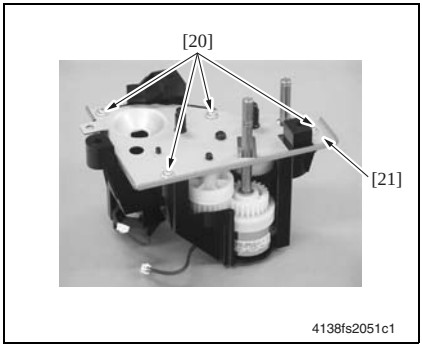
10. Snap off the E-ring [15] and remove the bearing [16].



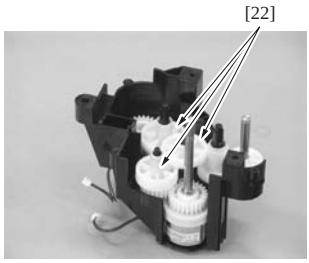
11. Snap off two E-rings [17] and remove two bearings [18].



12. Remove the Shaft [19].

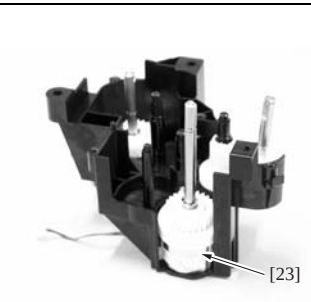


13. Remove four screws [20] and the Paper Feed and Conveyance Assy holding metal plate [21].



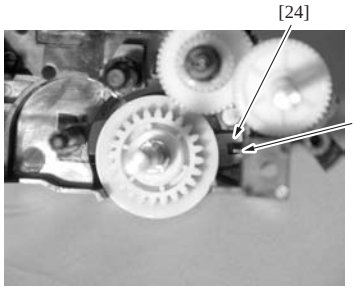
4138fs2052c2

14. Remove three gears [22].

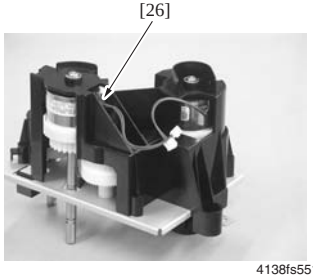


4138fs5513c0

15. Remove the Shaft and the Manual Feed Tray Paper Feed Clutch [23].



4138fs5514c0

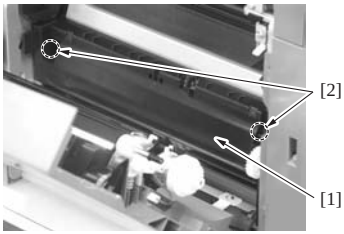


4138fs5515c0

Precautions for Reinstallation

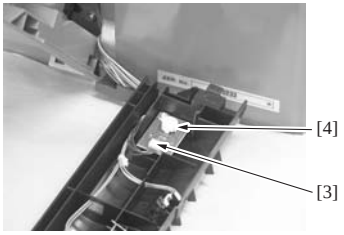
- **When reinstalling the Shaft and the Manual Feed Tray Paper Feed Clutch, make sure that the protrusion [24] on the Manual Feed Tray Paper Feed Clutch fits into the locking slot [25].**
- **Pass the harness of the Manual Feed Tray Paper Feed Clutch through the location [26] shown in the picture on the left.**

4.4.33 Temperature/ Humidity Sensor (HS1)



4138fs2061c0

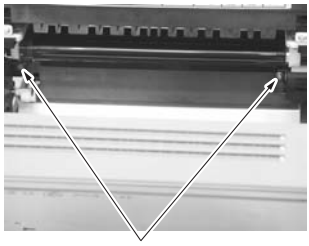
1. Open the Right Door.
2. Remove the screw [2] from the sensor holder [1].
3. Remove the sensor holder [1] by sliding it to the front.



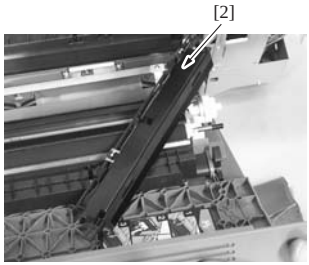
4138fs2062c0

4. Remove the screw [3], disconnect the connector [4], and remove the Temperature/Humidity Sensor.

4.4.34 AIDC Sensor/Rt, AIDC Sensor/Lt (AIDC R, AIDC L)



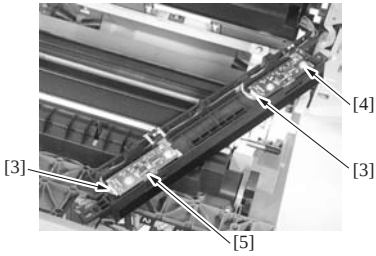
1. Open the Right Door.
2. Remove the Transfer Belt Unit.
☞ 2-16
3. Remove two screws [1].



4. Unhook the spring and remove the cover [2].

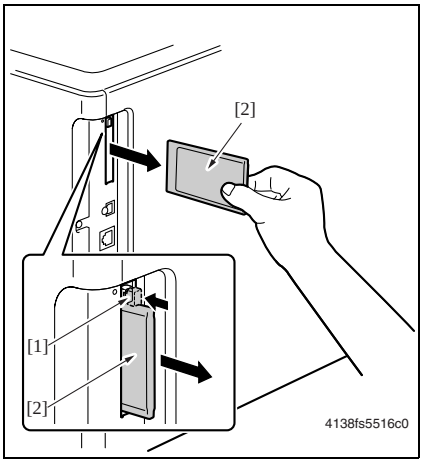
NOTE

- **Be careful not to lose the spring.**



5. Disconnect one connector [3] each, and remove the AIDC Sensor/Lt [4] and AIDC Sensor/Rt [5].

4.4.35 Camera Direct Photo Print Card (magicolor 5440 DL only)



1. Push the Lever [1].
2. Remove the Camera Direct Photo Print Card [2].

III Adjustment/Setting

1. How to Use the Adjustment Section

- This section contains detailed information on the adjustment items and procedures for this machine.
- Throughout this section the default settings are indicated by boldface.

A. Advance Checks

- Before attempting to solve the customer's problem, the following advance checks must be made:

1. Does the power supply voltage meet the specifications?
2. Is the power supply is properly grounded?
3. Does the machine share a power supply with any other machine that draws a large current intermittently (for example, an elevator or air conditioner that generates electrical noise)?
4. Is the installation site level and environmentally appropriate (for example, away from high temperatures, high humidity, direct sunlight, direct ventilation, etc.?
5. Does the original have a problem that may cause a defective image?
6. Is the density properly selected?
7. Is the Original Glass, slit glass, or a related part dirty?
8. Is the correct media being used for printing?
9. Are the units, parts, and supplies used for printing (developer, PC Drum, etc.) properly replenished and replaced when they reach the end of their useful service life?
10. Is there an adequate supply of toner in the toner cartridges?

B. Precautions for Service Jobs

1. Unplug the machine's power cord before starting a service job procedure.
2. If it is unavoidably necessary to service the machine with its power turned ON, use the utmost care not to get caught in the Scanner Cables or gears of the Exposure Unit.
3. Use special care when handling the Fusing Unit, which can be extremely hot.
4. The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.
5. Take care not to damage the PC Drum with a tool or similar device.
6. Do not touch IC pins with your bare hands.

2. Adjustment Item List

2.1 magicolor 5430 DL/5440 DL

Adjustment/Setting Items				NO	Replace Transfer Roller	Replace Transfer Belt Unit	Replace Fusing Unit	Replace Mechanical Control Board	Replace Print Control Board	Execute F/W update	RESTORE USER DEFAULT	RESTORE FACTORY DEFAULT
MENU	SERVICE	COLOR CALIBRATION		1	(2)	(2)						
		CONTROLLER VER.		2					❍	❍		
		ENGINE VER.		3				(2)				
		RESET COUNTER	Transfer Roller	4	(1)							
			Transfer Belt Unit	5		(1)						
		RESTORE USER DEFAULT		6								
	SERVICE SERVICE PERSON	RESTORE FACTORY DEFAULT		7								
		RESET COUNTER Fusing Unit		8			❍					
Re-entry				9							❍	❍
Remounting of Parameter Chip (Mechanical Control Board: PWB-A)				10				(1)				

* 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.

2.2 magicolor 5450

Adjustment/Setting Items				NO	Replace Transfer Roller	Replace Transfer Belt Unit	Replace Fusing Unit	Replace Mechanical Control Board	Replace Print Control Board	Execute F/W update	RESTORE DEFAULTS
			Replacement Part/Service Job								
MENU	QUALITY MENU	CALIBRATION	AIDC PROCESS	1	(2)	(2)	(2)				
		SUPPLIES	REPLACE/TRANS. BELT	2		(1)					
			REPLACE/ TRANS. ROLLER	3	(1)						
			REPLACE/FUSER UNIT	4			(1)				
	SYS DEFAULT MENU	RESTORE DEFAULTS		5							
	SERVICE MENU	FIRMWARE VERSION	CONTROLLER EW	6					❍	❍	
			ENGINE F/W	7				(2)	❍	❍	
			BOOT F/W	8					❍	❍	
Re-entry				9							❍
Remounting of Parameter Chip (Mechanical Control Board)				10				(1)			

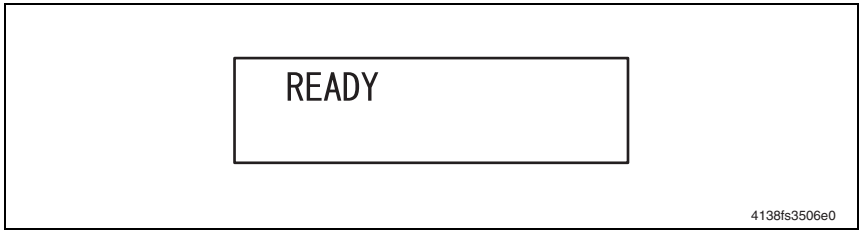
* This table shows the adjustment items that are required when a part of the machine has been replaced. Priority order, if applicable, during the adjustment procedures is indicated by the corresponding number.

3. Description of the Control Panel (magicolor 5430 DL /5440 DL)

3.1 Control Panel Display

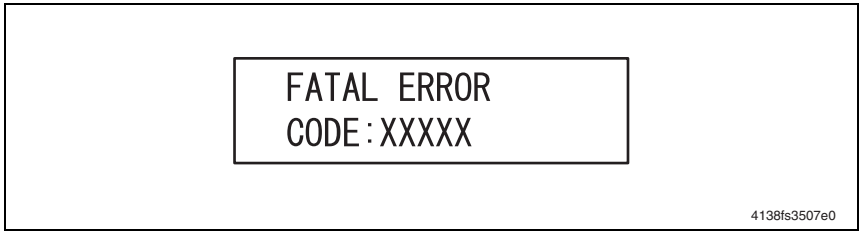
3.1.1 Basic screen

- The Basic Screen is the Initialization Screen that displays when warmup is complete or when the menu is cancelled.



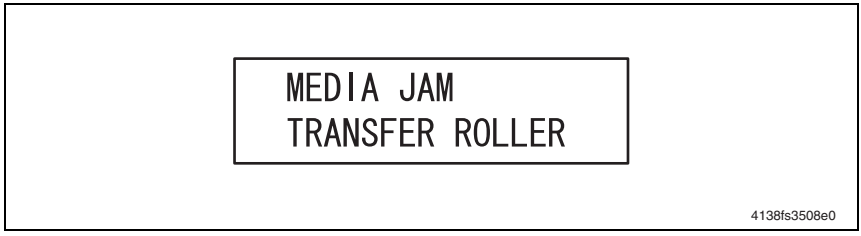
3.1.2 Warning screen

- This screen appears when a malfunction occurs that cannot be taken care of by the user.



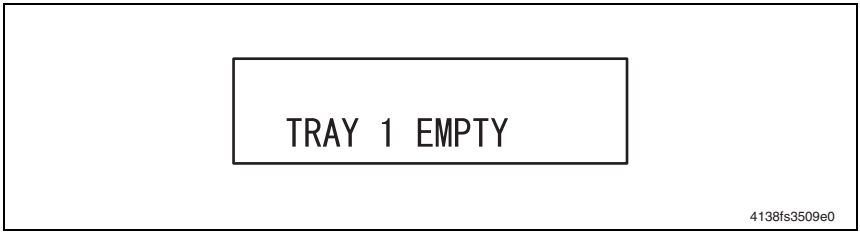
3.1.3 Error display

- This display appears when an error occurs.



3.1.4 Caution display

- A caution display appears when an event that requires user intervention, but doesn't interrupt printing, occurs.



3.2 List of Control Panel Messages

NOTE

- **When two or more messages are to be displayed, the message with the higher priority will be displayed.**
- **When a message concerning Consumables/Periodic Replacement Parts (Units) is displayed, print a "CONFIG PAGE" from the "SPECIAL/PRINT CONFIG PAGE" menu and check the status of the other consumables, too.**

☞ **"4.2.1 PRINT CONFIG PAGE"** 3-13

3.2.1 Normal state messages

- Normal state messages are displayed on the upper line of the LCD.

Message	Description
READY	• Print enabled.
PROCESSING	• Print data processing.
PRINTING	• Data being printed.
WARMING UP	• During warmup.
CALIBRATING	• Color shift correction in progress.
ENERGY SAVER	• Machine in Energy Saver mode; returns to normal mode within 35 seconds after print data is received.
CANCELING JOB	• Job canceled.

3.2.2 Caution messages

- Caution messages are displayed on the lower line of the LCD.

Message	Description
UNSUPPORTED DIMM	• DIMM currently installed is not supported.
TRAY 1 EMPTY	• No media in Tray 1
TRAY 2 EMPTY	• No media in Tray 2 (only when a Lower Feeder Unit is installed)
TRAY 3 EMPTY	• No media in Tray 3 (only when a Lower Feeder Unit is installed)
FUSER LIFE LOW	• Fusing Unit needs replacement soon.
TRANS.ROLLER LOW	• Transfer Roller needs replacement soon.
TRANSFER LOW	• Transfer Belt Unit needs replacement soon.
FUSER LIFE END	• Fusing Unit service life has been reached.
TRANS.ROLLER END	• Transfer Roller service life has been reached.
TRANSFER END	• Transfer Belt Unit service life has been reached.
WASTE:NEAR FULL	• Waste Toner Bottle needs replacement soon.
X TONER LOW	• The specified color toner needs replacement soon.
SIZE MISMATCH	• Media of the size specified in the driver is not loaded in any Tray. • Media of a size not specified in the driver is loaded in the Tray.

*: The lower the message in the above list, the higher the priority.

3.2.3 Minor error messages

Message	Description
TONER EMPTY X	• X toner has run out. Appears only when ENGINE/TONER EMPTY: CONTINUE is set. Monochrome printing can continue even with no color toner. Color printing cannot continue if C, M, or Y toner runs out. At this time, a Serious error message is displayed.
INCORRECT CART. X	• X toner is not the correct type. • X toner is not the correct volume. A print cycle can be initiated, but is run at 1/3 the normal print speed. **NOTE** **A high-capacity toner cartridge for the magicolor 5440 DL /5450 cannot be used for the magicolor 5430 DL.**
TONER LIFE END X	• The specified color toner service life has been reached.

*: The lower the message in the above list, the higher the priority.

3.2.4 Error messages

Message	Description
DRAWER OPEN TRAY X	• Tray X is not closed.
PUT MEDIA: M-TRAY “SIZE”	• The media size set in the printer driver does not match that of the media loaded in the Manual Feed Tray.
PUT MEDIA: M-TRAY “MEDIA”	• The media type set in the printer driver does not match that of the media loaded in the Manual Feed Tray.
PUT MEDIA:TRAY 1 “SIZE”	• The media size set in the printer driver does not match that of the media loaded in Tray 1.
PUT MEDIA:TRAY 1 “MEDIA”	• The media type set in the printer driver does not match that of the media loaded in Tray 1.
PUT MEDIA:TRAY 2 “SIZE”	• The media size set in the printer driver does not match that of the media loaded in Tray 2 (only when a Lower Feeder Unit is installed).
PUT MEDIA:TRAY 3 “SIZE”	• The media size set in the printer driver does not match that of the media loaded in Tray 3 (only when a Lower Feeder Unit is installed).
MEDIA JAM XXXX	• A media jam has occurred at location XXXX. ☞ For troubleshooting procedures, see “IV Troubleshooting” or the relevant Service Manual of the option concerned.

*: The lower the message in the above list, the higher the priority.

3.2.5 Serious error messages

Message	Description
SIZE/TYPE ERROR	• The correct media size or type is not loaded in, or fed through, the machine.
SIZE/TYPE ERROR DUPLEX	• The media size or type loaded in the machine is not good for 2-sided printing.
DUPLEX UNIT NOT ATTACHED	• A Duplex Option is not installed, but 2-sided printing is specified in the printer driver.
MANUAL FEED TRAY NOT INSTALLED	• The specified tray is not installed, but it is set in the printer driver.
TRAY X NOT ATTACHED	
REPLACE TONER X	• The specified color toner has run out. Appears only when ENGINE/TONER EMPTY: STOP is set.
WASTE BOTTLE FULL	• The Waste Toner Bottle is full.
FUSER NOT ATTACHED	• The Fusing Unit is not installed.
X TONER NOT INSTALLED	• The specified color toner is not installed correctly. • The specified color toner is not KONICA MINOLTA toner.
COVER OPEN TRAY X	• The Right Cover of Tray 2 or Tray 3 is open.
COVER OPEN DUPLEX	• The Duplex Option door is open.
COVER OPEN SIDE	• The Right Door of the machine is open.
COVER OPEN FRONT	• The Front Door of the machine is open.
ERROR VIDEO UNDERRUN	• The volume of data to be printed exceeds the permissible amount of data to be transferred in the machine
ERROR MEMORY OVERFLOW	• The volume of data to be printed exceeds the permissible amount of data to be processed by the machine memory.

*: The lower the message in the above list, the higher the priority.

3.2.6 Malfunction messages

☞ For details of malfunction messages and troubleshooting procedures, see “IV Troubleshooting.”

Message	Description
ILLEGAL ERROR DUPLEX	• A Duplex Option is not installed. • A 2-sided print cycle has been initiated using a type and size of media not supported for 2-sided printing.
ERROR AIDC SENSOR	• The AIDC Sensor is faulty.
FATAL ERROR CODE:XXXX	• The Engine or Controller is faulty.
ERROR COMMUNICATION	• A communications error has occurred in the USB or Ethernet interface.
ERROR ENGINE INTERFACE	• There is a connection fault between the Mechanical Control Board (PWB-A) and Print Control Board (PWB-P).
ERROR RAM	• An error has occurred during RAM read/write operations.
ERROR DIMM	• A fault has occurred in SDRAM DIMM.
ERROR ROM	• An error has occurred in ROM.
ERROR CONTROLLER	• A fault has occurred in the controller.

*: The lower the message in the above list, the higher the priority.

3.2.7 Message Priority for Consumables/Periodic Replacement Parts (Units)

NOTE

- **When two or more messages are to be displayed, the message with the higher priority will be displayed.**
- **When a message concerning Consumable/Periodic Replacement Parts (Units) is displayed, print a "CONFIG PAGE" from the "SPECIAL/PRINT CONFIG PAGE" menu and check the status of the other consumables, too.**

☞ **"4.2.1 PRINT CONFIG PAGE"** 3-13

No.	Priority	Message
1	Lower	TRAY1 EMPTY
2		TRAY2 EMPTY
3		TRAY3 EMPTY
4		FUSER LIFE LOW
5		TRANS.ROLLER LOW
6		TRANSFER LOW
7		FUSER LIFE END
8		TRANS.ROLLER END
9		TRANSFER END
10		WASTE:NEAR FULL
11		C TONER LOW
12		M TONER LOW
13		Y TONER LOW
14		K TONER LOW
15		TONER EMPTY CYAN
16		TONER EMPTY MAGENTA
17		TONER EMPTY YELLOW
18		TONER EMPTY BLACK
19		TONER LIFE END CYAN
20		TONER LIFE END MAGENTA
21		TONER LIFE END YELLOW
22		TONER LIFE END BLACK
23	Higher	WASTE BOTTLE FULL

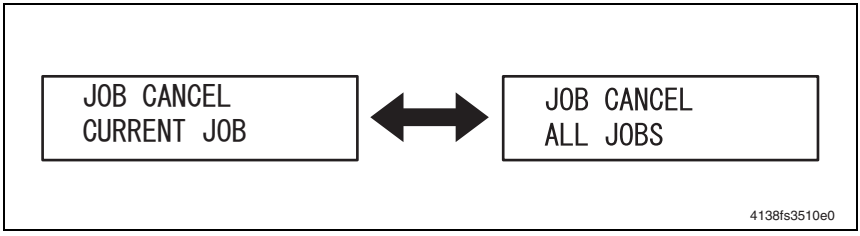
*: The lower the message in the above list, the higher the priority.

3.3 Canceling a Print Job

- A print job being processed or printed can be canceled by pressing the CANCEL key.

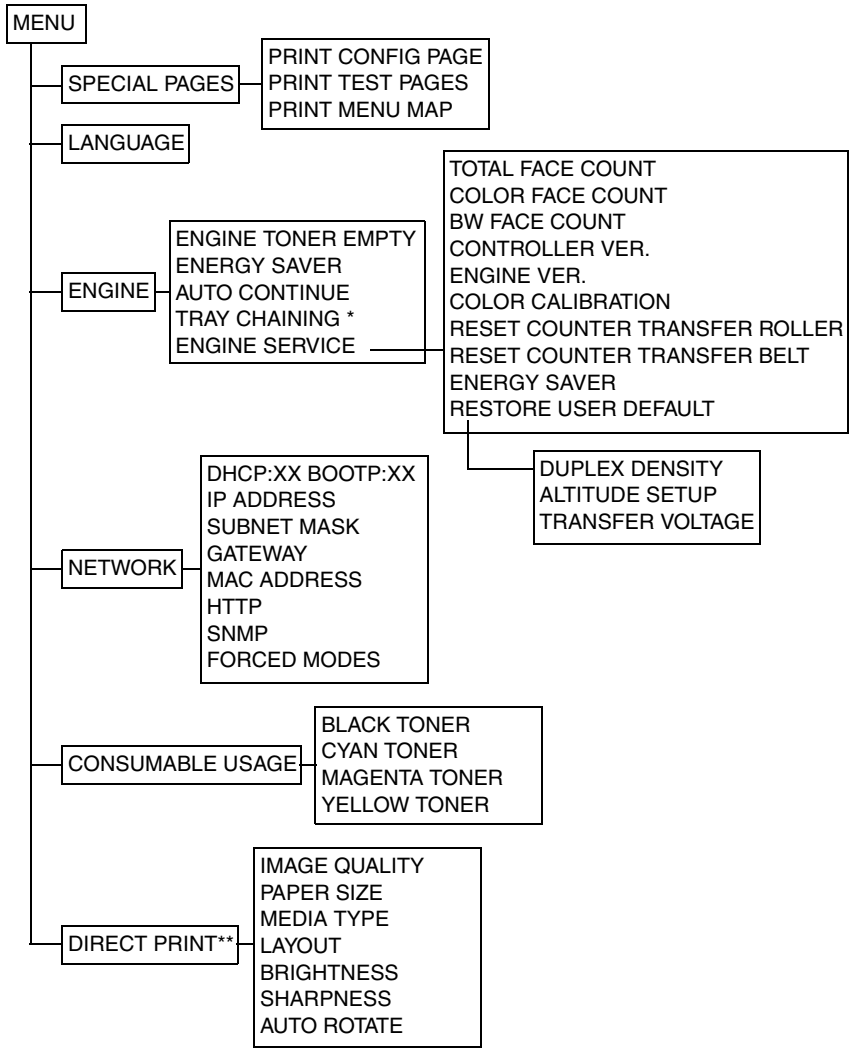
1. If the CANCEL key is pressed while a print job is being printed, a message appears on the Control Panel.
2. Select the job to be canceled using the right or left arrow key and press the MENU/ SELECT key.

Panel Display	Description
CURRENT JOB	Cancels the job being currently printed.
ALL JOBS	Cancels all jobs the machine has so far received.



4. Menu (magicolor 5430 DL /5440 DL)

4.1 List of Menu Functions



*: Available only when an optional Lower Feeder Unit is installed.
**: Available only when an optional Camera Direct Photo Print Card is installed in the magicolor 5440 DL.

4.2 SPECIAL PAGES

4.2.1 PRINT CONFIG PAGE

Function	• Prints a configuration page.
Use	• To check configuration of the machine. The following items can be checked: Consumables information Number of printed pages Options installed Installed memory Firmware version Network settings Engine settings
Setting /procedure	Select PRINT CONFIG PAGE and press the MENU/SELECT key.

4.2.2 PRINT TEST PAGES

Function	• Prints a test (demo) page.
Use	
Setting /procedure	• Select PRINT TEST PAGE and press the MENU/SELECT key. • When “READY” is displayed in the Control Panel message window, hold down the ▲ key for 2 seconds.

4.2.3 PRINT MENU MAP

Function	• Prints a menu map.
Use	• To check for available menu functions.
Setting /procedure	• Select PRINT MENU MAP and press the MENU/SELECT key.

4.3 LANGUAGE

Function	• Sets the language of the Control Panel display.
Use	• To change the language of the Control Panel display.
Setting/ procedure	• The default setting is “ENGLISH.” **ENGLISH** FRENCH GERMAN ITALIAN PORTUGUESE SPANISH CZECH JAPANESE

4.4 ENGINE

4.4.1 ENGINE TONER EMPTY

Function	• Specifies whether to stop or continue printing when a toner empty condition is detected.
Use	• To specify whether to permit printing upon a toner empty condition.
Setting /procedure	• The setting can be changed during printing. • The default setting is “STOP.” **STOP** CONTINUE

4.4.2 ENERGY SAVER

Function	• Sets the amount of time before the machine enters Energy Saver mode after the last print is received or the last key operated. • The Energy Saver mode is automatically canceled when any of the following operations is performed: The machine is restarted. A print job is received. Any of the keys on the Control Panel is pressed. The Front Door or Right Door is opened and closed. A Tray is opened, then closed.
Use	• To change the amount of time before the machine enters Energy Saver mode.
Setting /procedure	• The default setting is “30 MINUTES.” 15 MINUTES **30 MINUTES** 1 HOUR 2 HOURS

4.4.3 AUTO CONTINUE

Function	• Enables or disables printing when the size of the media loaded in the tray does not match that of the print data.
Use	• To select whether to print data on media of another size when the size of the media loaded in the tray does not match that of the print data.
Setting /procedure	• The setting can be changed during printing; however, the change is applied beginning with the next job. • The default setting is “ON.” **ON** OFF

4.4.4 TRAY CHAINING

Function Use	• Enables or disables printing when the current tray runs out of media during the print cycle by automatically selecting another one loaded with the media of the same size and type. • The setting is available only when an optional Lower Feeder Unit is installed.
Setting/ procedure	• The setting can be changed during printing; however, the change is applied beginning with the next job. • The default setting is “ON.” **ON** OFF

4.4.5 ENGINE SERVICE

A. TOTAL FACE COUNT

Function	• Displays the total number of printed pages.
Use	• To identify the use condition of the printer by finding the total number of printed pages.

B. COLOR FACE COUNT

Function	• Displays the total number of pages printed in color.
Use	• To identify the use condition of the printer by finding the total number of pages printed in color.

C. BW FACE COUNT

Function	• Displays the total number of pages printed in monochrome.
Use	• To identify the use condition of the printer by finding the total number of pages printed in monochrome.

D. CONTROLLER VER.

Function	• Displays the version information of the controller firmware.
Use	• To determine whether to upgrade the controller firmware. • To determine the controller firmware version when the Print Control Board is replaced with a new one.

E. ENGINE VER.

Function	• Displays the version information of the printer engine firmware.
Use	• To determine the engine firmware version when the Mechanical Control Board is replaced with a new one.

F. COLOR CALIBRATION

Function	• Executes COLOR CALIBRATION.
Use	• To calibrate the printer when the printed image is faulty. • To calibrate the printer after the Transfer Belt Unit and Transfer Roller are replaced.
Setting /procedure	*1.* Select COLOR CALIBRATION and press the MENU/SELECT key. *2.* The COLOR CALIBRATION is executed and, when it is completed, the initial screen reappears.

G. RESET COUNTER TRANSFER ROLLER

Function	• Resets the counter value of the Transfer Roller.
Use	• To reset the counter when the Transfer Roller is replaced.
Setting/ procedure	*1.* Select RESET COUNTER TRANSFER ROLLER and press the MENU/SELECT key. *2.* This resets the counter and the Engine/Service menu reappears.

H. RESET COUNTER TRANSFER UNIT

Function	• Resets the counter value of the Transfer Belt Unit.
Use	• To reset the counter when the Transfer Belt Unit is replaced.
Setting/ procedure	*1.* Select RESET COUNTER TRANSFER UNIT and press the MENU/SELECT key. *2.* This resets the counter and the Engine/Service menu reappears.

I. ENERGY SAVER

Function	• Selects whether to use Energy Saver or not.
Use	• To specify whether or not to use Energy Saver mode.
Setting /procedure	• The default setting is “ON.” **ON** OFF

J. RESTORE USER DEFAULT

Function	• Reinitializes the ENERGY SAVER, AUTO CONTINUE, and TRAY CHAINING settings. • Reinitializes the administrator password.
Use	• To restore the user default Energy Saver, Auto Continue, and Tray Chaining settings.
Setting /procedure	*1.* Select RESTORE USER DEFAULT and press the MENU/SELECT key. *2.* This reinitializes the functions involved and the Engine/Service menu reappears.

K. DUPLEX DENSITY

Function	• Adjusts any abnormal print density in duplexed prints.
Use	• To adjust the image density of duplexed prints when there is a problem due to the climate in which the Printer is being operated (such as dry or very humid).
Setting /procedure	• The default setting is “0.” *1.* With RESTORE USER DEFAULT selected, hold down ▼ key for 2 seconds. *2.* With DUPLEX DENSITY selected, press the ◀ key / ▶ key as necessary to select the appropriate adjustment level value. Adjustment range: -8 to +7 (16 steps) *3.* Press the MENU/SELECT key to validate the new adjustment level setting.

L. ALTITUDE SETUP

Function	• Adjusts the Printer if there is an image problem such as uneven density.
Use	• To adjust the printer when there is a problem due to the high altitude at which the printer is being operated.
Setting /procedure	• The default setting is “0.” *1.* With RESTORE USER DEFAULT selected, hold down ▼ key for 2 seconds. *2.* With ALITUDE SETUP selected, press the ◀ key / ▶ key as necessary to select the appropriate adjustment level value. Adjustment range: 0 to 3 (4 steps) *3.* Press the MENU/SELECT key to validate the new adjustment level setting. **NOTE** • **When the setting has been changed, be sure to run COLOR CALIBRATION.** ☞ 3-15

M. TRANSFER VOLTAGE

Function	• Adjusts the Printer if there is an image problem such as void areas or white spots.
Use	• To adjust the printer when void areas or white spots occur due to the characteristics of the media being used.
Setting /procedure	• The default setting is "0." *1.* With RESTORE USER DEFAULT selected, hold down ▼ key for 2 seconds. *2.* With TRANSFER VOLTAGE selected, press the ◀ key / ▶ key as necessary to select the appropriate adjustment level value. : If void areas occur, adjust within the plus levels. : If white spots occur, adjust within the minus levels. Adjustment range: -8 to +7 (16 steps) *3.* Press the MENU/SELECT key to validate the new adjustment level setting.

4.5 NETWORK

4.5.1 DHCP:XX / BOOTP:XX

Function	• DHCP : Automatically acquires an IP address from the DHCP server, if there is one in the network, and specifies whether to load other network information. • BOOTP : Automatically acquires an IP address from BOOTP and specifies whether to load other network information.
Use	• To automatically acquire an IP address and load other network information.
Setting /procedure	• Turn "ON" either DHCP or BOOTP or "OFF" both. • The default settings are "DHCP: ON / BOOTP: OFF." **DHCP:ON / BOOTP:OFF** DHCP:OFF / BOOTP:ON DHCP:OFF / BOOTP:OFF

4.5.2 IP ADDRESS

Function	• Sets the IP address of the printer on the network.
Use	• To enter the printer's IP address.
Setting /procedure	• Enter the IP address using the up, down, right, and left arrow keys. • The default setting is "192.168.1.2." **NOTE** • **Before manually setting the IP address, turn OFF DHCP and BOOTP.**

4.5.3 SUBNET MASK

Function	• Sets the subnet mask of the printer on the network.
Use	• To enter the printer's subnet mask.
Setting /procedure	• Enter the subnet mask using the up, down, right, and left arrow keys. • The default setting is "255.255.255.0." **NOTE** • **Before manually setting the subnet mask, turn OFF DHCP and BOOTP.**

4.5.4 GATEWAY

Function	• Sets the gateway address of the printer on the network.
Use	• To enter the printer's gateway address.
Setting/ procedure	• Enter the gateway address using the up, down, right, and left arrow keys. • The default setting is "192.168.1.1." **NOTE** • **Before manually setting the gateway address, turn OFF DHCP and BOOTP.**

4.5.5 MAC ADDRESS

Function	• Displays the Ethernet hardware address of the printer.
Use	• To display the printer's Ethernet hardware address.
Setting /procedure	• The address is displayed only and cannot be altered.

4.5.6 HTTP

Function	• Specifies whether to access PageScope Web Connection and to use the IPP protocol or not.
Use	• To specify whether to use IPP and access PageScope Web Connection.
Setting /procedure	• The machine must be restarted after the setting has been changed. • The default setting is "ON." **ON** OFF

4.5.7 SNMP

Function	• Specifies whether to use the SNMP protocol or not.
Use	• To specify whether to use SNMP.
Setting /procedure	• The machine must be restarted after the setting has been changed. • The default setting is "ON." **ON** OFF

4.5.8 FORCED MODES

Function	• Sets the network speed, duplex mode, and negotiation of the printer used on the network.
Use	• To set the printer's network speed, duplex mode, and negotiation.
Setting /procedure	• Settings Network speed (SPEED): AUTO, 100Mbps, 10Mbps Duplex mode (DUP): AUTO, Full-duplex mode, Half-duplex mode Negotiation (NEG.): ON, OFF • The default setting is "AUTO/AUTO/ON." **AUTO/ AUTO/ ON** AUTO/ FULL/ ON AUTO/ HALF/ ON 100M/ AUTO/ ON 100M/ FULL/ ON 100M/ FULL/ OFF 100M/ HALF/ ON 100M/ HALF/ OFF 10M/ AUTO/ ON 10M/ FULL/ ON 10M/ FULL/ OFF 10M/ HALF/ ON 10M/ HALF/ OFF

4.6 CONSUMABLE USAGE

NOTE

- **When the toner remaining in the cartridge is between 88% and 100%, the display shows "100%," regardless of the actual amount. The amount of toner supplied to the toner cartridge may vary slightly. Also, some toner is consumed when checking the screen during manufacture.**
- **When the amount of toner is 87% or less, the display shows the exact amount of toner.**

4.6.1 BLACK TONER

Function	• Displays the remaining life of the Toner Cartridge (K) as a percentage.
Use	• To check the remaining life of the Toner Cartridge (K).

4.6.2 CYAN TONER

Function	• Displays the remaining life of the Toner Cartridge (C) as a percentage.
Use	• To check the remaining life of the Toner Cartridge (C).

4.6.3 MAGENTA TONER

Function	• Displays the remaining life of the Toner Cartridge (M) as a percentage.
Use	• To check the remaining life of the Toner Cartridge (M).

4.6.4 YELLOW TONER

Function	• Displays the remaining life of the Toner Cartridge (Y) as a percentage.
Use	• To check the remaining life of the Toner Cartridge (Y).

4.7 DIRECT PRINT

NOTE

- **Available only when an optional Camera Direct Photo Print Card is installed on the magicolor 5440 DL.**

4.7.1 IMAGE QUALITY

Function	• Sets the output resolution for Camera Direct Photo Printing.
Use	• To change the output resolution Camera Direct Photo Printing.
Setting /procedure	• The output resolution for each setting is as follows: - DRAFT: 600 dpi - NORMAL: 1,200 dpi x 600 dpi - FINE: 2,400 dpi x 600 dpi **NOTE** • **When using Normal mode/Fine mode, an addition 128 MB of memory needs to be installed. Only Draft mode is available with the printer's base memory.** The default setting is "DRAFT." **DRAFT** NORMAL FINE

4.7.2 PAPER SIZE

Function	• Sets the paper size for Camera Direct Photo Printing.
Use	• To change the paper size for Camera Direct Photo Printing.
Setting /procedure	• For the ones for North America, the default setting is “LETTER.” For others, the default setting is “A4.” **LETTER/A4** A5 STATEMENT J-POSTCARD

4.7.3 MEDIA TYPE

Function	• Sets the media type for Camera Direct Photo Printing.
Use	• To change the media type for Camera Direct Photo Printing.
Setting /procedure	• The default setting is “PLAIN PAPER.” **PLAIN PAPER** /THICK STOCK1 /THICK STOCK2 /GLOSSY /POSTCARD /LABELS

4.7.4 LAYOUT

Function	• Sets the layout for Camera Direct Photo Printing.
Use	• To change the layout for Camera Direct Photo Printing.
Setting /procedure	• To set the number of pictures to be printed on one side of the paper. • The default setting is “1-up” **1-up** 2-up 3-up 4-up 6-up 8-up

4.7.5 BRIGHTNESS

Function	• Sets the image density of the image for Camera Direct Photo Printing.
Use	• To change the image density of the image for Camera Direct Photo Printing.
Setting /procedure	• Selecting “ON” will set the image density to “BRIGHTNESS.” • The default setting is “OFF” **OFF** ON

4.7.6 SHARPNESS

Function	• Sets the sharpness of the image for Camera Direct Photo Printing.
Use	• To change the sharpness of the image for Camera Direct Photo Printing.
Setting /procedure	• Selecting to “ON” will set the image to “SHARPNESS.” • The default setting is “OFF” **OFF** ON

4.7.7 AUTO ROTATE

Function	• Sets the rotation of the image for Camera Direct Photo Printing.
Use	• To change the rotation of the image for Camera Direct Photo Printing.
Setting /procedure	• Selecting “ON” turns the image 90 degrees clockwise for printing. • The default setting is “OFF” **OFF** ON

5. Service Mode (magicolor 5430 DL/5440 DL)

5.1 Service Mode Entry Procedure

NOTE

- **Ensure appropriate security for the Service Mode entry procedure. It should NEVER be given to any unauthorized person.**

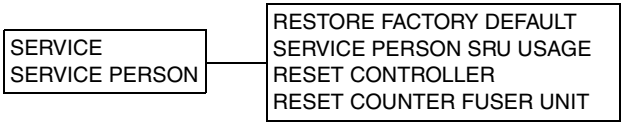
A. Procedure

1. In the configuration menu, display “ENGINE SERVICE” and press the ▼ key.
2. Using the ▶ key, display the “TOTAL FACE COUNT” menu.
3. Hold down the MENU/SELECT key and the ▼ key at the same time for 2 seconds or more.
4. When “SERVICE/SERVICE PERSON” displays, press the ▼ key.

B. Exiting

- Press the CANCEL key.

5.2 Service Mode Function Tree



5.3 Settings/Adjustments in Service/Service Person Mode Functions

5.3.1 RESTORE FACTORY DEFAULT

Function	• Reinitializes the settings to their factory defaults.
Use	• To return the current settings to the factory default settings. • Use this as the last resort before replacing the board when taking remedial steps for a malfunction. • The following table lists the items to be reinitialized and their default values. **NOTE** **• Some items can be reset after being reinitialized while others cannot be.**

A. Items that cannot be reset after reinitialization

Item		Factory Default Value	Ref. Page
Counter: Main Unit	Color	0	-
	B/W	0	-
	Total	0	-
Counter: Duplex *1	Color	0	-
	B/W	0	-
	Total	0	-
Amount of toner still available for use in each Toner Cartridge		100%	-
Transfer Roller use rate		0%	-
Transfer Belt use rate		0%	-
Fusing Unit use rate		0%	-
Waste Toner Bottle use rate		0%	-
Counter:Transfer Roller		0	-
Counter:Transfer Belt Unit		0	-
Counter:Fusing Unit		0	-

*1: When the Duplex Option is installed

Use

B. Items that can be reset after reinitialization

Item		Factory Default Value	Ref. Page
LANGUAGE		English	☞ 3-13
ENERGY SAVER		ON / 30 MINUTES	☞ 3-14
ENGINE TONER EMPTY		STOP	☞ 3-14
AUTO CONTINUE		ON	☞ 3-14
CHAINING TRAY		ON	☞ 3-14
DUPLEX DENSITY		0	☞ 3-16
ALTITUDE SETUP		0	☞ 3-16
TRANSFER VOLTAGE		0	☞ 3-17
IP ADDRESS		192.168.1.2	☞ 3-17
SUBNET MASK		255.255.255.0	☞ 3-17
GATEWAY		192.168.1.1	☞ 3-18
DHCP:XX / BOOTP:XX		DHCP:ON / BOOTP:OFF	☞ 3-17
HTTP		ON	☞ 3-18
SNMP		ON	☞ 3-18
FORCED MODES		AUTO / AUTO / ON	☞ 3-18
IMAGE QUALITY		DRAFT	☞ 3-19
PAPER SIZE		LETTER / A4	☞ 3-20
MEDIA TYPE		PLAIN PAPER	☞ 3-20
LAYOUT		1-up	☞ 3-20
BRIGHTNESS		OFF	☞ 3-20
SHARPNESS		OFF	☞ 3-20
AUTO ROTATE		OFF	☞ 3-20
PageScope Web Connection	Admin Password	administrator	-
	Refresh Rate	30 sec.	-
	Contact Name	KONICA MINOLTA Customer Support	-
	Contact Information	http://printer.konicaminolta.com/	-
	Product Help URL	http://pagescope.com/	-
	Corporate URL	http://printer.konicaminolta.com/	-
	Supplies and Accessories	http://www.q-shop.com/	-
	Online Help URL	http://printer.konicaminolta.com/	-
	Auto IP	DHCP	-
	WINS/NetBIOS Resolution	Checked	-
	NetBIOS Name	MC54**DLXXXXXX *2	-
	Domain/Workgroup	WORKGROUP	-
	Use DHCP for WINS	Checked	-

<table>
<tr><td>Use</td><td>
<table>
<tr><th colspan="2">Item</th><th>Factory Default Value</th><th>Ref. Page</th></tr>
<tr><td rowspan="7">PageScope Web Connection</td><td>Primary WINS</td><td>grayout/disabled</td><td>-</td></tr>
<tr><td>Secondary WINS</td><td>grayout/disabled</td><td>-</td></tr>
<tr><td>Rendezvous Service Discovery</td><td>Checked</td><td>-</td></tr>
<tr><td>Rendezvous Config Printer Name</td><td>KONICA MINOLTA magicolor 54** DL</td><td>-</td></tr>
<tr><td>Rendezvous Config Host Name</td><td>MC54**DLXXXXXX *2</td><td>-</td></tr>
<tr><td>IPP Config Printer Name</td><td>magicolor 54** DL</td><td>-</td></tr>
<tr><td>IPP Config Printer Location</td><td>Blank</td><td>-</td></tr>
</table>
*2: XXXXXX are the last 6 digits of the printer MAC address.
</td></tr>
<tr><td>Setting /procedure</td><td>
1. Take note of the current setting.
2. Enter the Service/Service Person mode.
3. Select RESTORE FACTORY DEFAULT and press the MENU/SELECT key.
4. When the initialization procedure is completed, restart the machine.
5. Make the settings that were valid before initialization once again.

NOTE
• Use this function with the greatest possible care. If this function is executed, the setting/count values saved in the Parameter Chip on the Mechanical Control Board are cleared.
• After executing this function, replace the following items with new ones:
All 4 Toner Cartridges
Transfer Roller
Transfer Belt
Fusing Unit
Waste Toner Bottle
</td></tr>
</table>

5.3.2 SERVICE PERSON SRU USAGE

Function	• Displays the remaining life of the Transfer Belt, Transfer Roller, and Fusing Unit.
Use	• To check the remaining life of the maintenance service parts.
Setting /procedure	*1.* Enter the Service mode. *2.* Select SERVICE PERSON SRU USAGE and press the MENU/SELECT key. *3.* Select the desired unit using the right and left arrow keys.

5.3.3 RESET CONTROLLER

Function	• Resets the controller.
Use	• To return the controller to its initial condition.
Setting /procedure	*1.* Enter the Service mode. *2.* Select RESET CONTROLLER and press the MENU/SELECT key. *3.* This automatically restarts the machine and the initial screen reappears.

5.3.4 RESET COUNTER FUSER UNIT

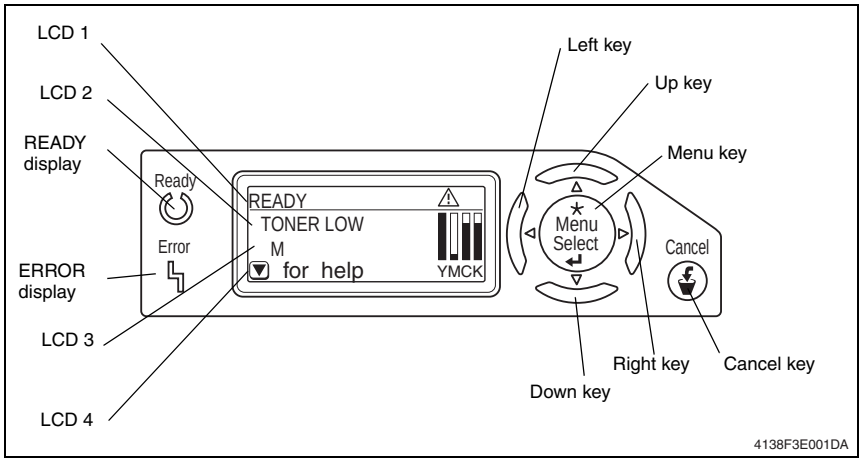
Function	• Resets the counter value of the Fusing Unit.
Use	• To reset the Fusing Unit counter after the Fusing Unit is replaced.
Setting /procedure	*1.* Enter the Service mode. *2.* Select RESET COUNTER FUSER UNIT and press the MENU/SELECT key. *3.* This resets the counter and the Engine/Service menu reappears.

6. Description of the Control Panel (magicolor 5450)

6.1 Control Panel Display

6.1.1 Parts of the Control Panel Display

- The following shows the names of each part of the control panel. These names are used throughout this manual.
  From the top, the panel is divided into LCD 1, LCD 2, LCD 3, and LCD 4.
- LCD 4 may display a message instructing you to press a key on the control panel. When you press that key, the displayed message changes.



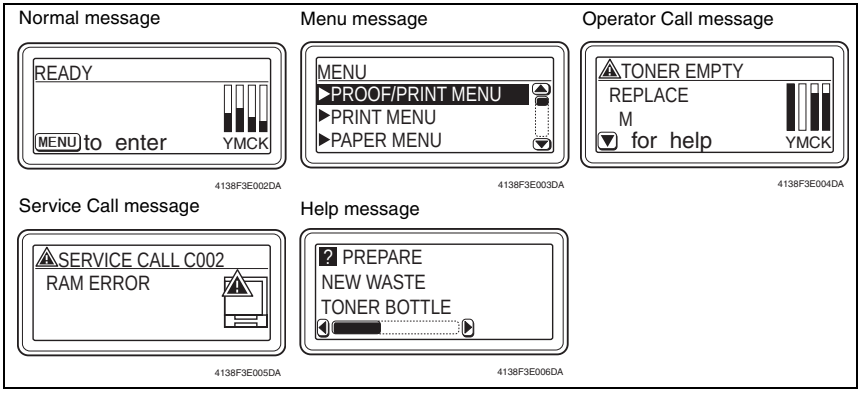
NOTE

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

6.1.2 Message structure

There are five types of messages.

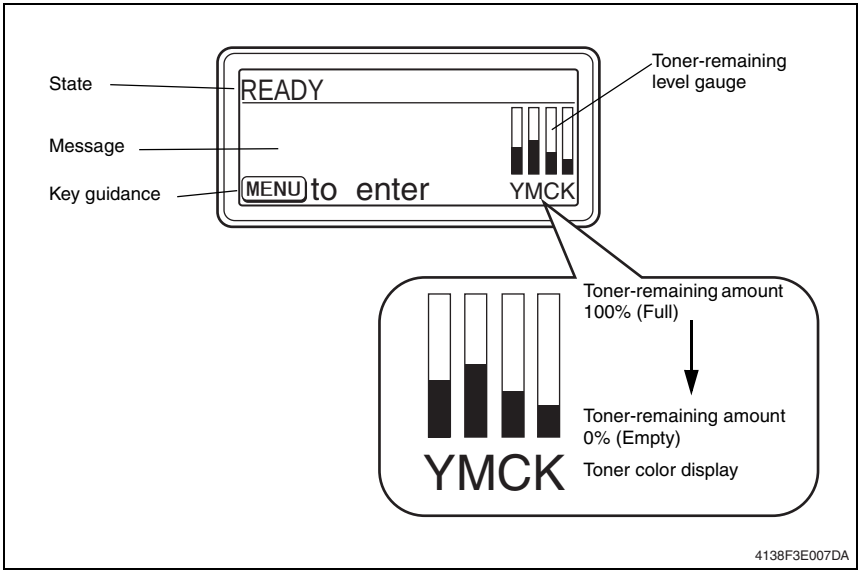
Message	Description
Normal messages	These messages are displayed after warmup has been completed: • Toner remaining gauge • Data-receiving message • Printing message • Firmware update messages • Warnings
Menu messages	These messages are displayed after the MENU key is pressed.
Operator Call messages	These messages are displayed when minor error(s) that can be handled by users occur.
Service Call messages	These messages are displayed when error(s) that cannot be handled by users occur.
Help messages	These messages are displayed when the Down key ▽ is pressed when a Normal message/Warning or Operator Call message is displayed.



6.1.3 Normal messages

The Basic Screen is displayed after warmup has been completed.
The "READY LED○" lights up while the message is displayed.

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



A. Toner-remaining level gauge

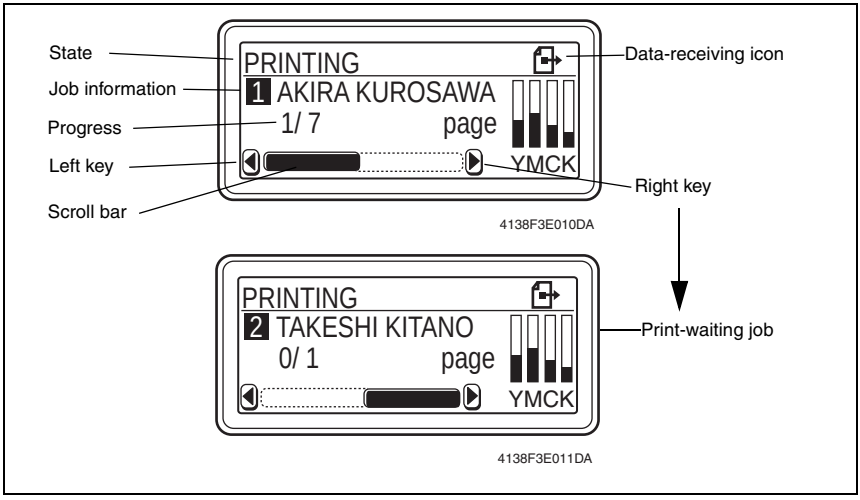
- The amount of each color of toner remaining is graphed in 10% increments (11 scales.) However, it's not displayed during the following states:

  - Operator Call
  - Service Call
  - Menu
  - Help menu
  - BOOT message
  - When the toner remaining amount is not determined immediately after startup.

B. Data receiving message/Print

The Control Panel displays the following description at data receiving message/Print.

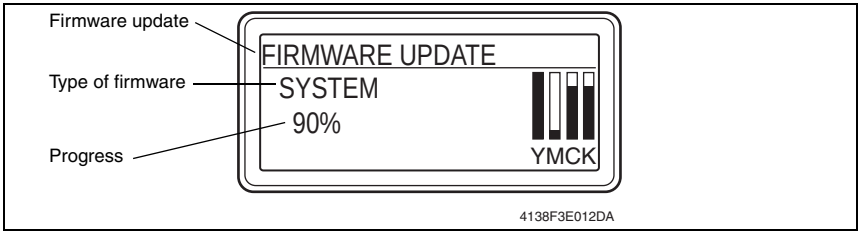
Display	Description
LCD 1	Printer mode is displayed (for example, PRINTING). • PROCESSING is displayed during data receiving or printer startup. • PRINTING is displayed during printing. • When printing in sets, COPYING is displayed after the second set starts printing. • The data-receiving icon "⊡" is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



C. Firmware update

The Control Panel displays the following description at firmware update.

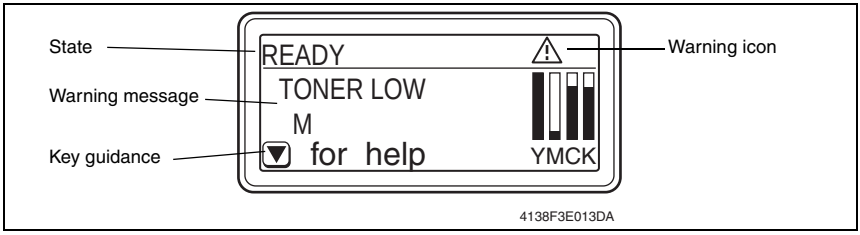
Display	Description
LCD 1	FIRMWARE UPDATE is displayed.
LCD 2	LCD 2 displays the type of firmware (for example, SYSTEM). • SYSTEM: Controller firmware • BOOT: Boot firmware • RESOURCE: Resource file • CONFIGURATION: Equipment configuration file • ENGINE: Engine firmware
LCD 3	Progress of the update is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



D. Warning

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

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



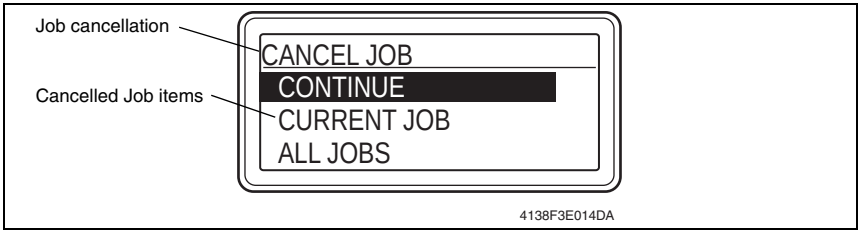
E. Job cancellation

By pressing the CANCEL key after the job is sent, the Control Panel displays the Job Cancel Menu.
When no job is has been sent, pressing the CANCEL key has no effect.

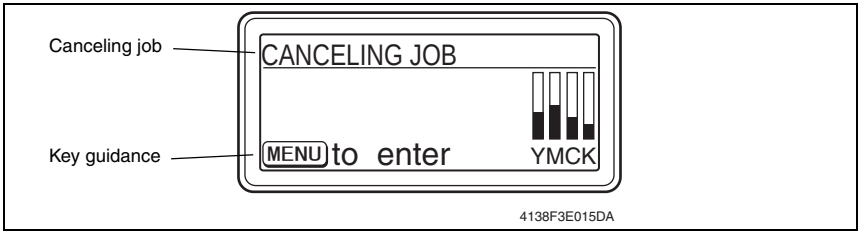
The Control Panel displays the following description at the Job Cancel Menu.

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

- By pressing the Up key△/Down key▽, the item can be selected.
- The selected item is displayed with highlighted text. The default setting is CONTINUE.
- By pressing the MENU key, the selected item is entered.
- By pressing the CANCEL key, the Job Cancel menu is closed.



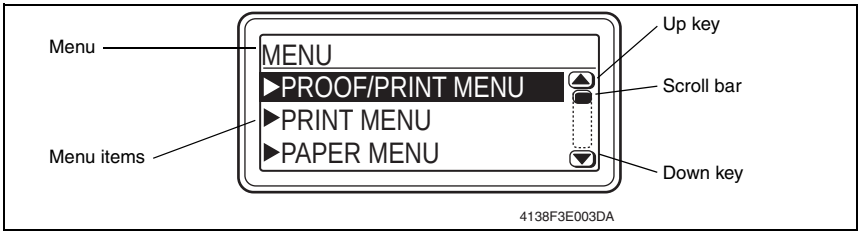
- By selecting CURRENT JOB or ALL JOB and pressing the MENU key, job cancellation is implemented.



6.1.4 Menu

The Menu is displayed when the MENU key is pressed.
The Control Panel displays the following description at the Menu screen.

Display	Description
LCD 1	A Warning icon is displayed.
LCD 2 LCD 3 LCD 4	Menu items are displayed (3 items/ 7 items). • By pressing the Up key△/Down key▽, the item is selected. • The Menu consists of the following 7 items: - PROOF/ PRINT MENU - PRINT MENU - PAPER MENU - QUALITY MENU - INTERFACE MENU - SYS DEFAULT MENU - SERVICE MENU



• For the details of each item, see “7. Menu.”
☞ 3-42

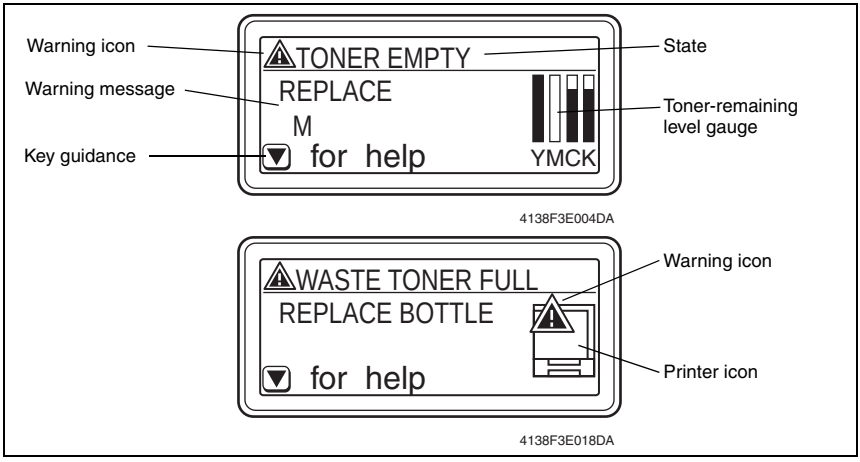
6.1.5 Operator Call messages

These messages are displayed when minor error(s) that can be handled by user occur.
The “Error LED ϟ” lights while the message is displayed on the Control Panel.
The “Ready LED ↻” on Control Panel turns OFF during Operator Call.

The Control Panel displays the following when an Operator Call message is displayed.

Display	Description
LCD 1	A Warning icon “ ⚠ ” is displayed and the state is displayed on the right (for example, TONER EMPTY).
LCD 2	Message is displayed (for example, REPLACE M).
LCD 3	
LCD 4	“▽ for help” is displayed. • By pressing the Down key, the panel displays the Help screen.

- In the case of an Operator Call message related to a Toner Cartridge, the toner-remaining level gauge is displayed, and the gauge of the appropriate color flashes (for example, the M gauge).
- In the case of an Operator Call message for another reason, the printer icon is displayed with a flashing “Warning icon ⚠.”



- For the details of each item, see “6.2.2 Operator Call messages.”

☞ 3-38

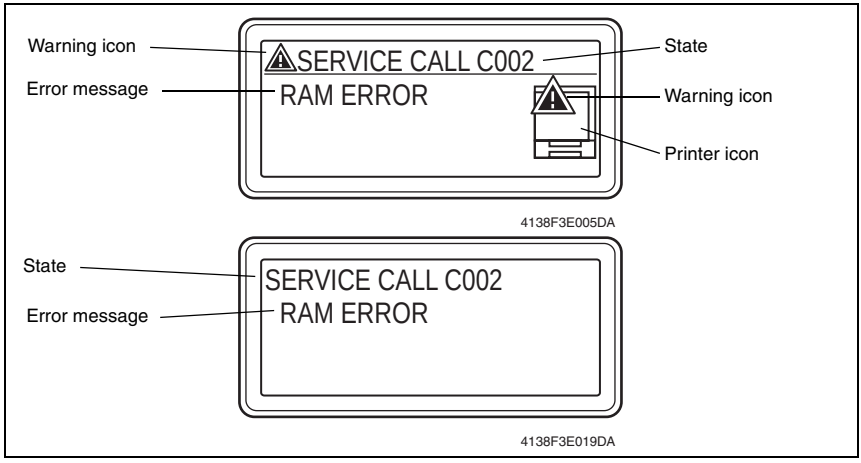
6.1.6 Service Call messages

These messages are displayed when error(s) that cannot be handled by the user occur.
The “Error LED ϟ” turns ON while the message is displayed on the Control Panel.
The “Ready LED ↻” on Control Panel turns OFF while an Operator Call message is displayed on the Control Panel.

The Control Panel displays the following description at Service Call.

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

- A printer icon is displayed with a flashing “Warning icon ⚠.”
- A Service Call detected during startup of the printer is displayed as shown in the bottom of the following picture.



- For the details of each item, see “6.2.3. Service Call messages.”

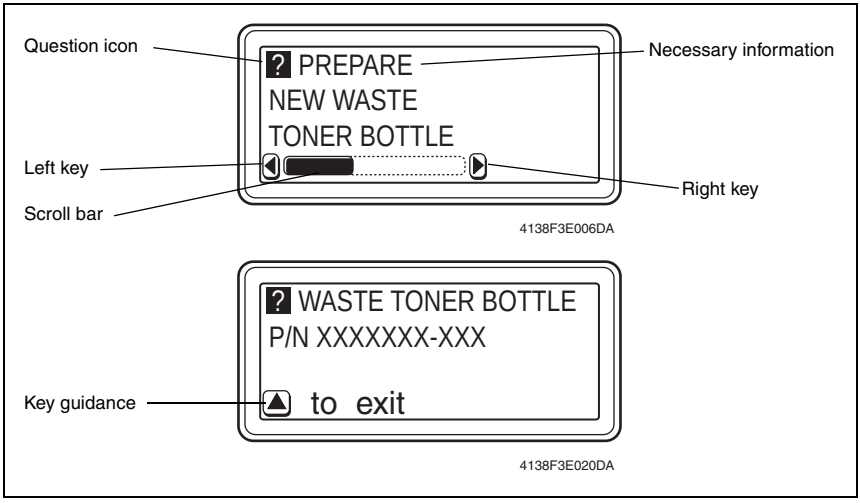
☞ 3-40

6.1.7 Help screen

This screen is displayed when the Down key ▽ is pressed when a Normal message/Warning or Operator Call message is displayed.
The Control Panel displays the following description at the help screen.

Display	Description
LCD 1 LCD 2 LCD 3	A "Question icon ?" is displayed and the necessary information is displayed on the right (for example, PREPARE NEW WASTE TONER BOTTLE).
LCD 4	A scroll bar or "△ to exit" message is displayed. • If there are several messages, a scroll bar is displayed. • By pressing the Left key◁/Right key▷, a previous/next screen message is displayed. • If all messages are displayed, "△ to exit" displays on the screen.

- A graphic is displayed if necessary.



6.2 List of Control Panel Messages

NOTE

- **When two or more messages are to be displayed, the message with the higher priority will be displayed.**
- **When a message concerning Consumables/Periodic Replacement Parts (Units) is displayed, print a "Statistics Page" from the "PRINT MENU/STATISTICS" menu and check the status of the other consumables, too.**

☞ p.3-46 **"7.3.3 Statistics Page"**

6.2.1 Normal messages

A. Normal messages

Message (LCD1)	Description
INITIALIZING	The printer is being initialized
READY	Print enabled (Data not being printed)
ENERGY SAVER	Machine in Energy Saver mode
PROCESSING	Print data processing (Data receiving - printer is started)
PRINTING	Data being printed (Printer is started)
COPYING	Data being printed in sets
WARMING UP	During warmup
CALIBRATING	Color shift correction in progress
CANCELING JOB	Job canceled
REBOOTING	The printer is restarting
FIRMWARE UPDATE	The printer's firmware is being upgraded

B. Warning messages

Priority	Message (LCD2/LCD3)	Description
High 1	UNABLE TO COLLATE JOB	Print in sets disabled (Full hard disk) (This warning message is also displayed during printing.)
2	HDD NEAR FULL	The hard disk space is running out.
3	TONER EMPTY X	The specified color toner cartridge has run out. • If the “TONER EMPTY” menu is set to “CONTINUE,” a Warning message appears instead of an Operator Call message. (Printing doesn't stop even if it is time for the toner cartridge to be replaced.) • If the “TONER EMPTY” menu is set to “STOP,” an Operator Call message is displayed. (Printing stops when it is time for the toner cartridge to be replaced.)
4	WASTE TONER NEAR FULL	The Waste Toner Bottle needs replacement soon.
5	TONER LOW X	The specified color toner cartridge will run out soon.
6	PAPER EMPTY TRAY X	• No media in the specified Tray. The specified tray is not installed, but it is set in the printer driver.
7	INCORRECT CART X	• The specified color toner cartridge is not the correct type. A print cycle can be initiated, but is run at 1/3 the normal print speed.
8	TRANS BELT END OF LIFE	Transfer Belt Unit service life has been reached.
9	TRANS ROLLER END OF LIFE	Transfer Roller service life has been reached.
Low 10	FUSER UNIT END OF LIFE	Fusing Unit service life has been reached.

6.2.2 Operator Call messages

Priority		Message		Description
		LCD1	LCD2/LCD3	
High 1		COVER OPEN	FRONT COVER	The Front Door of the machine is open.
			SIDE COVER	The Right Door of the machine is open.
			DUPLEX COVER	The Duplex Option door is open.
			TRAY3 COVER	The Right Cover of Tray 3 is open.
			TRAY4 COVER	The Right Cover of Tray 4 is open.
	2	PAPER JAM ☞ For trouble-shooting procedures, see "IV Trouble-shooting" or the relevant Service Manual of the option concerned.	FUSER/EXIT	A media jam has occurred at the Fusing section.
			SECOND TRANS	A media jam has occurred at the Second Transfer section.
			VERTICAL TRANS	A media jam has occurred at the Vertical Conveyance.
			DUPLEX1	A media jam has occurred at the Duplex Transport section of the Duplex Option.
			DUPLEX2	A media jam has occurred at the Duplex Paper Feed section of the Duplex Option.
			TRAY1	A media jam has occurred at Tray 1 (Manual Feed Tray).
			TRAY2	A media jam has occurred at Tray 2.
			TRAY3	A media jam has occurred at Tray 3.
			TRAY4	A media jam has occurred at Tray 4.
	3	FUSER MISSING	CHECK UNIT	The Fusing Unit is not installed.
	4	TONER MISSING	CHECK UNIT	The specified color toner cartridge is not installed.
	5	WASTE TONER FULL	REPLACE BOTTLE	The Waste Toner Bottle is full.
	6	TONER EMPTY	REPLACE Y	The specified color toner cartridge has run out. • If the "TONER EMPTY" menu is set to "CONTINUE," a Warning message appears instead of an Operator Call message. (Printing doesn't stop even if it is time for the toner cartridge to be replaced.) • If the "TONER EMPTY" menu is set to "STOP," an Operator Call message is displayed. (Printing stops when it is time for the toner cartridge to be replaced.)
			REPLACE M	
			REPLACE C	
			REPLACE K	
	7	TRAYX SIZE ERROR	ADD SSSS *	The media size set in the printer driver does not match that of the media loaded in the specified tray. • Load "SSSS" size media in the specified tray.
	8	TRAYX TYPE ERROR	ADD TTTT *	The media size set in the printer driver does not match that of the media loaded in the specified tray. • Load "TTTT" type media in the specified tray.
Low 9		ADJUST TRAY1	-	Tray 1 is not installed, but it is selected in the printer driver.

Priority	Message		Description
	LCD1	LCD2/LCD3	
High 10	PAPER EMPTY	SSSS * TTTT *	• No specified media in Trays 1 to 4. • Tray 3/4 is loaded with the specified media but is not set appropriately. • Displays when “TRAY CHAINING” is set to “ON.”
	TRAYX EMPTY	SSSS * TTTT *	• No specified media in the specified Tray or Tray 3/4 is not set appropriately. • Displays when “TRAY CHAINING” is set to “OFF.”
	MANUAL FEED	SSSS * TTTT *	• During print startup, media has been loaded in Tray 1 and is waiting for a print start command. After the user confirms the media and gives the print start command, printing starts. How to start printing: *1.* Press the Up key△. *2.* Press the Down key▽, select Tray with Help Menu and press the MENU key. *3.* Set the media loaded in the Tray 1 again.
11	PAPER ERROR	SSSS * TTTT *	• The size and type of media specified in the driver is not loaded in any Tray. • A different size of media from the one specified in the driver is loaded in the Tray at paper feeding. • Displays when “TRAY CHAINING” is set to “ON.”
	TRAYX PAPER ERR	SSSS * TTTT *	• The size and type of media specified in the driver is not loaded in the specified Tray. • A different size of media from the one specified in the driver is loaded in the specified tray at paper feeding. • Displays when “TRAY CHAINING” is set to “OFF.”
12	OUTPUT FULL	REMOVE PAPER	The printed media volume has reached maximum capacity in the Exit Tray.
13	MEMORY FULL	PRESS CANCEL	The volume of data to be printed exceeds the permissible amount of data to be processed by the machine’s memory.
Low 14	HOLD JOB ERROR	UNABLE TO STORE JOB	The specified data of the held job is being received, but an optional HDD is not installed.

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

6.2.3 Service Call messages

☞ For troubleshooting procedures, see “IV Troubleshooting”.

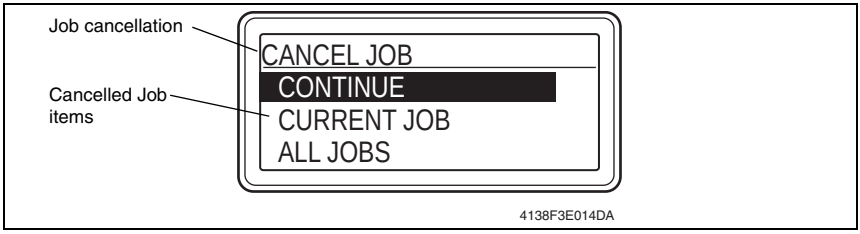
Message		Description
LCD1 (Service Call ID)	LCD2/LCD3 (Error description)	
0010	P MOTOR COLOR	Color PC Drum Motor malfunction
0017	P MOTOR BLACK	Intermediate Transport Motor malfunction
001B	D MOTOR COLOR	Developing Motor/Y,M,C malfunction
0018	D MOTOR BLACK	Developing Motor/K malfunction
0046	FUSER FAN	Fusing Cooling Fan Motor malfunction
004C	OZONE FAN	Ozone Ventilation Fan Motor malfunction
004E	POWER FAN	LV Cooling Fan Motor malfunction
0060	FUSER MOTOR	Fusing Motor malfunction
0094	XFER DETACH2	2nd image transfer pressure/retraction failure
0096	XFER DETACH1	1st image transfer pressure/retraction failure
0300	POLYGON MOTOR	Polygon Motor malfunction
0310	LASER ERROR	Laser malfunction
0500	FUSER ERROR	Heating Roller warm-up failure
0501	FUSER ERROR	Fusing Pressure Roller warm-up failure
0510	FUSER ERROR	Abnormally low Heating Roller temperature
0511	FUSER ERROR	Abnormally low Fusing Pressure Roller temperature
0520	FUSER ERROR	Abnormally high Heating Roller temperature
0521	FUSER ERROR	Abnormally high Fusing Pressure Roller temperature
13D0	EEPROM1	Parameter Chip failure
13E2	FLASH WRITE	Flash ROM write error
13E3	FLASH DEVICE	Flash ROM device fault
C002, C003	RAM ERROR	RAM error at startup
C013	H/W ADDRESS	MAC address error at startup (MAC address is invalid)
C015	BOOT ROM	Boot ROM error at startup
C022	NVRAM ERROR	NVRAM access error
C025, C026, C027	CONTROLLER ROM	Controller ROM error
C050	HDD ERROR	HDD access error
C051	HDD DISK FULL	HDD full error
C060	UPDATE ERROR	Firmware update error
C061	HOLD JOB ERROR DUPLEX	Hold job error/No Duplex Print unit
C062	HOLD JOB ERROR TRAY3	Hold job error/No Tray 3
C063	HOLD JOB ERROR TRAY4	Hold job error/No Tray 4
C064	HOLD JOB ERROR MEMORY	Hold job error/No Memory
FFFF	I/F COMM ERROR	Interface Communication error

6.3 Canceling a Print Job

- A print job being processed or printed can be canceled by pressing the CANCEL key.
- When no job has been sent, pressing the CANCEL key has no effect.

1. If the CANCEL key is pressed while a print job is being printed, a message appears on the Control Panel.
2. Select the job to be canceled using the Up key△/ Down key▽ and press the MENU/ SELECT key.
   By pressing the CANCEL key, the Job Cancel menu is closed.

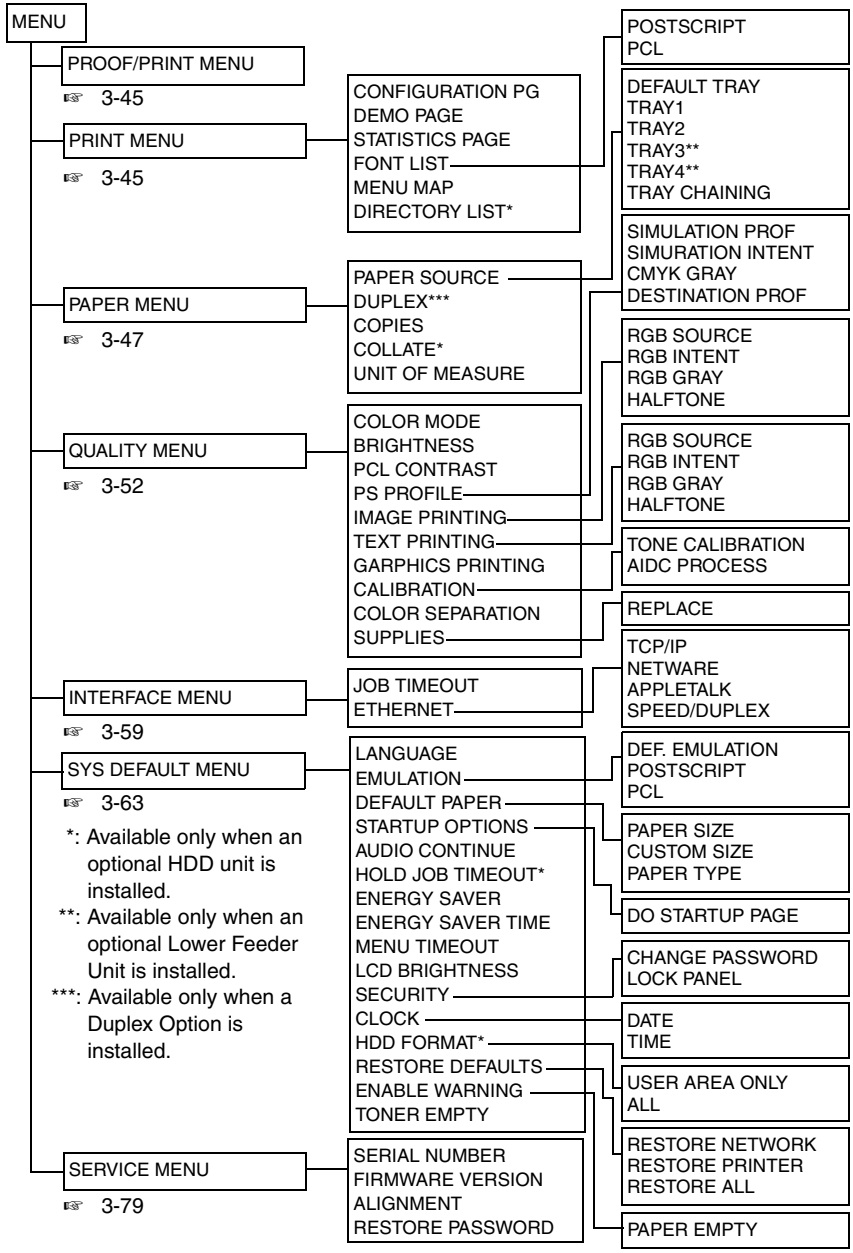
Panel Display (LCD2-LCD4)	Description
CONTINUE	Continue printing the currently processing job.
CURRENT JOB	Stop printing the currently processing job.
ALL JOB	Stop printing all jobs, including the currently processing job and all jobs waiting to be printed.



7. Menu (magicolor 5450)

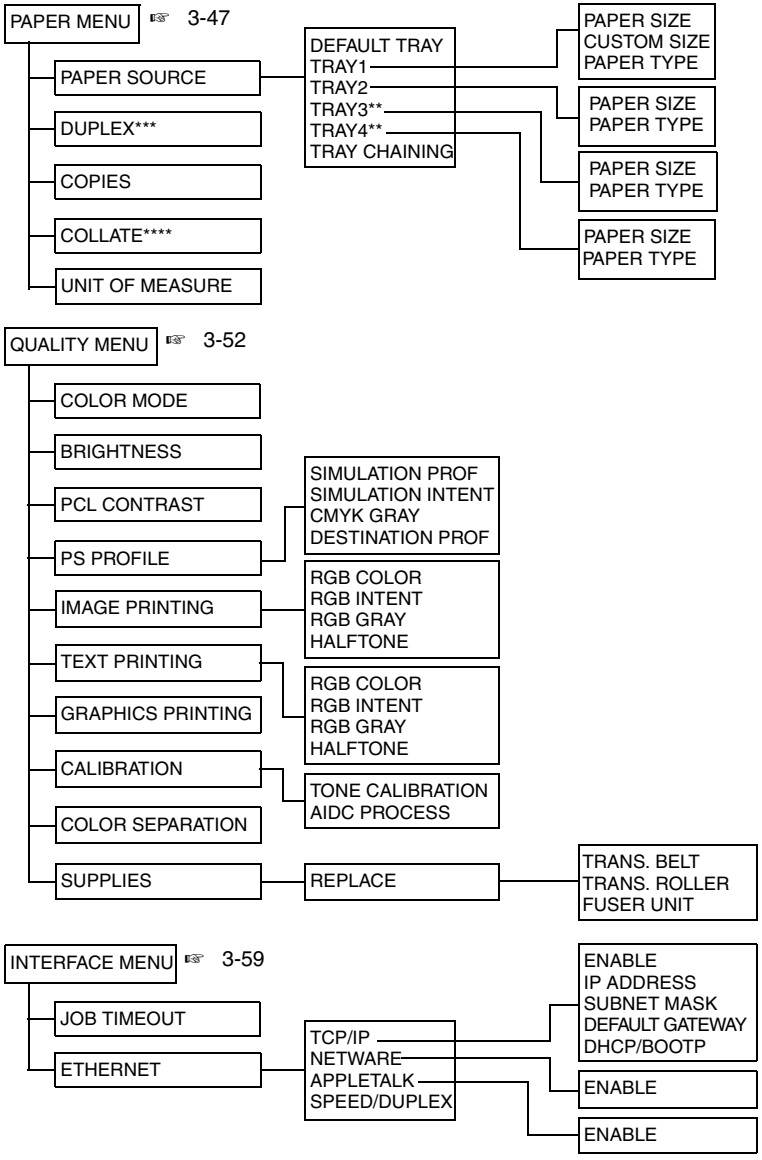
7.1 List of Menu Functions

7.1.1 Outline



*: Available only when an optional HDD unit is installed.
**: Available only when an optional Lower Feeder Unit is installed.
***: Available only when a Duplex Option is installed.

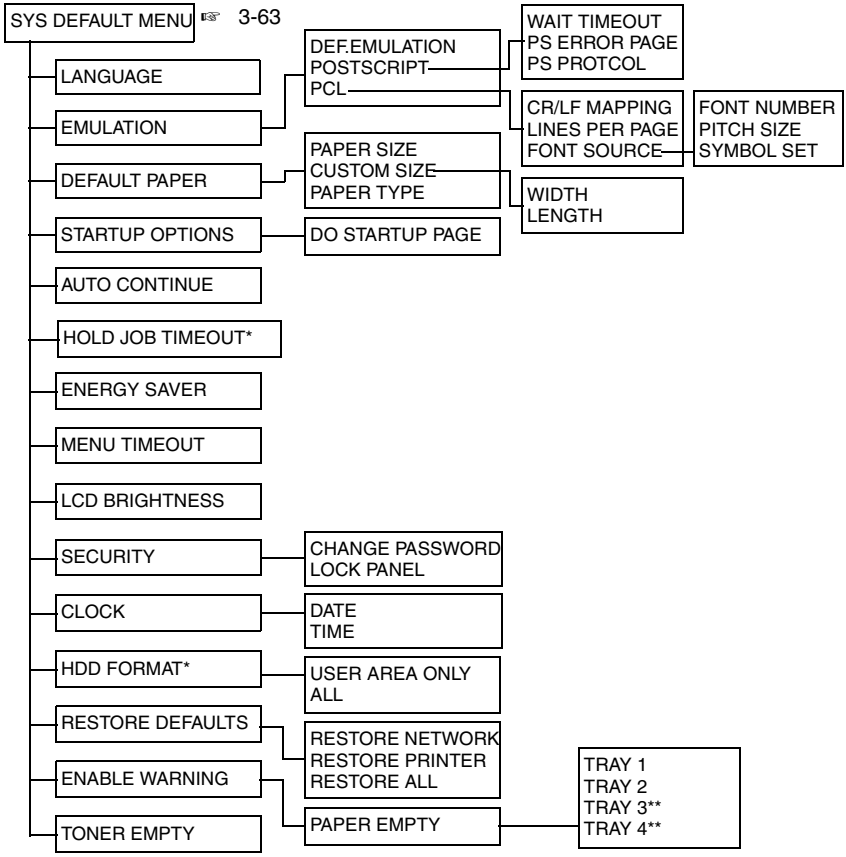
7.1.2 Detail



*: Available only when an optional HDD unit is installed.

**: Available only when an optional Lower Feeder Unit is installed.

***: Available when a Duplex Option is installed.



*: Available only when an optional HDD unit is installed.

**: Available only when an optional Lower Feeder Unit is installed.

***: Available when a Duplex Option is installed.

7.2 PROOF/PRINT MENU

Function	• Selects and prints the job held temporarily in the printer. • Selects and deletes the job held temporarily in the printer.
Use	• To proof one copy of a print job before printing the rest of the copies.
Setting /procedure	How to print the held job *1.* Select “PROOF/PRINT MENU” and press the MENU/SELECT key. *2.* Select “Desired print job” and press the MENU/SELECT key. *3.* Select “PRINT” and press the MENU/SELECT key. *4.* If the hold job is set as “PRIVATE JOB”, enter the pin number (Personal Identification Number) with the Up key△/Down key▽. *5.* Set “Print number” with the Up key△/Down key▽ and press the MENU/SELECT key. **NOTE** **• The held job cannot be printed until the correct pin number is entered at the printer control panel.** **• The held job is deleted automatically after the period of time specified in the “SYSTEM DEFAULT MENU/HOLD JOB TIMEOUT” menu.**
	How to delete the held job *1.* Select “PROOF/PRINT MENU” and press the MENU/SELECT key. *2.* Select “Desired delete job” and press the MENU/SELECT key. *3.* Select “DELETE” and press the MENU/SELECT key. *4.* If the held job is set as “PRIVATE JOB”, enter the pin number (Personal Identification Number) with the Up key△/Down key▽. *5.* Select “YES” and press the MENU/SELECT key. **NOTE** **• The held job cannot be deleted until the correct pin number is entered.**

7.3 PRINT MENU

7.3.1 CONFIGURATION PG

Function	• Prints a Configuration Page.
Use	• To check the configuration of the machine. The following items can be checked: Printer information Options Interface menu Paper menu System default menu Quality menu
Setting /procedure	Select “Configuration Page” and press the MENU/SELECT key.

7.3.2 DEMO PAGE

Function	• Prints a Demo Page.
Use	• To prints a Demo Page.
Setting /procedure	• Select “Demo Page” and press the MENU/SELECT key.

7.3.3 STATISTICS PAGE

Function	• Prints a Statistics Page.
Use	• To check consumable status and the usage of the machine. The following items can be checked: Supplies Page information
Setting /procedure	Select “Statistics Page” and press the MENU/SELECT key.

7.3.4 FONT LIST

Function	• Prints a PostScript and PCL Font Mist.
Use	• To determine which PostScript and PCL fonts are available on the printer.
Setting /procedure	*1.* Select “Font list” and press the MENU/SELECT key. *2.* Select “Desired font list” and press the MENU/SELECT key. • The default setting is “POSTSCRIPT.” **POSTSCRIPT** PCL

7.3.5 MENU MAP

Function	• Prints a Menu Map.
Use	• To see the printer’s menu structure.
Setting /procedure	• Select “Menu map” and press the MENU/SELECT key.

7.3.6 DIRECTORY LIST

Function	• Prints a Directory List of the Hard Disk unit’s contents.
Use	• To check the data saved in the optional Hard Disk unit.
Setting /procedure	• Select “Directory list” and press the MENU/SELECT key. **NOTE** **• This menu is available only when an optional Hard Disk unit is installed.**

7.4 PAPER MENU

7.4.1 PAPER SOURCE

A. DEFAULT TRAY

Function	• Sets the priority feed tray.
Use	• To set the priority media feed tray.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “DEFAULT TRAY” and press the MENU/SELECT key. *3.* Select “Desired Tray” and press the MENU/SELECT key. • The default setting is “TRAY 2.” TRAY 1 **TRAY 2** TRAY 3 TRAY 4 **NOTE** • **TRAY 3/TRAY 4 can be selected only when one or more optional Lower Feeder Units are installed.**

B. TRAY 1/PAPER SIZE

Function	• Sets the size of the media in Tray 1.
Use	• To specify the size of the media loaded in Tray 1.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “TRAY 1” and press the MENU/SELECT key. *3.* Select “PAPER SIZE” and press the MENU/SELECT key. *4.* Select “Desired paper size” and press the MENU/SELECT key. For North America • The default setting is “LETTER.” For other destinations • The default setting is “A4.” ANY /**LETTER*** /LEGAL /EXECUTIVE /**A4*** /A5 /B5(JIS) /GOVT LETTER /STATEMENT /FOLIO /SP FOLIO /UK QUARTO /FOOLSCAP /GOVT LEAGAL /16K /KAI 16 /KAI 32 /ENV C5 /ENV C6 /ENV DL /ENV MONARCH /ENV CHOU#3 /ENV CHOU#4 /B5(JIS) /ENV #10 /ENV YOU#4 /JPOST /JPOST-D /CUSTOM **NOTE** • **ANY specifies any media size.** • **CUSTOM is used to set a “CUSTOM media size.”**

C. TRAY 1/CUSTOM SIZE

Function	• Sets the CUSTOM SIZE of media in Tray 1.
Use	• To specify the custom size media loaded in Tray 1.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “TRAY 1” and press the MENU/SELECT key. *3.* Select “PAPER SIZE” and press the MENU/SELECT key. *4.* Select “CUSTOM SIZE” and press the MENU/SELECT key. *5.* Select “CUSTOM SIZE” again and press the MENU/SELECT key. *6.* Select “Desired DIMENSION” and press MENU/SELECT key. *7.* Set “Desired number” with the Up key△/Down key▽ and press the MENU/SELECT key. For North America • The default setting of WIDTH is “8.50 inches.” WIDTH: “3.63 inches to 8.50 inches.” • The default setting of LENGTH is “11.00 inches.” LENGTH: “5.83 inches to 14.00 inches.” For other destinations • The default setting of WIDTH is “210 mm.” WIDTH: “92 mm to 210 mm.” • The default setting of LENGTH is “297 mm.” LENGTH: “148 mm to 356 mm.” **NOTE** • **By changing the “UNIT OF MEASURE” setting (INCHES/MILLMETERS), the custom size units are changed.**

D. TRAY 1/PAPER TYPE

Function	• Sets the media type for Tray 1.
Use	• To specify the type of media loaded in Tray 1.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “TRAY 1” and press the MENU/SELECT key. *3.* Select “PAPER TYPE” and press the MENU/SELECT key. *4.* Select “Desired paper type” and press MENU/SELECT key. • The default setting is “PLAIN PAPER.” ANY /**PLAIN PAPER** /RECYCLED /THICK1 /THICK2 /LABEL STOCK /TRANSPARENCY /ENVELOPE /POSTCARD /LETTERHEAD /GLOSSY STOCK **NOTE** • **ANY identifies any media type.**

E. TRAY 2-4/PAPER SIZE

Function	• Sets the paper size for Trays 2 to 4.
Use	• To specify the size of media loaded in Trays 2 to 4.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “Desired feed tray (TRAY 2-4)” and press the MENU/SELECT key. *3.* Select “PAPER SIZE” and press the MENU/SELECT key. *4.* Select “Desired paper size” and press the MENU/SELECT key. For North America • The default setting is “LETTER.” For other destinations • The default setting is “A4.” TRAY2: **LETTER*** /LEGAL /EXECUTIVE /GOVT LEGAL /**A4*** /B5(JIS) TRAY3/4: **LETTER*** /**A4*** **NOTE** • **TRAY3/TRAY4 can be selected only when one or more optional Lower Feeder Units are installed.**

F. TRAY 2-4/PAPER TYPE

Function	• Sets the paper type for Trays 2 to 4.
Use	• To specify the type of media loaded in Trays 2 to 4.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “Desired feed tray (TRAY 2-4)” and press the MENU/SELECT key. *3.* Select “PAPER TYPE” and press the MENU/SELECT key. *4.* Select “Desired paper type” and press MENU/SELECT key. • The default setting is “PLAIN PAPER.” ANY **PLAIN PAPER** RECYCLED **NOTE** • **TRAY3/TRAY4 can be selected only when one ore more optional Lower Feeder Units are installed.** • **ANY identifies any media type.**

G. TRAY CHAINING

Function	• Sets auto tray switching.
Use	• To specify that the printer should pull media from another tray when the specified tray runs is empty.
Setting /procedure	*1.* Select “PAPER SOURCE” and press the MENU/SELECT key. *2.* Select “TRAY CHAINING” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” **ON** OFF

7.4.2 DUPLEX

Function	• Sets duplex printing mode.
Use	• To specify duplex printing.
Setting /procedure	OFF: Duplex print is OFF LONG EDGE: Duplex print is ON, long edge SHORT EDGE: Duplex print is ON, short edge *1.* Select “DUPLEX” and press the MENU/SELECT key. *2.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “OFF.” **OFF** LONG EDGE SHORT EDGE **NOTE** • **This menu is available only when a Duplex Option is installed.**

7.4.3 COPIES

Function	• Sets the number of prints.
Use	• To specify the number of copies of the job to be printed.
Setting /procedure	*1.* Select “COPIES” and press the MENU/SELECT key. *2.* Select “Desired print number” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “1” copy. “1” copy to “9999” copies.

7.4.4 COLLATE

Function	• Sets printing in sets.
Use	• To print several sets of multiple pages.
Setting /procedure	ON: Print in sets. OFF: Print in page *1.* Select “COLLATE” and press the MENU/SELECT key. *2.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “OFF.” ON **OFF** **NOTE** • **This menu is available only when an optional Hard Disk unit is installed.** • **The setting in the printer driver overrides the setting in this menu.**

7.4.5 UNIT OF MEASURE

Function	• Sets the measurement units for TRAY 1/CUSTOM SIZE mode. • Sets the measurement units for SYS DEFAULT MENU/DEFAULT PAPER/CUSTOM SIZE mode.
Use	• To change media measurement units.
Setting /procedure	*1.* Select “UNIT OF MEASURE” and press the MENU/SELECT key. *2.* Select “Desired setting” and press the MENU/SELECT key. For North America • The default setting is “INCHES.” For other destinations • The default setting is “MILLIMETERS.” **INCHES*** **MILLIMETERS***

7.5 QUALITY MENU

7.5.1 COLOR MODE

Function	• Sets the color mode for printing.
Use	• To specify whether jobs should be printed in color or grayscale.
Setting /procedure	*1.* Select “COLOR MODE” and press the MENU/SELECT key. *2.* Select “Desired color mode” and press the MENU/SELECT key. • The default setting is “COLOR.” **COLOR** GRAYSCALE

7.5.2 BRIGHTNESS

Function	• Sets the brightness of the printed image.
Use	• To adjust the brightness of the printed image.
Setting /procedure	*1.* Select “BRIGHTNESS” and press the MENU/SELECT key. *2.* Select “Desired adjustment” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0 %.” -15 % -10 % -5 % **0 %** +5 % +10 % +15 %

7.5.3 PCL CONTRAST

Function	• Sets the contrast of a PCL printed image.
Use	• To adjust the contrast of a PCL printed image.
Setting /procedure	*1.* Select “PCL CONTRAST” and press the MENU/SELECT key. *2.* Select “Desired adjustment” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0%.” -15 % -10 % -5 % **0 %** +5 % +10 % +15 %

7.5.4 PS PROFILE

A. SIMULATION PROF

Function	• Sets the simulation profile.
Use	• To set a CMYK simulation profile at implementation of the simulation.
Setting /procedure	SWOP...DIC: Profile that has been preset at the printer. Custom profile: Custom profile that has been downloaded to the printer by users. *1.* Select “PS PROFILE” and press the MENU/SELECT key. *2.* Select “SIMULATION PROF” and press the MENU/SELECT key. *3.* Select “Desired profile” and press the MENU/SELECT key. • The default setting is “NONE.” **NONE** /SWOP /Euroscale /CommercialPress /TOYO /DIC /Custom Profile...

B. SIMULATION INTENT

Function	• Sets the color characteristics.
Use	• To set the color characteristics at the implementation of the simulation.
Setting /procedure	Relative color: Reproduce the color that minimizes the color difference between original and print by adjusting the basic color (white.) Absolute color: Reproduce the color that maintains the absolute color within the device reproduced color. *1.* Select “PS PROFILE” and press the MENU/SELECT key. *2.* Select “SIMULATION INTENT” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “RELATIVE COLOR.” **RELATIVE COLOR** ABSOLUTE COLOR

C. CMYK GRAY

Function	• Sets CMYK gray reproduction.
Use	• To set the CMYK data K maintain method at the implementation of the simulation.
Setting /procedure	Composite black: Print according to the result of color conversion with profile. Black and gray: Print by maintaining the value only for black (C=M=Y=0, K=255) Black only: Print by maintaining the value only for gray (C=M=Y=0, K=any) *1.* Select “PS PROFILE” and press the MENU/SELECT key. *2.* Select “CMYK GRAY” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “COMPOSITE BLACK.” **COMPOSITE BLACK** BLACK AND GRAY BLACK ONLY

D. DESTINATION PROF

Function	• Sets the output profile.
Use	• To set the profile used for output.
Setting /procedure	AUTO: Select automatically appropriate output profile that has been preset at the printer with other print conditions. Custom Profile: Custom profile that has been downloaded to the printer by user. *1.* Select “PS PROFILE” and press the MENU/SELECT key. *2.* Select “DESTINATION PROF” and press the MENU/SELECT key. *3.* Select “Desired profile” and press the MENU/SELECT key. • The default setting is “AUTOMATIC.” **AUTOMATIC** Custom Profile...

7.5.5 IMAGE PRINTING

A. RGB COLOR

Function	• Sets the RGB color space of the image to be printed.
Use	• To set the input RGB color space that is used for printing the image (picture).
Setting /procedure	sRGB...BlueAdjustRGB: Profile that has been preset to the printer. Custom Profile: Custom profile that has been downloaded to the printer by user. *1.* Select “IMAGE PRINTING” and press the MENU/SELECT key. *2.* Select “Desired RGB color space” and press the MENU/SELECT key. • The default setting is “sRGB.” DEVICE COLOR /**sRGB** /AppleRGB /AdobeRGB1998 /ColorMatchRGB /BlueAdjustRGB /Custom Profile...

B. RGB INTENT

Function	• Sets the RGB characteristics of the image to be printed.
Use	• To set the color conversion characteristic from input RGB to device CMYK that is used for printing the image (picture).
Setting /procedure	Vivid: Color conversion characteristic suited to the image emphasizing on color vividness. Photographic: Color conversion characteristic suited to the image emphasizing on color image. Relative color: Reproduce the color that minimize the color difference between original and print by adjusting the basic color (white.) Absolute color: Reproduce the color that maintains the absolute color within the device reproduced color. *1.* Select “IMAGE PRINTING” and press the MENU/SELECT key. *2.* Select “RGB INTENT” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “PHOTOGRAPHIC.” VIVID **PHOTOGRAPHIC** RELATIVE ABSOLUTE COLOR

C. RGB GRAY

Function	• Sets the RGB gray reproduction of the image to be printed.
Use	• To set the gray print method that is processed by the printer for the printed image (picture).
Setting /procedure	Composite black: Print gray with the toner of 4 colors CMYK. Black and gray: Print black (R=G=B=0) only with K toner and print gray with toner of 4 colors CMYK. Black only: Print gray only with K toner. *1.* Select “IMAGE PRINTING” and press the MENU/SELECT key. *2.* Select “RGB GRAY” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “COMPOSITE BLACK.” **COMPOSITE BLACK** BLACK AND GRAY BLACK ONLY

D. HALFTONE

Function	Sets the halftone characteristic of image to be printed.
Use	To set the halftone characteristic that is used for the printed image (picture.)
Setting /procedure	Line art: HALFTONE characteristic that emphasizes the resolution of the print image. Detail: HALFTONE characteristic that emphasizes the balance between the resolution and the tone reproducibility of the print image. Smooth: HALFTONE characteristic that emphasizes the tone reproducibility of the print image. *1.* Select “IMAGE PRINTING” and press the MENU/SELECT key. *2.* Select “HALFTONE” and press the MENU/SELECT key. *3.* Select “Desired halftone characteristic” and press the MENU/SELECT key. • The default setting is “DETAIL.” LINE ART **DETAIL** SMOOTH

7.5.6 TEXT PRINTING

A. RGB COLOR

Function	• Sets the RGB color space of the text to be printed.
Use	• To set the input RGB color space that is used for printing text (letter).
Setting /procedure	sRGB...BlueAdjustRGB: Profile that has been preset to the printer. Custom Profile: Custom profile that has been downloaded to the printer by user. *1.* Select “TEXT PRINTING” and press the MENU/SELECT key. *2.* Select “Desired RGB color space” and press the MENU/SELECT key. • The default setting is “sRGB.” DEVICE COLOR /**sRGB** /AppleRGB /AdobeRGB1998 /ColorMatchRGB /BlueAdjustRGB /Custom Profile...

B. RGB INTENT

Function	• Sets the RGB characteristic of the text to be printed.
Use	• To set the color conversion characteristic from input RGB to device CMYK that is used for printing text (letter).
Setting /procedure	Vivid: Color conversion characteristic suited to the image with emphasis on color vividness. Photographic: Color conversion characteristic suited to the image with emphasis on color image. Relative color: Reproduce the color that minimizes the color difference between the original and the print by adjusting the basic color (white.) Absolute color: Reproduce the color that maintains the absolute color within the device reproduced color. *1.* Select “TEXT PRINTING” and press the MENU/SELECT key. *2.* Select “RGB INTENT” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “PHOTOGRAPHIC.” VIVID **PHOTOGRAPHIC** RELATIVE ABSOLUTE COLOR

C. RGB GRAY

Function	• Sets the RGB gray reproduction of the text to be printed.
Use	• To set the gray print method that is used for printing text (letter).
Setting /procedure	Composite black: Print gray with the toner of 4 colors CMYK. Black and gray: Print black (R=G=B=0) only with K toner and print gray with toner of 4 colors CMYK. Black only: Print gray only with K toner. *1.* Select “TEXT PRINTING” and press the MENU/SELECT key. *2.* Select “RGB GRAY” and press the MENU/SELECT key. *3.* Select “Desired color characteristic” and press the MENU/SELECT key. • The default setting is “COMPOSITE BLACK.” **COMPOSITE BLACK** BLACK AND GRAY BLACK ONLY

D. HALFTONE

Function	• Sets the halftone characteristic of the text to be printed.
Use	• To set the halftone characteristic that is used for printing text (letter).
Setting /procedure	Line art: HALFTONE characteristic that emphasizes the resolution of the print image. Detail: HALFTONE characteristic that emphasizes the balance between the resolution and the tone reproducibility of the print image. Smooth: HALFTONE characteristic that emphasizes the tone reproducibility of the print image. *1.* Select “TEXT PRINTING” and press the MENU/SELECT key. *2.* Select “HALFTONE” and press the MENU/SELECT key. *3.* Select “Desired halftone characteristic” and press the MENU/SELECT key. • The default setting is “DETAIL.” LINE ART **DETAIL** SMOOTH

7.5.7 GRAPHICS PRINTING

Function	• Sets the RGB characteristics for graphics printing.
Use	• To set each characteristic for printing graphics (figures).
Setting /procedure	*1.* Select “GRAPHICS PRINTING” and press the MENU/SELECT key. *2.* Select “Desired print mode” and press the MENU/SELECT key. • The default setting is “AS TEXT.” AS IMAGE **AS TEXT**

7.5.8 CALIBRATION

A. TONE CALIBRATION

Function	• Sets the gradation adjustment (Image stabilization with the controller).
Use	• To use for a CCD malfunction or a particular calibration made by users.
Setting /procedure	ON: Gradation adjustment is ON. OFF: Gradation adjustment is OFF. *1.* Select “CALIBRATION” and press the MENU/SELECT key. *2.* Select “TONE CALIBRATION” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” **ON** OFF

B. AIDC PROCESS

Function	• Controls the image stability.
Use	• To be used to adjust image quality. • To be used when the Transfer Belt unit and/or the Transfer roller are replaced.
Setting /procedure	*1.* Select “CALIBRATION” and press the MENU/SELECT key. *2.* Select “AIDC PROCESS” and press the MENU/SELECT key. *3.* Select “EXCUTE” and press the MENU/SELECT key. *4.* Image stable control is set and after completion the screen returns to the default. • The default setting is “CANCEL.” EXCUTE **CANCEL**

7.5.9 COLOR SEPARATION

Function	• Sets the color separation function.
Use	• To create color separations.
Setting /procedure	*1.* Select “COLOR SEPARATION” and press the MENU/SELECT key. *2.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” **ON** OFF

7.5.10 SUPPLIES

A. REPLACE/TRANS.BELT

Function	• Resets the life counter of the Transfer Belt unit.
Use	• To be used when the Transfer Belt unit is replaced.
Setting /procedure	*1.* Select “SUPPLIES” and press the MENU/SELECT key. *2.* Select “REPLACE” and press the MENU/SELECT key. *3.* Select “TRANS.BELT” and press the MENU/SELECT key. *4.* Select “ON” and press the MENU/SELECT key. *5.* Counter reset is set and after completion the screen returns to the default. • The default setting is “NO.” YES **NO**

B. REPLACE/TRANS.ROLLER

Function	• Resets the life counter of the Transfer Roller.
Use	• To be used when the Transfer Roller is replaced.
Setting /procedure	*1.* Select “SUPPLIES” and press the MENU/SELECT key. *2.* Select “REPLACE” and press the MENU/SELECT key. *3.* Select “TRANS.ROLLER” and press the MENU/SELECT key. *4.* Select “ON” and press the MENU/SELECT key. *5.* Counter reset is set and after completion the screen returns to the default. • The default setting is “NO.” YES **NO**

C. REPLACE/FUSER UNIT

Function	• Resets the life counter of the Fusing unit
Use	• To be used when the Fusing unit is replaced.
Setting /procedure	*1.* Select “SUPPLIES” and press the MENU/SELECT key. *2.* Select “REPLACE” and press the MENU/SELECT key. *3.* Select “FUSER UNIT” and press the MENU/SELECT key. *4.* Select “ON” and press the MENU/SELECT key. *5.* Counter reset is set and after completion the screen returns to the default. • The default setting is “NO.” YES **NO**

7.6 INTERFACE MENU

7.6.1 JOB TIMEOUT

Function	• Sets the time to activate JOB TIMEOUT.
Use	• To specify the amount of time before a print job times out.
Setting /procedure	*1.* Select “JOB TIMEOUT” and press the MENU/SELECT key. *2.* Select “Desired JOB TIME OUT activation time” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “15 seconds.” “5 seconds” to “300 seconds”

7.6.2 ETHERNET

NOTE

- **When the “ETHERNET” setting is changed, the printer restarts automatically.**

A. TCP/IP /ENABLE

Function	• Enables TCP/IP
Use	• To specify that the printer is connected to a TCP/IP network.
Setting /procedure	YES: Enable TCP/IP. Print can be made at TCP/IP environment. NO: Disable TCP/IP. Print cannot be made at TCP/IP environment. *1.* Select “ETHERNET” and press the MENU/SELECT key. *2.* Select “TCP/IP” and press the MENU/SELECT key. *3.* Select “ENABLE” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “YES.” **YES** NO **NOTE** • **The screen displays “IP ADDRESS,” “SUBNET MASK,” “DEFAULT GATEWAY,” and “DHCP/BOOTP” only when “ENABLE/YES” is selected.**

B. TCP/IP /IP ADDRESS

Function	• Sets the IP address of the printer used for the network.
Use	• To set the printer's IP address.
Setting /procedure	*1.* Select "ETHERNET" and press the MENU/SELECT key. *2.* Select "TCP/IP" and press the MENU/SELECT key. *3.* Select "IP ADDRESS" and press the MENU/SELECT key. *4.* Set "Desired IP ADDRESS (first bite)" with the Up key△/Down key▽ and press the Right key▷. *5.* Repeat the above procedures and set the IP address up to fourth bite. *6.* Press the MENU/SELECT key. • The default setting is "000.000.000.000." "000.000.000.000" to "255.255.255.255" **NOTE** **• When setting the IP address manually, "DHCP/BOOTP" (IP auto acquisition function) setting must be set to "NO."** **• When "DHCP/BOOTP" (IP auto acquisition function) is activated, the IP address is set automatically within the range "169.254.0.0. to 169.254.255.255."**

C. TCP/IP /SUBNET MASK

Function	• Sets the subnet mask of the printer used in the network.
Use	• To set the printer's subnet mask.
Setting /procedure	*1.* Select "ETHERNET" and press the MENU/SELECT key. *2.* Select "TCP/IP" and press the MENU/SELECT key. *3.* Select "SUBNET MASK" and press the MENU/SELECT key. *4.* Set "Desired SUBNET MASK (first bite)" with the Up key△/Down key▽ and press the Right key▷. *5.* Repeat the above procedures and set the SUBNET MASK up to fourth bite. *6.* Press the MENU/SELECT key. • The default setting is "000.000.000.000." "000.000.000.000" to "255.255.255.255"

D. TCP/IP /DEFAULT GATEWAY

Function	• Sets the gateway address of the printer used in the network.
Use	• To set the printer's gateway address.
Setting /procedure	*1.* Select "ETHERNET" and press the MENU/SELECT key. *2.* Select "TCP/IP" and press the MENU/SELECT key. *3.* Select "DEFAULT GATEWAY" and press the MENU/SELECT key. *4.* Set "Desired DEFAULT GATEWAY ADDRESS (first bite)" with the Up key△/Down key▽ and press the Right key▷. *5.* Repeat the above procedures and set the DEFAULT GATEWAY ADDRESS up to fourth bite. *6.* Press the MENU/SELECT key. • The default setting is "000.000.000.000." "000.000.000.000" to "255.255.255.255"

E. TCP/IP / DHCP/BOOTP

Function	• DHCP: Automatically acquires an IP address from the DHCP server, if there is one in the network, and specifies whether to load other network information. • BOOTP: Automatically acquires an IP address from BOOTP and specifies whether to load other network information.
Use	• To automatically acquire an IP address and load other network information.
Setting /procedure	YES: Enable IP auto acquisition setting. No: Disable IP auto acquisition setting. *1.* Select “ETHERNET” and press the MENU/SELECT key. *2.* Select “TCP/IP” and press the MENU/SELECT key. *3.* Select “DHCP/BOOTP” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “YES.” **YES** NO **NOTE** • **When “TCP/IP/IP ADDRESS” is enabled, the “DHCP/BOOTP” setting is changed to “NO.”** • **When “DHCP/BOOTP” is activated, “TCP/IP/IP ADDRESS” is set automatically set within the range “169.254.0.0. to 169.254.255.255.”**

F. NETWARE

Function	• Enables NetWare.
Use	• To specify that the printer is connected to a NetWare network.
Setting /procedure	YES: Enable NetWare. Printing can be done via NetWare. No: Disable NetWare. Printing cannot be done via NetWare. *1.* Select “ETHERNET” and press the MENU/SELECT key. *2.* Select “NETWARE” and press the MENU/SELECT key. *3.* Select “ENABLE” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “YES.” **YES** NO

G. APPLETALK

Function	• Enables AppleTalk.
Use	• To specify that the printer is connected to an AppleTalk network.
Setting /procedure	YES: Enable AppleTalk. Printing can be done via AppleTalk. No: Disable Apple Talk. Printing cannot be done via AppleTalk. *1.* Select “ETHERNET” and press the MENU/SELECT key. *2.* Select “APPLETALK” and press the MENU/SELECT key. *3.* Select “ENABLE” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “YES.” **YES** NO

H. SPEED/DUPLEX

Function	• Sets the communication speed and method of Network.
Use	• To set the network communication speed and method.
Setting /procedure	• Setting items Network speed (SPEED): AUTO, 10Mbps, 100Mbps, 1,000Mbps Duplex mode (DUP): AUTO, Full-duplex mode, Half-duplex mode *1.* Select “ETHERNET” and press the MENU/SELECT key. *2.* Select “SPEED/DUPLEX” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “AUTO.” **AUTO** 10BASE FULL 100BASE FULL 100BASE HALF 1000BASE FULL

7.7 SYS DEFAULT MENU

7.7.1 LANGUAGE

Function	• Sets the language of the Control Panel display.
Use	• To set the language used in the Menu.
Setting /procedure	*1.* Select “LANGUAGE” and press the MENU/SELECT key. *2.* Select “Desired LANGUAGE” and press the MENU/SELECT key. For Japan • The default setting is “JAPANESE.” For all other areas • The default setting is “ENGLISH.” **ENGLISH*** / FRANCH / GERMAN / SPANISH / ITALIAN / PORTUGUESE / CZECH / **JAPANEASE*** / KOREAN / CHINESE (SHIMPLIFIELD) / CHINESE (TRADITIONAL)

7.7.2 EMULATION

A. DEF. EMULATION

Function	• Sets the default printer language.
Use	• To set the default printer language.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “DEF.EMULATION” and press the MENU/SELECT key. *3.* Select “Desired EMULATION” and press the MENU/SELECT key. • The default setting is “AUTO.” **AUTO** POSTSCRIPT PCL

B. POSTSCRIPT /WAIT TIMEOUT

Function	• Sets the amount of time to wait for a PostScript file.
Use	• To set the amount of time to wait for a PostScript file before the print job times out.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “POSTSCRIPT” and press the MENU/SELECT key. *3.* Select “WAIT TIMEOUT” and press the MENU/SELECT key. *4.* Select “Desired time” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0” seconds. “**0**” seconds to “300” seconds.

C. POSTSCRIPT /PS ERROR PAGE

Function	• Specifies whether error pages are printed at the time of a PostScript error.
Use	• To specify whether error pages are printed after a PostScript error occurs.
Setting /procedure	ON: Error pages are printed at the time of PostScript error. OFF: Error pages are not printed at the time of PostScript error. *1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “POSTSCRIPT” and press the MENU/SELECT key. *3.* Select “PS ERROR PAGE” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “OFF.” ON **OFF**

D. POSTSCRIPT /PS PROTOCOL

Function	• Sets the protocol to be used for PostScript printing.
Use	• To specify the PostScript protocol.
Setting /procedure	AUTO: Automatic recognition NORMAL: ASCII letter code data BINARY: Binary data *1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “POSTSCRIPT” and press the MENU/SELECT key. *3.* Select “PS PROTCOL” and press the MENU/SELECT key. *4.* Select “Desired protocol” and press the MENU/SELECT key. • The default setting is “AUTO.” **AUTO** NORMAL BINARY

E. PCL / CR/LF MAPPING

Function	• Sets the linefeed code for PCL printing.
Use	• To specify the type of linefeed to be used for PCL printing.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “CR/LF MAPPING” and press the MENU/SELECT key. *4.* Select “Desired linefeed code” and press the MENU/SELECT key. • The default setting is “CR=CR LF=LF.” **CR=CR LF=LF** CR=CRLF LF=LF CR=CR LF=LFCR CR=CRLF LF=LFCR

F. PCL /LINES PER PAGE

Function	• Sets the lines per page for PCL printing.
Use	• To set the number of lines to be printed per page for PCL jobs.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “LINES PER PAGE” and press the MENU/SELECT key. *4.* Select “Desired line number” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “60” lines. “5” lines to “128” lines.

G. PCL /FONT SOURCE /FONT NUMBER

Function	• Sets the PCL font to be used for PCL printing.
Use	• To set the font to be used for printing PCL jobs.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “FONT SOURCE” and press the MENU/SELECT key. *4.* Select “FONT NUMBER” and press the MENU/SELECT key. *5.* Select “Desired font” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0”. “0” to “102”. **NOTE** • **According to the selected “FONT NUMBER”, “PITCH SIZE” or “POINT SIZE” setting is available.**

H. PCL /FONT SOURCE /PITCH SIZE

Function	• Sets the pitch size of the PCL font for PCL printing.
Use	• To set the pitch size of the font to be used for printing PCL jobs.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “FONT SOURCE” and press the MENU/SELECT key. *4.* Select “PITCH SIZE” and press the MENU/SELECT key. *5.* Select “Desired pitch size” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “10.00” pt. “0.44” pt to “99.99” pt. **NOTE** • **When one of the following “FONT NUMBERs” is selected, “PITCH SIZE” setting is available.** **FONT NUMBER: 0 to 5, 21 to 23, 54 to 57, 81, 82.**

I. PCL /FONT SOURCE /POINT SIZE

Function	• Sets the point size of the PCL font for PCL printing.
Use	• To set the point size of the font to be used for printing PCL jobs.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “FONT SOURCE” and press the MENU/SELECT key. *4.* Select “POINT SIZE” and press the MENU/SELECT key. *5.* Select “Desired point size” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “12.00” pt. “4.00” pt to “999.75” pt. **NOTE** • **When the following “FONT NUMBER” is selected, “POINT SIZE” setting is available.** **FONT NUMBER: 6 to 20, 24 to 53, 58 to 80, 83 to 102.**

J. PCL /FONT SOURCE /SYMBOL SET

Function	• Sets the symbol set for PCL printing.
Use	• To set the symbol set to be used for printing PCL jobs.
Setting /procedure	*1.* Select “EMULATION” and press the MENU/SELECT key. *2.* Select “PCL” and press the MENU/SELECT key. *3.* Select “FONT SOURCE” and press the MENU/SELECT key. *4.* Select “SYMBOL SET” and press the MENU/SELECT key. *5.* Select “Desired SYMBOL SET” and press the MENU/SELECT key. • The default setting is “PC8”. **PC8** / DESKTOP / ISO4 / ISO6 / ISO11 / ISO15 / ISO17 / ISO21 / ISO60 / ISO69 / ISOL1 / ISOL2 / ISOL5 / ISOL6 / ISOL9 / LEGAL / MATH8 / MCTEXT / MSPUBL / PC775 / PC850 / PC852 / PC858 / PC8DN / PC8TK / PC1004 / PIFONT / PSMATH / PSTEXT / ROMAN8 / WIN30 / WINBALT / WINL1 / WINL2 / WINL5 / ARABIC8 / HPWARA / PC864ARA / HEBREW7 / HEBREW8 / ISOHEB / PC862HEB / ISOCYR / PC866CYR / WINCYR / PC866UKR / GREEK8 / WINGRK / PC851GRK / PC8GRK / ISOGRK

7.7.3 DEFAULT PAPER

A. PAPER SIZE

Function	• Sets the default media size.
Use	• To set the default media size.
Setting /procedure	*1.* Select “DEFAULT PAPER” and press the MENU/SELECT key. *2.* Select “PAPER SIZE” and press the MENU/SELECT key. *3.* Select “Desired paper size” and press the MENU/SELECT key. For North America • The default setting is “LETTER.” For other destinations • The default setting is “A4.” **LETTER*** / LEGAL / EXECUTIVE / **A4*** / A5 / B5(JIS) / GOVT LETTER / STATEMENT /FOLIO / SP FOLIO / UK QUART / FOOLSCAP / GOVT LEGAL / 16K / KAI16 / KAI32 / ENV C5 / ENV C6 / ENV DL / ENV MONARCH / ENV CHOU#3 / ENV CHOU#4 / B5(ISO) / ENV #10 / ENV YOU#4 / JPOST / JPOST-D / CUSTOM

B. CUSTOM SIZE /WIDTH

Function	• Sets the custom media width.
Use	• To set the width of the custom media size.
Setting /procedure	*1.* Select “DEFAULT PAPER” and press the MENU/SELECT key. *2.* Select “CUSTOM SIZE” and press the MENU/SELECT key. *3.* Select “WIDTH” and press the MENU/SELECT key. *4.* Select “Desired paper width” with the Up key△/Down key▽ and press the MENU/SELECT key. For North America • The default setting is “8.50 inches.” “3.63 inches” to “8.50 inches”. For other destinations • The default setting is “210 mm.” “92 mm” to “216 mm”. **NOTE** • **By changing the “PAPER MENU/UNIT OF MEASURE” setting (INCHES/MILLIMETERS), the unit of measurement can be changed.**

C. CUSTOM SIZE /LENGTH

Function	• Sets the custom media length.
Use	• To set the length of the custom media size.
Setting /procedure	*1.* Select “DEFAULT PAPER” and press the MENU/SELECT key. *2.* Select “CUSTOM SIZE” and press the MENU/SELECT key. *3.* Select “LENGTH” and press the MENU/SELECT key. *4.* Select “Desired paper length” with the Up key△/Down key▽ and press the MENU/SELECT key. For North America • The default setting is “11.00 inches.” “5.83 inches” to “14.00 inches”. For other destinations • The default setting is “279 mm.” “148 mm” to “356 mm”. **NOTE** • **By changing the “PAPER MENU/UNIT OF MEASURE” setting (INCHES/MILLIMETERS), the unit of measurement can be changed.**

D. PAPER TYPE

Function	• Set the default media type.
Use	• To set the default media type.
Setting /procedure	*1.* Select “DEFAULT PAPER” and press the MENU/SELECT key. *2.* Select “PAPER TYPE” and press the MENU/SELECT key. *3.* Select “Desired paper type” and press the MENU/SELECT key. • The default setting is “PLAIN PAPER.” **PLAIN PAPER** / RECYCLED / THICK 1 / THICK 2 / LABEL STOCK / TRANSPARENCY / ENVELOPE / POSTCARD / LETTERHEAD / GLOSSY STOCK

7.7.4 STARTUP OPTIONS /DO STARTUP PAGE

Function	• Sets whether a startup page is printed at startup of the printer.
Use	• To specify whether a startup page is printed.
Setting /procedure	ON: Start up page is printed at startup the printer. OFF: Start up page is not printed at startup of the printer. *1.* Select “STARTUP OPTIONS” and press the MENU/SELECT key. *2.* Select “DO STARTUP PAGE” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” **ON** OFF

7.7.5 AUTO CONTINUE

Function	• At the time of the following Operator Call, continues auto printing by ignoring the media type or size. • "PAPER EMPTY" (except "MANUAL FEED"), "xxxx SIZE ERROR", "xxxx TYPE ERROR".
Use	To specify whether printing should continue when the specified media size and type are not available.
Setting /procedure	ON: Auto continuous printing is ON. OFF: Auto continuous printing is OFF. *1.* Select "AUTO CONTINUE" and press the MENU/SELECT key. *2.* Select "Desired setting" and press the MENU/SELECT key. • The default setting is "ON." **ON** OFF

7.7.6 HOLD JOB TIMEOUT

Function	• Sets the amount of time before a job saved temporarily in the printer is automatically deleted.
Use	• To change the amount of time a job is held before being deleted.
Setting /procedure	*1.* Select "HOLD JOB TIMEOUT" and press the MENU/SELECT key. *2.* Select "Desired auto delete time" with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is "DISABLE." (No auto delete.) **DISABLE** 1 hour 4 hours 1 day 1 week **NOTE** • **This menu is available only when an optional Hard Disk unit is installed.**

7.7.7 ENERGY SAVER

Function	• Sets whether the printer should go into Energy Saver mode when not printing or processing a print job and when the Control Panel is not being used. To set the amount of time before Energy Saver mode is activated, use the "ENERGY SAVER TIME" menu. • Energy Saver mode is automatically canceled when any of the following operations is performed: The machine is restarted. A print job is received. Any of the keys on the Control Panel is pressed. The Front Door or Right Door is opened and closed.
Use	To specify whether Energy Saver mode is to be used.
Setting /procedure	*1.* Select "ENERGY SAVER" and press the MENU/SELECT key. *2.* Select "Desired setting" and press the MENU/SELECT key. • The default setting is "ON." **ON** OFF

7.7.8 ENERGY SAVER TIME

Function	• Sets the amount of time before the machine enters Energy Saver mode after the last print is received or the last key operated.
Use	• To change the amount of time before the machine enters Energy Saver mode.
Setting /procedure	*1.* Select “ENERGY SAVER TIME” and press the MENU/SELECT key. *2.* Select “Desired auto delete time” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “30 minutes.” 15 minutes **30 minutes** 1 hour 4 hours **NOTE** • **This menu is available only when “ENERGY SAVER” is set to “ON.”**

7.7.9 MENU TIMEOUT

Function	• Sets the amount of time before the Control Panel returns to the status screen from menu mode and the help display.
Use	• To set the amount of the time before the Control Panel returns to the status screen from the menu and the help display.
Setting /procedure	*1.* Select “MENU TIMEOUT” and press the MENU/SELECT key. *2.* Select “Desired time” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “2 minutes.” OFF 1 minute **2 minutes**

7.7.10 LCD BRIGHTNESS

Function	• Sets the brightness of the Control Panel LCD display.
Use	• To set the brightness of the Control Panel LCD display.
Setting /procedure	*1.* Select “LCD BRIGHTNESS” and press the MENU/SELECT key. *2.* Select “Desired brightness” with the Up key△/Down key▽ and press the MENU/SELECT key. The default setting is “0.” -3 -2 -1 **0** +1 +2 +3

7.7.11 SECURITY

A. CHANGE PASSWORD

Function	• Sets the password used for the LOCK PANEL function.
Use	• To change the password used for the LOCK PANEL function.
Setting /procedure	0000: Panel lock function is OFF. 0001 to FFFF: Valid password for panel lock function. *1.* Select “SECURITY” and press the MENU/SELECT key. *2.* Select “CHANGE PASSWORD” and press the MENU/SELECT key. *3.* Set “Desired password (first digit)” with the Up key△/Down key▽ and press the Right key▷. *4.* Repeat the above procedures to set up to fourth digit password. • The default setting is “0000.” “**0000**” to “FFFF” **NOTE** • **Make sure to set the password to something other than “0000” when the “LOCK PANEL” function is set to “ON.”** • **If you forget the password, it can be initiated (0000) with SERVICE MODE/ RESTORE PASSWORD.** ☞ 3-84

B. LOCK PANEL

Function	• Protects the Menu (except the Service menu) and Job Cancel function with a password.
Use	• To make the Menu (except the Service menu) impossible to change unless the correct password is entered.
Setting /procedure	OFF: Panel Lock function is OFF. MINIMUM: Panel Lock function is ON. Protect the operation of “INTERFACE MENU”, “SYS DEFAULT MENU.” ON: Panel Lock function is ON. Protect the operation of “PROF/PRINT MENU”, “PRINT MENU”, “PAPER MENU”, “QUALITY MENU”, “INTERFACE MENU”, “SYS DEFAULT MENU”, “CANCEL JOB MENU.” *1.* Select “SECURITY” and press the MENU/SELECT key. *2.* Select “LOCK PANEL” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “OFF.” **OFF** MINIMUM ON

7.7.12 CLOCK

A. DATE

Function	• Sets the date of the printer's built-in clock.
Use	• To change the date of the printer's built-in clock.
Setting /procedure	DATE (DD.MM.YY): For Europe DATE (MM.DD.YY): For North America DATE(YY.MM.DD): For Japan The following shows how to set DATE (DD.MM.YY). *1.* Select "CLOCK" and press the MENU/SELECT key. *2.* Select "DATE (DD.MM.YY)" and press the MENU/SELECT key. *3.* Set "Date" with the Up key△/Down key▽ and press the Right key▷. *4.* Repeat the above procedures to set "Month" and "Year." *5.* Press the MENU/SELECT key. DD: "01" to "31". MM: "01" to "12". YY: "2004" to "2032".

B. TIME

Function	• Sets the time of the printer's built-in clock.
Use	• To change the time of the printer's built-in clock.
Setting /procedure	*1.* Select "CLOCK" and press the MENU/SELECT key. *2.* Select "TIME" and press the MENU/SELECT key. *3.* Set "Hour" with the Up key△/Down key▽ and press the Right key▷. *4.* Repeat the above procedures to set "Minute." *5.* Press the MENU/SELECT key.

7.7.13 HDD FORMAT

Function	• Initializes the format of the optional Hard Disk unit.
Use	• To initialize the format of the optional Hard Disk unit.
Setting /procedure	USER AREA ONLY: Initialize only user area. ALL: Initialize all area *1.* Select "HDD FORMAT" and press the MENU/SELECT key. *2.* Select "Desired initialization method" and press the MENU/SELECT key. *3.* "ARE YOU SURE?" is displayed. *4.* By pressing the MENU/SELECT key, initialization starts. By pressing the CANCEL key without pressing the MENU/SELECT key, the start of initialization can be cancelled. *5.* The printer restarts and the hard disk is initialized. Once the initialization starts, it cannot be cancelled. • The default setting is "USER AREA ONLY." **USER AREA ONLY** ALL **NOTE** **• This menu is available only when an optional Hard Disk unit is installed.**

7.7.14 RESTORE DEFAULTS

Function	• Restores the factory default of each setting.
Use	• To restore the defaults of all settings.
Setting /procedure	RESTORE NETWORK: Restore the default for “INTERFACE MENU/ETHERNET” setting. RESTORE PRINTER: Restore the defaults for the settings other than “INTERFACE MENU/ETHERNET” RESTORE ALL: Restore defaults for all settings. *1.* Select “RESTORE DEFFAULTS” and press the MENU/SELECT key. *2.* Select “Desired mode” and press the MENU/SELECT key. *3.* “ARE YOU SURE?” is displayed. *4.* By pressing the MENU/SELECT key, initialization starts. By pressing the CANCEL key without pressing the MENU/SELECT key, the start of initialization can be cancelled. *5.* The printer restarts and the hard disk is initialized. Once the initialization starts, it cannot be cancelled. • The default setting is “RESTORE NETWORK.” **RESTORE NETWORK** RESTORE PRINTER RESTORE ALL

List of reset items 1

Item				Reset Item			Initial Value	Ref. Page
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL		
PRINT MENU	FONT LIST			-	Reset	Reset	POST SCRIPT	☞ 3-46
PAPER MENU	PAPER SOURCE	DEFAULT TRAY		-	Reset	Reset	TRAY2	☞ 3-47
		TRAY1	PAPER SIZE	-	Reset	Reset	LETTER	☞ 3-47
				-	Reset	Reset	A4	
			* CUSTOM SIZE	-	Reset	Reset	WIDTH: 8.5inches LENGTH: 11inches	☞ 3-48
							WIDTH :210mm LENGTH :297mm	
			PAPER TYPE	-	Reset	Reset	PLAIN PAPER	☞ 3-48
		TRAY2 to TRAY4	* PAPER SIZE	-	Reset	Reset	LETTER	☞ 3-49
							A4	
			PAPER TYPE	-	Reset	Reset	PLAIN PAPER	☞ 3-49
		TRAY CHAINING		-	Reset	Reset	ON	☞ 3-49
		DUPLEX		-	Reset	Reset	1	☞ 3-50
		COPIES		-	Reset	Reset	1	☞ 3-50
		COLLATE		-	Reset	Reset	OFF	☞ 3-50
		* UNIT OF MEASURE		-	Reset	Reset	INCHES	☞ 3-51
							MILLIMETERS	

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

List of reset items 2

Item				Reset Item: RESTORE NETWORK	Reset Item: RESTORE PRINTER	Reset Item: RESTORE ALL	Initial Value	Ref. Page
QUALITY MENU	COLOR MODE			-	Reset	Reset	COLOR	☞ 3-52
	BRIGHTNESS			-	Reset	Reset	0%	☞ 3-52
	PCL CONTRAST			-	Reset	Reset	0%	☞ 3-52
	PS PROFILE	SIMULATION PROF		-	Reset	Reset	NONE	☞ 3-52
		SIMULATION INTENT		-	Reset	Reset	RELATIVE COLOR	☞ 3-53
		CMYK GRAY		-	Reset	Reset	COMPOSITE BLACK	☞ 3-53
		DESTINATION PROF		-	Reset	Reset	AUTOMATIC	☞ 3-53
	IMAGE PRINTING	RGB COLOR		-	Reset	Reset	sRGB	☞ 3-54
		RGB INTENT		-	Reset	Reset	PHOTO-GRAPHIC	☞ 3-54
		RGB GRAY		-	Reset	Reset	COMPOSITE BLACK	☞ 3-54
		HALF TONE		-	Reset	Reset	DETAIL	☞ 3-55
	TEXT PRINTING	RGB COLOR		-	Reset	Reset	sRGB	☞ 3-55
		RGB INTENT		-	Reset	Reset	PHOTO-GRAPHIC	☞ 3-55
		RGB GRAY		-	Reset	Reset	COMPOSITE BLACK	☞ 3-56
		HALF TONE		-	Reset	Reset	DETAIL	☞ 3-56
	GAPHIC PRINTING			-	Reset	Reset	AS TEXT	☞ 3-56
	CALIBRATION	TONE CALIBRATION		-	Reset	Reset	ON	☞ 3-57
		AIDC PROCESS		-	Reset	Reset	CANCEL	☞ 3-57
		COLOR SEPARATION		-	Reset	Reset	OFF	☞ 3-57
	SUPPLIES	REPLACE	TRANS. BELT	-	Reset	Reset	NO	☞ 3-58
			TRANS. ROLLER	-	Reset	Reset	NO	☞ 3-58
			FUSER UNIT	-	Reset	Reset	NO	☞ 3-58
INTERFACE MENU	JOB TIMEOUT			Reset	-	Reset	15 second	☞ 3-59
	ETHERNET	TCP/IP	ENABLE	Reset	-	Reset	YES	☞ 3-59
			IP ADDRESS	Reset	-	Reset	000.000. 000.000	☞ 3-60
			SUBNET MASK	Reset	-	Reset	255.255. 000.000	☞ 3-60
			DEFAULT GATEWAY	Reset	-	Reset	000.000. 000	☞ 3-60
			DHCP/ BOOTP	Reset	-	Reset	YES	☞ 3-61
		NETWARE		Reset	-	Reset	YES	☞ 3-61
		APPLE TALK		Reset	-	Reset	YES	☞ 3-61
		SPEED /DUPLEX		Reset	-	Reset	AUTO	☞ 3-62
	* LANGUAGE			-	Reset	Reset	ENGLISH	☞ 3-63
							JAPANESE	

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

List of reset items 3

Item				Reset Item			Initial Value	Ref. Page
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL		
SYS DEFAULT MENU	EMULATION	DEF. EMULATION		-	Reset	Reset	AUTO	☞ 3-63
		POST SCRIPT	WAIT TIMEOUT	-	Reset	Reset	0	☞ 3-63
			PS ERROR PAGE	-	Reset	Reset	OFF	☞ 3-64
			PS PROTOCOL	-	Reset	Reset	AUTO	☞ 3-64
		PCL	CR/LF MAPPING	-	Reset	Reset	CR=CR LF=LF	☞ 3-64
			LINES PER PAGE	-	Reset	Reset	60	☞ 3-65
			FONT SOURCE/ FONT NUMBER	-	Reset	Reset	0	☞ 3-65
			FONT SOURCE/ PITCH SIZE	-	Reset	Reset	10.00	☞ 3-65
			FONT SOURCE/ POINT SIZE	-	Reset	Reset	12.00	☞ 3-66
			FONT SOURCE/ SYMBOL SET	-	Reset	Reset	PC8	☞ 3-66
	DEFAULT PAPER	* PAPER SIZE		- -	Reset	Reset	LETTER	☞ 3-67
							A4	
		* CUSTOM SIZE	WIDTH	-	Reset	Reset	8.5 inches	☞ 3-67
							210 mm	
			LENGTH	-	Reset	Reset	11 inches	☞ 3-68
							279 mm	
		PAPER TYPE		-	Reset	Reset	PLAIN PAPER	☞ 3-68
	STARTUP OPTIONS	DO STARTUP PAGE		-	Reset	Reset	ON	☞ 3-68
	AUTO CONTINUE			-	Reset	Reset	ON	☞ 3-69
	HOLD JOB TIMEOUT			-	Reset	Reset	DISABLE	☞ 3-69
	ENERGY SAVER			-	Reset	Reset	ON	☞ 3-69
	ENERGY SAVER TIME			-	Reset	Reset	30 minutes	☞ 3-70
	MENU TIMEOUT			-	Reset	Reset	2 minutes	☞ 3-70
	LCD BRIGHTNESS			-	Reset	Reset	0	☞ 3-70
	SECURITY	CHANGE PASSWORD		-	Reset	Reset	0000	☞ 3-71
		LOCK PANEL		-	Reset	Reset	OFF	☞ 3-71
	HDD FORMAT			-	Reset	Reset	USER AREA ONLY	☞ 3-72

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

List of reset items 4

Item				Reset Item			Initial Value	Ref. Page
				RESTORE NETWORK	RESTORE PRINTER	RESTORE ALL		
SYS DEFAULT MENU	RESTORE DEFAULTS			-	Reset	Reset	RESTORE NETWORK	☞ 3-73
	ENABLE WARNING	PAPER EMPTY	TRAY1	-	Reset	Reset	OFF	☞ 3-77
			TRAY2	-	Reset	Reset	ON	☞ 3-77
			TRAY3	-	Reset	Reset	ON	☞ 3-77
			TRAY4	-	Reset	Reset	ON	☞ 3-78
	TONER EMPTY			-	Reset	Reset	STOP	☞ 3-78
Page-Scope Web Connec-tion	Admin Password			Reset	-	Reset	administrator	-
	Refresh Rate			Reset	-	Reset	30 sec.	-
	Contact Name			Reset	-	Reset	KONICA MINOLTA Customer Support	-
	Contact Information			Reset	-	Reset	http://printer.konicaminolta.com/	-
	Product Help URL			Reset	-	Reset	http://pagescope.com/	-
	Corporate URL			Reset	-	Reset	http://printer.konicaminolta.com/	-
	Supplies and Accessories			Reset	-	Reset	http://www.q-shop.com/	-
	Online Help URL			Reset	-	Reset	http://printer.konicaminolta.com/	-
	Auto IP			Reset	-	Reset	DHCP	-
	WINS/NetBIOS Resolution			Reset	-	Reset	Checked	-
	** NetBIOS Name			Reset	-	Reset	MC5450XXXXXX	-
	Domain/Workgroup			Reset	-	Reset	WORK-GROUP	-
	Use DHCP for WINS			Reset	-	Reset	Checked	-
	Primary WINS			Reset	-	Reset	grayed out/ disabled	-
	Secondary WINS			Reset	-	Reset	grayed out/ disabled	-
	Rendezvous Service Discovery			Reset	-	Reset	Checked	-
	Rendezvous Config Printer Name			Reset	-	Reset	KONICA MINOLTA magicolor 5450	-
	** Rendezvous Config Host Name			Reset	-	Reset	MC5450XXXXXX	-
	IPP Config Printer Name			Reset	-	Reset	magicolor 5450	-
	IPP Config Printer Location			Reset	-	Reset	Blank	-

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

**: XXXXXX are the final 6 digits of the printer's MAC address.

7.7.15 ENABLE WARNING

A. PAPER EMPTY /TRAY1

Function	• Specifies whether a “TRAY 1 Paper Empty” (Manual Feed Tray) is displayed as a Normal message when it is empty.
Use	• To specify whether to display a “TRAY 1 Paper Empty” message as a Normal message.
Setting /procedure	ON: “Paper empty message” is displayed on Normal message when Tray is empty. OFF: “Paper empty message” is not displayed on Normal message when Tray is empty. *1.* Select “ENABLE WARNING” and press the MENU/SELECT key. *2.* Select “PAPER EMPTY” and press the MENU/SELECT key. *3.* Select “TRAY 1” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “OFF.” **OFF** ON

B. PAPER EMPTY /TRAY2

Function	• Specifies whether a “TRAY 2 Paper Empty” is displayed as a Normal message when it is empty.
Use	• To specify whether to display a “TRAY 2 Paper Empty” message as a Normal message.
Setting /procedure	ON: “Paper empty message” is displayed on Normal message when Tray is empty. OFF: “Paper empty message” is not displayed on Normal message when Tray is empty. *1.* Select “ENABLE WARNING” and press the MENU/SELECT key. *2.* Select “PAPER EMPTY” and press the MENU/SELECT key. *3.* Select “TRAY 2” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” OFF **ON**

C. PAPER EMPTY /TRAY3

Function	• Specifies whether a “TRAY 3 Paper Empty” is displayed as a Normal message when it is empty.
Use	• To specify whether to display a “TRAY 3 Paper Empty” message as a Normal message.
Setting /procedure	ON: “Paper empty message” is displayed on Normal message when Tray is empty. OFF: “Paper empty message” is not displayed on Normal message when Tray is empty. *1.* Select “ENABLE WARNING” and press the MENU/SELECT key. *2.* Select “PAPER EMPTY” and press the MENU/SELECT key. *3.* Select “TRAY 3” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” OFF **ON** **NOTE** **• This menu is available only when an optional Lower Feeder Unit is installed.**

D. PAPER EMPTY /TRAY4

Function	• Specifies whether a “TRAY 4 Paper Empty” is displayed as a Normal message when it is empty.
Use	• To specify whether to display a “TRAY 4 Paper Empty” message as a Normal message.
Setting /procedure	ON: “Paper empty message” is displayed on Normal message when Tray is empty. OFF: “Paper empty message” is not displayed on Normal message when Tray is empty. *1.* Select “ENABLE WARNING” and press the MENU/SELECT key. *2.* Select “PAPER EMPTY” and press the MENU/SELECT key. *3.* Select “TRAY 4” and press the MENU/SELECT key. *4.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “ON.” OFF **ON** **NOTE** • **This menu is available only when an optional Lower Feeder Unit is installed.**

7.7.16 TONER EMPTY

Function	• Specifies whether printing stops or continues when a Toner Empty occurs.
Use	• To specify whether printing should stop or continue printing when a Toner Empty occurs.
Setting /procedure	STOP: Print stops when Toner Empty occurs. Print cannot be started until the toner cartridge is exchanged. CONTINUE: Print continues even if Toner Empty occurs. Print is available, however there is no toner and printing with proper image is impossible. *1.* Select “ENABLE WARNING” and press the MENU/SELECT key. *2.* Select “TONER EMPTY” and press the MENU/SELECT key. *3.* Select “Desired setting” and press the MENU/SELECT key. • The default setting is “STOP.” **STOP** CONTINUE

8. Service Menu (magicolor 5450)

8.1 How to Enter the Service Menu

NOTE

- **Make sure not to reveal the password of the Service Menu to any unauthorized person.**

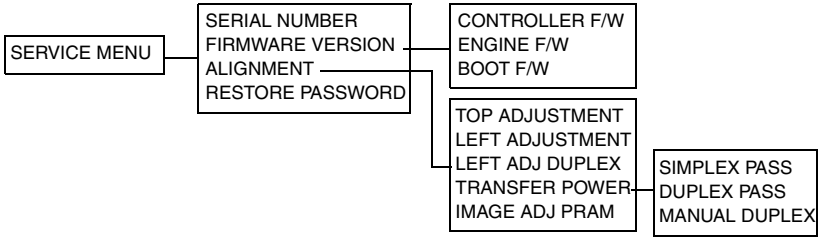
A. Procedure

1. Display “SERVICE MENU” on the menu screen and press the MENU/SELECT key.
2. “ENTER PASSWORD” message is displayed.
3. Set “First digit of password” with the Up key△/Down key▽ and press the Right key▷.
4. Repeat the above procedures to set up to seventh digit of password. Enter “KMM5450” for Service password. Press the MENU/SELECT key.
5. Press the MENU/SELECT key.

B. Exiting

- Press the CANCEL key.

8.2 Service mode function tree



8.3 Service Menu Setting/Adjustment

8.3.1 SERIAL NUMBER

Function	• Displays the serial number of the printer.
Use	• To determine the printer's serial number.
Setting /procedure	*1.* Select "SERVICE MENU" and press the MENU/SELECT key. *2.* Select "SERIAL NUMBER" and press the MENU/SELECT key. *3.* "SERIAL NUMBER" is displayed.

8.3.2 FIRMWARE VERSION

Function	• Displays the version number of the printer firmware.
Use	• To determine the version number of the printer firmware.
Setting /procedure	CONTROLLER F/W: Firmware of controller ENGINE F/W: Firmware of engine BOOT/F/W: Boot firmware *1.* Select "FIRMWARE VERSION" and press the MENU/SELECT key. *2.* Select "Desired firmware" and press the MENU/SELECT key. *3.* Version number of firmware is displayed.

8.3.3 ALIGNMENT

A. TOP ADJUSTMENT

Function	• Adjusts the top margin of media for single-sided printing.
Use	• To correct a misaligned print image.
Setting /procedure	PLAIN PAPER: Adjust the head margin of plain paper. THICK PAPER: Adjust the head margin of thick paper. ENVELOPE: Adjust the head margin of envelope. TRANSPARENCY: Adjust the head margin of transparency. *1.* Select "ALIGNET" and press the MENU/SELECT key. *2.* Select "TOP ADJUSTMENT" and press the MENU/SELECT key. *3.* Select "Desired paper type" and press the MENU/SELECT key. *4.* Select "Desired adjustment amount" with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is "0." "-15" to "+15". (31 steps)

B. LEFT ADJUSTMENT

Function	• Adjusts the left margin of media for single-sided printing.
Use	• To correct a misaligned print image.
Setting /procedure	LEFT ADJ TRAY 1: Adjust the left margin of paper fed from Tray 1 (Manual tray.) LEFT ADJ TRAY 2: Adjust the left margin of paper fed from Tray 2. LEFT ADJ TRAY 3: Adjust the left margin of paper fed from Tray 3. LEFT ADJ TRAY 4: Adjust the left margin of paper fed from Tray 4. *1.* Select “ALIGNET” and press the MENU/SELECT key. *2.* Select “LEFT ADJUSTMENT” and press the MENU/SELECT key. *3.* Select “Desired tray” and press the MENU/SELECT key. *4.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” “-15” to “+15”. (31 steps)

C. LEFT ADJ DUPLEX

Function	• Adjusts the left margin of media for double-sided printing.
Use	• To correct a misaligned print image.
Setting /procedure	LEFT ADJ TRAY 1: Adjust the left margin of duplex print paper fed from Tray 1 (Manual tray.) LEFT ADJ TRAY 2: Adjust the left margin of duplex print paper fed from Tray 2. LEFT ADJ TRAY 3: Adjust the left margin of duplex print paper fed from Tray 3. LEFT ADJ TRAY 4: Adjust the left margin of duplex print paper fed from Tray 4. *1.* Select “ALIGNET” and press the MENU/SELECT key. *2.* Select “LEFT ADJ DUPLEX” and press the MENU/SELECT key. *3.* Select “Desired tray” and press the MENU/SELECT key. *4.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” “-15” to “+15”. (31 steps)

D. TRANSFER POWER /SIMPLEX PASS

Function	• Adjusts the transfer power when single-sided pages have image quality problems (void areas or white spots).
Use	• To correct single-sided pages with image quality problems (void areas or white spots) due to the characteristics of the media being used.
Setting /procedure	PLAIN PAPER: Adjust the image quality (void areas, white spot) of plain paper. TRANSPARENCY: Adjust the image quality (void areas, white spot) of OHP film. THICK 1: Adjust the image quality (void areas, white spot) of thick paper 1. THICK 2: Adjust the image quality (void areas, white spot) of thick paper 2. POSTCARD: Adjust the image quality (void areas, white spot) of postcard. ENVELOPE: Adjust the image quality (void areas, white spot) of envelope. • If void areas occurs, adjust in the plus levels. • If white spots occurs, adjust in the minus levels. *1.* Select “TRANSFER POWER” and press the MENU/SELECT key. *2.* Select “SIMPLEX PASS” and press the MENU/SELECT key. *3.* Select “Desired paper type” and press the MENU/SELECT key. *4.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” “-8” to “+7” (16 steps)

E. TRANSFER POWER /DUPLEX PASS

Function	• Adjusts the transfer power when double-sided pages have image quality problems (void areas or white spots).
Use	• To correct double-sided pages with image quality problems (void areas or white spots) due to the characteristics of the media being used.
Setting /procedure	PLAIN PAPER: Adjust the image quality (void areas, white spot) of plain paper. • If void areas occurs, adjust in the plus levels. • If white spots occurs, adjust in the minus levels. *1.* Select “TRANSFER POWER” and press the MENU/SELECT key. *2.* Select “DUPLEX PASS” and press the MENU/SELECT key. *3.* Check if “PLAIN PAPER” is displayed and press the MENU/SELECT key. *4.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” “-8” to “+7” (16 steps)

F. TRANSFER POWER /MANUAL DUPLEX

Function	• Adjusts the transfer power when manually duplexed pages have image quality problems (void areas or white spots).
Use	• To correct manually duplexed pages with image quality problems (void areas or white spots) due to the characteristics of the media being used.
Setting /procedure	PLAIN PAPER: Adjust the image quality (void areas, white spot) of plain paper. THICK 1: Adjust the image quality (void areas, white spot) of thick paper 1. THICK 2: Adjust the image quality (void areas, white spot) of thick paper 2. POSTCARD: Adjust the image quality (void areas, white spot) of postcard. ENVELOPE: Adjust the image quality (void areas, white spot) of envelope. • If void areas occurs, adjust in the plus levels. • If white spots occurs, adjust in the minus levels. *1.* Select “TRANSFER POWER” and press the MENU/SELECT key. *2.* Select “MANUAL DUPLEX” and press the MENU/SELECT key. *3.* Select “Desired paper type” and press the MENU/SELECT key. *4.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” “-8” to “+7” (16 steps)

8.3.4 TRANSFER POWER /IMAGE ADJ PARAM

Function	• Adjusts the Printer in case of an image quality problem (uneven density)
Use	• To correct image quality problems (uneven density) due to the Printer being operated at a high altitude.
Setting /procedure	*1.* Select “IMAGE ADJ PARAM” and press the MENU/SELECT key. *2.* Select “Desired adjustment amount” with the Up key△/Down key▽ and press the MENU/SELECT key. • The default setting is “0.” **0** 1 2 3 **NOTE** • **When the setting has been changed, be sure to run a CALIBRATION/AIDC process.** ☞ 3-57

8.3.5 RESTORE PASSWARD

Function	• Reinitializes the password used for the “SYSTEM DEFAULT MENU/SECURITY/ PANEL LOCK FUNCTION” set by user. ☞ LOCK PANEL 3-71
Use	• To reinitialize the Panel Lock function when the menu cannot be opened even when entering the correct password. • To reinitialize the Panel Lock function when the user forgets the password.
Setting /procedure	YES: Initialize password NO: Not initialize password *1.* Select “RESTORE PASSWORD” and press the MENU/SELECT key. *2.* Select “Desired setting” with the Up key△/Down key▽ and press the MENU/ SELECT key. *3.* Return the password set at “SYSTEM DEFAULT MENU/SECURITY/CHANGE PASSWORD” to “0000” (Enable Panel Lock function) • The default setting is “NO.” YES **NO**

IV Troubleshooting

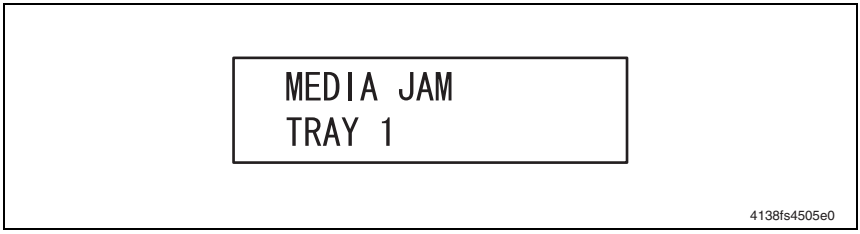
1. Jam Display

NOTE
Make sure to note that the feed trays are named differently, depending on the printer model.

magicolor 5430 DL / 5440 DL	magicolor 5450
MANUAL FEED TRAY	TRAY 1
TRAY 1	TRAY 2
TRAY 2	TRAY 3
TRAY 3	TRAY 4

1.1 Misfeed Display (magicolor 5430 DL / 5440 DL)

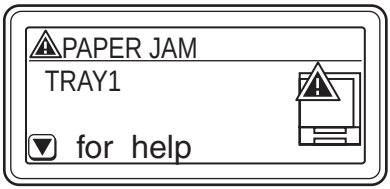
- When a media misfeed occurs a message is displayed on the Control Panel.



Display	Misfeed Location	Misfeed processing location	Action
MEDIA JAM TRAY 1	1st Drawer take-up	• Tray 1 • Right Door (Main Unit)	☞ 4-5
MEDIA JAM MANUAL FEED TRAY	Manual Feed Tray take-up	• Manual Feed Tray • Right Door (Main Unit)	☞ 4-6
MEDIA JAM TRAY 2	2nd Drawer take-up, Vertical Conveyance	• Tray 2 • Tray 2 Right Door	☞ See each Option Service Manual.
MEDIA JAM TRAY 3	3rd Drawer take-up, Vertical Conveyance	• Tray 3 • Tray 3 Right Door	
MEDIA JAM DUPLEX LOWER	Duplex paper feed section	• Duplex Option door	
MEDIA JAM DUPLEX UPPER	Duplex transport section		
MEDIA JAM TRANSFER ROLLER	Transfer section	• Right Door	☞ 4-7
MEDIA JAM FUSER	Fusing/exit section	• Right Door • Fusing Unit	☞ 4-8
MEDIA JAM UNDEFINED	-	-	☞ 4-8

1.2 Misfeed Display (magicolor 5450)

- When a media misfeed occurs a message is displayed on the Control Panel.



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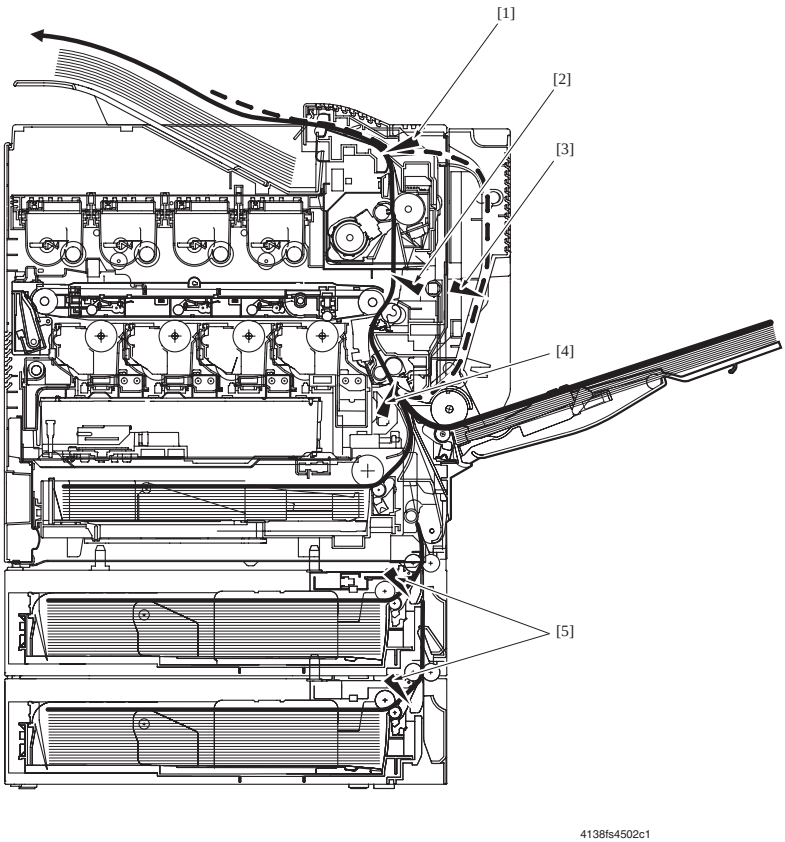
Display		Misfeed Location	Misfeed processing location	Action
LCD 1	LCD 2			
PAPER JAM	FUSER/EXIT	• Fusing/exit section	• Right Door (Main Unit) • Fusing Unit	☞ 4-8
	SECOND TRANS	• Transfer section	• Right Door (Main Unit)	☞ 4-7
	VERTICAL TRANS	• Vertical Conveyance	• Right Door (Main Unit) • Tray 3 Right Door • Tray 4 Right Door	☞ 4-5 See the Service Manual for the optional Lower Feeder Unit.
	DUPLEX1	• Duplex transport section	• Duplex Option door	☞ See the Service Manual for the Duplex Option.
	DUPLEX2	• Duplex paper feed section		
	TRAY1	• 1st Drawer take-up (Manual Feed Tray)	• Manual Feed Tray • Right Door (Main Unit)	☞ 4-6
	TRAY2	• 2nd Drawer take-up	• Tray 2 • Right Door (Main Unit)	☞ 4-5
	TRAY3	• 3rd Drawer take-up • Vertical Conveyance	• Tray 4 • Tray 3 Right Door	☞ See the Service Manual for the optional Lower Feeder Unit.
	TRAY4	• 4th Drawer take-up • Vertical Conveyance	• Tray 4 • Tray 4 Right Door	

1.3 Misfeed Display Resetting Procedure

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

1.4 Sensor Layout

- System equipped with two Lower Feeder Units and one Duplex Option



[1]	Exit Sensor	PC8	[4]	Synchronizing Roller Sensor	PC4
[2]	Paper Loop Sensor	PC6	[5]	Lower Feeder Paper Feed Sensor	PC3 PF
[3]	Sensor on Duplex Board	PWB-E DU			

1.5 Solutions

1.5.1 Initial Check Items

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

Check Item	Action
Does media meet product specifications?	• Change media.
Is media curled, wavy, or damp.	• Change media. • Instruct user in correct media storage.
Is a foreign matter present along the media path, or is the media path deformed or worn?	• Clean or change the media path.
Are the 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 the media?	• Set as necessary.
Are actuators found operational as checked for correct operation?	• Correct or change the defective actuator.

1.5.2 Misfeed at Tray 1 media feed section (Misfeed at Tray 2 media feed section)

NOTE

- **Make sure to note that the feed trays are named differently, depending on the printer model.**

magicolor 5430 DL / 5440 DL	magicolor 5450
TRAY 1	TRAY 2

- **The following procedures use the name for magicolor 5430 DL/5440 DL.**

A. Detection Timing

Type	Description
Detection of misfeed at Tray 1 media feed section	The media does not unblock the Synchronizing Roller Sensor (PC4) even after the lapse of a given period of time after the media feed sequence has been started.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC4) Tray 1 Paper Feed Clutch (CL1) Intermediate Transport Motor (M3)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
3	CL1 operation check	PWB-A PJ6A-2 (ON)	2-K
4	M3 operation check	PWB-A PJ27A-8 (LOCK) PWB-A PJ27A-5 (REM)	2-I
5	Change PWB-A.	-	-

1.5.3 Misfeed at Manual Feed Tray media feed section (Misfeed at Tray 1 media feed section)

NOTE

- **Make sure to note that the feed trays are named differently, depending upon the printer model.**

magicolor 5430 DL / 5440 DL	magicolor 5450
MANUAL FEED TRAY	TRAY 1

- **The following procedures use the name for magicolor 5430 DL/5440 DL.**

A. Detection Timing

Type	Description
Detection of misfeed at Manual Feed Tray media feed section	The media does not unblock the Synchronizing Roller Sensor (PC4) even after the lapse of a given period of time after the media feed sequence has been started.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC4) Manual Feed Tray Paper Feed Clutch (CL3) Intermediate Transport Motor (M3)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
3	CL3 operation check	PWB-A PJ6A-4 (ON)	2-B
4	M3 operation check	PWB-A PJ27A-8 (LOCK) PWB-A PJ27A-5 (REM)	2-I
5	Change PWB-A.	-	-

1.5.4 Misfeed at transfer section

A. Detection Timing

Type	Description
Detection of misfeed at transfer section	The Synchronizing Roller Sensor (PC4) is not blocked even after the lapse of a given period of time after the media has unblocked PC4.
	The media does not block the Exit Sensor (PC8) even after the lapse of a given period of time after the media has unblocked the Synchronizing Roller Sensor (PC4).
	The media has unblocked the Synchronizing Roller Sensor (PC4), though a loop is yet to be formed after drive of the Synchronizing Rollers has been started.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC4) Exit Sensor (PC8)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
3	PC8 sensor check	PWB-A PJ4A-6 (ON)	2-J
4	Change PWB-A.	-	-

1.5.5 Misfeed at fusing/exit section

A. Detection Timing

Type	Description
Detection of misfeed at fusing/ exit section	The Exit Sensor (PC8) is not unblocked even after the lapse of a given period of time after the media has blocked PC8.
	The media does not block the sensor on the Duplex Board (PWB-E DU) even after the lapse of a given period of time after it has unblocked the Exit Sensor (PC8) during media feeding from the Duplex Option.
Detection of media left in fusing/exit section	The Exit Sensor (PC8) is blocked when the Power Switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts	
Exit Sensor (PC8)	Duplex Board (PWB-E DU) Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC8 sensor check	PWB-A PJ4A-6 (ON)	2-J
3	Change PWB-E DU.	-	-
4	Change PWB-A.	-	-

1.5.6 Undefined misfeed

A. Detection Timing

Type	Description
Detection of undefined misfeed	Conflicting settings are made in printer driver.

B. Action

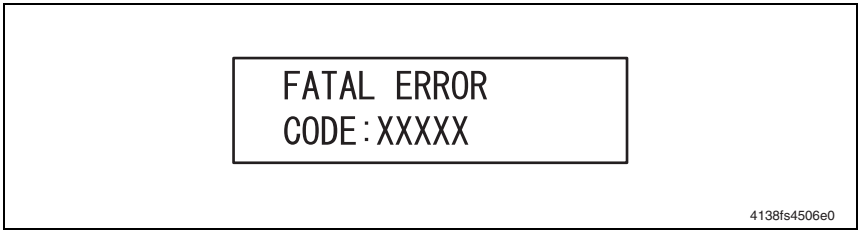
Relevant Electrical Parts	
Print Control Board (PWB-P)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check printer driver settings.	-	-
2	Change PWB-P.	-	-
3	Change PWB-A.	-	-

2. Malfunction code

2.1 Trouble Codes (magicolor 5430 DL/5440 DL)

- The printer'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.



2.1.1 Trouble code list

- For the details of the malfunction codes of the options, see the Service Manual for the corresponding option.

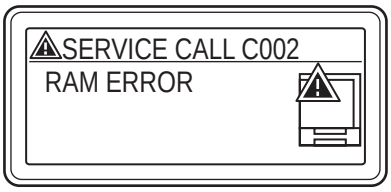
Code	Item	Detection Timing
0010H	Color PC Drum Motor malfunction	• The Color PC Drum Motor does not rotate evenly even after the lapse of a given period of time while it is being started.
		• The Motor Lock signal remains HIGH for a given period of consecutive time while the Color PC Drum Motor is being rotated.
001BH	Developing Motor/Y,M,C malfunction	• The Developing Motor/Y,M,C does not rotate evenly even after the lapse of a given period of time while it is being started.
		• The Motor Lock signal remains HIGH for a given period of consecutive time while the Developing Motor/Y,M,C is being rotated.
0017H	Intermediate Transport Motor malfunction	• The Intermediate Transport Motor does not rotate evenly even after the lapse of a given period of time while it is being started.
		• The Motor Lock signal remains HIGH for a given period of consecutive time while the Intermediate Transport Motor is being rotated.
0018H	Developing Motor/K malfunction	• The Developing Motor/K does not rotate evenly even after the lapse of a given period of time while it is being started.
		• The Motor Lock signal remains HIGH for a given period of consecutive time while the Developing Motor/K is being rotated.
0046H	Fusing Cooling Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the Fusing Cooling Fan Motor is being rotated.
004CH	Ozone Ventilation Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the Ozone Ventilation Fan Motor is being rotated.

Code	Item	Detection Timing
004EH	LV Cooling Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the LV Cooling Fan Motor is being rotated.
0060H	Fusing Motor malfunction	• The Fusing Motor does not rotate evenly even after the lapse of a given period of time while it is being started. • The Motor Lock signal remains HIGH for a given period of consecutive time while the Fusing Motor is being rotated.
0094H	2nd image transfer pressure/ retraction failure	• The Retraction Position Sensor/2nd Image Transfer is not activated (retracted position) within a given period of time after the retraction sequence of the 2nd Transfer Roller has been started. • The Retraction Position Sensor/2nd Image Transfer is not deactivated (pressed position) within a given period of time after the pressure sequence of the 2nd Transfer Roller has been started.
0096H	1st image transfer pressure/ retraction failure	• The Retraction Position Sensor/1st Image Transfer is not activated (retracted position) within a given period of time after the Intermediate Transport Motor has started rotating. • The Retraction Position Sensor/1st Image Transfer is not deactivated (pressed position) within a given period of time after the Intermediate Transport Motor has started rotating.
0300H	Polygon Motor malfunction	• The Polygon Motor does not rotate evenly even after the lapse of a given period of time after it has been started. • The Motor Lock signal remains HIGH for a given period of consecutive time while the Polygon Motor is being rotated.
0310H	Laser malfunction	• The SOS signal is not detected within a given period of time after the output of the laser has been started.
0500H	Heating Roller warm-up failure	• The Heating Roller Thermistor does not detect the specified temperature and the warm-up cycle is not completed even after the lapse of a given period of time after the cycle has been started.
0501H	Fusing Pressure Roller warm-up failure	• The Fusing Pressure Roller Thermistor does not detect the specified temperature and the warm-up cycle is not completed even after the lapse of a given period of time after the cycle has been started.
0510H	Abnormally low Heating Roller temperature	• The temperature detected by the Heating Roller Thermistor remains lower than the specified value for a given period of time or longer.
0511H	Abnormally low Fusing Pressure Roller temperature	• The temperature detected by the Fusing Pressure Roller Thermistor remains lower than the specified value for a given period of time or longer.
0520H	Abnormally high Heating Roller temperature	• The temperature detected by the Heating Roller Thermistor remains higher than the specified value for a given period of time or longer.

Code	Item	Detection Timing
0521H	Abnormally high Fusing Pressure Roller temperature	• The temperature detected by the Fusing Pressure Roller Thermistor remains higher than the specified value for a given period of time or longer.
13D0H	Parameter Chip failure	• Data, which has been written, is read, checked, and found faulty; rewriting of the data is then executed and the data is checked to be found faulty during re-reading.
		• A count value is found faulty during reading.
		• Parameter Chip is detected to be not mounted during initial mounting detecting sequence.
		• Found to be access failure.
13E2H	Flash ROM write error	• Flash ROM writing is found faulty during a check.
13E3H	Flash ROM device fault	• An erase error occurs during erasing of data in Flash ROM.

2.2 Trouble Codes (magicolor 5450)

- The printer'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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2.2.1 Trouble code list

- For the details of the malfunction codes of the options, see the Service Manual for the corresponding option.

LCD1 (Service call ID)	LCD2/LCD3 (Error description)	Item	Detection Timing
0010	P MOTOR COLOR	Color PC Drum Motor malfunction	• The Color PC Drum Motor does not rotate evenly even after the lapse of a given period of time while it is being started.
			• The Motor Lock signal remains HIGH for a given period of consecutive time while the Color PC Drum Motor is being rotated.
0017	P MOTOR BLACK	Intermediate Transport Motor malfunction	• The Intermediate Transport Motor does not rotate evenly even after the lapse of a given period of time while it is being started.
			• The Motor Lock signal remains HIGH for a given period of consecutive time while the Intermediate Transport Motor is being rotated.
001B	D MOTOR COLOR	Developing Motor/ Y,M,C malfunction	• The Developing Motor/Y,M,C does not rotate evenly even after the lapse of a given period of time while it is being started.
			• The Motor Lock signal remains HIGH for a given period of consecutive time while the Developing Motor/Y,M,C is being rotated.
0018	D MOTOR BLACK	Developing Motor/K malfunction	• The Developing Motor/K does not rotate evenly even after the lapse of a given period of time while it is being started.
			• The Motor Lock signal remains HIGH for a given period of consecutive time while the Developing Motor/K is being rotated.
0046	FUSER FAN	Fusing Cooling Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the Fusing Cooling Fan Motor is being rotated.
004C	OZONE FAN	Ozone Ventilation Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the Ozone Ventilation Fan Motor is being rotated.

LCD1 (Service call ID)	LCD2/LCD3 (Error description)	Item	Detection Timing
004E	POWER FAN	LV Cooling Fan Motor malfunction	• The Motor Lock signal remains HIGH for a given period of consecutive time while the LV Cooling Fan Motor is being rotated.
0060	FUSER MOTOR	Fusing Motor malfunction	• The Fusing Motor does not rotate evenly even after the lapse of a given period of time while it is being started. • The Motor Lock signal remains HIGH for a given period of consecutive time while the Fusing Motor is being rotated.
0094	XFER DETACH 2	2nd image transfer pressure / retraction failure	• The Retraction Position Sensor/2nd Image Transfer is not activated (retracted position) within a given period of time after the retraction sequence of the 2nd Transfer Roller has been started. • The Retraction Position Sensor/2nd Image Transfer is not deactivated (pressed position) within a given period of time after the pressure sequence of the 2nd Transfer Roller has been started.
0096	XFER DETACH 1	1st image transfer pressure / retraction failure	• The Retraction Position Sensor/1st Image Transfer is not activated (retracted position) within a given period of time after the Intermediate Transport Motor has started rotating. • The Retraction Position Sensor/1st Image Transfer is not deactivated (pressed position) within a given period of time after the Intermediate Transport Motor has started rotating.
0300	POLYGON MOTOR	Polygon Motor malfunction	• The Polygon Motor does not rotate evenly even after the lapse of a given period of time after it has been started. • The Motor Lock signal remains HIGH for a given period of consecutive time while the Polygon Motor is being rotated.
0310	LASER ERROR	Laser malfunction	• The SOS signal is not detected within a given period of time after the output of the laser has been started.
0500	FUSER ERROR	Heating Roller warm-up failure	• The Heating Roller Thermistor does not detect the specified temperature and the warm-up cycle is not completed even after the lapse of a given period of time after the cycle has been started.
0501	FUSER ERROR	Fusing Pressure Roller warm-up failure	• The Fusing Pressure Roller Thermistor does not detect the specified temperature and the warm-up cycle is not completed even after the lapse of a given period of time after the cycle has been started.
0510	FUSER ERROR	Abnormally low Heating Roller temperature	• The temperature detected by the Heating Roller Thermistor remains lower than the specified value for a given period of time or longer.

LCD1 (Service call ID)	LCD2/LCD3 (Error description)	Item	Detection Timing
0511	FUSER ERROR	Abnormally low Fusing Pressure Roller temperature	• The temperature detected by the Fusing Pressure Roller Thermistor remains lower than the specified value for a given period of time or longer.
0520	FUSER ERROR	Abnormally high Heating Roller temperature	• The temperature detected by the Heating Roller Thermistor remains higher than the specified value for a given period of time or longer.
0521	FUSER ERROR	Abnormally high Fusing Pressure Roller temperature	• The temperature detected by the Fusing Pressure Roller Thermistor remains higher than the specified value for a given period of time or longer.
13D0	EEPROM1	Parameter Chip failure	• Data, which has been written, is read, checked, and found faulty; rewriting of the data is then executed and the data is checked to be found faulty during re-reading.
			• A count value is found faulty during reading.
			• Parameter Chip is detected to be not mounted during initial mounting detecting sequence.
			• Found to be access failure.
13E2	FLASH WRITE	Flash ROM write error	• Flash ROM writing is found faulty during a check.
13E3	FLASH DEVICE	Flash ROM device fault	• An erase error occurs during erasing of data in Flash ROM.
C002	RAM ERROR	RAM error at Standard Memory	• RAM error at Standard Memory is detected during printer start-up.
C003		RAM error at Extension Memory	• RAM error at Extension Memory is detected during printer start-up.
C013	H/W ADDRESS	MAC address error	• Invalid Mac address is detected during printer start-up.
C015	BOOT ROM	Boot ROM error	• Boot ROM error is detected during printer start-up.
C022	NVRAM ERROR	NVRAM access error	• Correct access to NVRAM is failed during the printer starting.
C025	CONTROLLER ROM	Controller ROM error	• Lead error of destination setting file is detected during the printer starting.
C026			• Flash ROM access error is detected during the printer starting.
C027			• Final check sum error is detected during the printer starting.
C050	HDD ERROR	HDD access error	• When correct access to the hard disc unit is failed during access.
C051	HDD DISK FULL	HDD full error	• Range for user space is full during access to the Hard Disk unit.
C060	UPDATE ERROR	Firmware update error	• Firmware update fails to complete correctly during update.

LCD1 (Service call ID)	LCD2/LCD3 (Error description)	Item	Detection Timing
C061	HOLD JOB ERROR DUPLEX	Hold job error/No Duplex unit	• The Duplex Option is not installed, but it is required for printing the job held in the HDD.
C062	HOLD JOB ERROR TRAY 3	Hold job error/No Tray 3	• Tray 3 is not set when the tray 3 is required for printing of the job hold in HDD.
C063	HOLD JOB ERROR TRAY 4	Hold job error/No Tray 4	• Tray 4 is not set when the tray 4 is required for printing of the job hold in HDD.
C064	HOLD JOB ERROR MEMORY	Hold job error/No Memory	• Expansion memory is not set when the expansion memory is required for printing of the job hold in HDD.
FFFF	I/F COMM ERROR	Interface Communication error	• Correct communication is failed when receiving/sending the command between PWB-A and PWB-P.

2.3 Resetting a Malfunction

• To reset a malfunction, turn the Power Switch OFF and then ON again.

2.4 Solutions

2.4.1 0010H: Color PC Drum Motor malfunction

Relevant Electrical Parts	
Color PC Drum Motor (M2)	Mechanical Control Board (PWB-A) Low Voltage Unit (LV)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M2 connector for proper connection and correct as necessary.	-	-
2	Check 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 PJ14A-8 (LOCK) PWB-A PJ14A-5 (REM)	11-B
5	Change PWB-A.	-	-
6	Change LV.	-	

2.4.2 001BH: Developing Motor/Y,M,C malfunction

Relevant Electrical Parts	
Developing Motor/Y,M,C (M1)	Mechanical Control Board (PWB-A) Low Voltage Unit (LV)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M1 connector for proper connection and correct as necessary.	-	-
2	Check 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 PJ8A-8 (LOCK) PWB-A PJ8A-5 (REM)	11-A
5	Change PWB-A.	-	-
6	Change LV.	-	-

2.4.3 0017H: Intermediate Transport Motor malfunction

Relevant Electrical Parts	
Intermediate Transport Motor (M3)	Mechanical Control Board (PWB-A) Low Voltage Unit (LV)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M3 connector for proper connection and correct as necessary.	-	-
2	Check M3 for proper drive coupling and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M3 operation check	PWB-A PJ27A-8 (LOCK) PWB-A PJ27A-5 (REM)	2-I
5	Change PWB-A.	-	-
6	Change LV.	-	-

2.4.4 0018H: Developing Motor/K malfunction

Relevant Electrical Parts	
Developing Motor/K (M5)	Mechanical Control Board (PWB-A) Low Voltage Unit (LV)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M5 connector for proper connection and correct as necessary.	-	-
2	Check M5 for proper drive coupling and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M5 operation check	PWB-A PJ33A-8 (LOCK) PWB-A PJ33A-5 (REM)	11-C
5	Change PWB-A.	-	-
6	Change LV.	-	-

2.4.5 0046H: Fusing Cooling Fan Motor malfunction

Relevant Electrical Parts	
Fusing Cooling Fan Motor /1 (M11)	Mechanical Control Board (PWB-A)

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	M11 operation check	PWB-A PJ21A-3 (LOCK) PWB-A PJ21A-1 (ON)	2-F~E
4	Change PWB-A.	-	-

2.4.6 004CH: Ozone Ventilation Fan Motor malfunction

Relevant Electrical Parts	
Ozone Ventilation Fan Motor (M12)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M12 connector for proper connection and correct as necessary.	-	-
2	Check the fan for possible overload and correct as necessary.	-	-
3	M12 operation check	PWB-A PJ6A-7 (LOCK) PWB-A PJ6A-5 (ON)	14-I
4	Change PWB-A.	-	-

2.4.7 004EH: LV Cooling Fan Motor malfunction

Relevant Electrical Parts	
LV Cooling Fan Motor (M10)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M10 connector for proper connection and correct as necessary.	-	-
2	Check the fan for possible overload and correct as necessary.	-	-
3	M10 operation check	PWB-A PJ9A-3 (LOCK) PWB-A PJ9A-1 (ON)	12-J
4	Change PWB-A.	-	-

2.4.8 0060H: Fusing Motor malfunction

Relevant Electrical Parts	
Fusing Motor (M4)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M4 connector for proper connection and correct as necessary.	-	-
2	Check the Fusing Unit driving mechanism for possible overload and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	M4 operation check	PWB-A PJ19A-8 (LOCK) PWB-A PJ19A-5 (REM)	2-B–C
5	Change PWB-A.	-	-

2.4.9 0094H: 2nd image transfer pressure/retraction failure

Relevant Electrical Parts	
Retraction Position Sensor/2nd Image Transfer (PC10) Pressure/Retraction Clutch/2nd Image Transfer (CL5) Intermediate Transport Motor (M3)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M3 connector for proper connection and correct as necessary.	-	-
2	Check the CL5 connector for proper connection and correct as necessary.	-	-
3	Check M3 for proper drive coupling and correct as necessary.	-	-
4	Check CL5 for proper drive coupling and correct as necessary.	-	-
5	Check the PWB-A connector for proper connection and correct as necessary.	-	-
6	PC10 sensor check	PWB-A PJ10A-6 (ON)	7-A
7	CL5 operation check	PWB-A PJ10A-8 (ON)	7-A
8	M3 operation check	PWB-A PJ27A-8 (LOCK) PWB-A PJ27A-5 (REM)	2-I
9	Change PWB-A.	-	-

2.4.10 0096H: 1st image transfer pressure/retraction failure

Relevant Electrical Parts	
Retraction Position Sensor/1st Image Transfer (PC9) Pressure/Retraction Clutch /1st Image Transfer (CL4) Intermediate Transport Motor (M3)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the M3 connector for proper connection and correct as necessary.	-	-
2	Check the CL4 connector for proper connection and correct as necessary.	-	-
3	Check M3 for proper drive coupling and correct as necessary.	-	-
4	Check CL4 for proper drive coupling and correct as necessary.	-	-
5	Check the PWB-A connector for proper connection and correct as necessary.	-	-
6	PC9 sensor check	PWB-A PJ7A-13 (ON)	7-B~C
7	CL4 operation check	PWB-A PJ7A-10 (ON)	7-B
8	M3 operation check	PWB-A PJ27A-8 (LOCK) PWB-A PJ27A-5 (REM)	2-I
9	Change PWB-A.	-	-

2.4.11 0300H: Polygon Motor malfunction

Relevant Electrical Parts	
PH Unit	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the cable and connector for proper connection and correct as necessary.	-	-
2	Change PH Unit.	-	-
3	Change PWB-A.	-	-

2.4.12 0310H: Laser malfunction

Relevant Electrical Parts	
PH Unit	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the cable and connector for proper connection and correct as necessary.	-	-
2	Change PH Unit.	-	-
3	Change PWB-A.	-	-

2.4.13 0500H: Heating Roller warm-up failure

2.4.14 0501H: Fusing Pressure Roller warm-up failure

2.4.15 0510H: Abnormally low Heating Roller temperature

2.4.16 0511H: Abnormally low Fusing Pressure Roller temperature

2.4.17 0520H: Abnormally high Heating Roller temperature

2.4.18 0521H: Abnormally high Fusing Pressure Roller temperature

Relevant Electrical Parts	
Fusing Unit	Mechanical Control Board (PWB-A) Low Voltage Unit (LV)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the Fusing Unit for correct installation (whether it is secured in position).	-	-
2	Check the Fusing Unit, LV, and PWB-A for proper connection and correct as necessary.	-	-
3	Change Fusing Unit.	-	-
4	Change PWB-A.	-	-
5	Change LV.	-	-

2.4.19 13D0H: Parameter Chip failure

Relevant Electrical Parts	
Parameter Chip (IC15)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Unplug the power cord and plug it in, then turn OFF and ON the Power Switch.	-	-
2	Check Parameter Chip (IC15) on PWB-A for proper connection and correct as necessary.	-	-
3	Change PWB-A.	-	-
4	Change Parameter Chip.	-	-

2.4.20 13E2H: Flash ROM write error
13E3H: Flash ROM device fault

Relevant Electrical Parts
Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Change PWB-A.	-	-

2.4.21 C002, C003: RAM error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	Extension memory

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check connection state of the extension memory and correct as necessary.	-	-
3	Check the PWB-P connector for proper connection and correct as necessary.	-	-
4	Changethe extension memory.	-	-
5	Change PWB-P.	-	-

2.4.22 C013: MAC address error (Only for magicolor 5450)
C015: BOOT ROM error (Only for magicolor 5450)
C022: NVRAM error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check the PWB-P connector for proper connection and correct as necessary.	-	-
3	Change PWB-P.	-	-

2.4.23 C025, C026, C027: Controller ROM error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check the PWB-P connector for proper connection and correct as necessary.	-	-
3	If this error message is displayed after update of firmware, conduct the firmware update procedures again.	-	-
4	Change PWB-P.	-	-

2.4.24 C050: Hard disk access error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	Hard disk unit (HDD)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check the HDD connector for proper connection and correct as necessary.	-	-
3	Check the PWB-P connector for proper connection and correct as necessary.	-	-
4	Change HDD.	-	-
5	Change PWB-P.	-	-

2.4.25 C051: Hard disk full error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	Hard disk unit (HDD)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Delete the job hold in “PROOF/PRINT MENU” to increase the available range for user space.	-	-
3	Check the HDD connector for proper connection and correct as necessary.	-	-
4	Format HDD with “SYS DEFAULT MENU/HDD FORMAT.”	-	-
5	Change HDD.	-	-

2.4.26 C060: Firmware Update error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check the cable that has been used for update of the firmware for proper connection and correct as necessary.	-	-
3	Update the firmware again.	-	-
4	Check the PWB-P connector for proper connection and correct as necessary.	-	-
5	Change PWB-P	-	-

2.4.27 C061: Hold job error/No Duplex unit (Only for magicolor 5450)
C062: Hold job error/No Tray 3 (Only for magicolor 5450)
C063: Hold job error/No Tray 4 (Only for magicolor 5450)
C064: Hold job error/No Memory (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Return to the same state as the device configuration when job was held.	-	-
3	Check the options that are mounted on the printer for proper connection and correct as necessary.	-	-
4	Check the PWB-A connector for proper connection and correct as necessary.	-	-
5	Delete the job hold in “PROOF/PRINT MENU.”	-	-

2.4.28 FFFF: Interface Communication error (Only for magicolor 5450)

Relevant Electrical Parts	
Print Control Board (PWB-P)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF the Power Switch of the printer and turn it ON again (Restart of the printer.)	-	-
2	Check the PWB-P connector for proper connection and correct as necessary	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	Change PWB-A.	-	-

3. Power Supply Troubles

3.1 Machine is Not Energized at All (LV Operation Check)

Relevant Electrical Parts	
Power Switch Mechanical Control Board (PWB-A)	Low Voltage Unit (LV)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is the power source voltage being applied to CN1LV on LV?	12-L	NO	Check wiring from power outlet to PG1 to CN1LV.
2	Are fuses (F1 and F2) on LV conducting?	-	NO	Change LV.
3	Are DC24 V and DC5 V being applied to CN5V on the Mechanical Control Board?	10-K~L	NO	Change LV.
			YES	Change PWB-A.

3.2 Control panel indicators do not Light

Relevant Electrical Parts	
Print Control Board (PWB-P) Control Panel (PWB-OP)	Low Voltage Unit (LV)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is the power source voltage being applied to CN1LV on LV?	12-L	NO	Check wiring from power outlet to PG1 to CN1LV.
2	Are fuses (F1 and F2) on LV conducting?	-	NO	Change LV.
3	Is CN10P on PWB-P properly connected?	14-B	NO	Reconnect.
4	Is CN20P on PWB-OP properly connected?	11-E~F	NO	Reconnect.
			YES	Change PWB-OP. Change PWB-P.

3.3 Fusing Heaters do not Operate

Relevant Electrical Parts	
Safety Switch/Fr (S2) Safety Switch/Rt (S3) Fusing Unit	Low Voltage Unit (LV)

Step	Check Item	Location (Electrical Component)	Result	Action
1	Is the power source voltage being applied to CN1LV on LV? The Right Door should in closed position at this time.	12-L	NO	Check wiring from power outlet to PG1 to CN1LV.
2	Is the power source voltage being applied to CN4 or CN5?	3-D	YES	Change Fusing Unit.
			NO	Change LV.

4. Miscellaneous Malfunctions (Only for magicolor 5430 DL/5440 DL)

4.1 List of Miscellaneous Malfunctions

Message	Description
ILLEGAL ERROR DUPLEX	• The Duplex Option is not installed. • A 2-sided print cycle is run using the type and size of media that are not good for 2-sided printing.
ERROR AIDC SENSOR	• The AIDC Sensor has developed a malfunction.
ERROR COMMUNICATION	• A communications error has occurred in USB or Ethernet interface.
ERROR ENGINE INTERFACE	• There is a connection failure between the Mechanical Control Board (PWB-A) and Print Control Board (PWB-P).
ERROR RAM	• A RAM read or write error has occurred.
ERROR DIMM	• An SDRAM DIMM error has been detected.
ERROR ROM	• A control ROM error has been detected.
ERROR CONTROLLER	• A control error has occurred in the printer.

4.2 ILLEGAL ERROR DUPLEX

Relevant Electrical Parts	
Duplex Board (PWB-E DU)	Mechanical Control Board (PWB-A) Print Control Board (PWB-PÅj

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the printer driver settings.	-	-
2	Check the PWB-E DU connector for proper connection and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	Check the PWB-P connector for proper connection and correct as necessary.	-	-
5	Change PWB-E DU.	-	-
6	Change PWB-P.	-	-
7	Change PWB-A.	-	-

4.3 ERROR AIDC SENSOR

Relevant Electrical Parts	
AIDC Sensor/Rt (AIDC R) AIDC Sensor/Lt (AIDC L)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the AIDC R connector for proper connection and correct as necessary.	-	-
2	Check the AIDC L connector for proper connection and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	AIDC R sensor check.	-	-
5	AIDC L sensor check.	-	-
6	Change PWB-A.	-	-

4.4 ERROR COMMUNICATION

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the Ethernet or USB cable for proper connection and correct as necessary.	-	-
2	Check the PWB-P connector for proper connection and correct as necessary.	-	-
3	Change PWB-P.	-	-

4.5 ERROR ENGINE INTERFACE

Relevant Electrical Parts	
Mechanical Control Board (PWB-A)	Print Control Board (PWB-P)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Turn OFF and ON the Power Switch.	-	-
2	Check the PWB-A connector for proper connection and correct as necessary.	-	-
3	Check the PWB-P connector for proper connection and correct as necessary.	-	-
4	Check the circuit across PWB-A and PWB-P for proper connection and correct as necessary.	-	-
5	Change PWB-P.	-	-
6	Change PWB-A.	-	-

4.6 ERROR RAM

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the PWB-P connector for proper connection and correct as necessary.	-	-
2	Change PWB-P.	-	-

4.7 ERROR DIMM

Relevant Electrical Parts	
DIMM	Print Control Board (PWB-P)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check DIMM for proper connection and correct as necessary.	-	-
2	Check the PWB-P connector for proper connection and correct as necessary.	-	-
3	Change PWB-P.	-	-

4.8 ERROR ROM

Relevant Electrical Parts	
Print Control Board (PWB-P)	

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the PWB-P connector for proper connection and correct as necessary.	-	-
2	Change PWB-P.	-	-

4.9 ERROR CONTROLLER

Relevant Electrical Parts	
Print Control Board (PWB-P)	

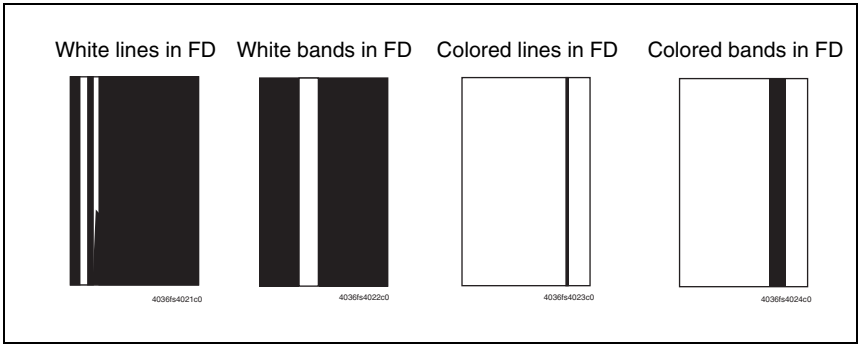
Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check the PWB-P connector for proper connection and correct as necessary.	-	-
2	Change PWB-P.	-	-

5. Image Quality Problems

5.1 Solutions

5.1.1 White lines in FD, white bands in FD, colored lines in FD, and colored bands in FD

A. Typical Faulty Images

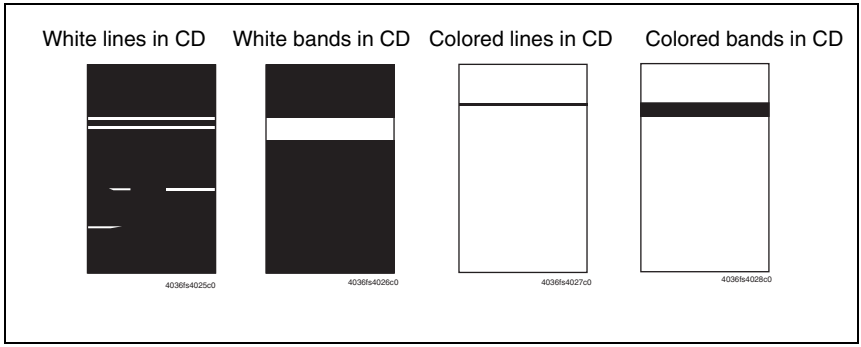


B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
2		Is the outside dirty?	YES	Clean.
3		Is the connector or contact terminal between each Toner Cartridge and PH Unit connected properly?	NO	Clean the contact terminal or reconnect the connector.
4		Is the developing bias contact terminal in good contact?	NO	Clean the contact terminal or check the terminal position.
5	PH Unit	Is the window surface dirty?	YES	Clean.
6	Transfer Belt Unit	Is the Transfer Belt dirty with fingerprints or oil?	YES	Clean.
7		Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
8		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
9	Media path	Is there a foreign matter on the media path?	YES	Remove foreign matter.
10	Fusing Unit	Is the Fusing Entrance Guide Plate dirty or scratched?	YES	Clean. Change the Fusing Unit.
11		Is the Separator Fingers dirty?	YES	Change the Fusing Unit.
12		Has the problem been eliminated through the checks of steps up to 11?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit. → Change the PH Unit. → Change the Fusing Unit.

5.1.2 White lines in CD, white bands in CD, colored lines in CD, and colored bands in CD

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
2		Is the outside dirty?	YES	Clean.
3		Is the connector or contact terminal between each Toner Cartridge and PH Unit connected properly?	NO	Clean the contact terminal or reconnect the connector.
4		Is the developing bias contact terminal in good contact?	NO	Clean the contact terminal or check the terminal position.
5	Transfer Belt Unit	Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
6		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
7	Media path	Is there a foreign matter on the media path?	YES	Remove the foreign matter.
8	Fusing Unit	Is the Fusing Entrance Guide Plate dirty or scratched?	YES	Clean.
9		Is the Separator Fingers dirty?	YES	Change the Fusing Unit.
10		Has the problem been eliminated through the checks of steps up to 9?	NO	Change the Low Voltage Unit. → Change the Transfer Belt Unit. → Change the Fusing Unit.

5.1.3 Uneven density in FD

A. Typical Faulty Images


4036fs4043c0


4036fs4044c0


4036fs4045c0

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Adjustment /Setting	The Printer is being operated at high altitude.	YES	Adjust the image with “ALTITUDE SETUP” (magicolor 5430 DL/ 5440 DL) → ENGINE/ENGINE SERVICE/ RESTORE USER DEFAULT/ ALTITUDE SETUP
				Adjust the image with “IMAGE ADJ PRAM” (magicolor 5450) → SERVICE MENU/ALIGN-MENT/IMAGE ADJ PRAM
2	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
3		Is the outside dirty?	YES	Clean.
4	PH Unit	Is the window surface dirty?	YES	Clean.
5	Transfer Belt Unit	Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
6		Is the terminal dirty?	YES	Clean.
7		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
8		Has the problem been eliminated through the checks of steps up to 6?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit. → Change the PH Unit. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.4 Uneven density in CD

A. Typical Faulty Images


4036fs4046c0


4036fs4047c0

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Adjustment /Setting	The Printer is being operated at high altitude.	YES	Adjust the image with “ALTITUDE SETUP” (magicolor 5430 DL/ 5440 DL) → ENGINE/ENGINE SERVICE/ RESTORE USER DEFAULT/ ALTITUDE SETUP
				Adjust the image with “IMAGE ADJ PRAM”. (magicolor 5450) → SERVICE MENU/ALIGN-MENT/IMAGE ADJ PRAM
2	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
3		Is the outside dirty?	YES	Clean.
4	Transfer Belt Unit	Is the contact on the rail of the Transfer Belt Unit in good contact with the mating part?	NO	Check or correct contact.
5		Is the Transfer Belt dirty with fingerprints or oil?	YES	Clean.
6		Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
7		Is the terminal dirty?	YES	Clean.
8		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
9		Has the problem been eliminated through the checks of steps up to 7?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.5 Low image density

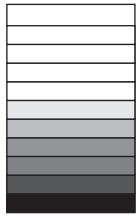
A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Adjustment /Setting	The Duplex Option is being used, and also the Printer is being operated in the climate such as dry or highly humid. (magicolor 5430 DL/5440 DL)	YES	Adjust the image with “DUPLEX DENSITY” (magicolor 5430 DL/5440 DL) → ENGINE/ENGINE SERVICE/ RESTORE USER DEFAULT/ DUPLEX DENSITY
		The Printer is being operated in the climate such as dry or highly humid (magicolor 5450.)		Adjust the image with “TRANSFER POWER” (magicolor 5450) → SERVICE MENU/ALIGNMENT /TRANSFER POWER/
2	Toner Cartridge	Is the outside dirty?	YES	Clean.
3	PH Unit	Is the window surface dirty?	YES	Clean.
4	Transfer Belt Unit	Is the contact on the rail of the Transfer Belt Unit in good contact with the mating part?	NO	Check or correct contact.
5		Is the terminal dirty?	YES	Clean.
6	Paper	Is the paper damp?	YES	Replace the paper with paper that has just been unwrapped.
7	AIDC Sensor/Rt, AIDC Sensor/Lt	Is the sensor dirty?	YES	Clean.
8		Has the problem been eliminated through the checks of steps up to 6?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit. → Change the PH Unit. → Change the AIDC Sensor. → Change the Mechanical Control Board. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.6 Gradation reproduction failure

A. Typical Faulty Images


4036fs4048c0

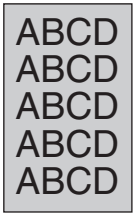

4036fs4049c0

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Toner Cartridge	Is the outside dirty?	YES	Clean.
2	PH Unit	Is the window surface dirty?	YES	Clean.
3	AIDC Sensor/Rt, AIDC Sensor/Lt	Is the sensor dirty?	YES	Clean.
4		Has the problem been eliminated through the checks of steps up to 3?	NO	Change the Toner Cartridge. → Change the PH Unit. → Change the AIDC Sensor. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.7 Foggy background

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Adjustment /Setting	The Duplex Option is being used, and also the Printer is being operated in the climate such as dry or highly humid. (magicolor 5430 DL/5440 DL)	YES	Adjust the image with “DUPLEX DENSITY.” (magicolor 5430 DL/5440 DL) → ENGINE/ENGINE SERVICE/ RESTORE USER DEFAULT/ DUPLEX DENSITY
		The Printer is being operated in the climate such as dry or highly humid (magicolor 5450)		Adjust the image with “TRANSFER POWER” (magicolor 5450) → SERVICE MENU/ALIGNMENT /TRANSFER POWER/
2	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
3		Is the outside dirty?	YES	Clean.
4		Is the connector or contact terminal between each Toner Cartridge and PH Unit connected properly?	NO	Clean the contact terminal or reconnect the connector.
5		Is the developing bias contact terminal in good contact?	NO	Clean the contact terminal or check the terminal position.
6	PH Unit	Is the window surface dirty?	YES	Clean.
7	AIDC Sensor/Rt, AIDC Sensor/Lt	Is the sensor dirty?	YES	Clean.
8		Has the problem been eliminated through the checks of steps up to 6?	NO	Change the Toner Cartridge. → Change the PH Unit. → Change the AIDC Sensor.

5.1.8 Poor color reproduction

A. Typical Faulty Images

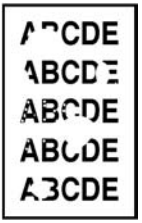
B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Paper	Is the paper damp?	YES	Replace the paper with paper that has just been unwrapped.
2	Transfer Belt Unit	Is the terminal dirty?	YES	Clean.
3	AIDC Sensor/Rt, AIDC Sensor/Lt	Is the sensor dirty?	YES	Clean.
4		Has the problem been eliminated through the checks of steps up to 3?	NO	Change the Transfer Belt Unit. → Change the AIDC Sensor. → Change the Mechanical Control Board. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.9 Void areas, white spots

A. Typical Faulty Images

Void areas White spots



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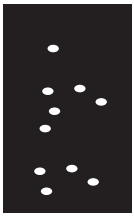

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B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Adjustment /Setting	Thick or Special media is being used.	YES	Adjust the image with “TRANSFER VOLTAGE.” (magicolor 5430 DL/5440 DL) → ENGINE/ENGINE SERVICE/ RESTORE USER DEFAULT/ TRANSFER VOLTAGE
				Adjust the image with “TRANSFER POWER.” (magicolor 5450) → SERVICE MENU/ALIGNMENT /TRANSFER POWER/
2	Toner Cartridge	Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
3		Is the outside dirty?	YES	Clean.
4	Transfer Belt Unit	Is the Transfer Belt dirty with fingerprints, oil, or other foreign matter?	YES	Clean.
5		Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
6		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
7		Is the ground terminal connected properly?	NO	Correct.
8	Media path	Is there a foreign matter on the media path?	YES	Remove foreign matter.
9		Is the Fusing Entrance Guide Plate dirty or scratched?	YES	Clean or change.
10		Has the problem been eliminated through the checks of steps up to 8?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit.

5.1.10 Colored spots

A. Typical Faulty Images

Colored spots

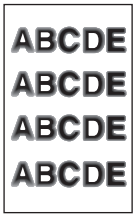
B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Toner Cartridge	Are the spots in a single color?	YES	Change the Toner Cartridge.
2		Are there scratches or lines evident on photo conductor surface?	YES	Change the Toner Cartridge.
3	Transfer Belt Unit	Is the Transfer Belt dirty with fingerprints, oil, or other foreign matter?	YES	Clean.
4		Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
5		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
6	Media path	Is there a foreign matter on the media path?	YES	Remove foreign matter.
7	Fusing Unit	Is the Fusing Roller dirty or scratched?	YES	Change the Fusing Unit.
8		Has the problem been eliminated through the checks of steps up to 7?	NO	Change the Toner Cartridge. → Change the Transfer Belt Unit. → Change the Fusing Unit.

5.1.11 Blurred image

A. Typical Faulty Images

Blurred image

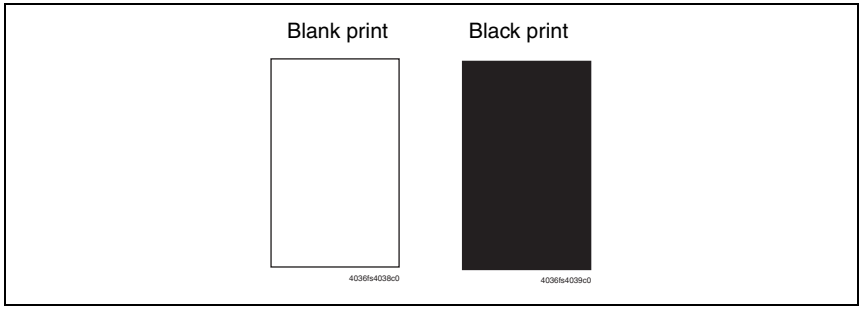


B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	PH Unit	Is the window surface dirty?	YES	Clean.
2	Toner Cartridge	Is the outside dirty?	YES	Clean.
3		Has the problem been eliminated through the checks of steps up to 2?	NO	Change the Toner Cartridge. → Change the PH Unit.

5.1.12 Blank copy, black copy

A. Typical Faulty Images

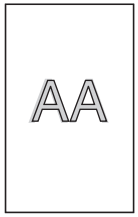


B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Image check	Does a blank print occur?	YES	Check the PH Unit connector for proper connection.
2	Toner Cartridge	Is the coupling of the Toner Cartridge drive mechanism installed properly?	NO	Check or correct drive transmitting coupling or change the Toner Cartridge.
3		Is the charge corona voltage contact or photo conductor ground contact of the Toner Cartridge connected properly?	NO	Check, clean, or correct the contact.
4	High Voltage Unit/1, High Voltage Unit/2	Is the connector corrected properly?	NO	Reconnect.
5		Has the problem been eliminated through the checks of steps up to 4?	NO	Change High Voltage Unit/1. → Change High Voltage Unit/2. → Change the Mechanical Control Board. → Change the PH Unit.

5.1.13 Incorrect color image registration

A. Typical Faulty Images



B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Transfer Belt Unit	Is the Transfer Belt dirty with fingerprints, oil, or other foreign matter?	YES	Clean.
2		Is the Transfer Belt dirty or scratched?	YES	Wipe the surface clean of dirt with a soft cloth. Change a scratched Transfer Belt for a Transfer Belt Unit.
3		Is the drive coupling to the machine dirty?	YES	Clean.
4		Is the Transfer Roller dirty or scratched?	YES	Change the Transfer Roller.
5	Toner Cartridge	Is the Toner Cartridge installed in position?	NO	Reinstall the Toner Cartridge.
6		Is the photo conductor scratched?	YES	Change the Toner Cartridge.
7		Has the problem been eliminated through the checks of steps up to 6?	NO	Change the Transfer Belt Unit. → Change the PH Unit. → Change the Mechanical Control Board.

5.1.14 Poor fusing performance, offset

A. Typical Faulty Images

Poor fusing performance

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Offset

4036fs4060c0

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Paper	Does the paper being used conform to specifications?	NO	Change the media.
2		Has the problem been eliminated through the check of step 1?	NO	Change the Fusing Unit. → Change the Mechanical Control Board.

	Transfer Roller.
	e the Transfer Belt Unit. hange the Fusing Unit. → Change High Voltage Unit/1. → Change High Voltage Unit/2.

5.1.17 Uneven Pitch

A. Typical Faulty Images

B. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	Toner Cartridge	Is the Toner Cartridge for each color of toner installed in position?	NO	Reinstall.
2	PH Unit	Is the PH Unit secured in position with the fixing screw?	NO	Secure it in position.
3	Toner Cartridge	Is the drive mechanism of the Toner Cartridge dirty or damaged?	YES	Clean or change the Toner Cartridge.
4	Toner Cartridge	Is the photo conductor dirty, scratched, or worn?	YES	Change the Toner Cartridge.
5	Transfer Roller	Are the Transfer Roller and drive mechanism dirty, scratched, deformed, or worn?	YES	Change the Transfer Roller.
6	Fusing Unit	Are the rollers and drive mechanism of the Fusing Unit dirty, scratched, deformed, or worn?	YES	Change the Fusing Unit.
7		Has the problem been eliminated through the checks of steps up to 6?	NO	Change the Transfer Belt Unit.

5.1.18 No print cycles can be run as commanded via the network

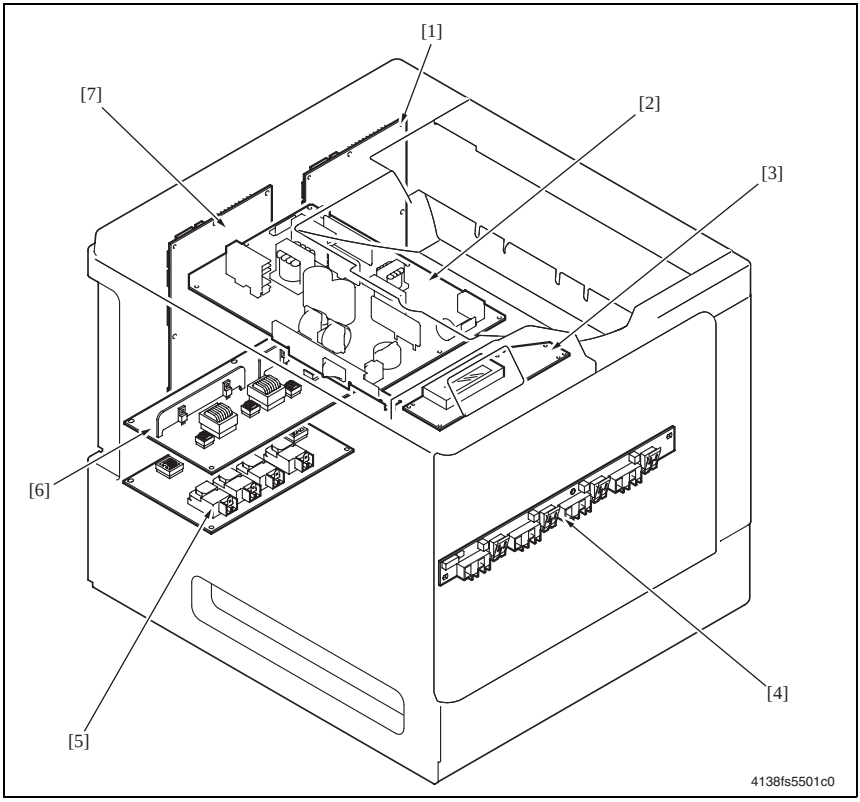
A. Troubleshooting Procedure

Step	Section	Check Item	Result	Action
1	PWB-P	Is the Ethernet cable connected properly?	NO	Reinstall.
2	Operation Panel/ MENU	Are the network address and other data input correctly?	NO	Retype.
3		Is the Network/Forced Modes setting made correctly according to the network environment being used? (magicolor 5430 DL/5440 DL)	NO	Reset.
		Is the INTERFACE MENU/ETHERNET/TCP/IP/SPEED/DUPLEX setting made correctly according to the network environment being used? (magicolor 5450)		
4	PWB-P	Is the PWB-P connector connected properly?	NO	Reinstall.
			YES	Change the PWB-P.

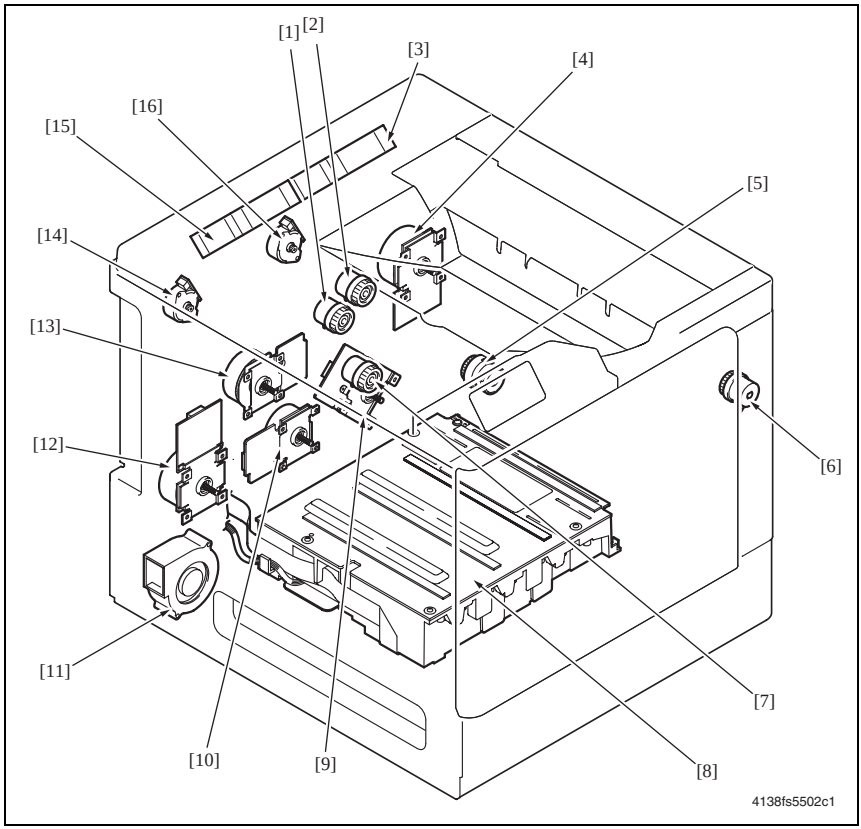
V Appendix

1. Parts Layout Drawing

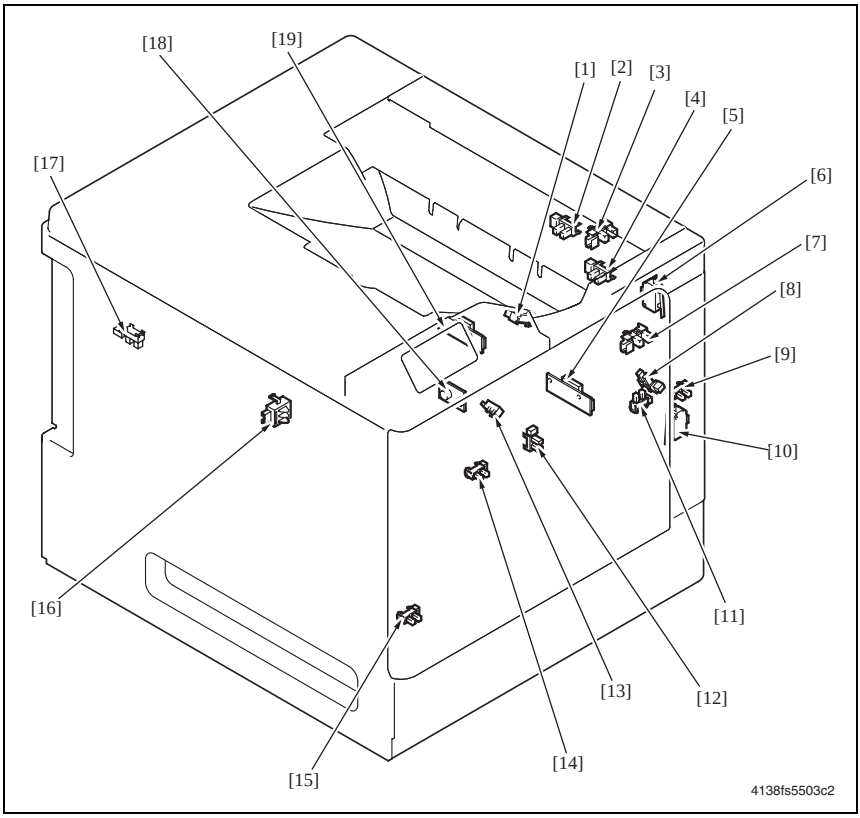
1.1 Main unit



[1] Mechanical Control Board (PWB-A)
[2] Low Voltage Unit (LV)
[3] Control Panel (PWB-OP)
[4] Toner Level Sensor Board (PWB-D)
[5] High Voltage Unit /2 (HV2)
[6] High Voltage Unit /1 (HV1)
[7] Print Control Board (PWB-P)

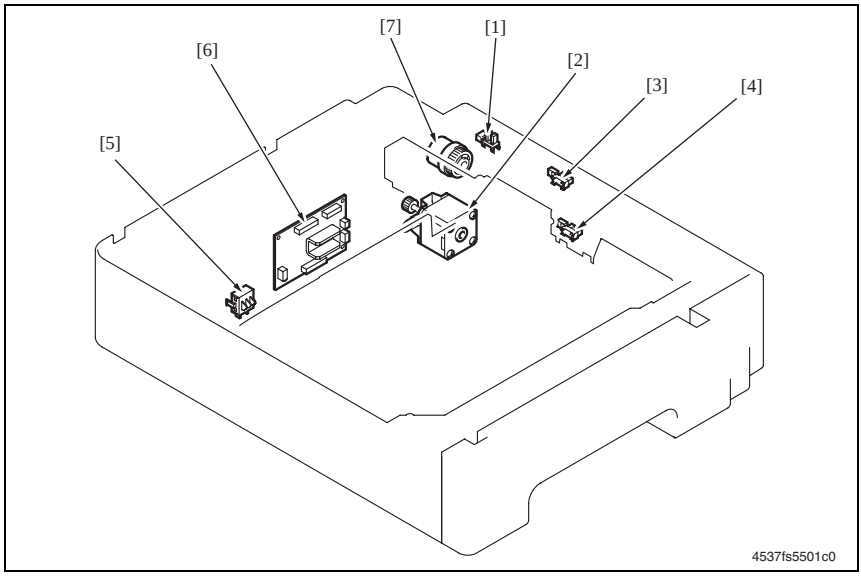


[1]	Tray 1 Paper Feed Clutch (CL1)	[9]	Intermediate Transport Motor (M3)
[2]	Manual Feed Tray Paper Feed Clutch (CL3)	[10]	Developing Motor /K (M5)
[3]	Fusing Cooling Fan Motor (M11)	[11]	Ozone Ventilation Fan Motor (M12)
[4]	Fusing Motor (M4)	[12]	Developing Motor /Y,M,C (M1)
[5]	Synchronizing Roller Clutch (CL2)	[13]	Color PC Drum Motor (M2)
[6]	Pressure/Retraction Clutch /2nd Image Transfer (CL5)	[14]	Toner Supply Motor /C,K (M7)
[7]	Pressure/Retraction Clutch /1st Image Transfer (CL4)	[15]	LV Cooling Fan Motor (M10)
[8]	PH Unit	[16]	Toner Supply Motor /Y,M (M6)



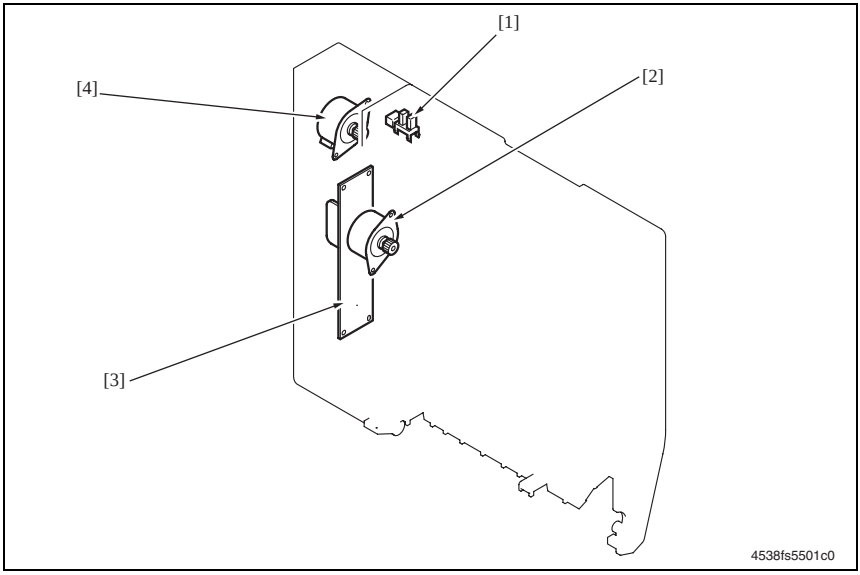
[1] Paper Loop Sensor (PC6)
[2] Paper Size Sensor (PC23)
[3] Paper Full sensor (PC20)
[4] Manual Feed Tray Paper Empty Sensor (PC3)
[5] AIDC Sensor /Rt (AIDC R)
[6] Safety Switch /Fr (S2)
[7] Exit Sensor (PC8)
[8] Retraction Position Sensor /2nd Image Transfer (PC10)
[9] Right Door Sensor (PC21)
[10] Safety Switch /Rt (S3)
[11] Front Door Sensor (PC22)
[12] Synchronizing Roller Sensor (PC4)
[13] OHP Sensor (PC7)
[14] Tray 1 Paper Empty Sensor (PC1)
[15] Waste Toner Full Sensor (PC11)
[16] Paper Size Switch (S5)
[17] Retraction Position Sensor /1st Image Transfer (PC9)
[18] Temperature/ humidity Sensor (HS1)
[19] AIDC Sensor /Lt (AIDC L)

1.2 Lower Feeder Unit (Option)



[1] Lower Feeder Right Door Switch (PC5 PF)
[2] Lower Feeder Motor (M1 PF)
[3] Lower Feeder Paper Feed Sensor (PC3 PF)
[4] Lower Feeder Paper Empty Sensor (PC1 PF)
[5] Lower Feeder Paper Size Switch (S1 PF)
[6] Lower Feeder Board (PWB-F PF)
[7] Lower Feeder Paper Feed Clutch (CL1 PF)

1.3 Duplex Option (Option)



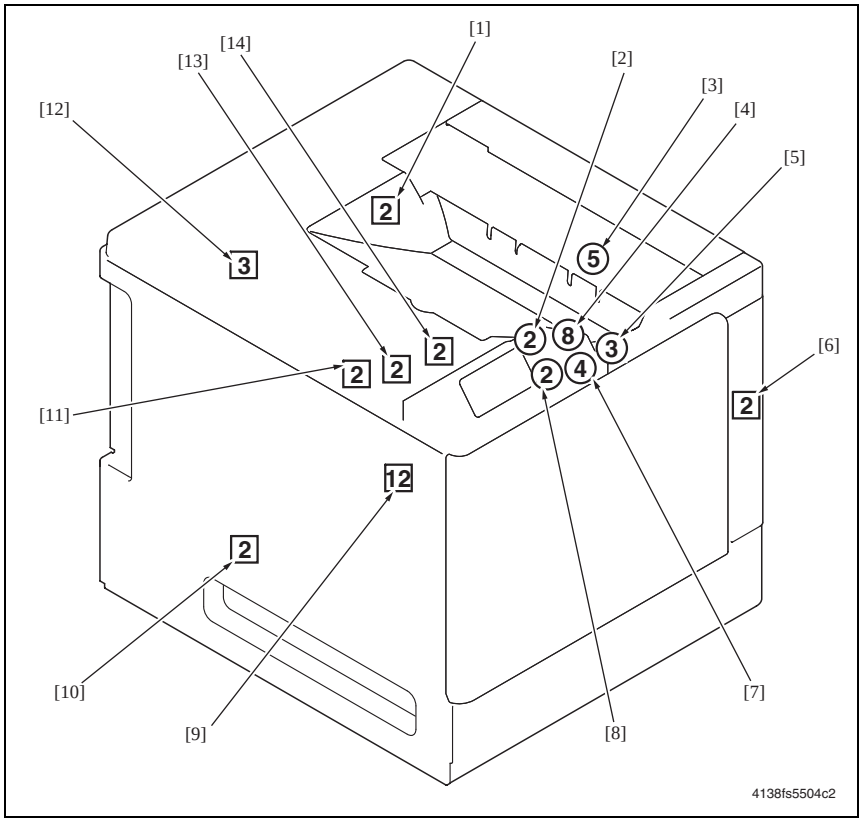
[1] Duplex Door Sensor (PC2 DU)
[2] Duplex Transport Motor (M1 DU)
[3] Duplex Board (PWB-E DU)
[4] Duplex Reverse Motor (M2 DU)

2. 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]	CN16	3-G~H	[8]	CN5	3-D
[2]	CN4	3-D	[9]	CN25	10-M~N
[3]	CN15	3-A	[10]	CN6	14-J
[4]	CN19	3-L	[11]	CN12	3-B
[5]	CN28	3-F	[12]	CN27	7~8-B
[6]	CN17	7~8-A~B	[13]	CN11	3-K
[7]	CN20	3-E	[14]	CN12	3-B

3. Timing chart

Color A4 2-print

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

Lower Feeder Unit

2005.04
KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 2.0

CONTENTS

I General

1. Product specifications

1.1 Type

Name	Add-on 500-sheet paper feed cassette
Type	Front-loading type
Installation	Desk type
Paper Feeding System	Paper separation by a small-diameter roller with torque limiter
Document Alignment	Center

1.2 Paper type

Paper Size	B5/Exective/Letter/A4/Letter Plus/G-Legal/Legal
Paper Type	• Plain paper: 60 to 90 g/m^2 (16 to 24 lb) • Recycled paper: 60 to 90 g/m^2 (16 to 24 lb)
Capacity	500 sheets

1.3 Machine specifications

Power Requirements	DC 24 V ± 10% (supplied from the main unit)
	DC 5 V ± 5%
Max. Power Consumption	16 W
Dimensions	448 mm (W) × 520 mm (D) × 111.5 mm (H) 17.6 inch (W) × 4.4 inch (D) × 20.5 inch (H)
Weight	Approx. 6.5 kg (14.25 lb)

1.4 Operating environment

Temperature	10° to 30° C/50° to 95° F (with a fluctuation of 10° C/h (18° F/h))
Humidity	15% to 85% (with a fluctuation of 20%/h)

NOTE

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

II Maintenance

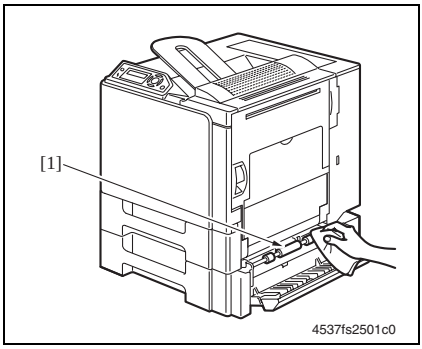
1. Periodic check

1.1 Maintenance procedure (Periodic parts check)

NOTE

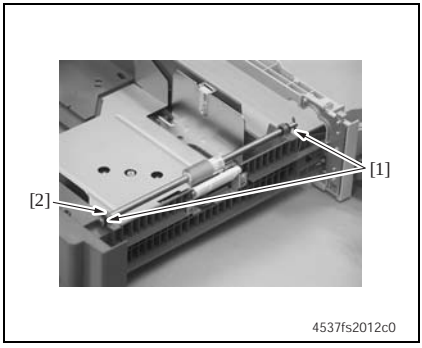
- **The alcohol used in this cleaning procedure is isopropyl alcohol.**

1.1.1 Feed Roller



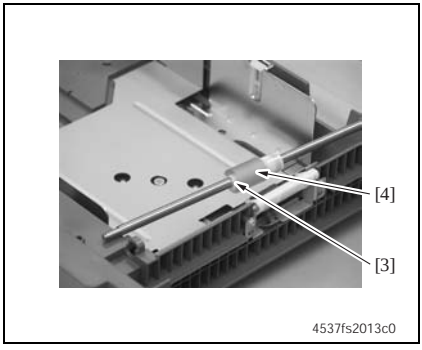
A. Cleaning procedure

1. Open the Lower Feeder Unit Right Cover.
2. Wipe the Feed Roller [1] clean of dirt using a soft cloth dampened with alcohol.



B. Replacing procedure

1. Slide out Tray 1.
2. Lock the Paper Lift Plate.
3. Snap off two C-clips [1] and the bearing [2] at the front.



4. Snap off the C-clip [3] and remove the Feed Roller [4].

2. Other

2.1 Disassembly/adjustment-prohibited items

A. Paint-locked screws

NOTE
- **Paint-locked screws show that the assembly or unit secured can only be adjusted or set at the factory and should not be adjusted, set, or removed in the field.**

B. Red-painted screws

NOTES
- **When the screws are removed, the red paint is coated on the points where readjustment is required.**
- **Once a red-painted screw is removed or loosened, you should make the adjustment. Accordingly, check the adjustment items in this manual and makethe necessary adjustmens. Note that when two or more screws are used on the part in question, only one representative screw may be marked with red paint.**

C. Variable resistors on the board

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

D. Removal of PWBs

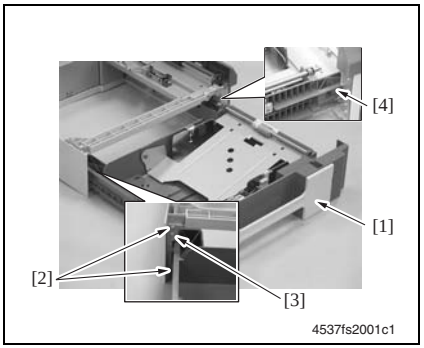
NOTES
- **When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.**
- **The removal procedures given in the following sections omit the removal of connectors and screws securing the circuit board support or circuit board.**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

2.2 Disassembly/Assembly list (Other parts)

No	Section	Part name	Ref. page
1	Exterior parts	Tray	☞ 2-3
2	Board and etc.	Lower Feeder Board	☞ 2-3
3	Others	Lower Feeder Paper Feed Clutch	☞ 2-5
4		Lower Feeder Motor	☞ 2-7

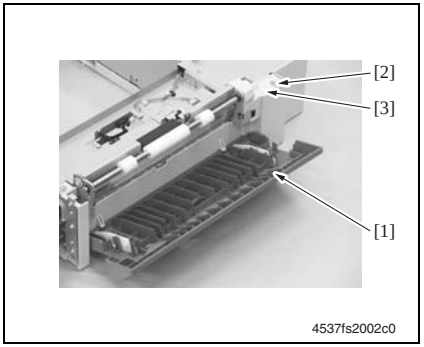
2.3 Disassembly/assembly procedure

2.3.1 Tray

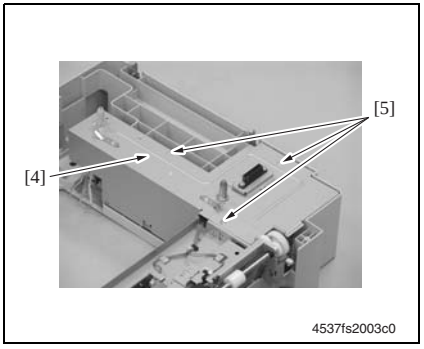


1. Slide out the Tray [1].
2. Remove two Screws [2], and remove the Stopper [3].
3. Pressing the tab [4], remove the Tray [1].

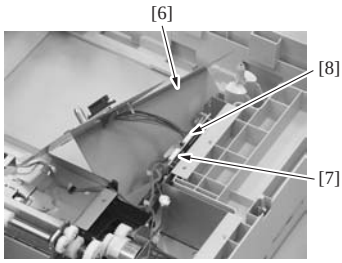
2.3.2 Lower Feeder Board (PWB-F PF)



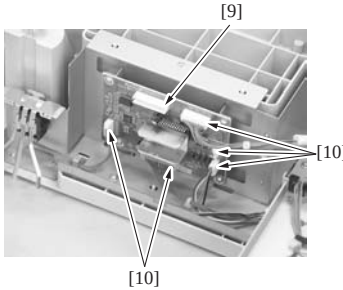
1. Remove the Lower Feeder Unit from the machine.
2. Slide out the Tray.
3. Open the Lower Feeder Unit Right Door [1].
4. Remove one screw [2] and the Gear Cover [3].



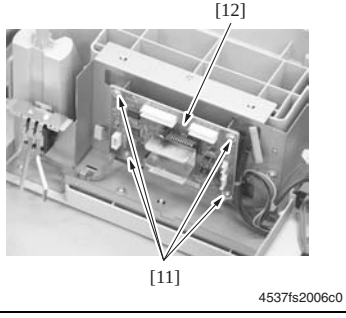
5. Remove three screws [5] from the PWB Protective Cover [4].



6. Slightly raise the PWB Protective Cover [6] and, at the same time, disconnect the connector [8] from the Lower Feeder Board [7].
7. Remove the PWB Protective Cover [6].

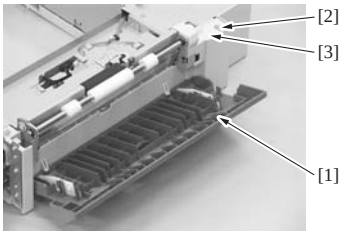


8. Disconnect all connectors [10] from the Lower Feeder Board [9].



9. Remove four screws [11] and the Lower Feeder Board [12].

2.3.3 Lower Feeder Paper Feed Clutch (CL1 PF)



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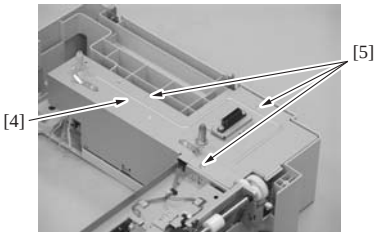
1. Remove the Lower Feeder Unit from the machine.
2. Slide out the Tray.
3. Open the Lower Feeder Unit Right Door [1].
4. Remove one screw [2] and the Gear Cover [3].



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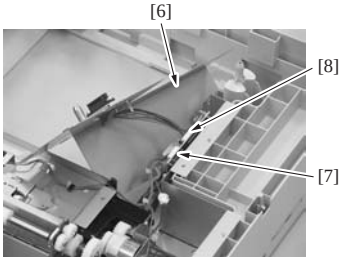
5. Remove three screws [5] from the PWB Protective Cover [4].



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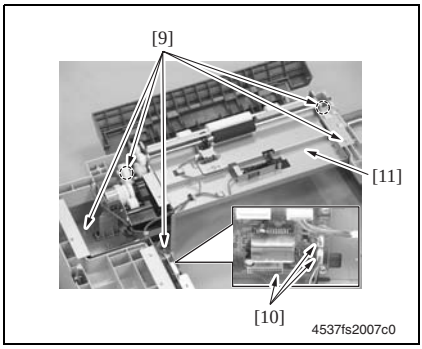
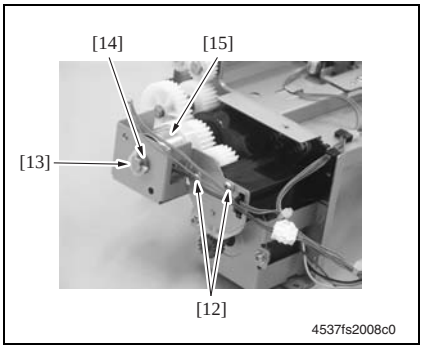
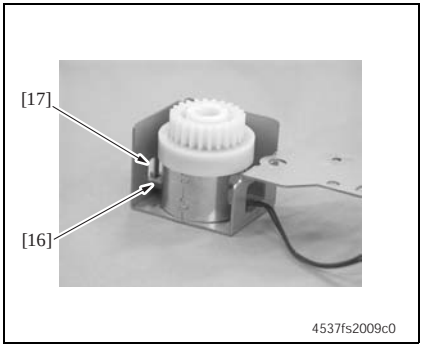
6. Slightly raise the PWB Protective Cover [6] and, at the same time, disconnect the connector [8] from the Lower Feeder Board [7].
7. Remove the PWB Protective Cover [6].



8. Remove four screws [9], disconnect three connectors [10], and remove the Paper Feed Drive Assy [11].



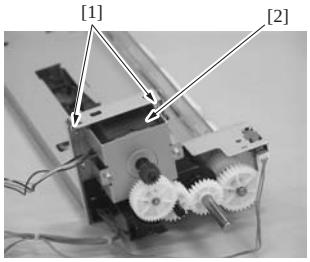
9. Remove two screws [12], snap off the C-clip [13] and bearing [14], and remove the Lower Feeder Paper Feed Clutch [15].



Precautions for reinstallation

- **Make sure that the protrusion [16] on the Lower Feeder Paper Feed Clutch fits into the locking slot [17].**

2.3.4 Lower Feeder Motor (M1 PF)

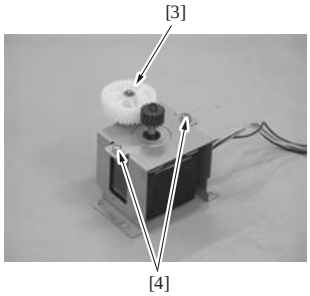


4537fs2010c0

1. Remove the Paper Feed Drive Assy and Lower Feeder Paper Feed Clutch.

☞ 2-5

2. Remove two screws [1] and the Lower Feeder Motor Assy [2].



4537fs2011c0

3. Remove the gear [3].
4. Remove two screws [4] and the Lower Feeder Motor.

III Adjustment/Setting

1. How to use the adjustment section

- This section contains detailed information on the adjustment items and procedures for this machine.
- Throughout this section the default settings are indicated by boldface.

A. Advance Checks

- Before attempting to solve the customer's problem, the following advance checks must be made:

1. Does the power supply voltage meet the specifications?
2. Is the power supply is properly grounded?
3. Does the machine share a power supply with any other machine that draws a large current intermittently (for example, an elevator or air conditioner that generates electrical noise)?
4. Is the installation site level and environmentally appropriate (for example, away from high temperatures, high humidity, direct sunlight, direct ventilation, etc.?
5. Does the original have a problem that may cause a defective image?
6. Is the density properly selected?
7. Is the Original Glass, slit glass, or a related part dirty?
8. Is the correct media being used for printing?
9. Are the units, parts, and supplies used for printing (developer, PC Drum, etc.) properly replenished and replaced when they reach the end of their useful service life?
10. Is there an adequate supply of toner in the toner cartridges?

B. Precautions for Service Jobs

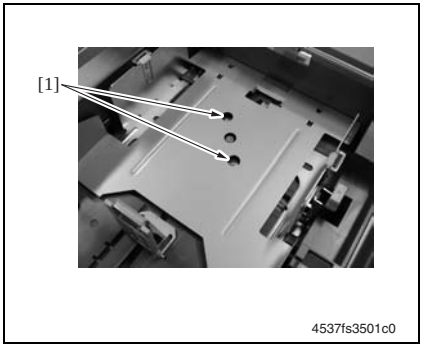
1. Unplug the machine's power cord before starting a service job procedure.
2. If it is unavoidably necessary to service the machine with its power turned ON, use the utmost care not to get caught in the Scanner Cables or gears of the Exposure Unit.
3. Use special care when handling the Fusing Unit, which can be extremely hot.
4. The Developing Unit has a strong magnetic field. Keep watches and measuring instruments away from it.
5. Take care not to damage the PC Drum with a tool or similar device.
6. Do not touch IC pins with your bare hands.

2. Mechanical Adjustment

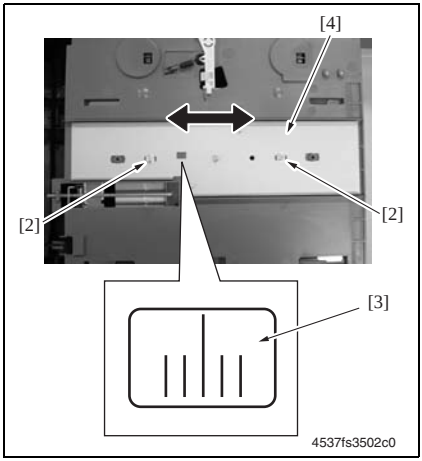
2.1 Registration adjustment

This adjustment must be made if:

- **The printed image deviates in the CD direction.**



1. Remove the tray.
2. Loosen two screws [1].



3. Loosen two screws [2].
4. Watching the graduations [3] on the adjusting plate, move the Edge Guide Plate [4] as necessary.
   Adjustment range: ± 2.0 mm
5. Tighten the four screws that have been loosened and mount the tray.

IV Troubleshooting

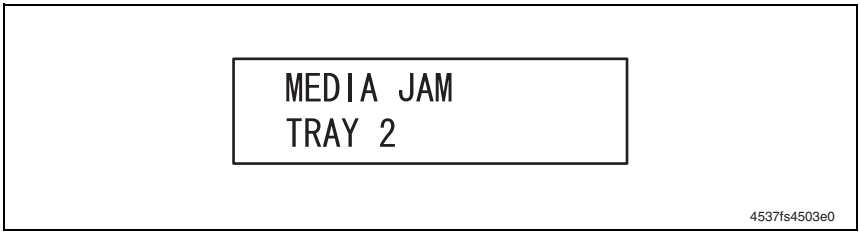
1. Jam Display

NOTE
Make sure that the feed tray is called differently between magicolor 5430 DL/5440 DL and magicolor 5450.

magicolor 5430 DL / 5440 DL	magicolor 5450
TRAY 2	TRAY 3
TRAY 3	TRAY 4

1.1 Misfeed display (magicolor 5430 DL/5440 DL)

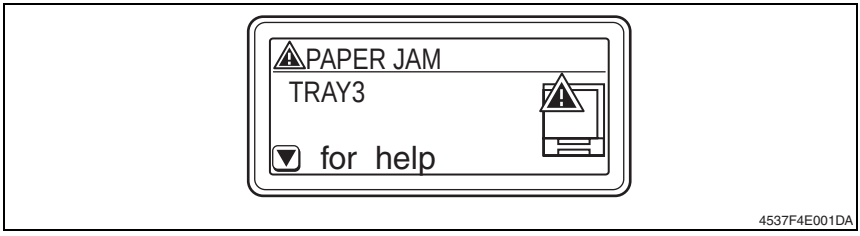
- When a paper misfeed occurs, a message is displayed on the Control Panel.



Display	Misfeed location	Misfeed clearing location	Ref. page
MEDIA JAM TRAY 2	Tray 2 paper feed section, Vertical conveyance section	Tray 2, Tray 2 Right Door	☞ 4-4
MEDIA JAM TRAY 3	Tray 3 paper feed section, Vertical conveyance section	Tray 3, Tray 3 Right Door	☞ 4-4

1.2 Misfeed display (magicolor 5450)

- When a paper misfeed occurs, a message is displayed on the Control Panel.



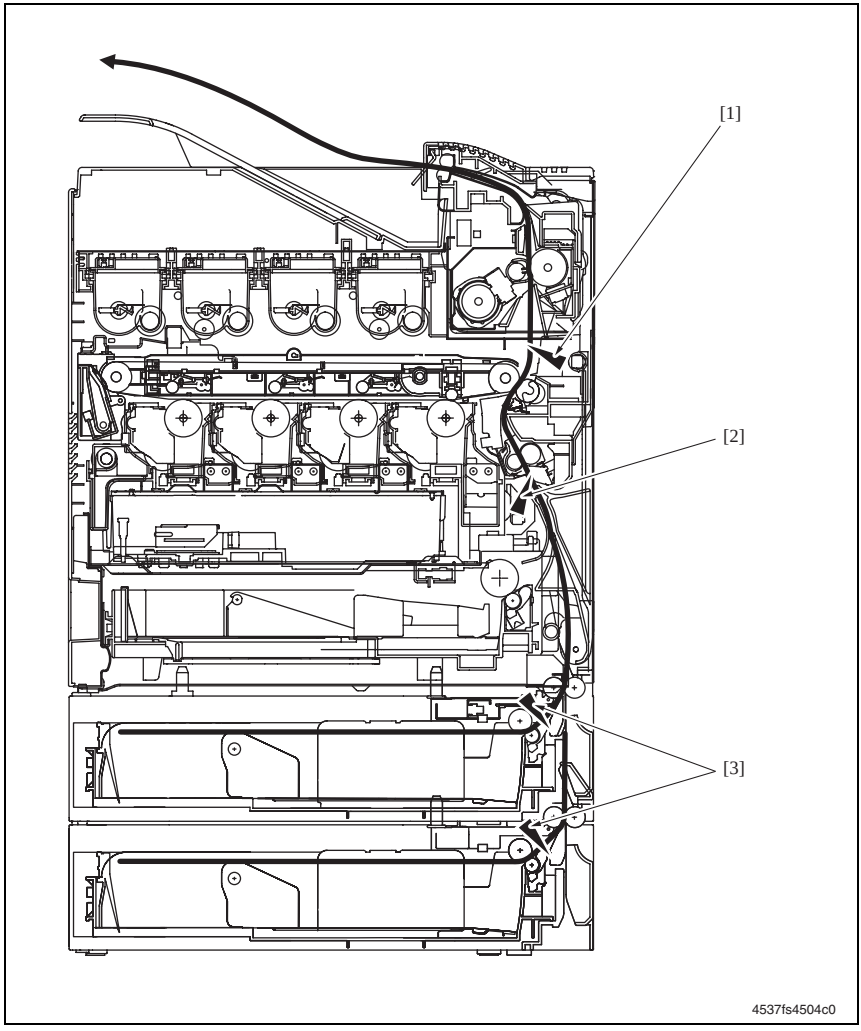
Display	Misfeed location	Misfeed clearing location	Ref. page
PAPER JAM TRAY 3	Tray 3 paper feed section, Vertical conveyance section	Tray 3, Tray 3 Right Door	☞ 4-4
PAPER JAM TRAY 4	Tray 4 paper feed section, Vertical conveyance section	Tray 4, Tray 4 Right Door	☞ 4-4

1.3 Misfeed display resetting procedure

- Open the relevant door, clear the sheet of misfed paper, and close the door.

1.4 Sensor layout

1.4.1 For a system equipped with two Lower Feeder Units



[1]	Paper Loop Sensor	PC6	[3]	Lower Feeder Paper Feed Sensor	PC3 PF
[2]	Synchronizing Roller Sensor	PC4			

1.5 Solution

1.5.1 Initial check items

- When a paper misfeed occurs, first check the following initial check items.

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

1.5.2 Misfeed at the Tray 2 paper feed section, Tray 3 paper feed section, and vertical conveyance section

A. Detection Timing

Type	Description
Detection of misfeed at Tray 2 paper feed section or Tray 3 paper feed section	The paper does not block the Lower Feeder Paper Feed Sensor (PC3 PF) even after the lapse of a given period of time after the paper feed sequence has been started.
Detection of misfeed at Tray 2 vertical conveyance section	The paper does not block the Synchronizing Roller Sensor (PC4) even after the lapse of a given period of time after it has blocked the Lower Feeder Paper Feed Sensor (PC3 PF).
	The paper does not unblock the Lower Feeder Paper Feed Sensor (PC3 PF) even after the lapse of a given period of time after it has blocked the Lower Feeder Paper Feed Sensor (PC3 PF).
	The Synchronizing Roller Sensor (PC4) is not blocked at the start of driving of the Synchronizing Roller.
Detection of misfeed at Tray 3 vertical conveyance section	The paper does not block the Lower Feeder Paper Feed Sensor (PC3 PF) of Tray 2 even after the lapse of a given period of time after it has blocked the Lower Feeder Paper Feed Sensor (PC3 PF) of Tray 3.
	The paper does not unblock the Lower Feeder Paper Feed Sensor (PC3 PF) even after the lapse of a given period of time after it has blocked the Lower Feeder Paper Feed Sensor (PC3 PF).
	The Synchronizing Roller Sensor (PC4) is not blocked at the start of driving of the Synchronizing Roller.
Detection of paper left at Tray 2 paper feed section or Tray 3 paper feed section	The Lower Feeder Paper Feed Sensor (PC3 PF) is blocked when the Power Switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts	
Lower Feeder Paper Feed Sensor (PC3 PF) Synchronizing Roller Sensor (PC4) Paper Loop Sensor (PC6) Lower Feeder Right Door Switch (PC5 PF) Lower Feeder Paper Feed Clutch (CL1 PF) Synchronizing Roller Clutch (CL2) Lower Feeder Motor (M1 PF)	Lower Feeder Board (PWB-F PF) Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC3 PF sensor check	PWB-F PF PJ5F PF-6 (ON)	6-B~C (Lower Feed Unit)
3	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
4	PC6 sensor check	PWB-A PJ16A-3 (ON)	2-G
5	PC5 PF sensor check	PWB-F PF PJ5F PF-3 (ON)	6-C (Lower Feed Unit)
6	CL1 PF operation check	PWB-F PF PJ6F PF-2 (REM)	6-E (Lower Feed Unit)
7	CL2 operation check	PWB-A PJ16A-5 (ON)	2-G~H
8	M1 PF operation check	-	6-E~F (Lower Feed Unit)
9	Change PWB-B PF.	-	-
10	Change PWB-A.	-	-

KONICA MINOLTA

SERVICE MANUAL

FIELD SERVICE

Duplex Option

2005.04

KONICA MINOLTA BUSINESS TECHNOLOGIES, INC. Ver. 2.0

CONTENTS

I General

1. Product specifications

1.1 Type

Name	Duplex Unit
Type	Switchback and Circulating Duplex Unit
Installation	Mounted on the right side door of main unit
Reversing System	Exit Roller switchback
Conveyance system	Rubber roller + driven rolls
Document Alignment	Center

1.2 Paper type

Paper Size	B5/A4/Letter/Legal
Paper Type	• Plain paper: 60 to 90 g/m^2 (16 to 24 lb) • Recycled paper: 60 to 90 g/m^2 (16 to 24 lb)

1.3 Machine specifications

Power Requirements	DC 24 V ± 10% (supplied from the main unit)
	DC 5 V ± 5% (supplied from the main unit)
Max. Power Consumption	17 W
Dimensions	394 mm (W) × 320 mm (D) × 58 mm (H) 15.5 inch (W) × 12.6 inch (D) × 2.3 inch (H)
Weight	Approx. 1.8 kg (4.0 lb)

1.4 Operating environment

Temperature	10° to 30° C/50° to 86° F (with a fluctuation of 10° C/h (18° F/h))
Humidity	15% to 85% (with a fluctuation of 20%/h)

NOTE

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

II Maintenance

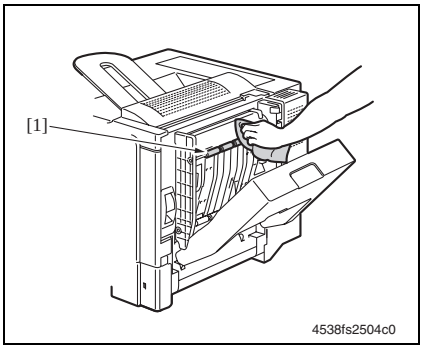
1. Periodic check

1.1 Maintenance procedure (Periodic parts check)

NOTE

- **The alcohol used in this cleaning procedure is isopropyl alcohol.**

1.1.1 Transport Roller



A. Cleaning procedure

1. Open the Duplex Door.

2. Using a soft cloth dampened with alcohol, wipe the Transport Roller [1] clean of dirt.

2. Other

2.1 Disassembly/adjustment-prohibited items

A. Paint-locked screws

NOTE
- **Paint-locked screws show that the assembly or unit secured can only be adjusted or set at the factory and should not be adjusted, set, or removed in the field.**

B. Red-painted screws

NOTES
- **When the screws are removed, the red paint is coated on the points where readjustment is required.**
- **Once a red-painted screw is removed or loosened, you should make the adjustment. Accordingly, check the adjustment items in this manual and makethe necessary adjustmens. Note that when two or more screws are used on the part in question, only one representative screw may be marked with red paint.**

C. Variable resistors on the board

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

D. Removal of PWBs

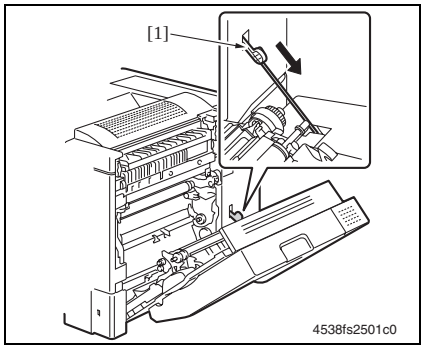
NOTES
- **When removing a circuit board or other electrical component, refer to "Handling of PWBs" and follow the corresponding removal procedures.**
- **The removal procedures given in the following sections omit the removal of connectors and screws securing the circuit board support or circuit board.**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

2.2 Disassembly/assembly list (other parts)

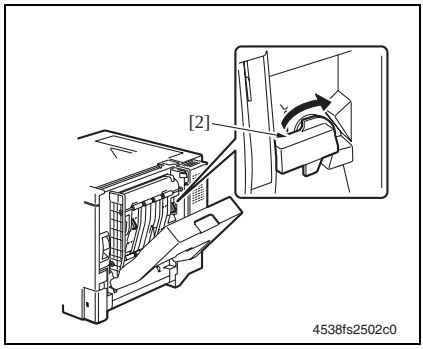
No	Section	Part name	Ref. page
1	-	Duplex Option	☞ 2-4
2	Exterior parts	Right Cover	☞ 2-5
3	Board and etc.	Duplex Board	☞ 2-5
4	Others	Duplex Transport Motor	☞ 2-6
5		Duplex Reverse Motor	☞ 2-6

2.3 Disassembly/assembly procedure

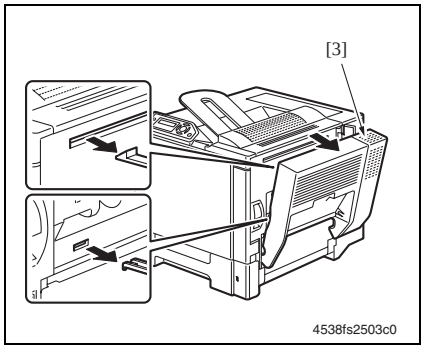
2.3.1 Duplex Option



1. Open the Right Door.
2. Remove the Support Wire [1] from the machine.
3. Close the Right Door.

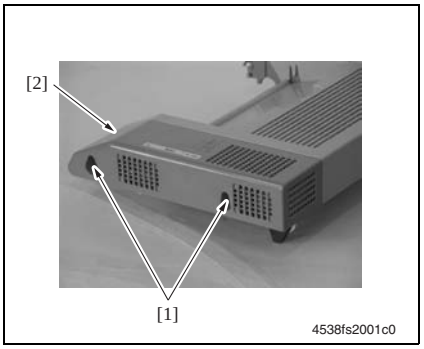


4. Open the Duplex Option Door.
5. Turn the two locking knobs [2] to unlock the Duplex Option.



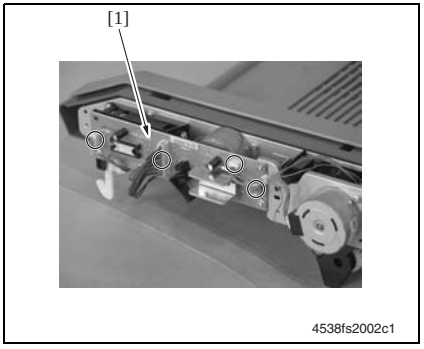
6. Remove the Duplex Option [3].

2.3.2 Right cover

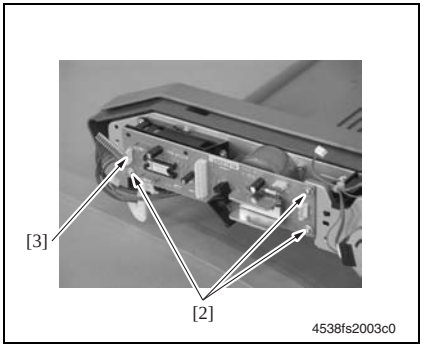


1. Remove the Duplex Option.
☞ 2-4
2. Remove two screws and the Right Cover [2].

2.3.3 Duplex Board (PWB-E DU)

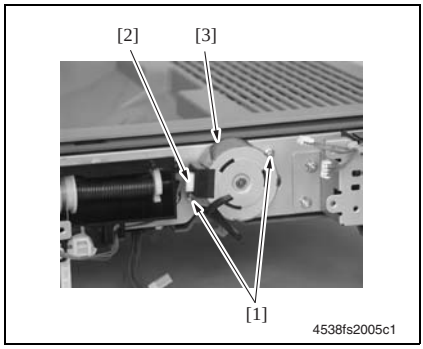


1. Remove the Right Cover.
☞ 2-5
2. Disconnect all connectors from the Duplex Board [1].



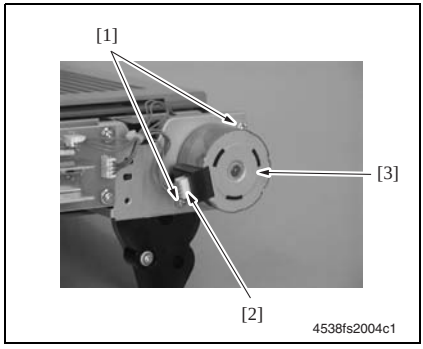
3. Remove three screws [2] and the Duplex Board [3].

2.3.4 Duplex Transport Motor (M1)



1. Remove the Duplex Board.
☞ 2-5
2. Remove two screws [1], disconnect the connector [2], and remove the Duplex Transport Motor [3].

2.3.5 Duplex Reverse Motor (M2)



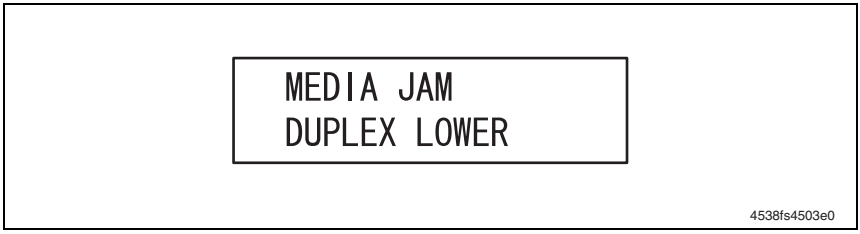
1. Remove the Right Cover.
☞ 2-5
2. Remove two screws [1], disconnect the connector [2], and remove the Duplex Reverse Motor [3].

III Troubleshooting

1. Jam Display

1.1 Misfeed Display (magicolor 5430 DL/5440 DL)

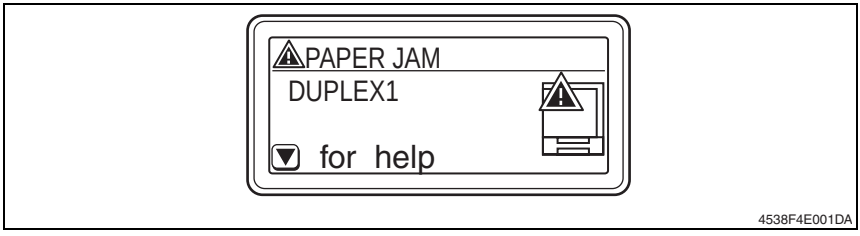
- When a paper misfeed occurs, a message is displayed on the Control Panel.



Display	Misfeed location	Misfeed clearing location	Ref. page
MEDIA JAM DUPLEX LOWER	Duplex Option paper feed section	Duplex Option Door	☞ 3-4
MEDIA JAM DUPLEX UPPER	Duplex Option paper conveyance section		☞ 3-5
MEDIA JAM UNDEFINED	-	-	☞ 3-6

1.2 Misfeed Display (magicolor 5450)

- When a paper misfeed occurs, a message is displayed on the Control Panel.

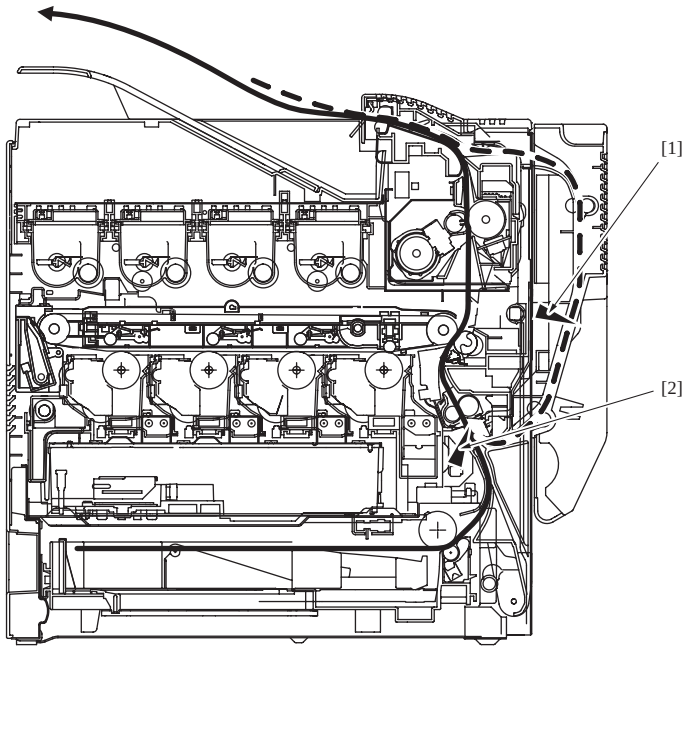


Display	Misfeed location	Misfeed clearing location	Ref. page
PAPER JAM DUPLEX 1	Duplex Option paper feed section	Duplex Option Door	☞ 3-4
PAPER JAM DUPLEX 2	Duplex Option paper conveyance section		☞ 3-5

1.3 Misfeed Display Resetting Procedure

- Open the relevant door, clear the sheet of misfed paper, and close the door.

1.4 Sensor layout



[1] Sensor on Duplex Board PWB-E DU PWB-E DU [2] Synchronizing Roller Sensor PC4

1.5 Solution

1.5.1 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.

1.5.2 Misfeed at Duplex Option paper feed section

A. Detection Timing

Type	Description
Detection of misfeed at Duplex Option paper feed section	The paper does not block the Synchronizing Roller Sensor (PC4) even after the lapse of a given period of time after the paper feed sequence has been started at the Duplex Option.
Detection of paper left at Duplex Option paper feed section	The Synchronizing Roller Sensor (PC4) is blocked when the Power Switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC4) Duplex Door Sensor (PC2 DU) Duplex Transport Motor (M1 DU) Duplex Reverse Motor (M2 DU)	Duplex Board (PWB-E DU) Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
3	PC2 DU sensor check	PWB-E DU PJ4E DU-3 (ON)	3-F~G (Duplex Option)
4	M1 DU operation check	-	7-D~E (Duplex Option)
5	M2 DU operation check	-	3-D (Duplex Option)
6	Change PWB-E DU.	-	-
7	Change PWB-A.	-	-

1.5.3 Misfeed at Duplex Option paper conveyance section

A. Detection Timing

Type	Description
Detection of misfeed at Duplex Option paper conveyance section	The paper does not block the Synchronizing Roller Sensor (PC4) even after the lapse of a given period of time after the sensor on the Duplex Board (PWB-E DU) has been blocked.
	The sensor on the Duplex Board (PWB-E DU) is not unblocked even after the lapse of a given period of time after it has been blocked.
Detection of paper left at Duplex Option paper conveyance section	The sensor on the Duplex Board (PWB-E DU) is blocked when the Power Switch is turned ON, a door or cover is opened and closed, or a misfeed or malfunction is reset.

B. Action

Relevant Electrical Parts	
Synchronizing Roller Sensor (PC4) Duplex Door Sensor (PC2 DU) Duplex Transport Motor (M1 DU) Duplex Reverse Motor (M2 DU)	Duplex Board (PWB-E DU) Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Initial check items	-	-
2	PC4 sensor check	PWB-A PJ15A-3 (ON)	2-H
3	PC2 DU sensor check	PWB-E DU PJ4E DU-3 (ON)	3-F~G (Duplex Option)
4	M1 DU operation check	-	7-D~E (Duplex Option)
5	M2 DU operation check	-	3-D (Duplex Option)
6	Change PWB-E DU.	-	-
7	Change PWB-A.	-	-

1.5.4 Undefined misfeed

A. Detection Timing

Type	Description
Detection of undefined misfeed	Conflicting settings are made in the printer driver.

B. Action

Relevant Electrical Parts	
Print Control Board (PWB-P)	Mechanical Control Board (PWB-A)

Step	Action	WIRING DIAGRAM	
		Control Signal	Location (Electrical Component)
1	Check printer driver settings.	-	-
2	Change PWB-P.	-	-
3	Change PWB-A.	-	-

2. Miscellaneous Malfunctions

2.1 List of miscellaneous malfunctions

Message	Description
ILLEGAL ERROR DUPLEX	• The Duplex Option is not installed. • A 2-sided print cycle, using a media size and type that are not supported for 2-sided printing, was requested.

2.2 ILLEGAL ERROR DUPLEX

Relevant Electrical Parts	
Duplex Board (PWB-E DU)	Mechanical Control Board (PWB-A) Print Control Board (PWB-P)

Step	Action	WIRING DIAGRAM	
		Control signal	Location (electrical component)
1	Check the printer driver settings.	-	-
2	Check the PWB-E DU connector for proper connection and correct as necessary.	-	-
3	Check the PWB-A connector for proper connection and correct as necessary.	-	-
4	Check the PWB-P connector for proper connection and correct as necessary.	-	-
5	Change PWB-E DU.	-	-
6	Change PWB-P.	-	-
7	Change PWB-A.	-	-

KONICA MINOLTA

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