



## Read This First

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For information not in this manual, refer to the HTML/PDF files on the supplied CD-ROM.



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# How to Read the Manuals

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## Symbols Used in the Manuals

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This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

 **Reference**


This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]


Indicates the names of keys on the machine's display or control panels.



Indicates instructions stored in a file on a provided CD-ROM.

 **Region A** (mainly Europe)

 **Region B** (mainly North America)

Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see "Model-Specific Information", Getting Started .

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## Disclaimer

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To the maximum extent permitted by applicable laws, in no event will the manufacturer be liable for any damages whatsoever arising out of failures of this machine, losses of the registered data, or the use or non-use of this product and operation manuals provided with it.

Make sure that you always copy or have backups of the data registered in this machine. Documents or data might be erased due to your operational errors or malfunctions of the machine.

In no event will the manufacturer be responsible for any documents created by you using this machine or any results from the data executed by you.

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## Notes

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Contents of this manual are subject to change without prior notice.

The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

For good output quality, the manufacturer recommends that you use genuine toner from the manufacturer.

Some illustrations in this manual might be slightly different from the machine.

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## Machine Types

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Check the type of your machine before reading the manuals.

Type 1: Pro 8100EX/Pro 8100S

Type 2: Pro 8110S

Type 3: Pro 8120S

Certain types might not be available in some countries. For details, please contact your local dealer.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.





# 1. Manuals Provided with This Machine

This chapter explains manuals for this machine.

## Manuals for This Machine

Read this manual carefully before you use this machine.

Refer to the manuals that are relevant to what you want to do with the machine.

### ★ Important

- Media differ according to manual.
- Adobe® Acrobat® Reader®/Adobe Reader must be installed in order to view the manuals as PDF files.
- A Web browser must be installed in order to view the html manuals.

### User Guide

Regarding the basic usage of this machine, frequently used functions, troubleshooting when an error message appears, etc., summaries are provided below for each user manual.

### Read This First

Before using the machine, be sure to read the section of this manual entitled Safety Information. It also describes how to install the included CD-ROM, each regulation, and environmental conformance.

### Easy Search

You can search for a description by what you want to do. Also, this machine's distinctive functions are explained.

### Getting Started

Describes preparations for using the machine, operating instructions, and character input methods.

### Paper Specifications and Adding Paper

Describes how to load originals and sheets and about their specifications.

### Convenient Functions

Describes how to register frequently used settings, customize the Home Screen, and display a Web page on the control panel. It also describes how to manage a job.

### Maintenance and Specifications

Describes how to replace supplies and how to install and clean this machine. It also describes the specifications of the main unit and options.

### Troubleshooting

Provides a guide for resolving common usage-related problems.

## **Copy/ Document Server**

Explains Copier and Document Server functions and operations. Also refer to this manual for explanations on how to specify the settings for originals.

## **Print**

Describes how to print using the printer driver. It also describes the functions available for printing.

## **Scan**

Describes how to scan paper data using this machine and how to send the scanned data to a computer and store the data.

## **Connecting the Machine/ System Settings**

Explains how to connect the machine to a network and how to configure and operate the machine in a network environment. It also explains how to change System Settings, how to specify Adjustment Settings for Operators, and how to register information in the Address Book.

## **PostScript 3**

Explains how to set up and use PostScript® 3™.

## **Extended Feature Settings**

Describes how to configure the extended features using the control panel or Web Image Monitor.

## **Paper Settings**

Explains how to make paper settings for each tray using the paper library, which contains optimum printing conditions. It also explains how to manually specify a paper size and type for a paper tray.

## **Security Guide**

This manual is for administrators of the machine. It explains security functions that you can use to prevent unauthorized use of the machine, data tampering, or information leakage. For enhanced security, we recommend that you first make the following settings:

- Install the Device Certificate.
- Enable SSL (Secure Sockets Layer) Encryption.
- Change the user name and password of the administrator.

For details, see "Before Using This Machine", Security Guide.

Be sure to read this manual when setting the enhanced security functions, or user and administrator authentication.

## **Guide to Paper**

Explains paper characteristics and methods for handling paper.

## **Driver Installation Guide**

Describes how to install and configure each driver. This manual is included in the drivers CD.

### **Note**

- Manuals provided are specific to machine types.

- Driver Installation Guide and HTML manuals are available in English, German, French, Italian, Spanish, Dutch, and Russian.
- You can download information about the machine's certification, which is based on an IT security certification system (hereafter CC Certification), from [http://support-download.com/services/device/ccmanual/pro\\_8100\\_8110\\_8120/en/download\\_admin.html](http://support-download.com/services/device/ccmanual/pro_8100_8110_8120/en/download_admin.html) and [http://support-download.com/services/device/ccmanual/pro\\_8100\\_8110\\_8120/en/download\\_user.html](http://support-download.com/services/device/ccmanual/pro_8100_8110_8120/en/download_user.html). This information is about how to set up the machine. If you have purchased a CC Certified machine, be sure to read it before operating the machine so you can make the correct settings before using it.
- The following software products are referred to using general names:

Product name	General name
ScanRouter EX Professional <sup>*1</sup> and ScanRouterEX Enterprise <sup>*1</sup>	the ScanRouter delivery software

\*1 The ScanRouter EX Professional and ScanRouterEX Enterprise are no longer available for sale.

## Manuals List

Manual Name	Printed Manuals Provided	HTML Manuals Provided	PDF Manuals Provided
User Guide	Yes	No	Yes
Read This First	Yes	No	No
Easy Search	No	Yes	No
Getting Started	No	Yes	No
Paper Specifications and Adding Paper	No	Yes	No
Convenient Functions	No	Yes	No
Maintenance and Specifications	No	Yes	No
Troubleshooting	No	Yes	No
Copy/ Document Server	No	Yes	No
Print	No	Yes	No
Scan	No	Yes	No

Manual Name	Printed Manuals Provided	HTML Manuals Provided	PDF Manuals Provided
Connecting the Machine/ System Settings	No	Yes	No
PostScript 3	No	Yes	No
Extended Feature Settings	No	Yes	No
Paper Settings	No	Yes	No
Security Guide	No	No	Yes
Guide to Paper	No	No	Yes
Driver Installation Guide	No	No	Yes

**Note**

- Driver Installation Guide and HTML manuals are available in English, German, French, Italian, Spanish, Dutch, and Russian.

# On-screen Operating Instructions

This chapter describes the on-screen operating instructions of this machine. The on-screen operating instructions are included in the supplied manual CD-ROM.

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## Formats of the Operating Instructions

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The operating instructions of this machine are provided in the following formats:

- Printed manuals
- HTML manuals
- PDF manuals

For details about the contents of each manual, see page 5 "Manuals for This Machine". The various manuals are available in different formats. For details about availability, see page 7 "Manuals List".

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## Reading the HTML Manuals on the CD-ROM

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This section describes how to read the HTML manuals on the supplied manual CD-ROM.

1. Insert the CD-ROM in the CD-ROM drive of your computer.
2. Select a language, and then click [OK].
3. Click [Read HTML manuals].
4. Click the title of manual you want to read.

The browser opens.

### Note

- Recommended browsers:
  - Internet Explorer 6 or later
  - Firefox 3.5 or later
  - Safari 4.0 or later
- If you want to read the HTML manuals on a Macintosh, insert the CD-ROM in the CD-ROM drive, and then open "Manuals.htm".
- If JavaScript is disabled or unavailable in your browser, you will not be able to search or use certain buttons in the HTML documentation.
- HTML manuals are available in English, German, French, Italian, Spanish, Dutch, and Russian.

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## Installing and Opening the HTML Manuals

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This section describes how to install and open the HTML manuals on your computer.

For your convenience, we recommend you install these manuals on your computer.

1. Insert the CD-ROM in the CD-ROM drive of your computer.
2. Select a language, and then click [OK].
3. Click [Install manuals].
4. Install the HTML manuals by following the on-screen instructions.
5. When the installation is complete, click [Finish].
6. Click [Exit].
7. Open the HTML manuals that you installed.

To open the manuals from an icon, double-click the icon on the desktop. To open the manuals from the [Start] menu, point to [All Programs], and then click [Product Name].

8. Click the title of the manual you want to read.

### Note

- You need administrator permissions to install the manuals. Log in as an Administrators group member.
- The system requirements for installing the manuals are as follows:
  - Operating system: Windows XP/Vista/7/8, Windows Server 2003/2003 R2/2008/2008 R2/2012
  - Minimum display resolution: 800 × 600 pixels
- If you cannot install a manual, copy the "MANUAL\_HTML" folder to your computer's hard drive, and then run "setup.exe".
- To delete an installed manual, on the [Start] menu, point to [All Programs], click [Product Name], and then uninstall the data.
- Depending on the settings made during installation, menu folder names may differ.
- HTML manuals are available in English, German, French, Italian, Spanish, Dutch, and Russian.

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## Reading the PDF Manuals on the CD-ROM

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This section describes how to read the PDF manuals on the supplied manual CD-ROM.

### File path

The manuals are included in the following folder on the CD-ROM:

MANUAL\_PDF\*(language)*

1. Insert the CD-ROM in the CD-ROM drive of your computer.
2. Select a language, and then click [OK].
3. Click [Read PDF manuals].
4. Click the title of the manual you want to view.

**Note**

- To view the PDF manuals, you need to have Adobe Acrobat Reader/Adobe Reader installed on your computer.
- If you want to read the PDF manuals on a Macintosh, insert the CD-ROM in the CD-ROM drive, and then open "Manuals.htm".
- Driver Installation Guide is available in English, German, French, Italian, Spanish, Dutch, and Russian.





# 2. Safety Information for This Machine

This chapter describes the safety precautions.

## Safety Information

### Safety During Operation

In this manual, the following important symbols are used:

 **WARNING**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

 **CAUTION**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

### Safety Precautions to Be Followed

This section explains safety precautions that should always be followed when using this machine.

#### Environments where the machine can be used

This section explains safety precautions about environments where the machine can be used.

 **WARNING**

- Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.

 **WARNING**

- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.

 **CAUTION**

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

**⚠ CAUTION**

- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

**⚠ CAUTION**

- Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.

**⚠ CAUTION**

- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.

**⚠ CAUTION**

- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

### Handling power cords and power cord plugs

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This section explains safety precautions about handling power cords and power cord plugs.

**⚠ WARNING**

- Do not use any power sources other than those that match the specifications shown. Doing so could result in fire or electric shock.

**⚠ WARNING**

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.

**⚠ WARNING**

- Do not use multi-socket adaptors. Doing so could result in fire or electric shock.

**⚠ WARNING**

- Do not use extension cords. Doing so could result in fire or electric shock.

**⚠ WARNING**

- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could result in fire or electric shock.

**⚠ WARNING**

- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

**⚠ WARNING**

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

**⚠ WARNING**

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

**⚠ WARNING**

- If the power cord is damaged and its inner wires are exposed or broken, contact your service representative for a replacement. Use of damaged power cords could result in fire or electric shock.

**⚠ WARNING**

- Be sure to disconnect the plug from the wall outlet at least once a year and check for the following:
  - There are burn marks on the plug.
  - The prongs on the plug are deformed.
- If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.

**⚠ WARNING**

- Be sure to disconnect the power cord from the wall outlet at least once a year and check for the following:
  - The power cord's inner wires are exposed, broken, etc.
  - The power cord's coating has a crack or dent.
  - When bending the power cord, the power turns off and on.
  - Part of the power cord becomes hot.
  - The power cord is damaged.
- If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.

**⚠ WARNING**

- When this machine's circuit breaker is set to "Off", do not switch it to "On". Doing so could result in electric shock, fire, smoke, or tripping of the room's breakers.

**⚠ CAUTION**

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.

**⚠ CAUTION**

- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

**⚠ CAUTION**

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

**⚠ CAUTION**

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

**⚠ CAUTION**

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

## Handling the main machine

This section explains safety precautions about handling the main machine.

### **WARNING**

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.

### **WARNING**

- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

### **WARNING**

- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

### **WARNING**

- Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.

### **WARNING**

- The following explains the warning messages on the plastic bag used in this product's packaging.
  - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

### **CAUTION**

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.

### **CAUTION**

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.

**⚠ CAUTION**

- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users. The machine's various handling areas are for service engineer use only. Do not touch these areas.

**⚠ CAUTION**

- Do not look into the lamp. It can damage your eyes.

**⚠ CAUTION**

- Do not hold the control panel while moving the machine. Doing so may damage the control panel, cause a malfunction, or result in injury.

**⚠ CAUTION**

- Keep your hands away from the hinges and exposure glass when lowering the ADF. Not doing so result in an injury if your hands or fingers are pinched.

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### Handling the machine's interior

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This section explains safety precautions about handling the machine's interior.

**⚠ WARNING**

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.

**⚠ CAUTION**

- Some of this machine's internal components get very hot. For this reason, take care when removing misfed paper. Not doing so could result in burns.

**⚠ CAUTION**

- When removing jammed paper, make sure not to trap or injure your fingers.

**⚠ CAUTION**

- When loading paper, take care not to trap or injure your fingers.

**⚠ CAUTION**

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

**⚠ CAUTION**

- While safety measures have been installed to prevent accidents, you must not touch the machine's rollers while it is operating. Doing so could cause injury.

**⚠ CAUTION**

- If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

**⚠ CAUTION**

- Keep your hands clear of the inside of the ring binder and the space under the ring binder tray. You can trap your fingers if you do not.

**Handling the machine's supplies**

This section explains safety precautions about handling the machine's supplies.

**⚠ WARNING**

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

**⚠ WARNING**

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

**⚠ WARNING**

- Do not use a vacuum cleaner to remove spilled toner (including used toner). Absorbed toner may cause a fire or explosion due to electrical contact flickering inside the vacuum cleaner. However, it is possible to use a vacuum cleaner that is explosion-proof and dust ignition-proof. If toner is spilled on the floor, remove the spilled toner slowly using a wet cloth, so that the toner is not scattered.



**⚠ WARNING**

- The following explains the warning messages on the plastic bag used in this product's packaging.
  - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

**⚠ CAUTION**

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

**⚠ CAUTION**

- Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

**⚠ CAUTION**

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

**⚠ CAUTION**

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

**⚠ CAUTION**

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

**⚠ CAUTION**

- When replacing a toner or waste toner container or consumables with toner, make sure that the toner does not splatter. Put the waste consumables in a bag after they are removed. For consumables with a lid, make sure that the lid is shut.

**⚠ CAUTION**

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.

**⚠ CAUTION**

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your skin. If toner comes into contact with your skin, wash the affected area thoroughly with soap and water.

**⚠ CAUTION**

- Do not attempt to print on stapled sheets, aluminum foil, carbon paper, or any kind of conductive paper. Doing so risks fire.

**⚠ CAUTION**

- Keep SD cards or USB flash memory devices out of reach of children. If a child accidentally swallows an SD card or USB flash memory device, consult a doctor immediately.

**⚠ CAUTION**

- When binding paper manually with the ring opener, take care not to trap or injure your fingers.

# Safety Labels of This Machine

This section explains the machine's safety information labels.

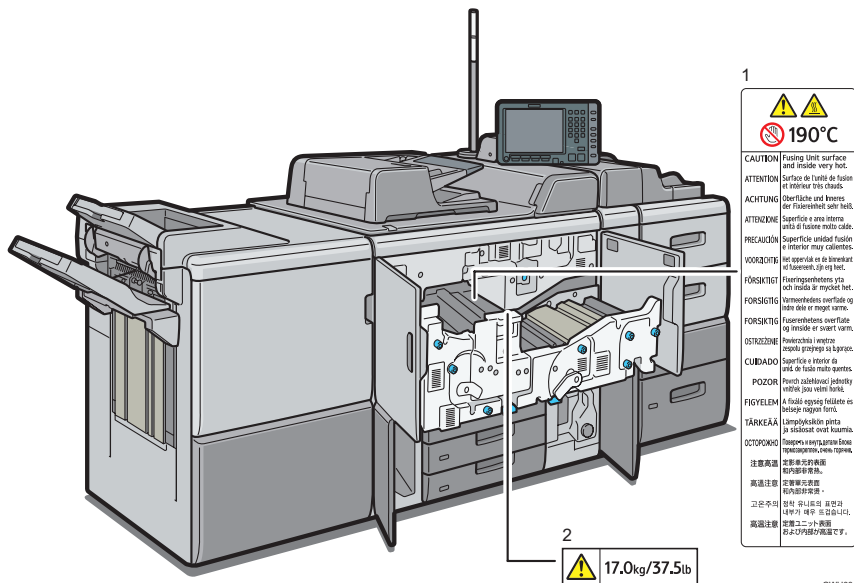
## Positions of WARNING and CAUTION labels

2

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.

### Main unit

#### Front side



1

**CAUTION** Fusing Unit surface and interior very hot.  
**ATTENTION** Surface de l'unité de fusion et intérieur très chauds.  
**ACHTUNG** Oberfläche und Innere der Fuserinheit sehr heiß.  
**ATTENZIONE** Superficie a zona interna della fusione molto calde.  
**PRECAUTION** Superficie unitéde Fusion et intérieur très chauds.  
**VOORZICHT** Het oppervlak en de binnenkant of fuserenheit zijn erg heet.  
**FOREGIFTEL** Varmingsenheden, inn- och utsida är mycket het.  
**FORSIKTIG** Varmoverfladen overflade og indside er meget varm.  
**FORSIKTIG** Fuserenhetens overflata og innside er svært varm.  
**OSTRZEZENIE** Powierzchnia wnętrza czepki grzejnej są gorące.  
**CUIDAD** Superficie e interior da unita de fusão muito quentes.  
**POZOR** Povrch zahřívací jednotky a vnitřek jsou velmi horké.  
**FIGYELEM** A fűtési egység felülete és belsője nagyon forró.  
**TÄRKEÄÄ** Lämpövoimakkeiden pinnat ja sisäosat ovat kuumia.  
**ОСТОРОЖНО** Температуры поверхности и внутренней части блока нагрева очень высоки.  
**注意高温** 本影印機の表面、特に内部が非常に熱い。  
**重要注意** 本影印機の表面、特に内部が非常に熱い。  
**注意** 本機は非常に重いです。重量は17.0kg/37.5lbです。  
**重要注意** 本機は非常に重いです。重量は17.0kg/37.5lbです。

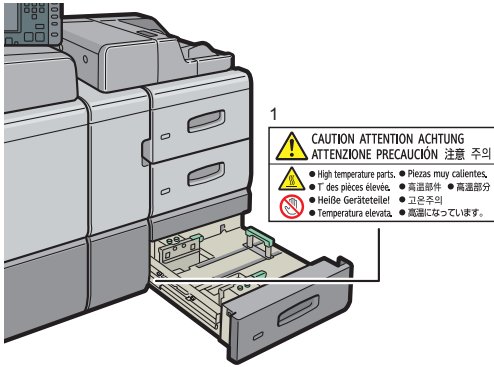
2

**17.0kg/37.5lb**

1  
Do not touch the parts a label indicates. The inside and surface of the fusing unit could be very hot. Caution should be taken when removing misfed paper.

2  
This label indicates the weight of the unit. However, this label is meant for customer engineers and operators who have received training. Do not lift a unit that has this label.

## Wide LCT

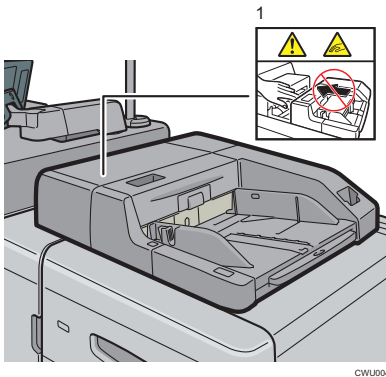


2

1

High temperature parts. Do not touch the parts which a label is put on. Otherwise, an injury might occur.

## Multi bypass tray

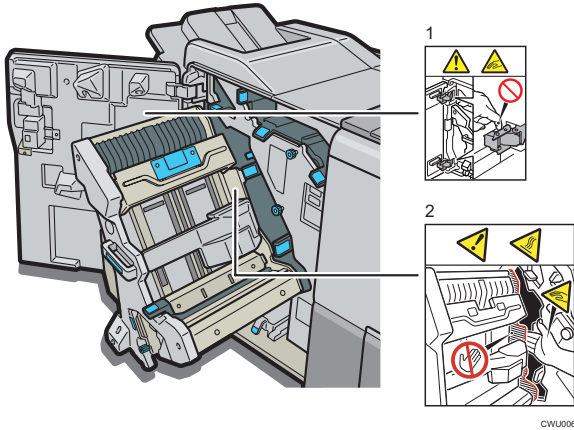


1

Keep your hands clear of the multi bypass tray when removing paper jam. You might trap your fingers if you do not.

## Finisher SR5050

2



1

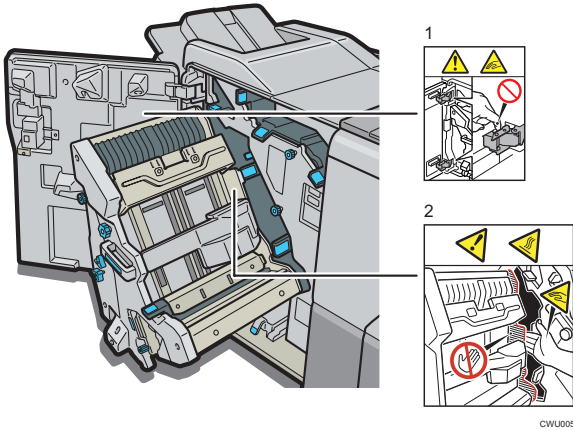
When opening and closing the front cover of Finisher SR5050, keep your hands clear of the hinges. The hinges are a hazard. You risk trapping your fingers if you do not keep your hands clear of them.

2

The inside of Finisher SR5050 could be very hot. Keep your hands clear of the parts a label indicates. You might trap your fingers and an injury might occur.

## Booklet Finisher SR5060

### Right side



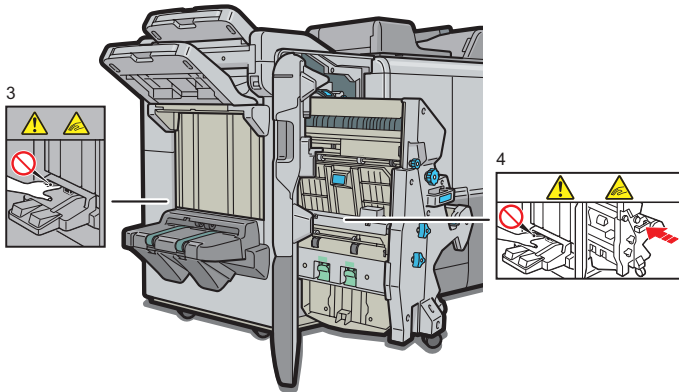
1

When opening and closing the front cover of Booklet Finisher SR5060, keep your hands clear of the hinges. The hinges are a hazard. You risk trapping your fingers if you do not keep your hands clear of them.

2

The inside of Booklet Finisher SR5060 could be very hot. Keep your hands clear of the parts a label indicates. You might trap your fingers and an injury might occur.

Left side



CWU007

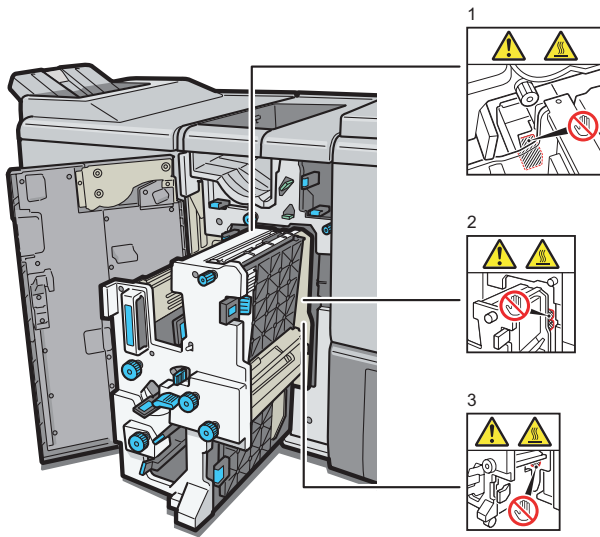
3

Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not. Take care not to touch the booklet finisher tray during operation. Otherwise, an injury might occur.

4

Keep your hands clear of the booklet finisher tray when pulling out or pushing in the finisher's staple unit, or removing paper jam. You might trap your fingers if you do not.

## Multi-Folding Unit



CWU010

1

Do not touch the parts a label indicates. The inside of the multi-folding unit could be very hot. Caution should be taken when removing misfed paper.

2

Do not touch the parts a label indicates. The inside of the multi-folding unit could be very hot. Caution should be taken when removing misfed paper.

3

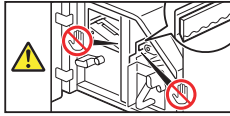
Do not touch the parts a label indicates. The inside of the multi-folding unit could be very hot. Caution should be taken when removing misfed paper.



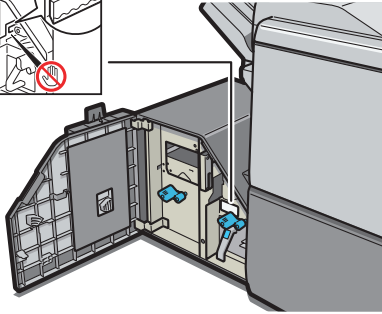
## Trimmer Unit

---

1



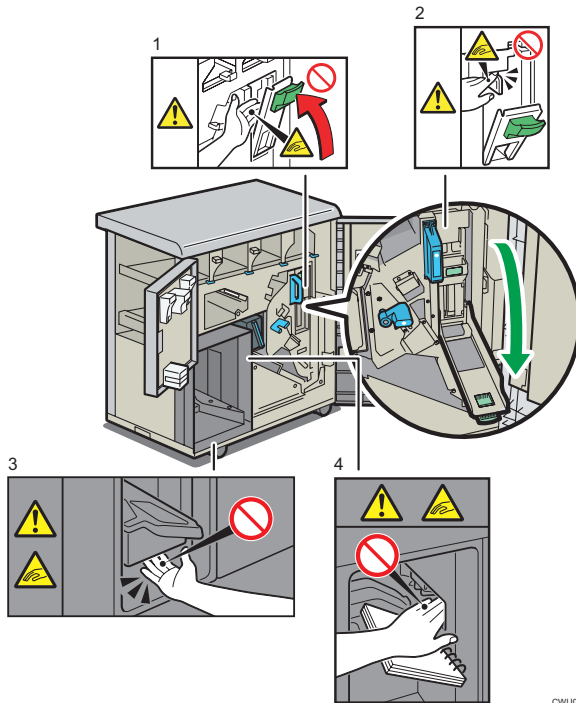
2



1

Keep your hands clear of the internal cutting blade when you are removing jammed paper. Not doing so risks injury to your fingers from the cutting blade.

## Ring Binder



1

Keep your other hand clear when closing the cartridge cover. You might trap your fingers if you do not.

2

Keep your hands clear of the parts a label indicates. Otherwise, you might trap your fingers and an injury might occur.

3

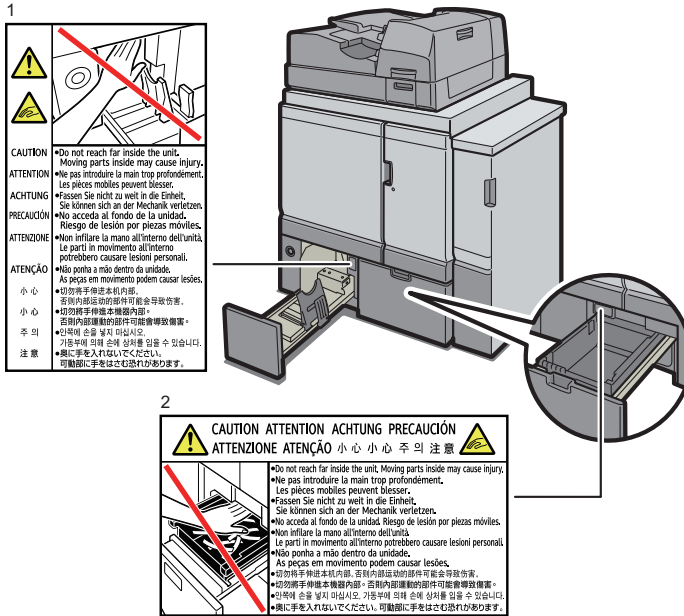
When the ring binder is in operation, keep your hands clear of the ring binder tray. You might trap your fingers if you do not.

4

When removing bound booklets, keep your hands clear of the paper exit. You might trap your fingers if you do not.

CWU008

## Perfect Binder



CWU009

1

When removing bound booklets, keep your hands clear of the perfect binder's lower left tray. You might trap your fingers if you do not.

2

Do not reach far inside the unit. Moving parts inside may cause injury.

## Power Switch Symbols

The meanings of the symbols for the switches on this machine are as follows:

- I : POWER ON
- O : POWER OFF
- Ⓞ : STANDBY

# 3. Other Information for This Machine

This chapter describes laws and regulations related to this machine.

## Laws and Regulations

### Duplication and Printing Prohibited

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

This machine is equipped with a function that prevents making counterfeit bank bills. Due to this function the original images similar to bank bills may not be copied properly.

### Laser Safety

#### CDRH Regulations

This equipment complies with requirements of 21 CFR Subchapter J for class I laser product. This equipment contains one VCSEL (Vertical Cavity Surface Emitting Laser), 772–792 nanometer wavelength. The beam divergence angle is 5.5 degrees (minimum) and 7.9 degrees (maximum) in the vertical direction, and 5.5 degrees (minimum) and 7.9 degrees (maximum) in the horizontal direction, and laser beams are generated in Continuous Wave (CW) mode. The VCSEL has forty light sources and the maximum output power of each light source is 1.4 milliwatt.

#### Caution:

Use of controls or adjustments or performance of procedures other than those specified in the manuals might result in hazardous radiation exposure.

### Notes to USA Users of FCC Requirements

#### Part 15 of the FCC Rules

#### Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection

against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Caution:**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**3**

**Installing the Ferrite Core**

The Ethernet interface cable with a ferrite core must be used for RF interference suppression.

## Other Information

### ENERGY STAR Program

#### ENERGY STAR® Program Requirements for Imaging Equipment



This company is a participant in the ENERGY STAR® Program.

This machine is compliant with the regulations specified by the ENERGY STAR® Program.

3

The ENERGY STAR® Program Requirements for Imaging Equipment encourage energy conservation by promoting energy efficient computers and other office equipment.

The program backs the development and dissemination of products that feature energy saving functions.

It is an open program in which manufacturers participate voluntarily.

Targeted products are computers, monitors, printers, facsimiles, copiers, scanners, and multi-function devices. Energy Star standards and logos are internationally uniform.

#### Note

- For details about the "default delay time", see page 33 "Energy Saving Functions".

### Energy Saving Functions

To reduce its power consumption, this machine has the following functions:

#### Low Power mode

- If this machine remains idle for a specified period, it automatically reduces its electrical consumption.
- The default period the machine waits before entering Low Power mode is 15 minutes. This default time can be changed.

### Sleep mode

- If this machine remains idle for a specified period or when the [Energy Saver] key is pressed, it enters Sleep mode to further reduce its electrical consumption.
- The default delay time the machine waits before entering Sleep mode is 60 minutes. This default time can be changed.
- The machine can print jobs from computers while in Sleep mode.

### Specification

	Type 1	Type 2	Type 3
Reduced electrical consumption in Low Power mode <sup>*1</sup>	260 W	260 W	170 W
Time of switch into Low Power mode	15 minutes	15 minutes	15 minutes
Time of switch out from Low Power mode <sup>*1</sup>	35 seconds	35 seconds	75 seconds
Reduced electrical consumption in Sleep mode <sup>*1</sup>	1.2 W	1.2 W	1.3 W
Time of switch into Sleep mode	60 minutes	60 minutes	60 minutes
Time of switch out from Sleep mode <sup>*1</sup>	360 seconds	360 seconds	360 seconds

<sup>\*1</sup> The time it takes to switch out from energy saving functions and electrical consumption may differ depending on the conditions and environment of the machine.

#### Note

- Specifications can vary depending on which options are installed on the machine.
- For details about how to change the default interval, see "Timer Settings", Connecting the Machine/ System Settings ②.
- The machine enters sleep mode directly in the following situations:
  - Low Power Mode Timer and Sleep Mode Timer are set to the same time
  - Sleep Mode Timer is set to a shorter time than Low Power Mode Timer
- Depending on which embedded software application is installed on it, the machine might take longer than indicated to enter Sleep mode.

---

## **Notes to users in the state of California (Notes to Users in USA)**

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Perchlorate Material - special handling may apply. See: [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate)





# 4. Appendix

This appendix describes trademarks and specifications for the machine.

## Specifications

For specifications not described in this manual, see "Specifications", Maintenance and Specifications .

### Warm-up time

360 seconds or less (23°C (73.4°F), rated voltage)

### First copy/print time

- Type 1: 6.3 seconds
- Type 2: 5.6 seconds
- Type 3: 4.6 seconds

(A4, 8 1/2 × 11, delivered face down, feeding from tray 1, on the exposure glass)

### Power consumption

- Main unit only

	Type 1	Type 2	Type 3
Ready	420 W	420 W	420 W
During printing	1,800 W	2,000 W	2,250 W
Maximum	1,900 W	2,100 W	2,350 W

The power level when the main switch is turned off and the power cord is plugged into an outlet: 1 W or less

- Complete system

	Type 1	Type 2	Type 3
Maximum	2,800 W	3,010 W 3,020 W	3,350 W 3,270 W

The complete system consists of the main unit, decurler unit, anti-humidity heater, wide LCT, multi bypass tray (Tray 7), interposer, and Booklet Finisher SR5060.

### Noise emission

- Sound power level:
  - Main unit only

	Type 1	Type 2	Type 3
Stand-by	61.5 dB (A)	61.5 dB (A)	61.5 dB (A)
Copying	74.0 dB (A)	74.0 dB (A)	74.0 dB (A)

- Complete system

	Type 1	Type 2	Type 3
Stand-by	62.0 dB (A)	62.0 dB (A)	62.0 dB (A)
Copying	79.5 dB (A)	79.5 dB (A)	79.5 dB (A)

- Sound pressure level:

- Main unit only

	Type 1	Type 2	Type 3
Stand-by	55.5 dB (A)	55.5 dB (A)	55.5 dB (A)
Copying	68.5 dB (A)	70.0 dB (A)	72.5 dB (A)

- Complete system

	Type 1	Type 2	Type 3
Stand-by	51.0 dB (A)	51.0 dB (A)	51.0 dB (A)
Copying	65.0 dB (A)	65.0 dB (A)	65.0 dB (A)

- Sound power level and sound pressure level are actual values measured in accordance with ISO 7779.
- Sound pressure level is measured from the position of the bystander.
- The complete system consists of the main unit, wide LCT, multi bypass tray (Tray 7), ring binder, and Booklet Finisher SR5060.

# Trademarks

Adobe, Acrobat, PostScript, PostScript 3, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Firefox is a registered trademark of the Mozilla Foundation.

Macintosh and Safari are trademarks of Apple Inc., registered in the United States and other countries.

Microsoft, Windows, Windows Server, Windows Vista, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

The SD is a trademark of SD-3C, LLC.

The proper name of Internet Explorer 6 is Microsoft® Internet Explorer® 6.

The proper names of the Windows operating systems are as follows:

- The product names of Windows XP are as follows:

Microsoft® Windows® XP Professional

Microsoft® Windows® XP Home Edition

Microsoft® Windows® XP Media Center Edition

Microsoft® Windows® XP Tablet PC Edition

- The product names of Windows Vista are as follows:

Microsoft® Windows Vista® Ultimate

Microsoft® Windows Vista® Business

Microsoft® Windows Vista® Home Premium

Microsoft® Windows Vista® Home Basic

Microsoft® Windows Vista® Enterprise

- The product names of Windows 7 are as follows:

Microsoft® Windows® 7 Home Premium

Microsoft® Windows® 7 Professional

Microsoft® Windows® 7 Ultimate

Microsoft® Windows® 7 Enterprise

- The product names of Windows 8 are as follows:

Microsoft® Windows® 8

Microsoft® Windows® 8 Pro

Microsoft® Windows® 8 Enterprise

- The product names of Windows Server 2003 are as follows:

Microsoft® Windows Server® 2003 Standard Edition

Microsoft® Windows Server® 2003 Enterprise Edition

- The product names of Windows Server 2003 R2 are as follows:  
Microsoft® Windows Server® 2003 R2 Standard Edition  
Microsoft® Windows Server® 2003 R2 Enterprise Edition
- The product names of Windows Server 2008 are as follows:  
Microsoft® Windows Server® 2008 Standard  
Microsoft® Windows Server® 2008 Enterprise
- The product names of Windows Server 2008 R2 are as follows:  
Microsoft® Windows Server® 2008 R2 Standard  
Microsoft® Windows Server® 2008 R2 Enterprise
- The product names of Windows Server 2012 are as follows:  
Microsoft® Windows Server® 2012 Foundation  
Microsoft® Windows Server® 2012 Essentials  
Microsoft® Windows Server® 2012 Standard

Other product names used herein are for identification purposes only and might be trademarks of their respective companies. We disclaim any and all rights to those marks.





## User Guide

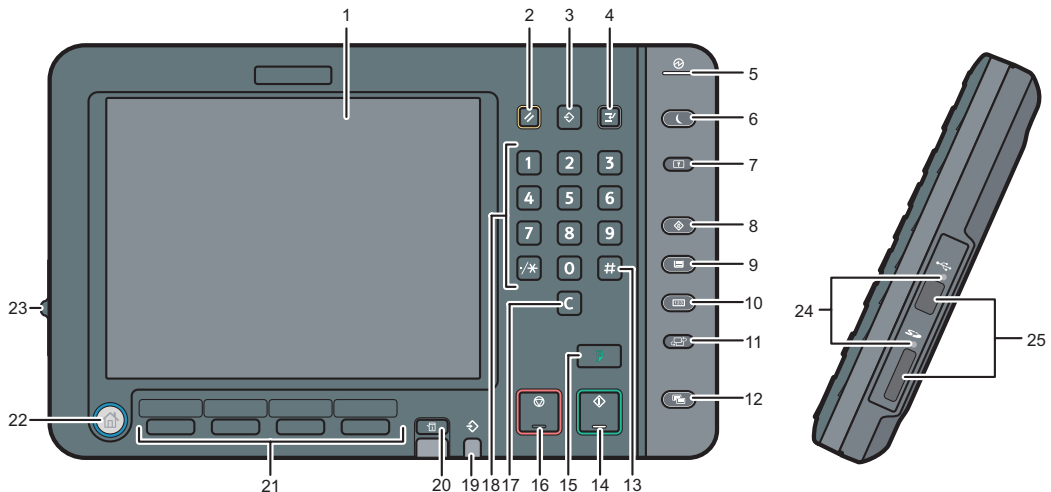
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Web Image Monitor	7
Adding Paper and Toner	8
Troubleshooting	9




For information not in this manual, refer to the HTML/PDF files on the supplied CD-ROM.



# Guide to the Names and Functions of the Machine's Control Panel





## 1. Display panel

Displays keys for each function, operation status, or messages. See "How to Use the Screens on the Control Panel", Getting Started .


## 2. [Reset] key

Press to clear the current settings.

## 3. [Program] key (copier, Document Server, and scanner mode)

- Press to register frequently used settings, or to recall registered settings. See "Registering Frequently Used Functions", Convenient Functions .
- Press to program defaults for the initial display when modes are cleared or reset, or immediately after the main power switch is turned on.  
See "Changing the Default Functions of the Initial Screen", Convenient Functions .


## 4. [Interrupt] key

Press to make interrupt copies. See "Interrupt Copy", Copy/ Document Server .

## 5. Main power indicator

The main power indicator goes on when you turn on the main power switch.


## 6. [Energy Saver] key


Press to switch to and from Low Power mode or Sleep mode. See "Saving Energy", Getting Started . When the machine is in Low Power mode, the [Energy Saver] key is lit. In Sleep mode, the [Energy Saver] key flashes slowly.

## 7. [Login/Logout] key


Press to log in or log out.

## 8. [User Tools] key


Press to change the default settings to meet your requirements. See "Accessing User Tools", Connecting the Machine/ System Settings .

You can find out where to order expendable supplies and where to call when a malfunction occurs. You can also print these details. See "Checking Inquiry Using the User Tools", Maintenance and Specifications .

## 9. [Paper Setting] key


Specify settings for the paper tray. See Paper Settings .

## 10. [Counter] key


Press to check or print the counter value. See "Counter", Maintenance and Specifications .



### 11. [Language] key

Press to change the language of the display. See "Changing the Display Language", Getting Started .

### 12. [Simple Screen] key

Press to switch to the simple screen. See "Switching Screen Patterns", Getting Started .


### 13. [#] key (Enter key)

Press to confirm values entered or items specified.

### 14. [Start] key

Press to start copying, printing, scanning, or sending.

### 15. [Sample Copy] key

Press to make a single set of copies or prints to check print quality before making multiple sets. See "Sample Copy", Copy/ Document Server .

### 16. [Stop] key

Press to stop a job in progress, such as copying, scanning or printing.


### 17. [Clear] key

Press to delete a number entered.

### 18. Number keys

Use to enter the numbers for copies and data for the selected function.


### 19. Data In indicator (printer mode)

Flashes when the machine is receiving print jobs from a computer. See Print .

### 20. [Check Status] key

Press to check the machine's system status, operational status of each function, and current jobs. You can also display the job history and the machine's maintenance information.

### 21. Function keys

No functions are registered to the function keys as a factory default. You can register often used functions, programs, and Web pages. For details, see "Configuring function keys", Getting Started .

### 22. [Home] key

Press to display the [Home] screen. For details, see "How to Use the [Home] Screen".

### 23. Screen brightness slider

Adjusts display panel brightness.

### 24. Media access lamp

Lights up when a memory storage device is inserted in the media slot.

### 25. Media slots

Use to insert an SD card or a USB flash memory device.

## Simple Screen

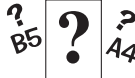
When you press the [Simple Screen] key, the screen changes to the simple screen. Letters and keys are displayed at a larger size, making operations easier. Certain keys do not appear on the simple screen.

# Quick Reference Copy Guide

## Tips



### Paper Size



#### Paper Size

You can check the paper size using the scale on the exposure glass.

#### Auto Image Density

Dark texture originals will be copied so that background will not be reproduced.

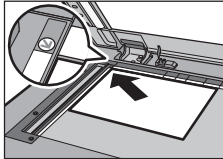
#### Auto Paper Select

Selects a suitable size of paper automatically.

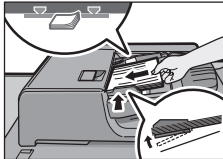
## How to make Copies...

(Placing Originals, Paper Specifications and Adding Paper Basic Copying)

- 1 Press the [Home] key on the bottom left of the control panel, and press the [Copier] icon on the [Home] screen.
- 2 Press the [Reset] key.
- 3 Place the originals.
  - Exposure Glass (Face down)



- Auto Document Feeder (Face up)



- 4 Make desired settings.
- 5 Enter the number of copies.
- 6 Press the [Start] key.

## How to Reduce/Enlarge... (Basic Copying)

### Auto Reduce/Enlarge

- 1 Press [Auto Reduce / Enlarge].
- 2 Select the paper size.
- 3 Place the originals, and then press the [Start] key.

### Preset Reduce/Enlarge

- 1 Press [Reduce/ Enlarge].
- 2 Select a ratio, and then press [OK].
- 3 Place the originals, and then press the [Start] key. (Paper size is selected automatically.)

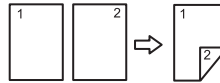
## How to save paper... (Basic Copying)

- 1 See if original is 1-sided or 2-sided (duplex).
- 2 Press [Dup./ Combine/ Series].
- 3 Select the original and copy types and/or the orientation.
- 4 Place the originals, and then press the [Start] key.

### Duplex

#### 1-Sided → 2-Sided

Copies two 1-sided pages on one 2-sided page.



#### 2-Sided → 2-Sided

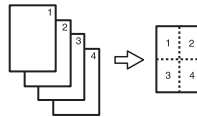
Copies one 2-sided page on one 2-sided page.



### Combine

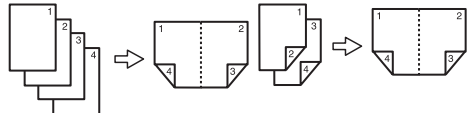
#### 1-sided Combine

Copies multiple 1-sided or 2-sided originals on one side of copy paper.



#### 2-sided Combine

Copies multiple 1-sided originals on two sides of copy paper. Copies multiple 2-sided originals on two sides of copy paper.

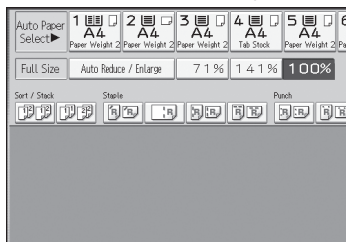


- ! For more functions on Combine, see "Basic Copying", Copy/ Document Server .

## How to finish your document... (Basic Copying)

### Staple

- 1 Select one of the stapling positions (Copies will be sorted automatically).
- 2 Enter the number of copy sets.
- 3 Place the originals, and then press the **[Start]** key.



### Punch

- 1 Select one of the punch hole positions (Copies will be hole punched).
- 2 Enter the number of copy sets.
- 3 Place the originals, and then press the **[Start]** key.

! Staple and Punch can be done at the same time.

! Availability of finishing depends on your configuration.

## Document Server (Basic Copying)

### Why use it...

- To store often used documents centrally and print on demand.
- To reduce network load.

### How to use in copy mode...

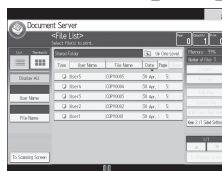
- 1 Press **[Store File]**.

Store File


- 2 Enter a file name, user name, or password if necessary.

User Name	COPY0017	Password
-----------	----------	----------

- 3 Specify a folder in which to store the document if necessary.
- 4 Press **[OK]**.
- 5 Place the originals.
- 6 Make the scanning settings for the original.
- 7 Press the **[Start]** key.



The machine stores scanned originals in memory and makes one set of copies. To find your document, press the **[Home]** key on the bottom left of the control panel, and press the **[Document Server]** icon on the **[Home]** screen.

! For more functions on Document Server, see "Document Server", Copy/ Document Server .

## Advanced features

(Basic Copying, Advanced Copying)

### Reduce/Enlarge

- Zoom: You can specify the reproduction ratio in increments of 1%.
- Magnification: You can specify the horizontal and vertical reproduction ratios, individually.

### Series Copies

- Separately copies the front and back of a 2-sided original onto two sheets.

### Booklet/Magazine

- Copies two or more originals in page order.

### Edit/Stamp

- Image Repeat/Double Copies: The original image is copied repeatedly.
- Centering: Moves image to center.
- Erase: Erases the center and/or all four sides of the original image.
- Stamps: Copies with the date, page numbers, etc.


### Cover/Slip Sheet

- Front Cover / Back Cover: Creates cover sheets.
- Designate: Copies certain pages of the original onto designation sheets.




## How to save to the machine's hard disk...


(Storing and Saving the Scanned Documents)


- 1 Press the [Home] key on the lower left of the control panel, and press the [Scanner] icon on the [Home] screen.
- 2 Make sure that no previous settings remain. If a previous setting remains, press the [Reset] key.
- 3 Place originals.
- 4 Press [Store File].
- 5 Press [Store to HDD].
- 6 If necessary, specify the stored file's information, such as [User Name], [File Name], [Password], and [Select Folder].
- 7 Press [OK].
- 8 If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.
- 9 Press the [Start] key.  
For details about saving to a memory storage device, see "Storing the Scanned Documents to a USB Flash Memory Device or SD Card", Scan  on the supplied CD-ROM.

### Why use it?

To store scanned files in the hard disk of the machine for later (shared) use. (See Scan )

## Registering an E-mail destination...

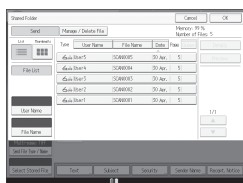
(Registering Addresses and Users, *Connecting the Machine/ System Settings* )

- 1 Press the [User Tools] key.
- 2 Press [Address Book Mangmnt].
- 3 Check that [Program / Change] is selected.
- 4 Select the name whose e-mail address you want to register. Press the name key, or enter the registered number using the number keys.
- 5 Press [E-mail].
- 6 Press [Change] under "E-mail Address".
- 7 Enter the e-mail address.
- 8 Press [OK].
- 9 Press [OK].
- 10 Press [Exit].
- 11 Press the [User Tools] key.  
For details about registering folders, see "Registering Addresses and Users", *Connecting the Machine/ System Settings* .

## Displaying a list of files stored on the machine's hard disk

(Storing and Saving the Scanned Documents)

- 1 Press the [Home] key on the lower left of the control panel, and press the [Scanner] icon on the [Home] screen.
- 2 Press [Select Stored File].
- 3 Specify the folder in which to save the stored files.  
The list of stored files is displayed.





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# How to Read the Manuals

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## Symbols Used in the Manuals

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This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

 **Reference**


This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.



Indicates instructions stored in a file on a provided CD-ROM.

 **Region A** (mainly Europe)

 **Region B** (mainly North America)

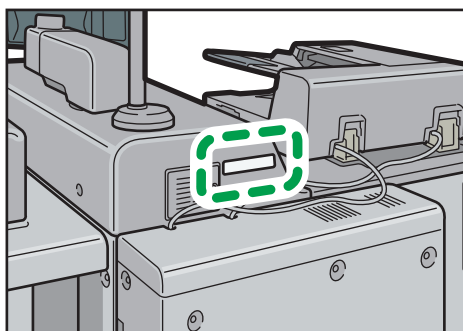
Differences in the functions of Region A and Region B models are indicated by two symbols. Read the information indicated by the symbol that corresponds to the region of the model you are using. For details about which symbol corresponds to the model you are using, see page 7 "Model-Specific Information".

---

# Model-Specific Information

This section explains how you can identify the region your machine belongs to.

There is a label on the rear of the machine, located in the position shown below. The label contains details that identify the region your machine belongs to. Read the label.



CWW201

The following information is region-specific. Read the information under the symbol that corresponds to the region of your machine.

## Region **A** (mainly Europe)

If the label contains the following, your machine is a region A model:

- CODE XXXX -67
- 220–240 V

## Region **B** (mainly North America)

If the label contains the following, your machine is a region B model:

- CODE XXXX -17, -57
- 208–240 V

### **Note**

- Dimensions in this manual are given in two units of measure: metric and inch. If your machine is a Region A model, refer to the metric units. If your machine is a Region B model, refer to the inch units.

---

## Names of Major Features

In this manual, major features of the machine are referred to as follows:

- Auto Document Feeder → ADF
- LCIT RT5070 → Large Capacity Tray (LCT)
- LCIT RT5080 → Wide Large Capacity Tray (Wide LCT)
- Multi-Folding Unit FD5020 → Multi-folding unit
- Decurl Unit DU5030 → Decurl unit
- Ring Binder RB5020 → Ring binder
- Perfect Binder GB5010 → Perfect binder
- Trimmer Unit TR5040 → Trimmer

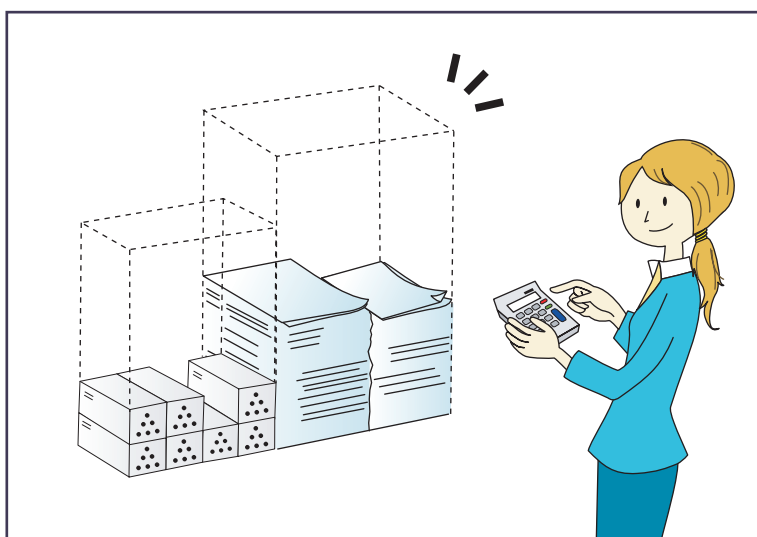
# 1. Easy Search

You can search for a description by what you want to do.

## Searching by What You Want to Do


You can search for a procedure by what you want to do.

### Reducing my Costs



BRL059S

#### Printing multi-page documents on both sides of sheets (Duplex Copy)

⇒ See "Duplex Copying", Copy/ Document Server .

#### Printing multi-page documents on a single sheet (Combine)


⇒ See "Combined Copying", Copy/ Document Server .

#### Checking how much paper is saved ([Information] screen)

⇒ See "How to Use the [Information] Screen", Getting Started .

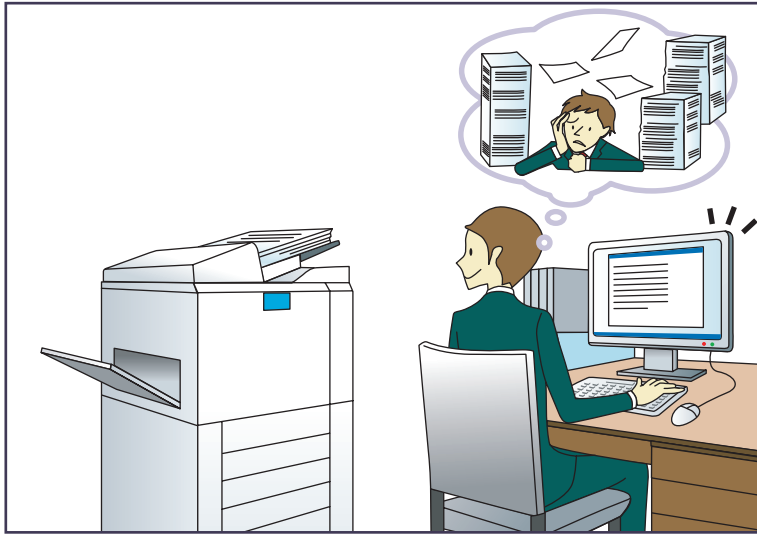
#### Reducing electricity consumption

⇒ See "Saving Energy", Getting Started .

⇒ See "Timer Settings", Connecting the Machine/ System Settings .

## Converting Documents to Electronic Formats Easily

1



BQX138S


### **Sending scan files**

⇒ See "Basic Procedure for Sending Scan Files by E-mail", Scan .

### **Sending the URL of the folder in which scan files are stored**

⇒ See "Sending the URL by E-mail", Scan .

### **Storing scan files in a shared folder**

⇒ See "Basic Procedure When Using Scan to Folder", Scan .


### **Storing scan files on media**

⇒ See "Basic Procedure for Saving Scan Files on a Memory Storage Device", Scan .

### **Embedding text information in scanned files**

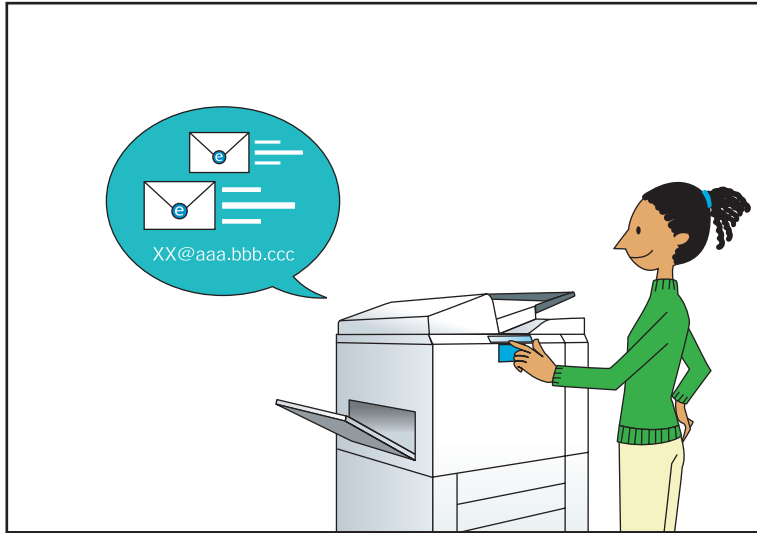
⇒ See "Embedding Text Information in Scanned Data", Scan .

### **Managing and using documents converted to electronic formats (Document Server)**

⇒ See "Relationship between Document Server and Other Functions", Copy/ Document Server .




## Registering Destinations



CAY062

### Using the control panel to register destinations in the Address Book

⇒ See "Registering a destination in the address book manually", Scan .

## Operating the Machine More Effectively




BQX139S

### Registering and using frequently-used settings (Program)

⇒ See "Registering Functions in a Program", Convenient Functions .

**Registering frequently-used settings as initial settings (Program as Defaults (Copier/Document Server/Scanner))**

⇒ See "Changing the Default Functions of the Initial Screen", Convenient Functions .

**Registering frequently-used printing settings to the printer driver**

⇒ See "Using One Click Presets", Print .


**Changing the initial settings of the printer driver to frequently-used printing settings**

⇒ See "Displaying the Printing Preferences Dialog Box", Print .

**Adding shortcuts to frequently used programs or Web pages**

⇒ See "Adding Icons to the [Home] Screen", Convenient Functions .

**Changing the order of the function and shortcut icons**

⇒ See "Changing the Order of Icons on the [Home] Screen", Convenient Functions .

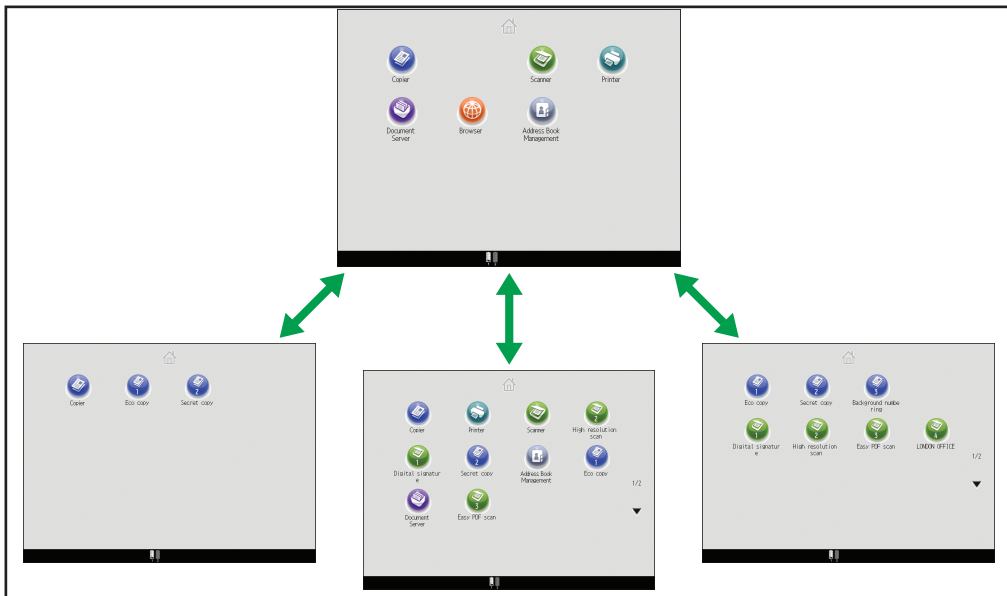
# What You Can Do with This Machine

This section describes the features of this machine.

1

## Customizing the [Home] Screen



The icons of each function are displayed on the [Home] screen.



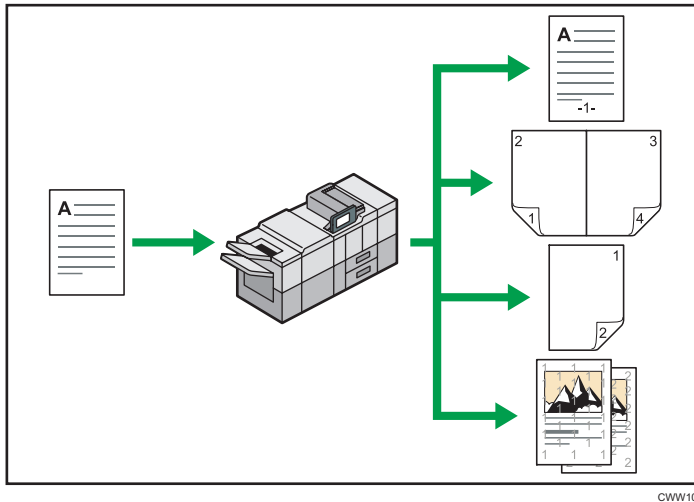
CWW101

- You can add shortcuts to often used programs or Web pages to the [Home] screen. The programs or Web pages can be recalled easily by pressing the shortcut icons.
- You can display only the icons of functions and shortcuts that you use.
- You can change the order of the function and shortcut icons.









### Reference



- For details about the features on the [Home] screen, see "How to Use the [Home] Screen", Getting Started .
- For details about how to customize the [Home] screen, see "Types of [Home] Screens and How to Customize Them", Convenient Functions .

## Making Copies Using Various Functions

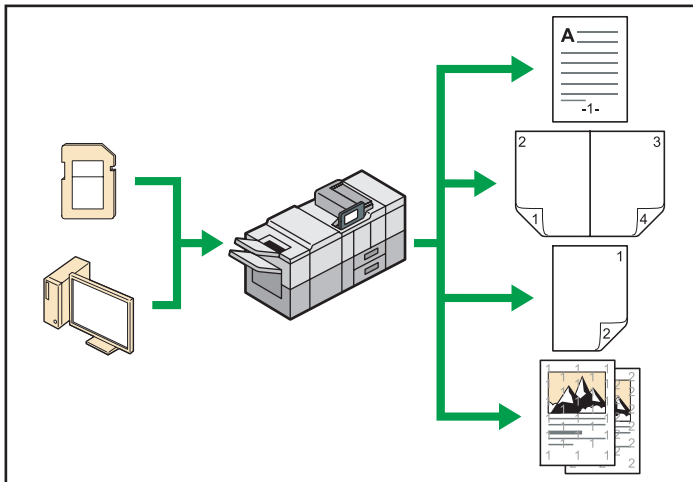


CWW102








- You can print stamps on copies. Stamps can include background numbers, scanned images, dates, page numbers, and texts.  
⇒ See "Stamps", Copy/ Document Server .
- You can reduce or enlarge the copy image. Auto Reduce / Enlarge function enables the machine to detect the original size automatically. Also, it enables the machine to select an appropriate reproduction ratio based on the paper size you specify. If the orientation of the original is different from that of the paper you are copying onto, the machine rotates the original image by 90 degrees to match it with the copy paper.  
⇒ See "Reducing or Enlarging Originals", Copy/ Document Server .
- Copier functions such as Duplex, Combine, Booklet, and Magazine allow you to save on paper by copying multiple pages onto single sheets.  
⇒ For details about duplex copying, see "Duplex Copying", Copy/ Document Server   
⇒ For details about combined copying, see "Combined Copying", Copy/ Document Server   
⇒ For details about the booklet and magazine functions, see "Booklet/Magazine", Copy/ Document Server .
- You can copy onto various types of paper such as tab stock and OHP transparencies.  
⇒ See "Copying onto Various Types of Paper", Copy/ Document Server .
- The finisher allows you to sort, staple, and punch holes in your copies.  
⇒ See "Finishing", Copy/ Document Server .
- The multi-folding unit allows you to fold your copies.  
⇒ See "Finishing", Copy/ Document Server .
- The ring binder allows you to bind your copies with a ring comb.



- ⇒ See "Finishing", Copy/ Document Server .
- The perfect binder allows you to apply adhesive to the spine of gathered pages to bind them in a booklet.
  - ⇒ See "Finishing", Copy/ Document Server .

## Printing Data Using Various Functions



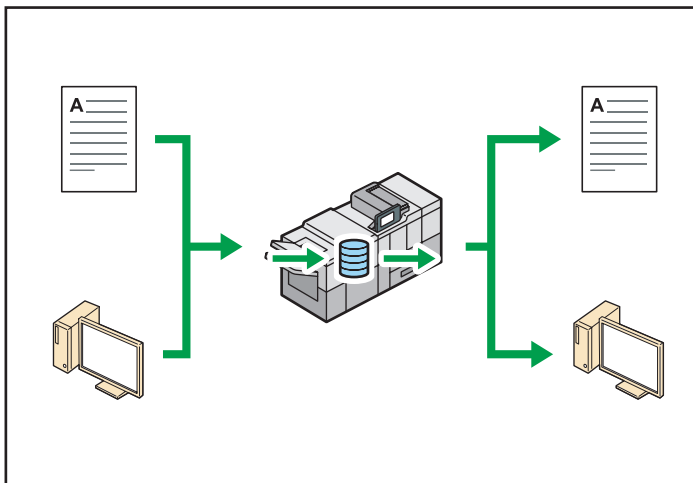
CWW103

- This machine supports network and local connections.
- You can send PDF files directly to the machine for printing, without having to open a PDF application.
  - ⇒ See "Printing a PDF File Directly", Print .
- You can print or delete print jobs stored on the machine's hard disk, which have been previously sent from computers using the printer driver. The following types of print jobs can be selected: Sample Print, Locked Print, Hold Print, and Stored Print.
  - ⇒ See "Storing Documents in the Hard Disk Drive and Printing Them", Print .
- The finisher allows you to collate, staple, and punch holes in your prints.
  - ⇒ For details about collating, see "Collate", Print .
  - ⇒ For details about stapling, see "Staple", Print .
  - ⇒ For details about punching, see "Punch", Print .
- The multi-folding unit allows you to fold your prints.
  - ⇒ For details about multi-folding, see "Fold", Print .
- The ring binder allows you to bind your prints with a ring comb.
  - ⇒ See "Ring Binding", Print .

- The perfect binder allows you to apply adhesive to the spine of gathered pages to bind them in a booklet.  
⇒ See "Perfect Binding", Print .
- You can print files stored on a removable memory device and specify print conditions such as print quality and print size.  
⇒ See "Direct Printing from a Memory Storage Device", Print .

## Utilizing Stored Document





You can store files scanned in copier, printer, or scanner mode on the machine's hard disk. Web Image Monitor allows you to use your computer to search for, view, print, delete, and send stored files via the network. You can also change print settings and print multiple documents (Document Server).



CWW104

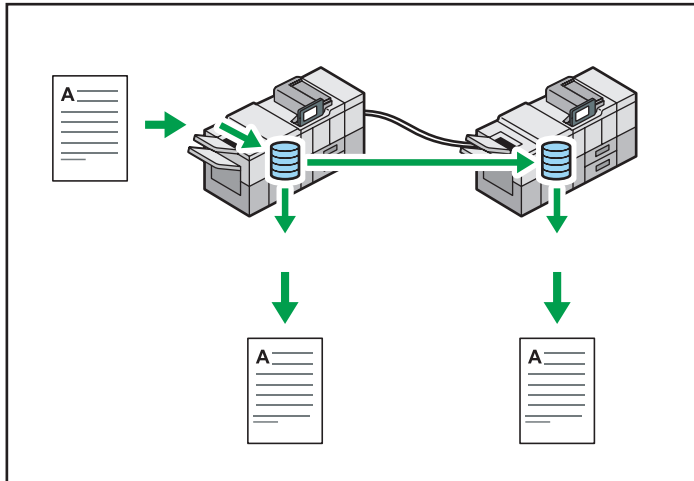
- You can retrieve stored documents scanned in scanner mode to your computer.
- Using the file format converter, you can download documents stored in copier, Document Server, or printer mode to your computer.

### Reference

- For details about how to use the Document Server, see "Storing Data in the Document Server", Copy/ Document Server .
- For details about the Document Server in copier mode, see "Document Server", Copy/ Document Server .
- For details about the Document Server in printer mode, see "Saving and Printing Using the Document Server", Print .
- For details about the Document Server in scanner mode, see "Storing and Saving the Scanned Documents", Scan .

## Connecting Two Machines for Copying

You can connect two machines together with copy connector. When you set up a copy job on one machine (the main machine), data is transferred to the other (the sub-machine) so that copies can be made on both machines simultaneously (Connect Copy).



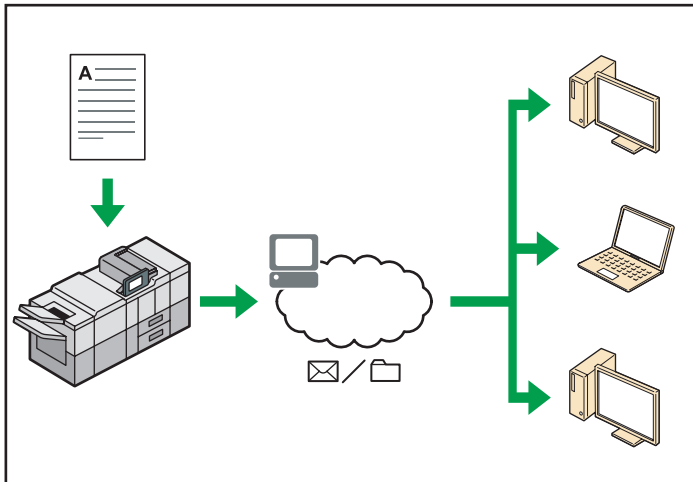
CWW105

- You can complete large volume copy runs in shorter time.
- Even if one machine runs out of paper, or stops because of a paper jam, the other machine can still continue to finish the job.





### Reference

- See "Connect Copying", Copy/ Document Server .

## Using the Scanner in a Network Environment



CWW106

- You can send scan files to a specified destination using e-mail (Sending scan files by e-mail).  
⇒ See "Basic Procedure for Sending Scan Files by E-mail", Scan .
- You can send scan files directly to folders (Sending scan files by Scan to Folder).  
⇒ See "Basic Procedure When Using Scan to Folder", Scan .
- You can use this machine as a delivery scanner for the ScanRouter delivery software <sup>\*1</sup> (Network delivery scanner). You can save scan files in the delivery server or send them to a folder in a computer on the same network.  
⇒ See "Basic Procedure for Delivering Files", Scan .
- You can use Web Services on Devices (WSD) to send scan files to a client computer.  
⇒ See "Basic Operating Procedure of WSD Scanner (Push Type)", Scan .

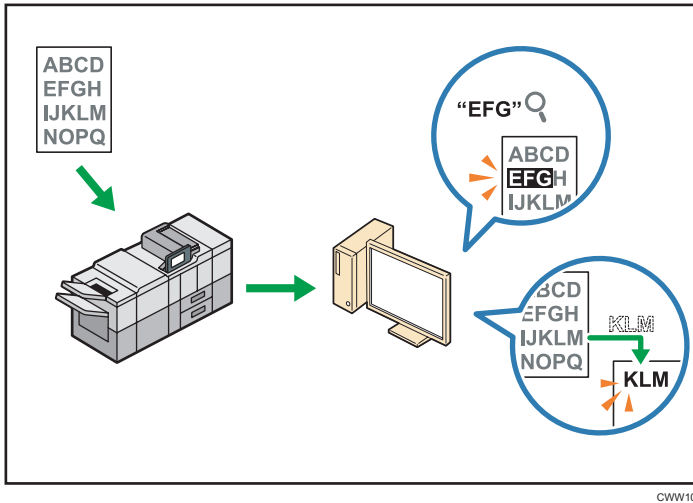
\*1 The ScanRouter delivery software is no longer available for sale.

## Embedding Text Information in Scanned Files

You can extract text information from a scanned document and embed it in the file without using a computer.

If you scan a document using this function, embedded text can be searched by using the text search function or copied to another document.





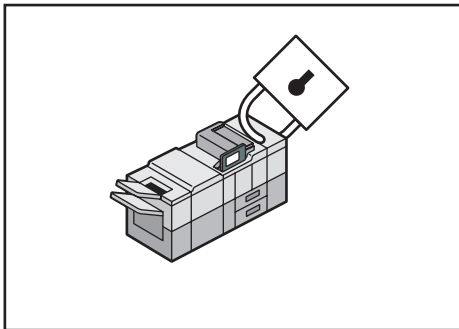
CWW107

- To use this function, the OCR unit is required.
- You can select a file type from [PDF], [High Compression PDF], or [PDF/A].
- This function can optically recognize characters in various languages and up to approximately 40,000 characters a page.

#### Reference

- See "Embedding Text Information in Scanned Data", Scan .

## Preventing Information Leakage (Security Functions)



CWW108

- You can protect documents from unauthorized access and stop them from being copied without permission.
- You can control the use of the machine, as well as prevent machine settings from being changed without authorization.
- By setting passwords, you can prevent unauthorized access via the network.
- You can erase or encrypt the data on the hard disk to minimize the risk of information leakage.

- You can limit the usage of functions for each user.

### Reference

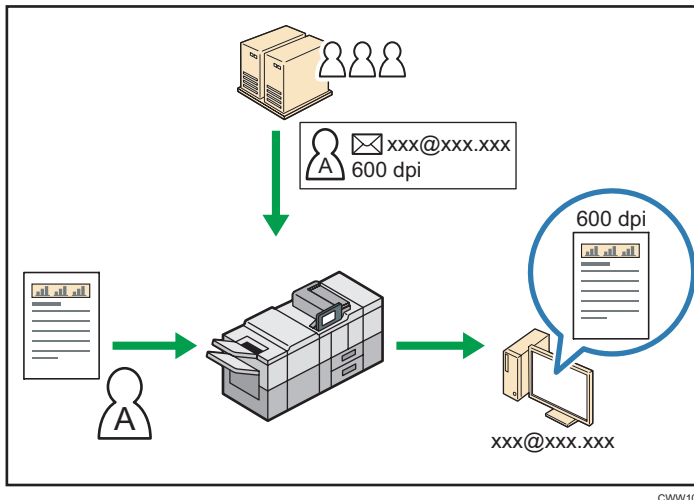
- See Security Guide .

1

## Centrally Controlling Scan Conditions and Distribution

You can use the distributed scan management (DSM) system in Windows Server 2008 R2 or later to manage the destinations and scan settings for each individual user in a group and to use the information when distributing scanned data.


You can also use this system to centrally manage information about people using the network and the machine's scanner functions. Both delivered files and user information can be controlled.



CWW109

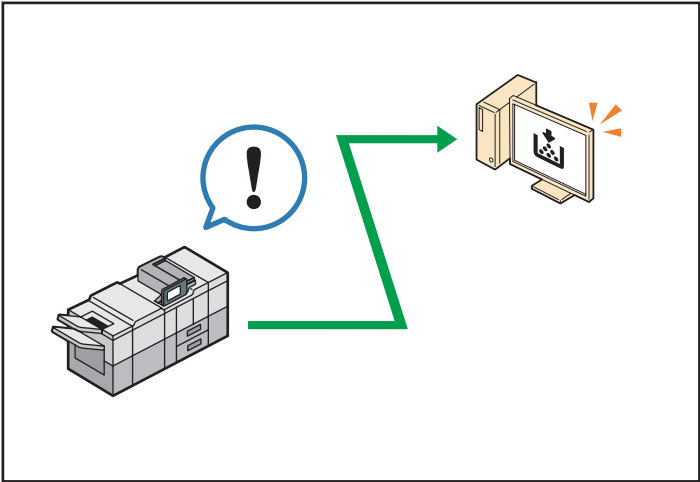
- You must set up and configure a Windows server to use the distributed scan management system. This system is supported by Windows Server 2008 R2 or later.

### Reference

- For details about how to deliver files using the distributed scan management system, see "Managing Scan Conditions and Other Settings in the Block using Distributed Scan Management", Scan .

## Monitoring and Setting the Machine Using a Computer


Using Web Image Monitor, you can check the machine's status and change the settings.



CWW110

You can check which tray is running out of paper, register information in the Address Book, specify the network settings, configure and change the system settings, manage jobs, print the job history, and configure the authentication settings.

**Reference**

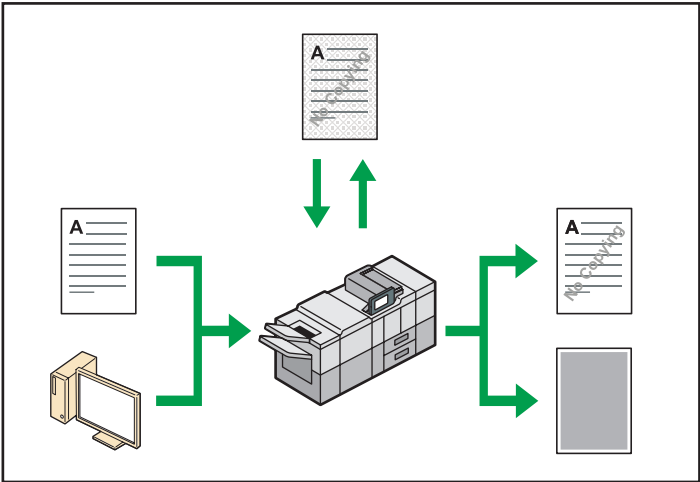
- See "Using Web Image Monitor", Connecting the Machine/ System Settings .
- See Web Image Monitor Help.

---

## Preventing Unauthorized Copying

---

You can print embedded patterns on printouts to prevent unauthorized copying.






CWW111

- Using the copier function or the printer driver, you can embed a pattern in the printed document. If the document is copied on a machine with the Copy Data Security unit, protected pages are grayed out in the copy. This can minimize the risk of confidential information being copied. If a document protected by unauthorized copy guard is copied on a machine that is equipped with the Copy Data Security unit, the machine beeps to notify users that unauthorized copying is being attempted.

If the document is copied on a machine without the Copy Data Security Unit, the hidden text becomes conspicuous in the copy, showing that the copy is unauthorized.

- Using the copier function or the printer driver, you can embed text in the printed document for unauthorized copy prevention. If the document is copied, scanned, or stored in a Document Server by a copier or multifunction printer, the embedded text appears conspicuous in the copy, discouraging such unauthorized copying.

#### Reference

- For details, see the printer driver Help and Security Guide .
- For details about this function in the copier mode, see "Preventing Unauthorized Copies", Copy/Document Server .
- For details about this function in the printer mode, see "Printing Documents that Are Not Authorized for Duplication", Print .

# 2. Getting Started

This chapter describes how to start using this machine.

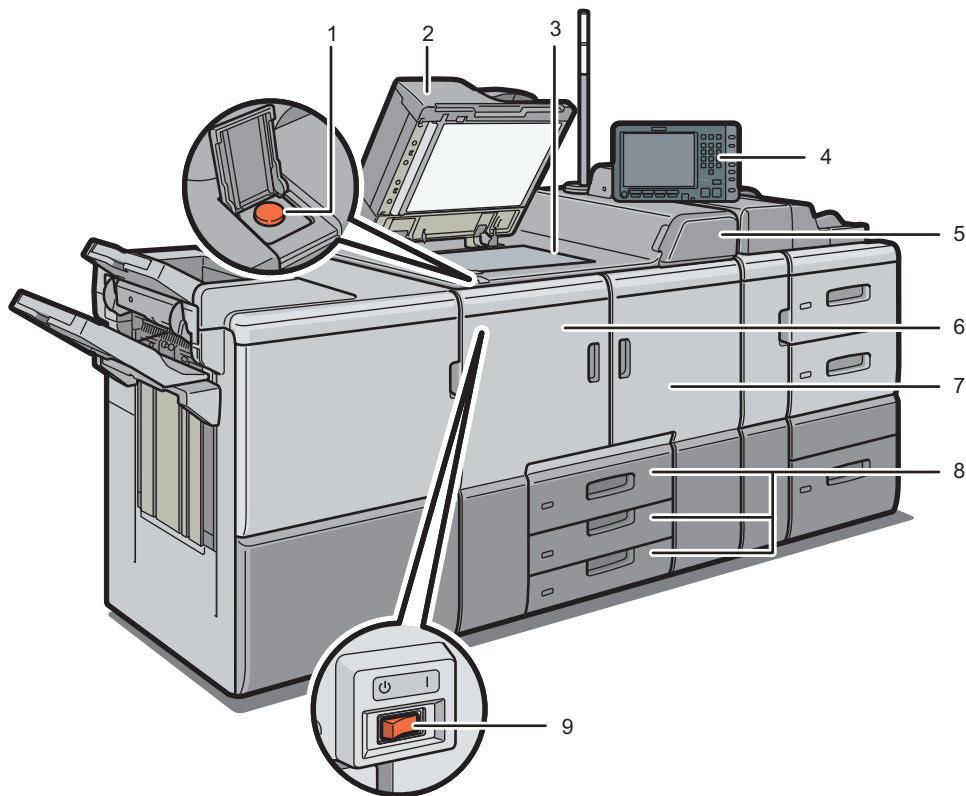
## Guide to Names and Functions of Components

### CAUTION

- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

2

### Front and left view



CWW202

#### 1. Main power switch

To operate the machine, the main power switch must be on. If it is off, open the main power switch's cover and turn the switch on.

#### 2. ADF

Lower the ADF over originals placed on the exposure glass.

If you load a stack of originals in the ADF, the ADF will automatically feed the originals one by one.

The ADF scans both sides of an original simultaneously.

### 3. Exposure glass

Place originals face down here.

### 4. Control panel

See "Guide to the Names and Functions of the Machine's Control Panel".

### 5. Toner cartridge cover

Open to change toner cartridges.

### 6. Front left cover

Open to remove paper jams or turn on/off the AC power switch.

### 7. Front right cover


Open to remove paper jams.

### 8. Paper trays (Trays 1–3)

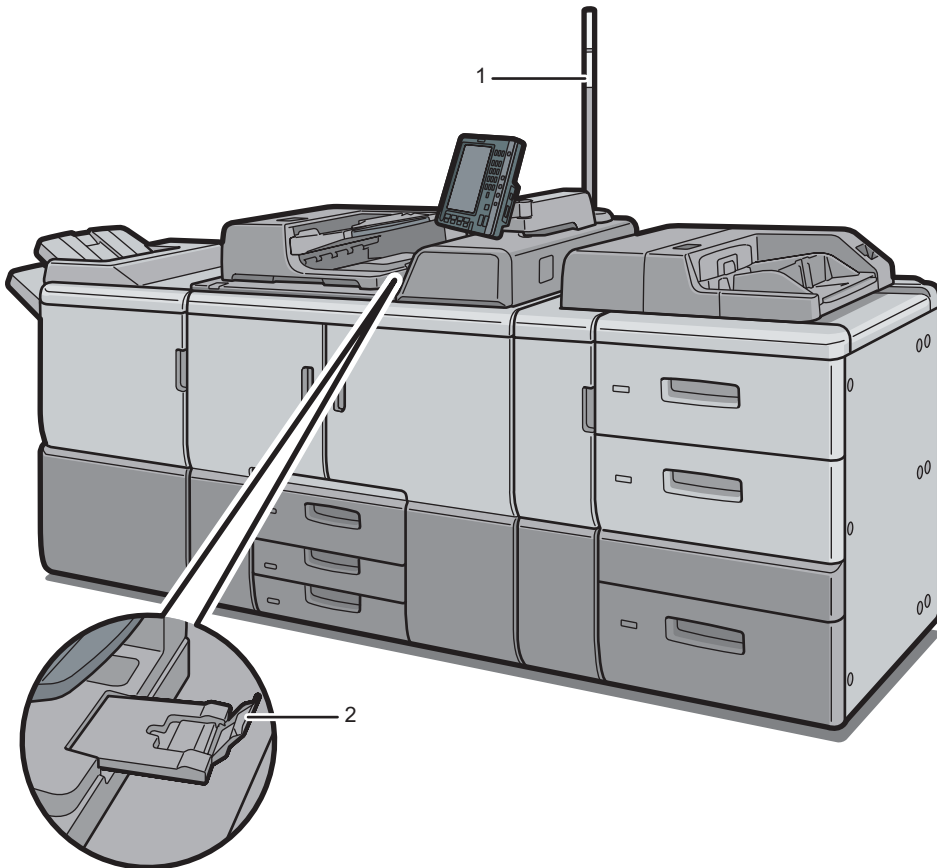
Load paper here. Tray 1 is a tandem tray where paper on the left side automatically moves to the right when paper there has run out.

An indicator on the front left side of the tray lights while paper is feeding.

### 9. AC power switch

Press to completely turn off the power of the machine. The AC power switch must be kept on in normal use. The switch is inside the front left cover. For details, see "Dos and Don'ts", Maintenance and Specifications .

Front and right view



**1. Attention light**

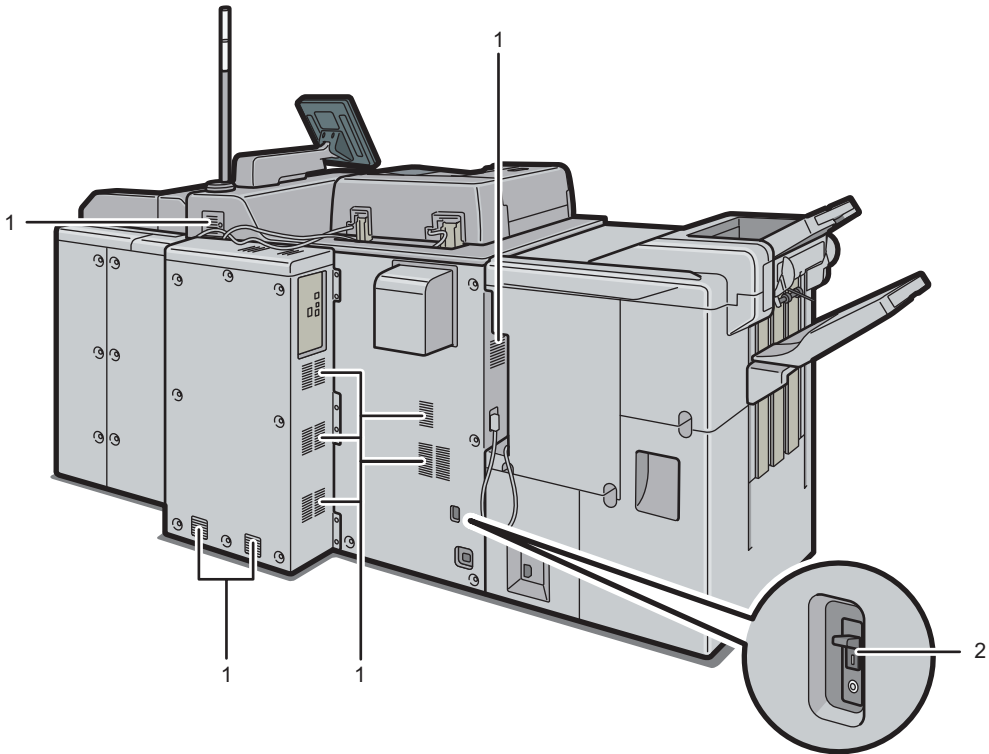
See page 26 "Guide to Functions of the Attention Light".

**2. ADF's extender**

Pull this extender to support large paper.

CWW203

### Rear and left view




CWW204

#### 1. Vents

Prevent overheating.

#### 2. Earth leakage breaker

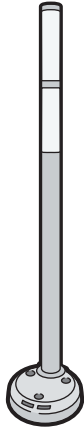
Protects users from electric shock. For details about checking the earth leakage breaker, see "Checking the Earth Leakage Breakers", Maintenance and Specifications .

## Guide to Functions of the Attention Light

### Important

- Do not push or pull the attention light when installed to the machine. Doing so may result in damage or malfunction of the attention light or the machine.







CUV121

The attention light notifies the user by light when there is a paper jam or no paper is left.

The colors of the lamp and their meanings are as follows:

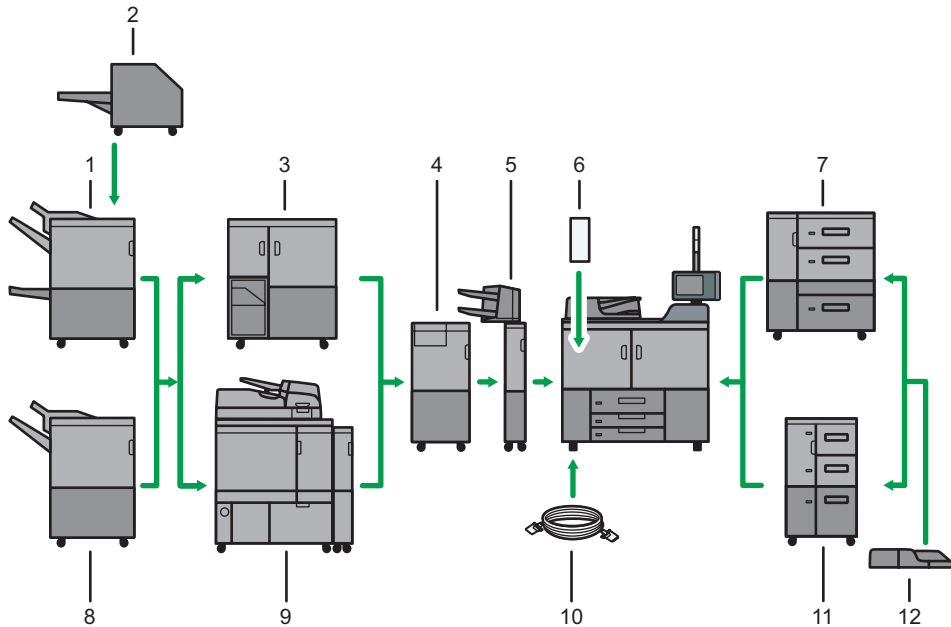
Lamp	Status
The bottom lamp lights blue.	Printing
The bottom lamp flashes blue.	<ul style="list-style-type: none"> <li>• Scanning</li> <li>• Data in</li> </ul>
The top lamp lights red.	<p>Error occurred (Example)</p> <ul style="list-style-type: none"> <li>• When the service call message appears</li> <li>• Paper jam</li> <li>• Out of paper</li> <li>• Out of toner</li> <li>• Memory overflow</li> </ul> <p>Read the message on the display panel, and then take appropriate action. For details, see "When Messages Appear", Troubleshooting .</p>

Lamp	Status
The top lamp flashes yellow.	Warning (Example) <ul style="list-style-type: none"><li>• Toner has nearly run out.</li><li>• Waste toner bottle is nearly full.</li></ul> Read the message on the display panel, and then take appropriate action. For details, see "When Messages Appear", Troubleshooting  .

# Guide to Functions of the Machine's Options

## Guide to Functions of the Machine's External Options

2



CWW214

### 1. Booklet Finisher SR5060

Sorts, stacks, and staples multiple sheets of paper. The saddle stitch function can staple multiple sheets of paper in the center and fold them into booklets. Consists of the following paper trays:

- Finisher upper tray
- Finisher shift tray
- Finisher booklet tray

Copies can be punched if the optional punch unit is installed on the finisher.

### 2. Trimmer

Cuts the fore edge of the book block after the book block is saddle stitched.

### 3. Ring binder

Binds sheets of paper with a ring comb.

### 4. Multi-folding unit

Applies the following folds: Half Fold, Letter Fold-out, Letter Fold-in, Double Parallel Fold, Gate Fold, and Z-fold.

### 5. Interposer

Inserts cover or slip sheets into copied or printed paper.

**6. Decurl unit**

Flattens curls from sheets to prevent paper jams.

**7. Wide LCT**

Holds up to 4,000 sheets of paper. You can load paper sizes up to SRA3 or  $13 \times 19\frac{1}{5}$ .

**8. Finisher SR5050**

Sorts, stacks, and staples multiple sheets of paper. Consists of the following paper trays:

- Finisher upper tray
- Finisher shift tray

Copies can be punched if the optional punch unit is installed on the finisher.

**9. Perfect binder**

Applies adhesive to the spine of gathered pages to bind them in a booklet.

**10. Copy connector**

Allows you to use the connect copy function.

**11. LCT**

Holds up to 4,550 sheets of paper.

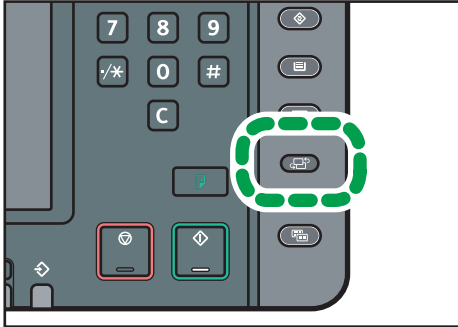
**12. Multi bypass tray (Tray 7)**

Holds up to 500 sheets of paper.

# Changing the Display Language

You can change the language used on the display. English is set as default.

1. Press the [Language] key until the language you want to display appears.



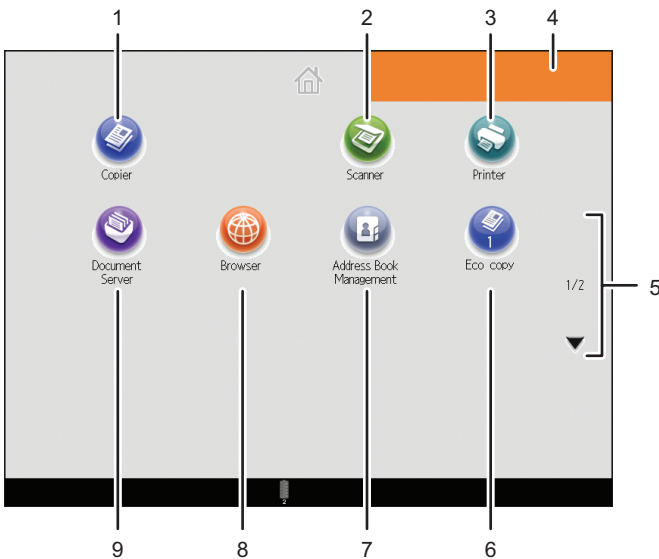
CWW225

## How to Use the [Home] Screen

The icons of each function are displayed on the [Home] screen.

You can add shortcuts to frequently used programs or Web pages to the [Home] screen. The icons of added shortcuts appear on the [Home] screen. The programs or Web pages can be recalled easily by pressing the shortcut icons.

To display the [Home] screen, press the [Home] key.



CWW229


### 1. [Copier]

Press to make copies.

For details about how to use the copy function, see Copy/ Document Server .

### 2. [Scanner]

Press to scan originals and save images as files.


For details about how to use the scanner function, see Scan .

### 3. [Printer]

Press to make settings for using the machine as a printer.

For details about how to make settings for the printer function, see Print .

### 4. Home screen image

You can display an image on the [Home] screen, such as a corporate logo. To change the image, see "Displaying an Image on the [Home] Screen", Convenient Functions .

### 5. ▲/▼

Press to switch pages when the icons are not displayed on one page.

**6. Shortcut icon**

You can add shortcuts to programs or Web pages to the [Home] screen. For details about how to register shortcuts, see page 33 "Adding Icons to the [Home] Screen". The program number appears on the bottom of the shortcut icon.

**7. [Address Book Management]**

Press to display the Address Book.

For details about how to use the Address Book, see "Address Book", Connecting the Machine/ System Settings.

**8. [Browser]**

Press to display Web pages.

For details about how to use the browser function, see "Using the Browser Function", Convenient Functions.

**9. [Document Server]**

Press to store or print documents on the machine's hard disk.

For details about how to use the Document Server function, see Copy/ Document Server.

---

## Adding Icons to the [Home] Screen


---

You can add shortcuts to programs stored in copier or scanner mode, or Web pages registered in Favorites using the browser function.

You can also review icons of functions and embedded software applications that you deleted from the [Home] screen.

### ↓ Note

- Shortcuts to programs stored in Document Server mode cannot be registered to the [Home] screen.
- Shortcut names of up to 32 characters can be displayed in a standard screen. If the name of the shortcut is longer than 32 characters, the 32nd character is replaced with "...". Only 30 characters can be displayed in a simple screen. If the name of the shortcut is longer than 30 characters, the 30th character is replaced with "...".
- For details about how to make a program, see page 37 "Registering Frequently Used Functions".
- For details about the procedure for registering Web pages to Favorites, see "Specifying the Settings for Favorites", Convenient Functions.
- Shortcuts to Web pages that are registered to Common Favorites can be registered to the [Home] screen. When user authentication is enabled, shortcuts to Web pages that are registered to Favorites by User can also be registered to a user's [Home] screen.
- For details about the procedure for registering a shortcut using the [Program] screen, see "Registering a Shortcut to a Program to the [Home] Screen", Convenient Functions.
- You can register up to 72 function and shortcut icons. Delete unused icons if the limit is reached. For details, see "Deleting an Icon on the [Home] Screen", Convenient Functions.


- You can change the position of icons. For details, see "Changing the Order of Icons on the [Home] Screen", Convenient Functions .

## Adding icons to the [Home] screen using Web Image Monitor

---

2

### 1. Start Web Image Monitor.

For details, see "Using Web Image Monitor", Connecting the Machine/ System Settings .

### 2. Log in to Web Image Monitor as an administrator.

For details, see Security Guide .

### 3. Point to [Device Management], and then click [Device Home Management].

### 4. Click [Edit Icons].

### 5. Point to [+Icon can be added.] of the position that you want to add, and then click [+ Add].

### 6. Select the function or shortcut icon you want to add.

### 7. Click [OK] four times.

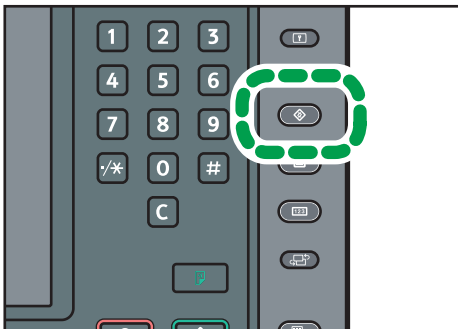
## Adding icons to the [Home] screen using the User Tools

---

In the following procedure, a shortcut to a copier program is registered to the [Home] screen.

### 1. Register a program.

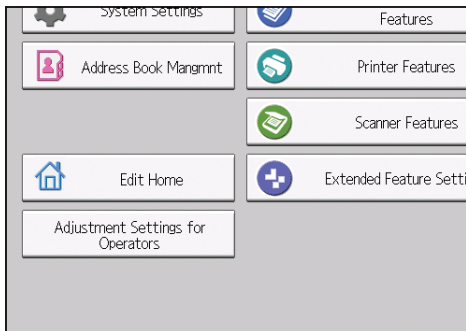
### 2. Press the [User Tools] key.



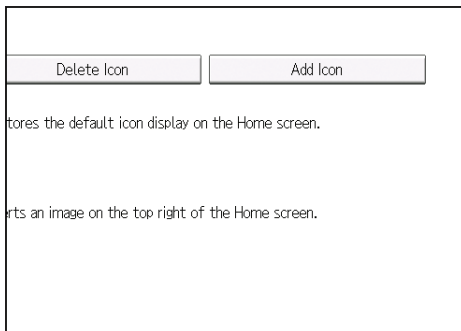
CWW222



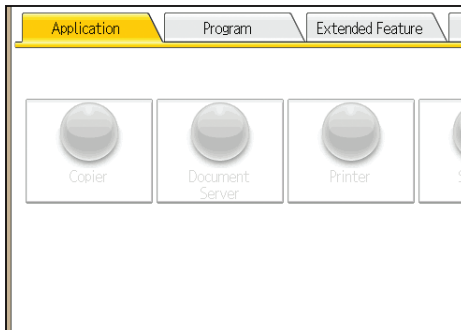
### 3. Press [Edit Home].



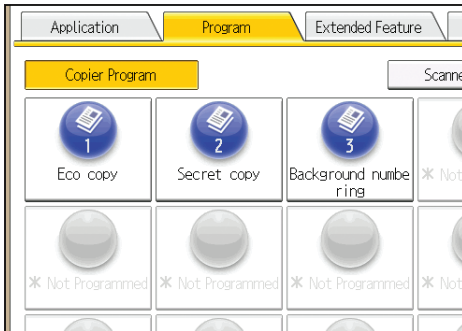
### 4. Press [Add Icon].



### 5. Press the [Program] tab.

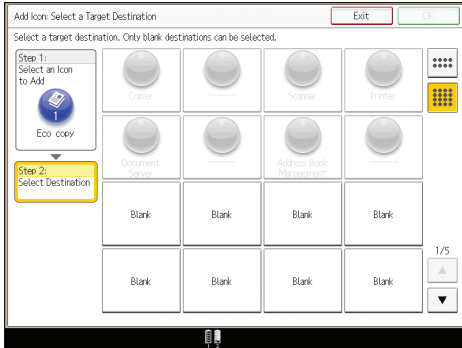


6. Make sure that [Copier Program] is selected.

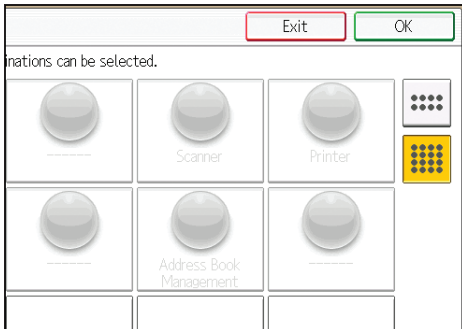


7. Select the program you want to add.

8. Specify the position where [Blank] is displayed.



9. Press [OK].



10. Press the [User Tools] key.

↓ Note

- Press [User Tools] on the upper-right corner of the screen to check the position on the simple screen.

# Registering Frequently Used Functions

## Registering Functions in a Program

2

Depending on the functions, the number of programs that can be registered is different.

- Copier: 50 programs
- Document Server: 25 programs
- Scanner: 25 programs

The following settings can be registered to programs:

### Copier:

Original type, density, Original Size, Mixed Sizes, Batch, Original Orientation, Reverse Orientation, paper tray, Store File (except for User Name, File Name, and Password), Auto Reduce / Enlarge, Create Margin, Output/ Customize Function/ Finisher, Stamp (except for Change Start No. in Stamp Text), Cover/ Slip Sheet, Edit, Dup./ Combine/ Series, Reduce/ Enlarge, number of copies

### Document Server (on the initial document print screen):

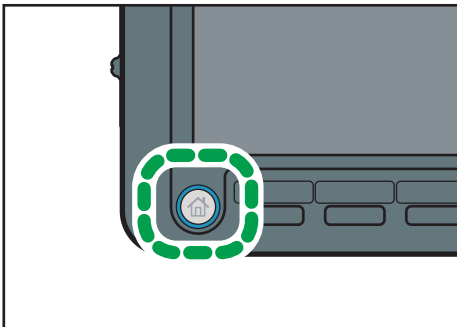
Output/ Finisher, Stamp, Cover/ Slip Sheet, Edit, 2 Sided / Book, number of prints

### Scanner:

Scan Settings, density, Original Feed Type, Send File Type / Name (except for Security Settings and Start No.), Store File (except for User Name, File Name, and Password), Destinations selected from the Address Book, Preview, Text, Subject, Security, Recept. Notice

This section explains how to register functions in a program using copier function as an example.

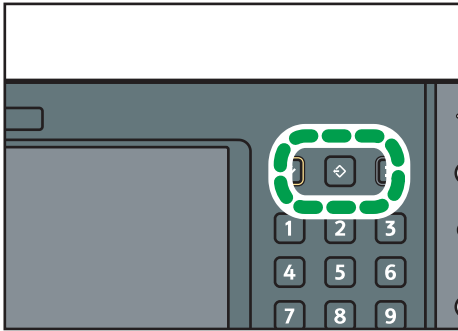
1. Press the [Home] key on the bottom left of the control panel, and press the [Copier] icon on the [Home] screen.



C1W220

2. Edit the copy settings so all functions you want to store in a program are selected.

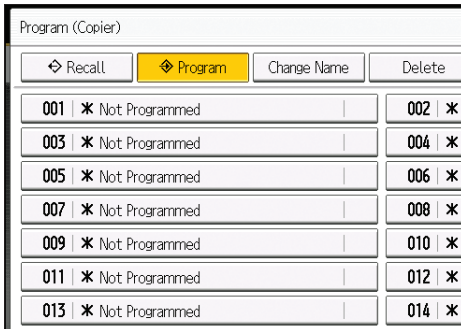
3. Press the [Program] key.



CWW405

4. Press [Program].

5. Press the program number you want to register.






6. Enter the program name.

7. Press [OK].

8. Press [Exit].

Note

- You can enter up to 40 characters for a program name.
- When a specified program is registered as the default, its values become the default settings, which are displayed without pressing the [Program] key, when modes are cleared or reset, and after the machine is turned on. See "Changing the Default Functions of the Initial Screen", Convenient Functions .
- When the paper tray you specified in a program is empty and if there is more than one paper tray with the same size paper in it, the paper tray prioritized under [Paper Tray Priority: Copier] will be selected first. For details, see "System Settings", Connecting the Machine/ System Settings .
- Destinations that are registered in the machine's Address Book can be registered to a program of the scanner mode.

- Destinations can be registered to a program of the scanner mode only when [Include Destinations] is selected for [Program Setting for Destinations] in [Scanner Features]. For details about the setting, see "General Settings", Scan .
- Folder destinations that have protection codes cannot be registered to a program of the scanner mode.
- Programs are not deleted by turning the power off or by pressing the [Reset] key unless the program is deleted or overwritten.
- Program numbers with  next to them already have settings made for them.
- Programs can be registered to the [Home] screen, and can be recalled easily. For details, see "Registering a Shortcut to a Program to the [Home] Screen", Convenient Functions  and page 33 "Adding Icons to the [Home] Screen". Shortcuts to programs stored in Document Server mode cannot be registered to the [Home] screen.

## Example of programs

### Copier mode

Program name	Program description	Effect
Eco copy	Specify [Combine 2 Sides] in [Dup./ Combine/ Series].	You can save paper and toner.
Dated confidential copy	In [Stamp], specify [CONFIDENTIAL] under [Preset Stamp], and [Date Stamp].	You can increase security awareness by printing "CONFIDENTIAL" and the date on copies.
Conference material copy	Specify [Combine 2 Sides] in [Dup./ Combine/ Series] and [Staple] in [Output/ Customize Function/ Finisher].	You can copy conference materials efficiently.
Magazine copy	Specify [Magazine] in [Dup./ Combine/ Series] and [Staple: Center] in [Output/ Customize Function/ Finisher].	You can save paper. Also, you can perform printing jobs such as producing leaflets in-house instead of having them printed by an outside printing company.
Unified-size copy	Specify [Mixed Sizes] and [Auto Reduce / Enlarge].	You can print various size copies onto one size of paper, so they are easier to manage.


Program name	Program description	Effect
Stamping corporate name copy	Specify [User Stamp] in [Stamp].	You can stamp the name of your company on copies of working or architectural drawings. Your company name needs to be pre-registered in the machine.
Z-folding copy	Specify [Z-fold] in [Output/Customize Function/ Finisher].	A3 size paper is folded to A4 size. You can print various size copies onto one size of paper, so they are easier to manage.
Thumbnail copy	Specify [Combine 1 Side] in [Dup./Combine/ Series].	You can copy up to eight pages onto one side of a sheet, so that you can save paper.
Storage copy: XXXX (replace XXXX by a folder name)	Specify a folder in [Target Folder to Store] in [Store File].	You can use folders to organize stored files by user name or intended use.

### Scanner mode

Program name	Program description	Effect
Easy PDF scan	Select [Full Color: Text / Photo] in [Scan Settings]. In [Send File Type / Name], select [PDF] under [File Type] and enter the business details such as "London branch: daily report" under [File Name].	You can scan documents efficiently.
High compression PDF scan	Select [Full Color: Text / Photo] in [Scan Settings] and [High Compression PDF] in [Send File Type / Name].	You can compress the data size of scanned documents, so that you can send and store them.
Long-term storage scan	Select [PDF/A] in [Send File Type / Name].	You can easily digitize documents to "PDF/A" file format, which is suitable for long-term storage.

Program name	Program description	Effect
Unified-size scan	In [Scan Settings], select [Mixed Original Sizes] in [Scan Size] and specify the finished size of scanned data in [Reduce / Enlarge] under [Edit].	You can skip this procedure to unify the size when reprinting scanned data.
Digital signature scan	In [Send File Type / Name], specify [PDF] in [File Type], and also specify [Digital Signature].	You can add a digital signature to an important document such as a contract, so that any data tampering can be detected.
Dividing file scan	Specify [Divide] in [Original Feed Type].	You can scan a multiple page original as one file by splitting it into groups of a specified number of pages.
High resolution scan	In [Send File Type / Name], specify TIFF format in [File Type]. Also, specify a higher resolution in [Scan Settings].	Scanned documents maintain much of the detail of the originals, but the size of the data may be quite large.
Batch document scan	Select [Batch] in [Original Feed Type].	You can apply multiple scans to a large volume of originals and send the scanned originals as a single job.
Scan to XXXX (replace XXXX by a destination name)	Select e-mail or folder destinations from the list that is registered in the machine's Address Book, and then specify the scan settings.	If you register destinations and scan settings that you use often, you can skip the procedures to specify them when sending a scanned file.
Storage scan: XXXX (replace XXXX by a folder name)	Specify a folder in [Target Folder to Store] in [Store File].	You can use folders to organize stored files by user name or intended use.

### ↓ Note

- Depending on the options installed, some functions cannot be registered. For details, see "Functions Requiring Optional Configurations", Getting Started .
- The names of programs given above are just examples. You can assign any name to a program according to your objectives.

- Depending on your business details or the type of documents to be scanned, registering a program cannot be recommended.



## Turning On/Off the Power

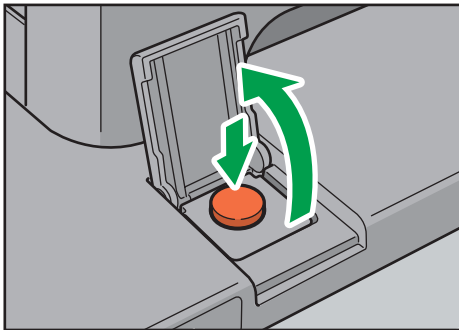
The main power switch is on the top left of the machine. When this switch is turned on, the main power turns on and the main power indicator on the right side of the control panel lights up. When this switch is turned off, the main power turns off and the main power indicator on the right side of the control panel goes out. When this is done, machine power is off.

Confirm how much power the options draw, and then plug them into an outlet that is nearby but separate from the outlet that the main machine is plugged into.

### Turning On the Main Power

1. Make sure the power cord is firmly plugged into the wall outlet.
2. Open the main power switch cover, and push the main power switch.

The main power indicator goes on.



CWW213

### Turning Off the Main Power

#### **⚠ CAUTION**

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

#### **★ Important**

- Do not turn off the power while the machine is in operation.
- Do not hold down the main power switch while turning off the main power. Doing so forcibly turns off the machine's power and may damage the hard disk or memory and cause malfunctions.

**1. Open the main power switch cover, and then push the main power switch.**

The main power indicator goes out. The main power turns off automatically when the machine shuts down. If the screen on the control panel does not disappear, contact your service representative.


# Logging In the Machine

## When the Authentication Screen is Displayed

If Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is active, the authentication screen appears on the display. The machine only becomes operable after entering your own Login User Name and Login Password. If User Code Authentication is active, you cannot use the machine until you enter the User Code.

If you can use the machine, you can say that you are logged in. When you go out of the operable state, you can say that you are logged out. After logging in the machine, be sure to log out of it to prevent unauthorized usage.

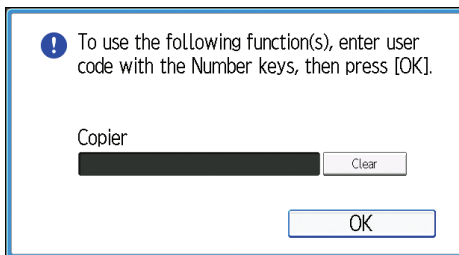
### ★ Important

- Ask the user administrator for the Login User Name, Login Password, and User Code. For details about user authentication, see Security Guide .
- User Code to enter on User Code Authentication is the numerical value registered in the Address Book as "User Code".

## User Code Authentication Using the Control Panel

If User Code Authentication is active, a screen prompting you to enter a User Code appears.

1. Enter a User Code (up to eight digits), and then press [OK].



## Logging In Using the Control Panel

This section explains the procedure for logging in to the machine when Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set.

**1. Press [Login].**



**2. Enter a Login User Name, and then press [OK].**

**3. Enter a Login Password, and then press [OK].**

When the user is authenticated, the screen for the function you are using appears.

---

## Logging Out Using the Control Panel

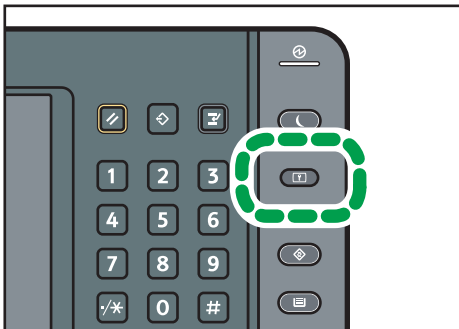
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This section explains the procedure for logging out the machine when Basic Authentication, Windows Authentication, LDAP Authentication, or Integration Server Authentication is set.

**★ Important**

- To prevent use of the machine by unauthorized persons, always log out when you have finished using the machine.

**1. Press the [Login/Logout] key.**



CWW226

**2. Press [Yes].**

# Placing Originals

## Placing Originals on the Exposure Glass

### CAUTION

- Keep your hands away from the hinges and exposure glass when lowering the ADF. Not doing so may result in an injury if your hands or fingers are pinched.

### Important

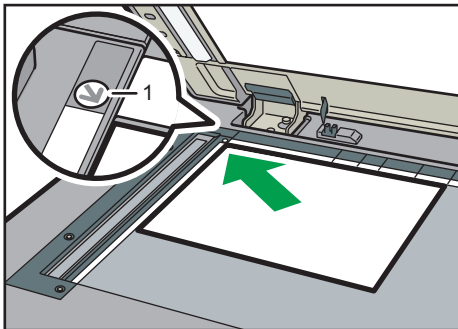
- Do not lift the ADF forcefully. Otherwise, the cover of the ADF might open or be damaged.

#### 1. Lift the ADF.

Be sure to lift the ADF by more than 30 degrees. Otherwise, the size of the original might not be detected correctly.

#### 2. Place the original face down on the exposure glass. The original should be aligned to the rear left corner.

Start with the first page to be scanned.



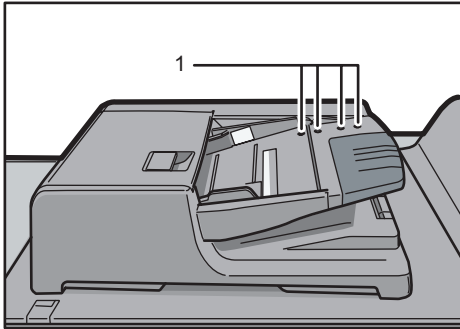
C1WW353

#### 1. Positioning mark

#### 3. Lower the ADF.

## Placing Originals in the Auto Document Feeder

Be sure not to block the sensor or load the original untidily. Doing so may cause the machine to detect the size of the original incorrectly or display a paper misfeed message. Also, be sure not to place originals or other objects on the top cover. Doing so may cause a malfunction.



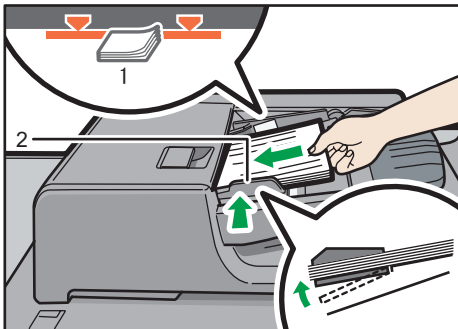
CWW355

**1. Sensors**

- 1. Adjust the original guide to the original size.**
- 2. Place the aligned originals squarely face up in the ADF.**

Do not stack originals beyond the limit mark.


The first page should be on the top.



CWW356

- 1. Limit mark**
- 2. Original guide**

# 3. Copy

This chapter describes frequently used copier functions and operations. For the information not included in this chapter, see Copy/ Document Server  on the supplied CD-ROM.


## Basic Procedure

To make copies of originals, place them on the exposure glass or in the ADF.

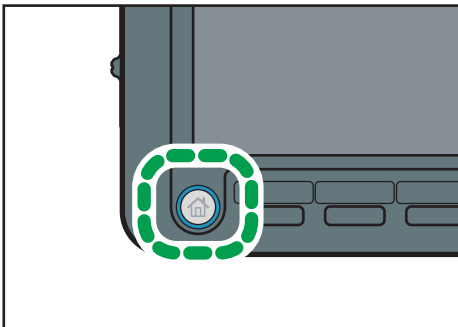
When placing the original on the exposure glass, start with the first page to be copied. When placing the original in the ADF, place them so that the first page is on the top.

For details about placing the original on the exposure glass, see page 47 "Placing Originals on the Exposure Glass".

For details about placing the original in the ADF, see page 47 "Placing Originals in the Auto Document Feeder".

To copy onto paper other than plain paper, specify the paper type in [Tray Paper Settings] according to the weight of the paper you are using. For details, see "Changing Tray Paper Settings", Paper Settings .

1. Press the [Home] key on the bottom left of the control panel, and press the [Copier] icon on the [Home] screen.



C1W220

2. Make sure that no previous settings remain.

When there are previous settings remaining, press the [Reset] key.

3. Place the originals.
4. Make desired settings.
5. Enter the number of copies with the number keys.

The maximum copy quantity that can be entered is 9999.

**6. Press the [Start] key.**

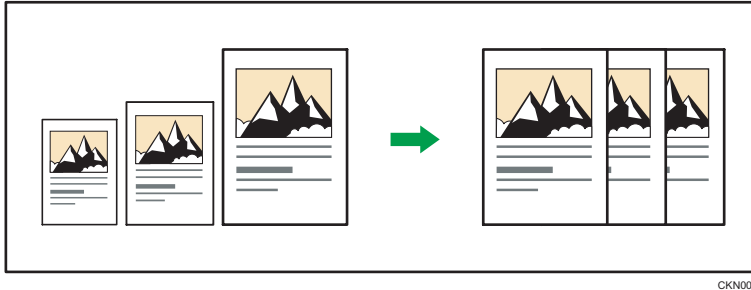
When placing the original on the exposure glass, press the [#] key after all originals are scanned. Some functions such as Batch mode may require that you press the [#] key when placing originals in the ADF. Follow the messages that appear on screen.

**7. When the copy job is finished, press the [Reset] key to clear the settings.**



# Auto Reduce / Enlarge

The machine automatically detects the original size and then selects an appropriate reproduction ratio based on the paper size you select.



CKN008

## ★ Important

- If you select a reproduction ratio after pressing [Auto Reduce / Enlarge], [Auto Reduce / Enlarge] is canceled and the image cannot be rotated automatically.

This is useful to copy different size originals to the same size paper.

If the orientation in which your original is placed is different from that of the paper you are copying onto, the machine rotates the original image by 90 degrees and fits it on the copy paper (Rotate Copy). For example, to reduce A3 (11 × 17)☐ originals to fit onto A4 (8½ × 11)☐ paper, select a paper tray containing A4 (8½ × 11)☐ paper, and then press [Auto Reduce / Enlarge]. The image is automatically rotated. For details about Rotate Copy, see "Rotate Copy", Copy/ Document Server 🗎.

The original sizes and orientations you can use with this function are as follows:

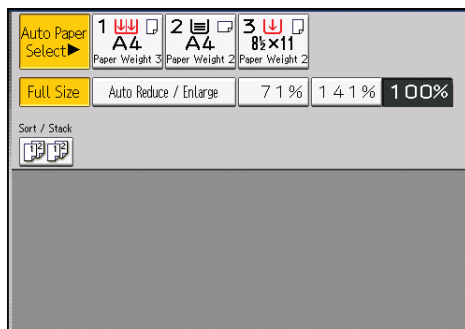
### 🌐 Region A (mainly Europe)

Original location	Original size and orientation
Exposure glass	A3☐, B4 JIS☐, A4☐☐, B5 JIS☐☐, A5☐, 8½ × 13☐
ADF	A3☐, B4 JIS☐, A4☐☐, B5 JIS☐☐, A5☐☐, B6 JIS☐☐, 11 × 17☐, 8½ × 11☐☐, 8½ × 13☐

### 🌐 Region B (mainly North America)

Original location	Original size and orientation
Exposure glass	11 × 17☐, 8½ × 14☐, 8½ × 11☐☐, 5½ × 8½☐
ADF	11 × 17☐, 8½ × 14☐, 8½ × 11☐☐, 5½ × 8½☐☐, 10 × 14☐, 7¼ × 10½☐, A3☐, A4☐☐

**1. Press [Auto Reduce / Enlarge].**

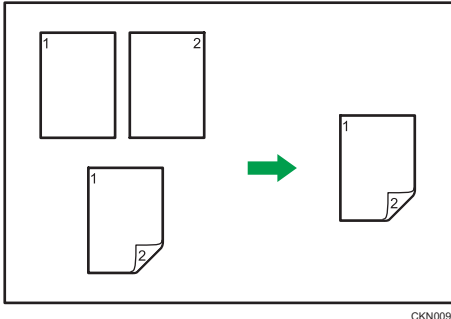


3

2. Select the paper size.
3. Place the originals, and then press the [Start] key.

# Duplex Copying

Copies two 1-sided pages or one 2-sided page onto a 2-sided page. During copying, the image is shifted to allow for the binding margin.



CKN009

There are two types of Duplex.

## 1 Sided → 2 Sided

Copies two 1-sided pages on one 2-sided page.

## 2 Sided → 2 Sided

Copies one 2-sided page on one 2-sided page.

The resulting copy image will differ according to the orientation in which you place your originals (□ or □).

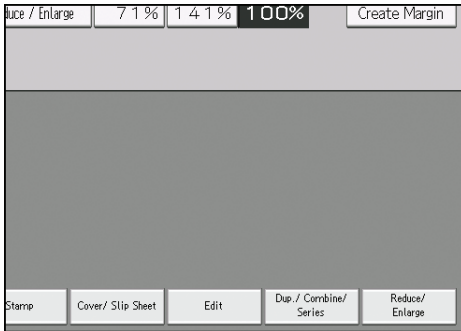
### Original orientation and completed copies

To copy on both sides of the paper, select the original and copy orientation according to how you want the printout to appear.

Original	Placing originals	Original Orientation	Orientation	Copy
			Top to Top	
			Top to Bottom	

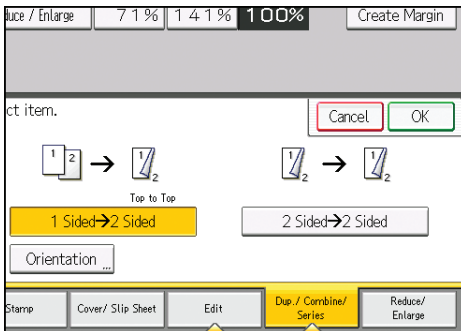
Original	Placing originals	Original Orientation	Orientation	Copy
			Top to Top	
			Top to Bottom	

1. Press [Dup./ Combine/ Series].



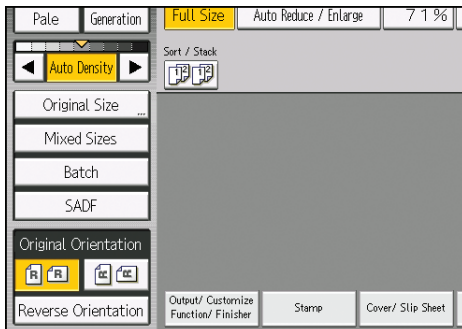
2. Make sure that [Duplex] is selected. If [Duplex] is not selected, press [Duplex].
3. Select [1 Sided → 2 Sided] or [2 Sided → 2 Sided] according to how you want the document to be output.

To change the original or copy orientation, press [Orientation].



4. Press [OK].
5. Place the originals.

## 6. Select the original orientation.



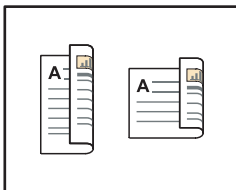
## 7. Press the [Start] key.

3

## Specifying the Original and Copy Orientation

Select the orientation of the originals and copies if the original is two-sided or if you want to copy onto both sides of the paper.

- Top to Top



CKN011

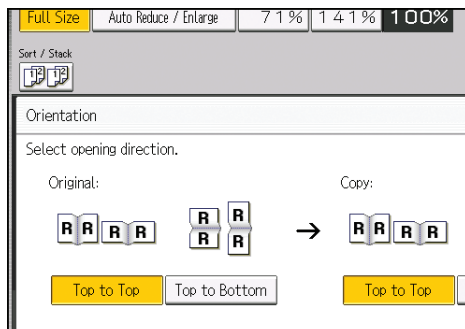
- Top to Bottom



CKN012

## 1. Press [Orientation].

2. Select [Top to Top] or [Top to Bottom] for [Original:] if the original is two-sided.



3

3. Select [Top to Top] or [Top to Bottom] for [Copy:].

4. Press [OK].

# Combined Copying

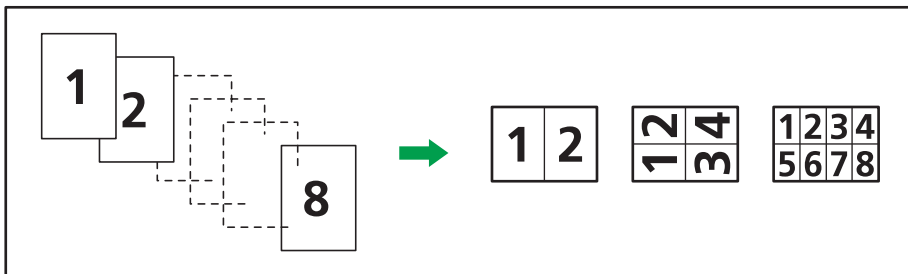
This mode can be used to select a reproduction ratio automatically and copy the originals onto a single sheet of copy paper.

The machine selects a reproduction ratio between 25 and 400%. If the orientation of the original is different from that of the copy paper, the machine will automatically rotate the image by 90 degrees to make copies properly.

## Orientation of the original and image position of Combine

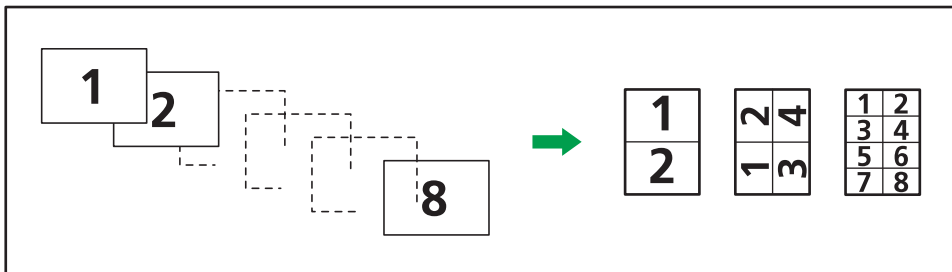
The image position of Combine differs according to original orientation and the number of originals to be combined.

- Portrait (📄) originals



CKN015

- Landscape (📄) originals

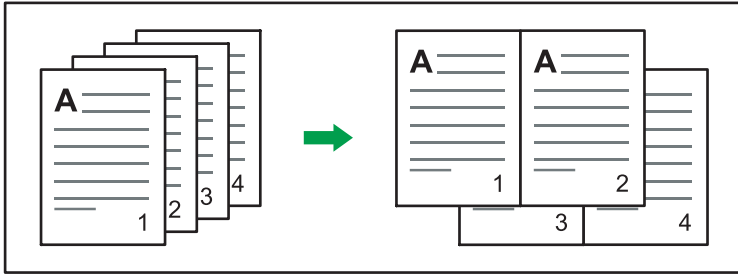


CKN016

## Placing originals (originals placed in the ADF)

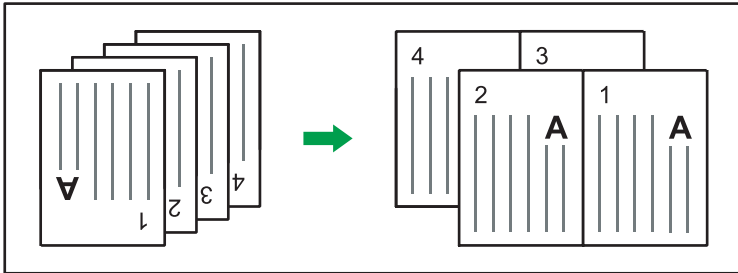
The default value for the copy order in the Combine function is [From Left to Right]. To copy originals from right to left in the ADF, place them upside down.

- Originals read from left to right



CKN010

- Originals read from right to left



CKN017

## One-Sided Combine

Combine several pages onto one side of a sheet.



CKN014

There are six types of One-Sided Combine.

### 1 Sided 2 Originals → Combine 1 Side

Copies two 1-sided originals to one side of a sheet.

### 1 Sided 4 Originals → Combine 1 Side

Copies four 1-sided originals to one side of a sheet.

### 1 Sided 8 Originals → Combine 1 Side

Copies eight 1-sided originals to one side of a sheet.

### 2 Sided 2 Pages → Combine 1 Side

Copies one 2-sided original to one side of a sheet.



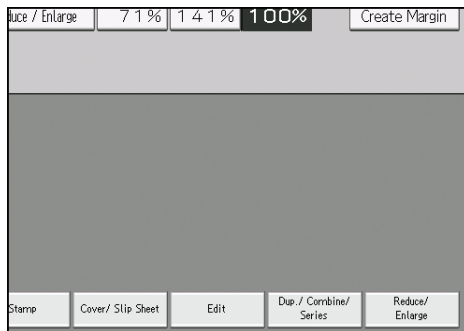
## 2 Sided 4 Pages → Combine 1 Side

Copies two 2-sided originals to one side of a sheet.

## 2 Sided 8 Pages → Combine 1 Side

Copies four 2-sided originals to one side of a sheet.

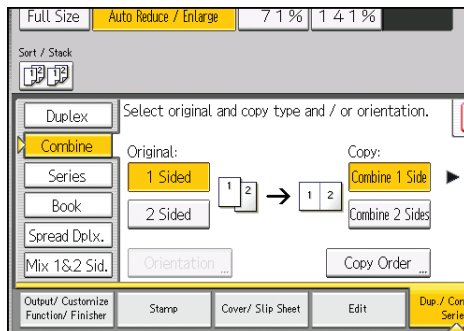
### 1. Press [Dup./ Combine/ Series].



### 2. Press [Combine].

### 3. Select [1 Sided] or [2 Sided] for [Original:].

If you selected [2 Sided], you can change the orientation.



### 4. Press [Combine 1 Side].

### 5. Select the number of originals to combine.

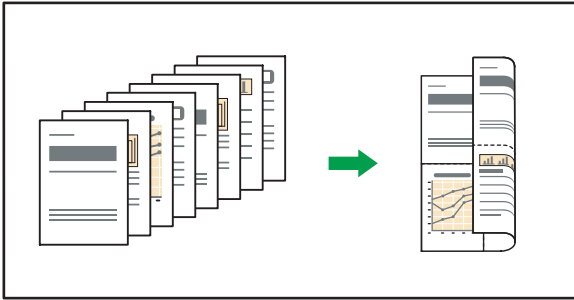
### 6. Press [OK].

### 7. Select the paper size.

### 8. Place the originals, and then press the [Start] key.

## Two-Sided Combine

Combines various pages of originals onto two sides of one sheet.



CKN074

3

There are six types of Two-Sided Combine.

**1 Sided 4 Originals → Combine 2 Sides**

Copies four 1-sided originals to one sheet with two pages per side.

**1 Sided 8 Originals → Combine 2 Sides**

Copies eight 1-sided originals to one sheet with four pages per side.

**1 Sided 16 Originals → Combine 2 Sides**

Copies 16 1-sided originals to one sheet with eight pages per side.

**2 Sided 4 Pages → Combine 2 Sides**

Copies two 2-sided originals to one sheet with two pages per side.

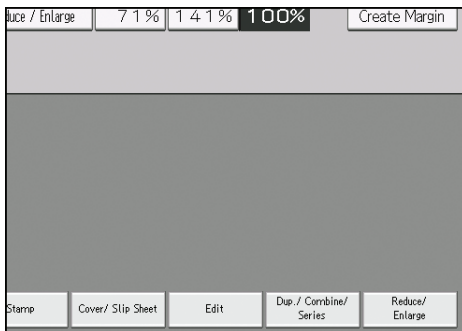
**2 Sided 8 Pages → Combine 2 Sides**

Copies four 2-sided originals to one sheet with four pages per side.

**2 Sided 16 Pages → Combine 2 Sides**

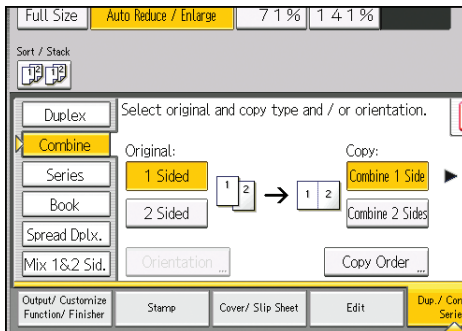
Copies eight 2-sided originals to one sheet with eight pages per side.

**1. Press [Dup./ Combine/ Series].**



**2. Press [Combine].**

### 3. Select [1 Sided] or [2 Sided] for [Original:].



4. Press [Combine 2 Sides].
5. Press [Orientation].
6. Select [Top to Top] or [Top to Bottom] for [Original:] and/or [Copy:], and then press [OK].
7. Select the number of originals to combine.
8. Press [OK].
9. Select the paper size.
10. Place the originals, and then press the [Start] key.

## Copying onto Custom Size Paper from the Multi Bypass Tray (Tray 7)

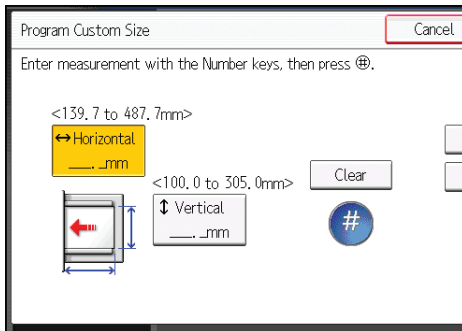
Paper that has a horizontal length of 139.7–487.7 mm (5.50–19.20 inches) and a vertical length of 100.0–330.2 mm (3.94–13.00 inches) can be fed in from the multi bypass tray (Tray 7). Note however that the limitation on the horizontal and vertical length range will vary depending on which options are installed.

3

- When prints are delivered to the shift tray of the finisher:

Horizontal length: 139.7–487.7 mm (5.50–19.20 inches), vertical length: 139.7–330.2 mm (5.50–13.00 inches)

1. Load the paper face up in the multi bypass tray (Tray 7).
2. Press [Tray 7].
3. Press [Paper Size].
4. Press [Program Custom Size].
5. Enter the horizontal size with the number keys, and then press [#].



6. Enter the vertical size with the number keys, and then press [#].
7. Press [OK] twice.
8. Place the originals, and then press the [Start] key.

# Copying onto Envelopes

This section describes how to copy onto regular size and custom size envelopes. Place the original on the exposure glass and place the envelope in the multi bypass tray (Tray 7) or wide LCT.

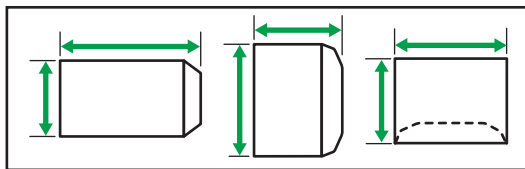
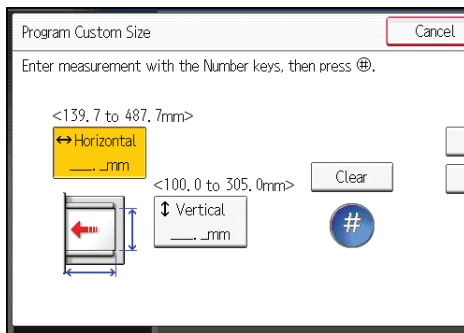
Specify the thickness of the paper according to the weight of the envelopes you are printing on. For details about the relationship between paper weight and paper thickness and the sizes of envelopes that can be used, see page 118 "Recommended Paper Sizes and Types".

For details about handling envelopes, supported envelope types, and how to load envelopes, see page 135 "Envelopes".

## ★ Important

- **The Duplex function cannot be used with envelopes. If the Duplex function is specified, cancel the setting.**

To copy onto custom size envelopes, you must specify the envelope's dimensions. Specify the horizontal and vertical length of the envelope.



CWR081

↔: Horizontal

↑↓: Vertical

Be sure to include the fully open flap in the horizontal dimension.

## Copying onto Envelopes from the Multi Bypass Tray (Tray 7)

1. Load the envelopes face up in the multi bypass tray (Tray 7).
2. Press [Tray 7].
3. Press [Paper Size].


4. Specify the envelope size, and then press [OK].
5. Press [Special Paper].
6. Select [Envelope], and then press [OK].
7. Place the originals, and then press the [Start] key.

---

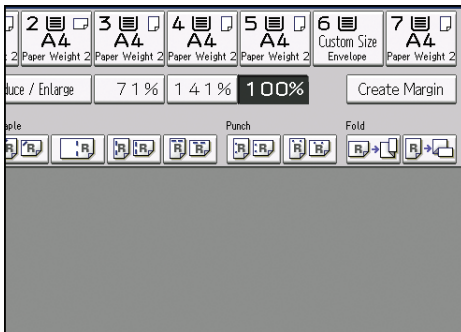
## Copying onto Envelopes from the Wide Large Capacity Tray

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Before using this function, specify the paper size and type under [Tray Paper Settings]. For the paper type, select [Envelope]. For details, see "Changing Tray Paper Settings", Paper Settings .

1. Select the paper tray where the envelopes are loaded.



2. Place the originals, and then press the [Start] key.

# Sort

The machine assembles copies as sets in sequential order.

## Sort/Shift Sort

Copies are assembled as sets in sequential order.

To use Shift Sort, a finisher is required. Each time the copies of one set or a job are delivered, the next copy is shifted to separate each set or job.



CKN018

1. Select the Sort function (  ) under [Sort / Stack].



2. Enter the number of copy sets using the number keys.
3. Place the originals.
  - To confirm the type of finishing, press the [Sample Copy] key.
4. Press the [Start] key.

## Changing the Number of Sets

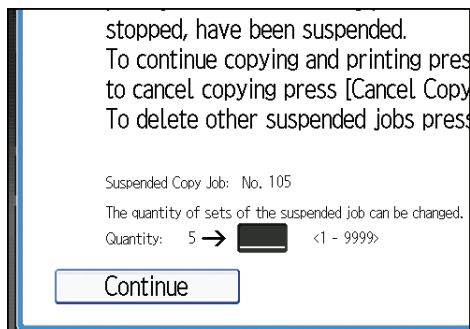
You can change the number of copy sets during copying.

### ★ Important

- This function can be used only when the Sort function is selected.

1. While "Copying..." is displayed, press the [Stop] key.

**2. Enter the number of copy sets with the number keys.**



3

**3. Press [Continue].**

Copying starts again.

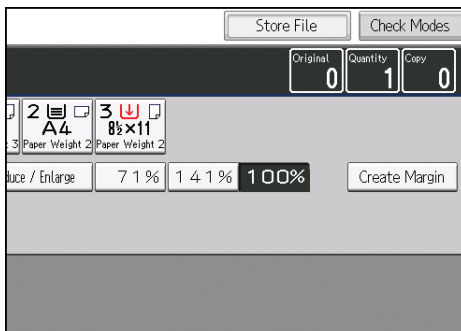


# Storing Data in the Document Server

The Document Server enables you to store documents being read with the copy feature on the hard disk of this machine. Thus you can print them later applying necessary conditions.

You can check the stored documents on the Document Server screen. For details about the Document Server, see page 95 "Storing Data".

## 1. Press [Store File].




2. Enter a file name, user name, or password if necessary.
3. Specify a folder in which to store the document if necessary.
4. Press [OK].
5. Place the originals.
6. Make the scanning settings for the original.
7. Press the [Start] key.

Stores scanned originals in memory and makes one set of copies. If you want to store another document, do so after copying is complete.



# 4. Print

This chapter describes frequently used printer functions and operations. For the information not included in this chapter, see Print  on the supplied CD-ROM.

## Quick Install

You can install the printer drivers easily from the CD-ROM provided with this machine.

Using Quick Install, the PCL 6 printer driver is installed under network environment, and the Standard TCP/IP port will be set.

### Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**

**1. Quit all applications. (Do not close this manual.)**

**2. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

**3. Select an interface language, and then click [OK].**

**4. Click [Quick Install].**

**5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

**6. Click [Next].**

**7. Select the machine model you want to use in the [Select Printer] dialog box.**

**8. Click [Install].**

**9. Configure the user code, default printer, and shared printer as necessary.**

**10. Click [Continue].**

The installation starts.

If the [User Account Control] dialog box appears, and then click [Yes] or [Continue].

**11. Click [Finish].**

When you are prompted to restart your computer, restart it by following the instructions that appear.

**12. Click [Exit] in the first window of the installer, and then take out the CD-ROM.**

## Displaying the Printer Driver Properties

This section explains how to open the printer driver properties from [Devices and Printers].

### ★ Important

- **Manage Printers permission is required to change the printer settings. Log on as an Administrators group member.**
- **You cannot change the machine default settings for individual users. Settings made in the printer properties dialog box are applied to all users.**

1. On the [Start] menu, click [Devices and Printers].
2. Right-click the icon of the printer you want to use.
3. Click [Printer properties].

# Standard Printing

## ★ Important

- The default setting is 2 sided printing. If you want to print on only one side, select [Off] for the 2 sided printing setting.
- If you send a print job via USB 2.0 while the machine is in Low Power mode or Sleep mode, an error message might appear when the print job is complete. In this case, check if the document was printed.

## When Using the PCL 6 Printer Driver

1. Click the WordPad menu button in the upper left corner of the window, and then click [Print].
2. In the [Select Printer] list, select the printer you want to use.
3. Click [Preferences].
4. In the "Job Type:" list, select [Normal Print].
5. In the "Document Size:" list, select the size of the original to be printed.
6. In the "Orientation:" list, select [Portrait] or [Landscape] as the orientation of the original.
7. In the "Input Tray:" list, select the paper tray that contains the paper you want to print onto.  
If you select [Auto Tray Select] in the "Input Tray:" list, the source tray is automatically selected according to the paper size and type specified.
8. In the "Paper Type:" list, select the type of paper that is loaded in the paper tray.
9. If you want to print multiple copies, specify a number of sets in the "Copies:" box.
10. Click [OK].
11. Start printing from the application's [Print] dialog box.

## Printing on Both Sides of Sheets

This section explains how to print on both sides of each page using the printer driver.

### ★ Important

- The types of paper that can be printed on both sides are as follows:
  - Plain, Recycled, Color 1, Color 2, Letterhead, Preprinted, Prepunched, Yellow, Green, Blue, Purple, Ivory, Orange, Pink, Red, Gray, Bond, Cardstock, Coated (Glossy), Coated (Matted)





### When Using the PCL 6 Printer Driver

4

1. Click the WordPad menu button in the upper left corner of the window, and then click [Print].
2. In the [Select Printer] list, select the printer you want to use.
3. Click [Preferences].
4. Click the [Detailed Settings] tab.
5. In the "Menu:" box, click the [Edit] icon.
6. Select the method for binding the output pages in the "2 sided:" list.
7. Change any other print settings if necessary.
8. Click [OK].
9. Start printing from the application's [Print] dialog box.

### Types of 2 sided Printing

You can select which way the bound pages open by specifying which edge to bind.

Orientation	Open to Left	Open to Top
Portrait		
Landscape		

# Combining Multiple Pages into Single Page

This section explains how to print multiple pages onto a single sheet. The combine printing function allows you to economize on paper by printing multiple sheets at reduced size onto a single sheet.

## When Using the PCL 6 Printer Driver

1. Click the WordPad menu button in the upper left corner of the window, and then click [Print].
2. In the [Select Printer] list, select the printer you want to use.
3. Click [Preferences].
4. Click the [Detailed Settings] tab.
5. In the "Menu:" box, click the [Edit] icon.
6. Select the combination pattern in the "Layout:" list, and then specify the method for combining pages in the "Page Order:" list.

To draw a border line around each page, select [Draw Frame Border].

7. Change any other print settings if necessary.
8. Click [OK].
9. Start printing from the application's [Print] dialog box.

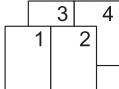
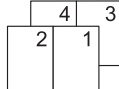
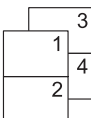
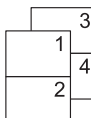
4

## Types of Combine Printing

This function allows you to print 2, 4, 6, 9, or 16 pages at reduced size onto a single sheet and to specify a page ordering pattern for the combination. When combining 4 or more pages onto a single sheet of paper, four patterns are available.

The following illustrations show example page ordering patterns for 2- and 4-page combinations.

### 2 Pages per Sheet

Orientation	From Left to Right/Top to Bottom	From Right to Left/Top to Bottom
Portrait		
Landscape		

**4 Pages per Sheet**

Right, then Down	Down, then Right	Left, then Down	Down, then Left																
<table border="1"><tr><td>1</td><td>2</td></tr><tr><td>3</td><td>4</td></tr></table>	1	2	3	4	<table border="1"><tr><td>1</td><td>3</td></tr><tr><td>2</td><td>4</td></tr></table>	1	3	2	4	<table border="1"><tr><td>2</td><td>1</td></tr><tr><td>4</td><td>3</td></tr></table>	2	1	4	3	<table border="1"><tr><td>3</td><td>1</td></tr><tr><td>4</td><td>2</td></tr></table>	3	1	4	2
1	2																		
3	4																		
1	3																		
2	4																		
2	1																		
4	3																		
3	1																		
4	2																		

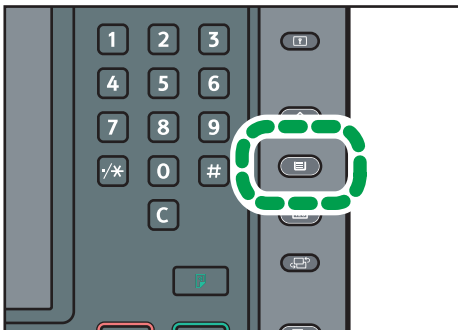


# Printing on Envelopes

Configure the paper settings appropriately using both the printer driver and the control panel.

## Configuring Envelope Settings Using the Control Panel

1. Load envelopes in the paper tray.
2. Press the [Paper Setting] key.



CWY003

3. Select the paper tray in which the envelopes are loaded.
4. Press [Manual Paper Settings].
5. Press [Envelope] in the "Paper Type" area, and then select the appropriate item in the "Paper Thickness" area.
6. Press the [Paper Size] tab.
7. Select the envelope size, and then press [OK].
8. Press [OK].
9. Press the [Paper Setting] key.

## Printing on Envelopes Using the Printer Driver

### When using the PCL 6 printer driver


1. Click the WordPad menu button in the upper left corner of the window, and then click [Print].
2. In the [Select Printer] list, select the printer you want to use.
3. Click [Preferences].
4. In the "Document Size:" list, select the envelope size.

5. In the "Input Tray:" list, select the paper tray where the envelopes are loaded.
6. In the "Paper Type:" list, select [Envelope].
7. Change any other print settings if necessary.
8. Click [OK].
9. Start printing from the application's [Print] dialog box.

# Saving and Printing Using the Document Server

The Document Server enables you to store documents on the machine's hard disk, and allows you to edit and print them as necessary.

## ★ Important

- Applications with their own drivers, such as PageMaker, do not support this function.
- Do not cancel the file transfer process while the data is being sent to the Document Server. The process may not be canceled properly. If you accidentally cancel a print job, use the control panel of the machine to delete the transferred data. For details about how to delete documents that are stored in the Document Server, see "Deleting Stored Documents", Copy/ Document Server , or Web Image Monitor Help.
- Up to 3,000 files can be stored in the Document Server. New files cannot be stored when 3,000 files have already been stored. Even if less than 3,000 files are stored, new files cannot be stored when
  - The number of pages in a document exceeds 15,000.
  - The total number of stored pages in the machine and the sent data has reached 15,000 (It may be fewer depending on the print data).
  - The hard disk is full.

You can send data created on a client computer to the Document Server.

## Storing Documents in Document Server

### ★ Important

- If the machine is not used as the Document Server, the maximum number of the documents that can be stored in the server may be less than the number described in the specification.
1. Click the WordPad menu button in the upper left corner of the window, and then click [Print].
  2. In the "Select Printer" list, select the printer you want to use.
  3. Click [Preferences].
  4. In the "Job Type:" list, click [Document Server].
  5. Click [Details...].
  6. Enter a user ID, file name, password, and user name as required.
  7. Specify the folder number to store the document in the "Folder Number" box.

When "0" is specified in the "Folder Number:" box, documents will be saved in the Shared folder.

8. If the folder is protected by a password, enter the password in the "Folder Password:" box.
9. Click [OK].
10. Change any other print settings if necessary.
11. Click [OK].
12. Start printing from the application's [Print] dialog box.

 **Note**

- You can print the documents stored in the Document Server using the control panel. For details, see page 97 "Printing Stored Documents".

4


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## Managing Documents Stored in Document Server

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If this machine is configured as a network printer using TCP/IP, you can view or delete the documents stored in the machine's Document Server using DeskTopBinder or Web Image Monitor from a client computer connected to the network. You can print and operate this machine remotely without operating the control panel.

# 5. Scan

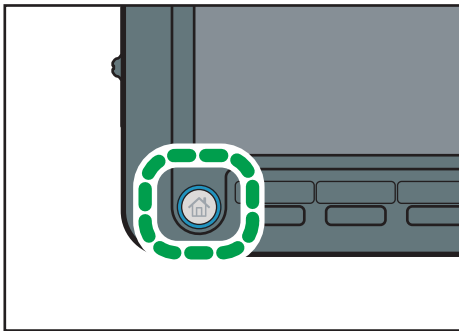
This chapter describes frequently used scanner functions and operations. For the information not included in this chapter, see Scan  on the supplied CD-ROM.

## Basic Procedure When Using Scan to Folder

### Important

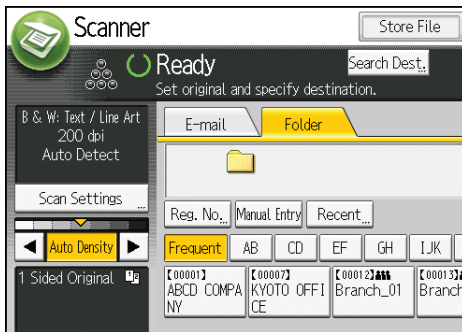
- Before performing this procedure, refer to "Preparation for Sending by Scan to Folder", Scan  and confirm the details of the destination computer. Also refer to "Registering Folders", Connecting the Machine/ System Settings , and register the address of the destination computer to the address book.

1. Press the [Home] key on the lower left of the control panel, and press the [Scanner] icon on the [Home] screen.



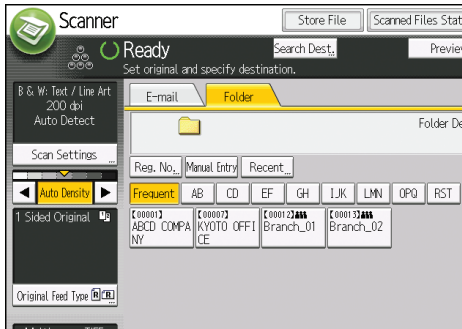
C1WW220

2. Make sure that no previous settings remain.  
If a previous setting remains, press the [Reset] key.
3. Press the [Folder] tab.



4. Place originals.

### 5. If necessary, specify the scan settings according to the original to be scanned.



Example: Scanning the document in color/duplex mode, and saving as a PDF file.

- Press [Scan Settings], [Full Color: Text / Photo] in the [Original Type] tab, and then press [OK].
- Press [Original Feed Type], [2 Sided Original], and then press [OK].
- Press [PDF] under [Send File Type / Name], and then press [OK].

### 6. Specify the destination.

You can specify multiple destinations.

### 7. Press the [Start] key.

## Creating a Shared Folder on a Computer Running Windows/Confirming a Computer's Information

The following procedures explain how to create a shared folder on a computer running Windows, and how to confirm the computer's information. In these examples, Windows 7 Ultimate is the operating system, and the computer is a member in a network domain. Write down the confirmed information.

### Step 1: Confirming the user name and computer name

Confirm the user name and the name of the computer you will send scanned documents to.

1. On the [Start] menu, point to [All Programs], then [Accessories], and then click on [Command Prompt].
2. Enter the command "ipconfig/all", and then press the [Enter] key.
3. Confirm the name of the computer.

The computer's name is displayed under [Host Name].

You can also confirm the IPv4 address. The address displayed under [IPv4 Address] is the IPv4 address of the computer.

4. Next, enter the command "set user", and then press the [Enter] key. (Be sure to put a space between "set" and "user".)

5. Confirm the user name.

The user name is displayed under [USERNAME].

## Step 2: Creating a shared folder on a computer running Microsoft Windows

Create a shared destination folder in Windows and enable sharing. In the following procedure, a computer which is running under Windows 7 Ultimate and participating in a domain is used as an example.

### ★ Important

- You must log in as an Administrators group member to create a shared folder.
- If "Everyone" is left selected in step 6, the created shared folder will be accessible by all users. This is a security risk, so we recommend that you give access rights only to specific users. Use the following procedure to remove "Everyone" and specify user access rights.
- Disable the simple file sharing setting before creating a shared folder.

1. Create a folder, just as you would create a normal folder, in a location of your choice on the computer.

2. Right-click the folder, and then click [Properties].

When using Windows XP, right-click the folder, and then click [Sharing and Security].

3. On the [Sharing] tab, select [Advanced Sharing...].

When using Windows XP, on the [Sharing] tab, select [Share this folder].

Proceed to step 5.

4. Select the [Share this folder] check box.

5. Click [Permissions].

6. In the [Group or user names:] list, select "Everyone", and then click [Remove].

7. Click [Add...].

8. In the [Select Users or Groups] window, click [Advanced...].

9. Specify one or more object types, select a location, and then click [Find Now].

10. From the list of results, select the groups and users you want to grant access to, and then click [OK].

11. In the [Select Users or Groups] window, click [OK].

12. In the [Groups or user names:] list, select a group or user, and then, in the [Allow] column of the permissions list, select either the [Full Control] or [Change] check box.

Configure the access permissions for each group and user.

13. Click [OK].

### Step 3: Specifying access privileges for the created shared folder

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If you want to specify access privileges for the created folder to allow other users or groups to access the folder, configure the folder as follows:

1. Right-click the folder created in step 2, and then click [Properties].
2. On the [Security] tab, click [Edit...].
3. Click [Add...].
4. In the [Select Users or Groups] window, click [Advanced...].
5. Specify one or more object types, select a location, and then click [Find Now].
6. From the list of results, select the groups and users you want to grant access to, and then click [OK].
7. In the [Select Users or Groups] window, click [OK].
8. In the [Groups or user names:] list, select a group or user, and then, in the [Allow] column of the permissions list, select either the [Full Control] or [Change] check box.
9. Click [OK].

5

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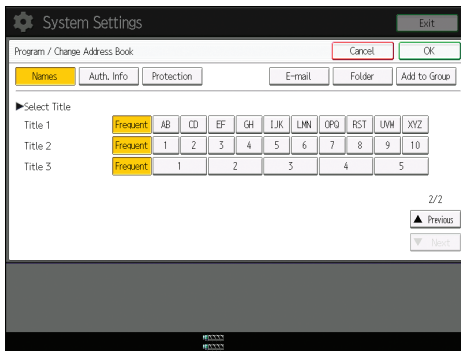
### Registering an SMB Folder

---

1. Press the [User Tools] key.
2. Press [Address Book Mangmnt].
3. Check that [Program / Change] is selected.
4. Press [New Program].
5. Press [Change] under "Name".  
The name entry display appears.
6. Enter the name, and then press [OK].
7. Press [▼Next].



## 8. Press the key for the classification you want to use under "Select Title".

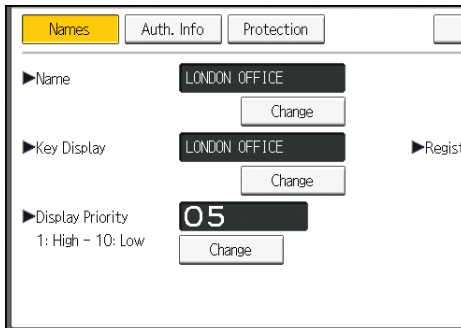


The keys you can select are as follows:

- [Frequent]: Added to the page that is displayed first.
- [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVM], [XYZ], [1] to [10]: Added to the list of items in the selected title.

You can select [Frequent] and one more key for each title.

## 9. Press [Auth. Info], and then press [▼Next].



## 10. Press [Specify Other Auth. Info] on the right side of "Folder Authentication".

When [Do not Specify] is selected, the SMB User Name and SMB Password that you have specified in "Default User Name / Password (Send)" of File Transfer settings are applied.

## 11. Press [Change] under "Login User Name".

## 12. Enter the login user name of the destination computer, and then press [OK].

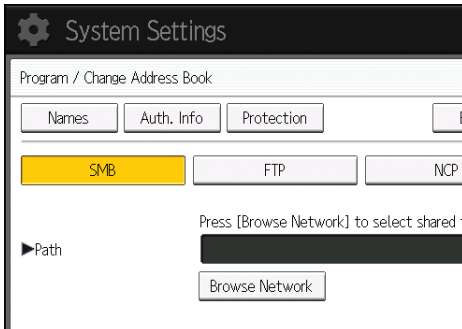
## 13. Press [Change] under "Login Password".

## 14. Enter the password of the destination computer, and then press [OK].

## 15. Enter the password again to confirm, and then press [OK].

## 16. Press [Folder].

### 17. Check that [SMB] is selected.



### 18. Press [Change] or [Browse Network], and then specify the folder.

To specify a folder, you can either enter the path manually or locate the folder by browsing the network.

5

### 19. Press [Connection Test] to check the path is set correctly.

### 20. Press [Exit].

If the connection test fails, check the settings, and then try again.

### 21. Press [OK].

### 22. Press [Exit].

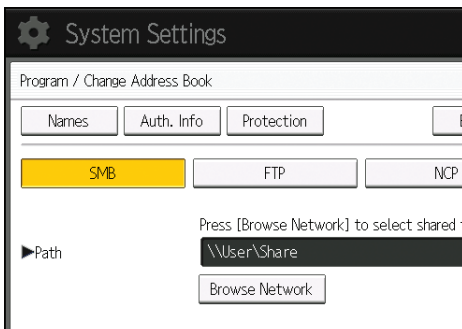
### 23. Press the [User Tools] key.

## Locating the SMB folder manually

### 1. Press [Change] under "Path".

### 2. Enter the path where the folder is located, and then press [OK].

For example: if the name of the destination computer is "User", and the folder name is "Share", the path will be \\User\Share.



If the network does not allow automatic obtaining of IP addresses, include the destination computer's IP address in the path. For example: if the IP address of the destination computer is "192.168.0.191", and the folder name is "Share", the path will be "\\192.168.0.191\Share".

### 3. Press [OK].

If the format of the entered path is not correct, a message appears. Press [Exit], and then enter the path again.

## Locating the SMB folder using Browse Network

### 1. Press [Browse Network].

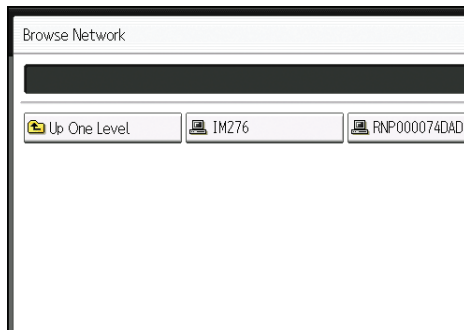
The client computers sharing the same network as the machine appear.

Network display only lists client computers you are authorized to access.

### 2. Select the group that contains the destination computer.

### 3. Select the computer name of the destination computer.

Shared folders under it appear.



You can press [Up One Level] to switch between levels.

### 4. Select the folder you want to register.

### 5. Press [OK].

## Deleting an SMB Registered Folder

### 1. Press the [User Tools] key.

### 2. Press [Address Book Mangmnt].

### 3. Check that [Program / Change] is selected.

### 4. Select the name whose folder you want to delete.

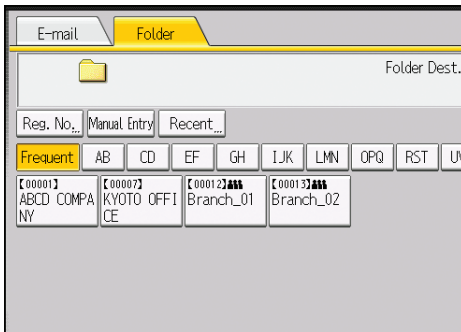
Press the name key, or enter the registered number using the number keys.

You can search by the registered name, user code, folder name, or e-mail address.

5. Press [Folder].
6. Press the protocol which is not currently selected.  
A confirmation message appears.
7. Press [Yes].
8. Press [OK].
9. Press [Exit].
10. Press the [User Tools] key.

## Entering the Path to the Destination Manually

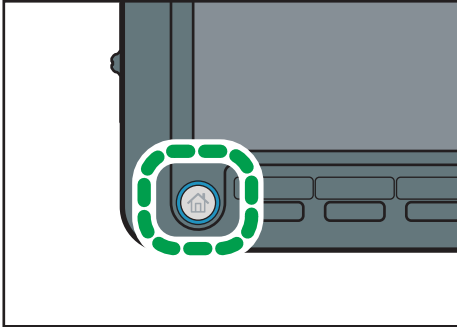
1. Press [Manual Entry].



2. Press [SMB].
3. Press [Manual Entry] on the right side of the path field.
4. Enter the path for the folder.  
In the following example path, the shared folder name is "user" and the computer name is "desk01":  
`\\desk01\user`
5. Press [OK].
6. Depending on the destination setting, enter the user name for logging in to the computer.  
Press [Manual Entry] to the right of the user name field to display the soft keyboard.
7. Depending on the destination setting, enter the password for logging in to the computer.  
Press [Manual Entry] for the password to display the soft keyboard.
8. Press [Connection Test].  
A connection test is performed to check whether the specified shared folder exists.
9. Check the connection test result, and then press [Exit].
10. Press [OK].

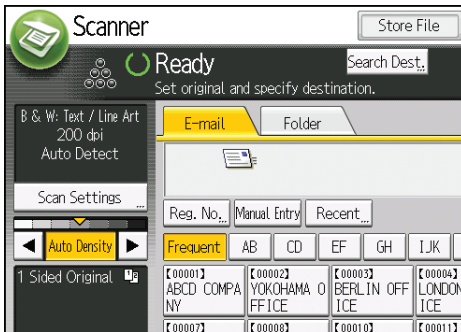
# Basic Procedure for Sending Scan Files by E-mail

1. Press the [Home] key on the lower left of the control panel, and press the [Scanner] icon on the [Home] screen.

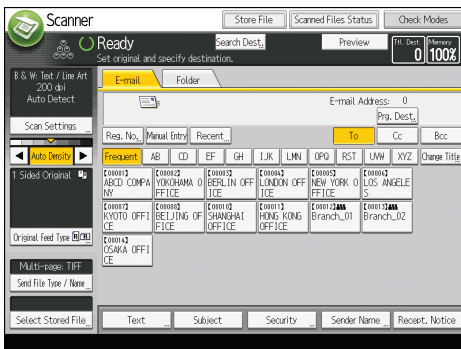


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2. Make sure that no previous settings remain.  
If a previous setting remains, press the [Reset] key.
3. Press the [E-mail] tab.



4. Place originals.
5. If necessary, specify the scan settings according to the original to be scanned.



Example: Scanning the document in color/duplex mode, and saving as a PDF file.

- Press [Scan Settings], [Full Color: Text / Photo] in the [Original Type] tab, and then press [OK].
- Press [Original Feed Type], [2 Sided Original], and then press [OK].
- Press [PDF] under [Send File Type / Name], and then press [OK].

## 6. Specify the destination.

You can specify multiple destinations.

## 7. To specify the e-mail sender, press [Sender Name], and then press [OK].

## 8. To use Message Disposition Notification, press [Recept. Notice].

If you select [Recept. Notice], the selected e-mail sender will receive e-mail notification when the e-mail recipient has opened the e-mail.

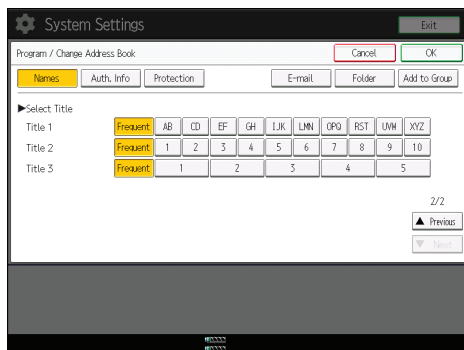
## 9. Press the [Start] key.

## Registering an E-mail Destination

1. Press the [User Tools] key.
2. Press [Address Book Mangmnt].
3. Check that [Program / Change] is selected.
4. Press [New Program].
5. Press [Change] under "Name".

The name entry display appears.

6. Enter the name, and then press [OK].
7. Press [▼Next].
8. Press the key for the classification you want to use under "Select Title".



The keys you can select are as follows:

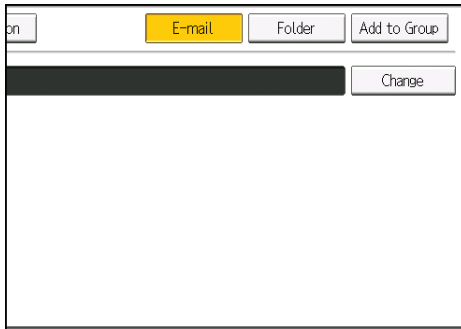
- [Frequent]: Added to the page that is displayed first.

- [AB], [CD], [EF], [GH], [IJK], [LMN], [OPQ], [RST], [UVW], [XYZ], [1] to [10]: Added to the list of items in the selected title.

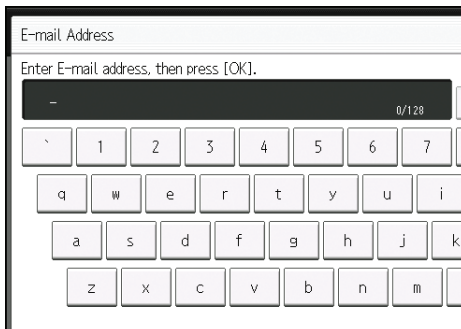
You can select [Frequent] and one more key for each title.

9. Press [E-mail].

10. Press [Change] under "E-mail Address".



11. Enter the e-mail address.



12. Press [OK].

13. Press [OK].

14. Press [Exit].

15. Press the [User Tools] key.

## Deleting an E-mail Destination

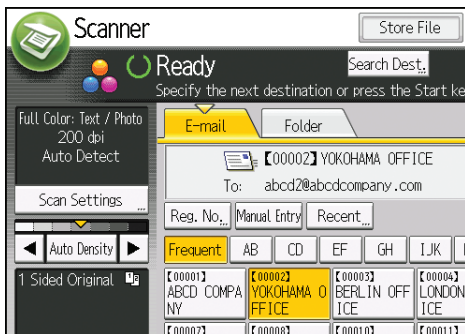
1. Press the [User Tools] key.
2. Press [Address Book Mangmnt].
3. Check that [Program / Change] is selected.
4. Select the name whose e-mail address you want to delete.

Press the name key, or enter the registered number using the number keys. You can search by the registered name, user code, folder name, or e-mail address.

5. Press [E-mail].
6. Press [Change] under "E-mail Address".
7. Press [Delete All], and then press [OK].
8. Press [OK].
9. Press [Exit].
10. Press the [User Tools] key.

## Entering an E-mail Address Manually

1. Press [Manual Entry].



2. Enter the e-mail address.
3. Press [OK].

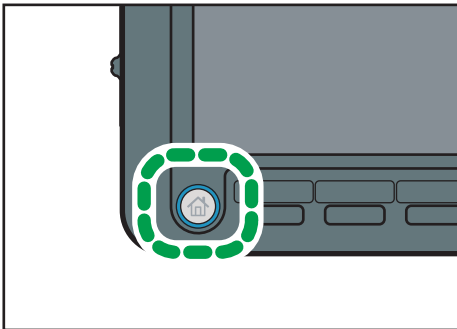


# Basic Procedure for Storing Scan Files

## ★ Important

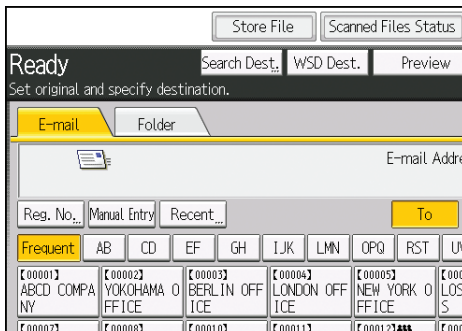
- You can specify a password for each stored file. Files that are not password-protected can be accessed by other users on the same local area network using DeskTopBinder. We recommend that you protect stored files from unauthorized access by specifying passwords.
- Scan file stored in the machine may be lost if some kind of failure occurs. We advise against using the hard disk to store important files. The supplier shall not be responsible for any damage that may result from the loss of files.

1. Press the [Home] key on the lower left of the control panel, and press the [Scanner] icon on the [Home] screen.



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2. Make sure that no previous settings remain.  
If a previous setting remains, press the [Reset] key.
3. Place originals.
4. Press [Store File].



5. Press [Store to HDD].
6. If necessary, specify the stored file's information, such as [User Name], [File Name], [Password], and [Select Folder].
  - User Name

Press [User Name], and then select a user name. To specify an unregistered user name, press [Manual Entry], and then enter the name. After specifying a user name, press [OK].

- File Name

Press [File Name], enter a file name, and then press [OK].

- Password

Press [Password], enter a password, and then press [OK]. Re-enter the password for confirmation, and then press [OK].

- Select Folder

Specify the folder in which to save the stored files, and then press [OK].

## 7. Press [OK].

## 8. If necessary, press [Scan Settings] to specify scanner settings such as resolution and scan size.

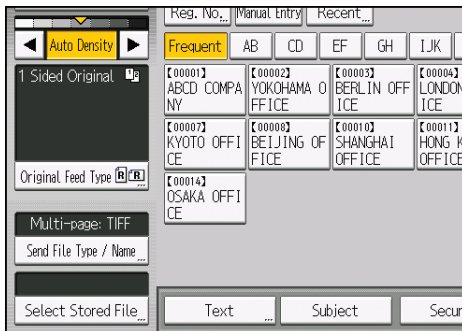
## 9. Press the [Start] key.

If you are scanning originals that have been divided into multiple sets, subsequently set the additional originals.

## Checking a Stored File Selected from the List

This section explains how to preview a file selected from the list of stored files.

### 1. Press [Select Stored File].



### 2. Specify the folder in which to save the stored files.

### 3. From the list of stored files, select the file you want to check.

You can select more than one file.

### 4. Press [Preview].

# Specifying the File Type

This section explains the procedure for specifying the file type of a file you want to send.

File types can be specified when sending files by e-mail or Scan to Folder, sending stored files by e-mail or Scan to Folder, and saving files on a memory storage device.


You can select one of the following file types:

- Single Page: [TIFF / JPEG], [PDF]

If you select a single-page file type when scanning multiple originals, one file is created for each single page and the number of files sent is the same as the number of pages scanned.

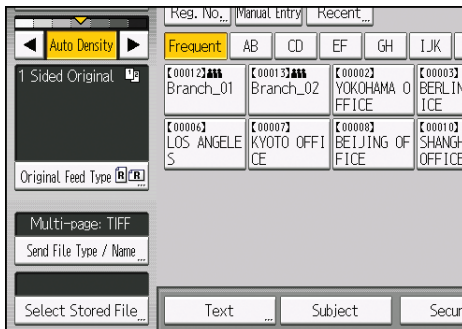
- Multi-page: [TIFF], [PDF]

If you select a multi-page file type when scan multiple originals, scanned pages are combined and sent as a single file.

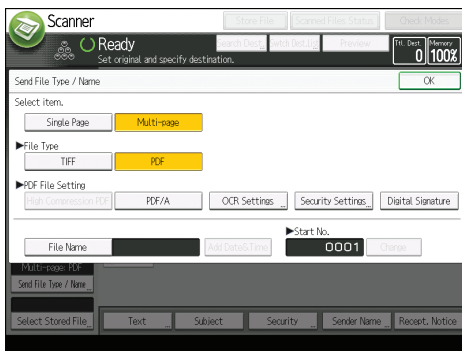
Selectable file types differ depending on the scan settings and other conditions. For details about file types, see "Notes About and Limitations of File Types", Scan .

5

## 1. Press [Send File Type / Name].



## 2. Select a file type.

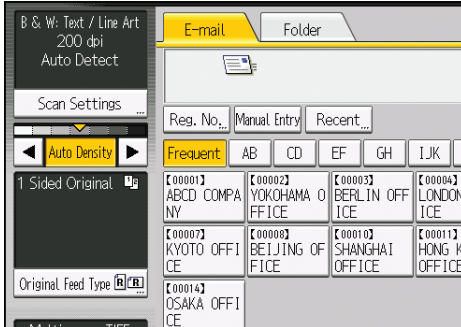


If the File Type is set to [PDF], configure PDF File Setting as required.

## 3. Press [OK].

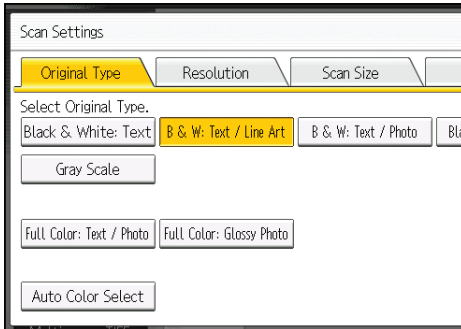
# Specifying Scan Settings

## 1. Press [Scan Settings].




## 2. Specify resolution, scan size, and other settings, as required.

5



## 3. Press [OK].

# 6. Document Server

This chapter describes frequently used Document Server functions and operations. For the information not included in this chapter, see Copy/ Document Server  on the supplied CD-ROM.

## Storing Data

This section describes the procedure for storing documents on the Document Server.

### Important


- A document accessed with a correct password remains selected even after operations are complete, and it can be accessed by other users. After the operation, be sure to press the [Reset] key to cancel the document selection.
- The user name registered to a stored document in the Document Server is to identify the document creator and type. It is not to protect confidential documents from others.
- When scanning by the scanner, make sure that all other operations are ended.

### File Name

A file name such as "COPY0001" and "COPY0002" is automatically attached to the scanned document. You can change the file name.

### User Name

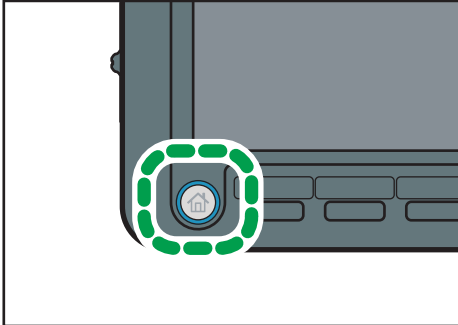
You can register a user name to identify the user or user group that stored the documents. To assign it, select the user name registered in the Address Book, or enter the name directly. Depending on the security setting, [Access Privileges] may appear instead of [User Name].

For details about the Address Book, see "Registering Addresses and Users", Connecting the Machine/ System Settings .

### Password

To prevent unauthorized printing, you can specify a password for any stored document. A protected document can only be accessed if its password is entered. If a password is specified for the documents, the lock icon appears on the left side of the file name.

1. Press the [Home] key on the bottom left of the control panel, and press the [Document Server] icon on the [Home] screen.



2. Press [To Scanning Screen].
3. Press [Target Folder to Store].
4. Specify a folder in which to store the document, and then press [OK].
5. Press [User Name].
6. Specify a user name, and then press [OK].

The user names shown are names that were registered in the Address Book. To specify a name not shown in the screen, press [Manual Entry], and then enter a user name.

7. Press [File Name].
8. Enter a file name, and then press [OK].
9. Press [Password].
10. Enter a password with the number keys, and then press [OK].

You can use four to eight digits for the password.

11. For double-check, enter the password again, and then press [OK].
12. Place the original.
13. Specify the original scanning conditions.
14. Press the [Start] key.

The original is scanned. The document is saved in the Document Server.


After scanning, a list of folders will be displayed. If the list does not appear, press [Finish Scanning].

# Printing Stored Documents

Prints stored documents on the Document Server.

The items you can specify on the printing screen are as follows:

- Paper tray
- The number of prints
- [Output/ Finisher] ([Output], [Finisher], [Folding Unit], [Perfect Binding])
- [Stamp] ([Background Numbering], [Preset Stamp], [User Stamp], [Date Stamp], [Page Numbering], [Stamp Text], [Unathd. Copy Prevention])
- [Cover/ Slip Sheet] ([Front Cover], [Back Cover], [Designate / Chapter], [Slip Sheet])
- [Edit] ([Margin Adj.], [Edit Image])
- [2 Sided / Book] ([1 Sided Print], [2 Sided Top to Top], [2 Sided Top to Bottom], [Specify Duplex Pages], [Booklet], [Magazine])

For details about each function, see Copy/ Document Server .

## 1. Select a folder.

No.	Folder Name	Created Date/Time	Sel. file
	Shared Folder		
001	User001	30 Apr. 22:34	
002	User002	30 Apr. 22:36	
003	User003	30 Apr. 22:39	
004	User004	30 Apr. 22:41	
005	User005	30 Apr. 22:43	

## 2. Select a document to be printed.

## 3. When printing two or more documents at a time, repeat step 2.

Up to 30 documents can be printed.

## 4. When specifying printing conditions, press [To Printing Screen], and then configure print settings.

## 5. Enter the number of print copies with the number keys.

The maximum quantity that can be entered is 9999.

## 6. Press the [Start] key.





# 7. Web Image Monitor

This chapter describes frequently used Web Image Monitor functions and operations. For the information not included in this chapter, see Connecting the Machine/ System Settings on the supplied CD-ROM or Web Image Monitor Help.

## Displaying Top Page

This section explains the Top Page and how to display Web Image Monitor.

### ★ Important

- When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10".

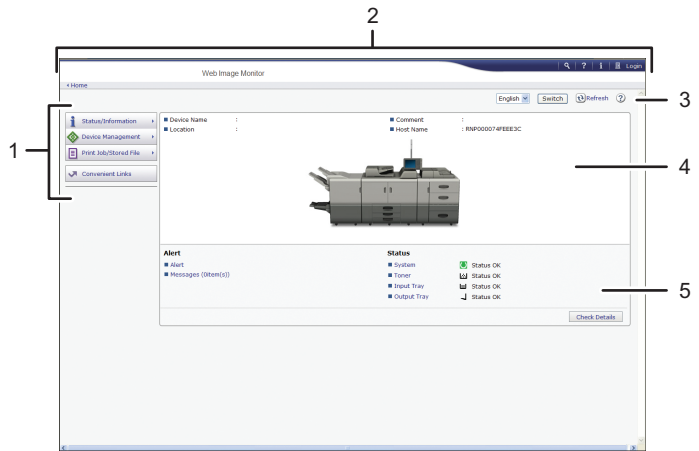
1. Start your Web browser.
2. Enter "http://(machine's IP address or host name)/" in your Web browser's URL bar.

Top Page of Web Image Monitor appears.

If the machine's host name has been registered on the DNS or WINS server, you can enter it.

When setting SSL, a protocol for encrypted communication, under environment which server authentication is issued, enter "https://(machine's IP address or host name)/".

Web Image Monitor is divided into the following areas:



### 1. Menu area



If you select a menu item, its content will be shown.


### 2. Header area

The dialog box for switching to the user mode and administrator mode appears, and each mode's menu will be displayed.

The link to Help and dialog box for keyword search appears.

### 3. Refresh/Help

 (Refresh): Click  at the upper right in the work area to update the machine information. Click the Web browser's [Refresh] button to refresh the entire browser screen.

 (Help): Use Help to view or download Help file contents.

### 4. Basic Information area

Displays the basic information of the machine.

### 5. Work area

Displays the contents of the item selected in the menu area.

# 8. Adding Paper and Toner

This chapter describes how to load paper into the paper tray and recommended paper sizes and types.

## Loading Paper

### Precautions for Loading Paper


#### CAUTION

- When loading paper, take care not to trap or injure your fingers.

#### Important

- Do not stack paper over the limit mark.

#### Note

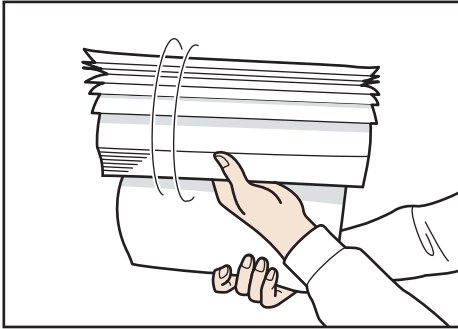
- To prevent multiple sheets from being fed at once, fan the paper before loading it.
- If you load paper when only a few sheets of paper remain in the tray, multiple sheet feeding may occur. Remove any remaining paper, stack them with the new sheets of paper, and then fan the entire stack before loading it into the tray.
- Straighten curled or warped paper before loading.
- When paper in trays that are set to automatically eject unnecessary tab stock sheets runs out, reload the tab stock from the beginning of the cycle (the first sheet).
- When you load paper into the paper tray for the first time or when you change the size or type of paper in the paper tray, be sure to specify the appropriate paper settings in Tray Paper Settings. For details, see "Changing Tray Paper Settings", Paper Settings .
- For details about the paper sizes and types that can be used, see page 118 "Recommended Paper Sizes and Types".
- You might at times hear a rustling noise from paper moving through the machine. This noise does not indicate a malfunction.

### Fanning the paper

#### Important

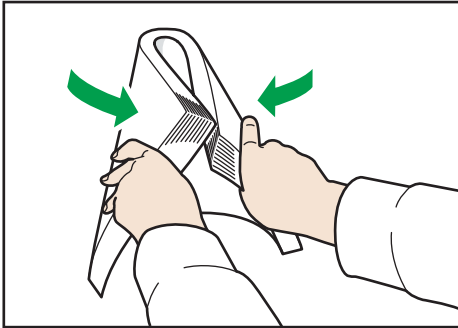
- If you load coated paper, label paper, or thick paper of 163.1–300.0 g/m<sup>2</sup> (60.1 lb. Cover–165.0 lb. Index) in the wide LCT, it is important that you fan the sheets thoroughly. Misfeeds may occur if paper is not fanned thoroughly.

**1. Loosen the stack by riffling the sheets.**

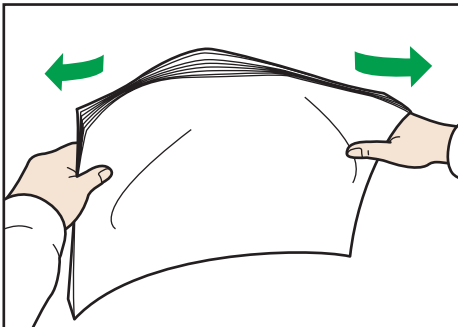


CVA068

**2. Holding its shorter ends, flex the stack back and forth to create space between the sheets. Repeat this several times.**

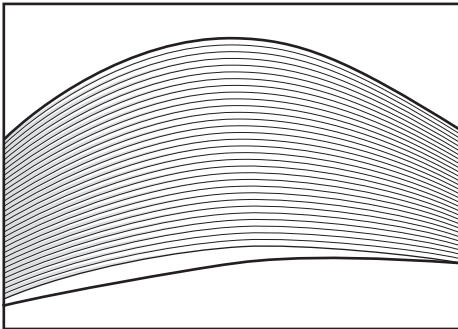


CVA069



CVA070

### 3. Make sure there is space between the sheets.



CVA071

## Loading Paper into Tray 1

### Region A (mainly Europe)

Tray 1 can hold A4 paper only. If you want to print on  $8\frac{1}{2} \times 11$  from Tray 1, contact your service representative.

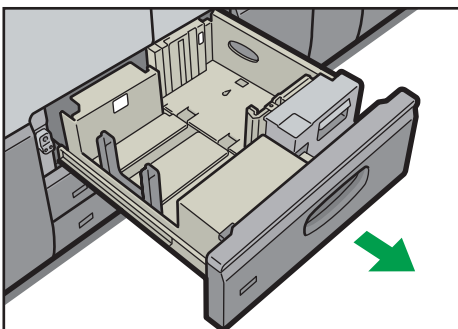
### Region B (mainly North America)

Tray 1 can hold  $8\frac{1}{2} \times 11$  paper only. If you want to print on A4 from Tray 1, contact your service representative.

### ★ Important

- When paper loaded in the right side of Tray 1 runs out, paper on the left is automatically shifted to the right. Do not pull out Tray 1 while the tray is moving paper; wait until sounds stop coming from the tray.
- For the right stack, align the right edge of the paper with the right edge of the tray. For the left stack, align the left edge of the paper to the left edge of the tray.

### 1. Carefully pull out the paper tray until it stops.

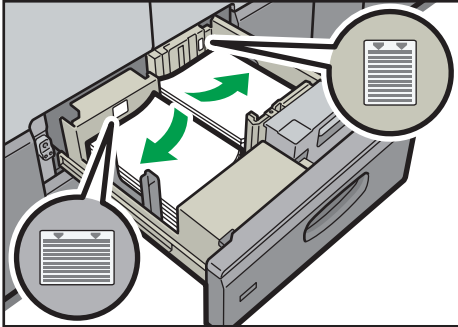


CWW301

**2. Square the paper and load it print side down.**

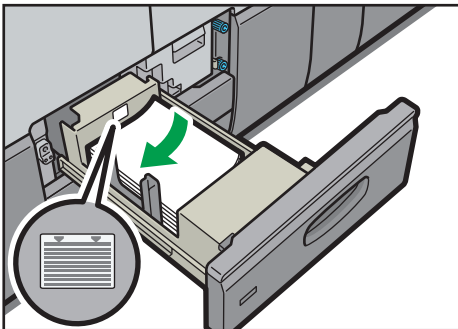
Do not stack paper over the limit mark.

- Whole tray pulled out



CWW302

- Left half of the tray pulled out



CWW303

**3. Carefully push the paper tray fully in.**

**Note**

- You can load paper even if Tray 1 is in use. It is okay to pull out the left half of the tray while Tray 1 is in use.

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## Loading Paper into Trays 2 and 3

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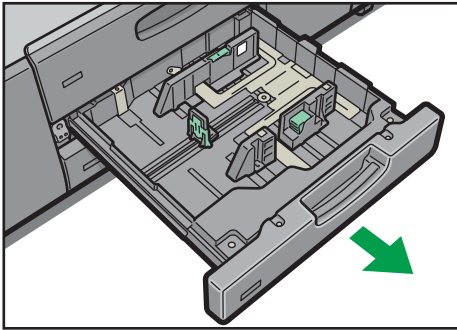
Each paper tray is loaded in the same way.

In the following example procedure, paper is loaded into Tray 2.

**Important**

- Check the paper edges are aligned at the right side.
- If a paper tray is pushed vigorously when putting it back into place, the position of the tray's side fences may slip out of place.

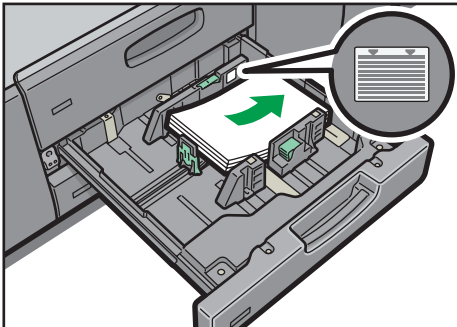
- When loading a low number of sheets, be sure not to squeeze the side fences in too tightly. If the side fences are squeezed too tightly against the paper, the edges may crease, the paper may misfeed, or if it weighs between 52.3–63.0g/m<sup>2</sup> (14.0–16.9 lb. Bond), it may wrinkle.
1. Check that paper in the paper tray is not being used, and then pull the tray carefully out until it stops.



CWW306

2. Square the paper and load it print side down.


Do not stack paper over the limit mark.



CWW307

3. Carefully push the paper tray fully in.

#### ↓ Note

- Various sizes of paper can be loaded in Trays 2 and 3 by adjusting the positions of side fences and end fence. For details, see "Changing the Paper Size in Trays 2 and 3", Paper Specifications and Adding Paper .

## Loading Paper into the Multi Bypass Tray (Tray 7)

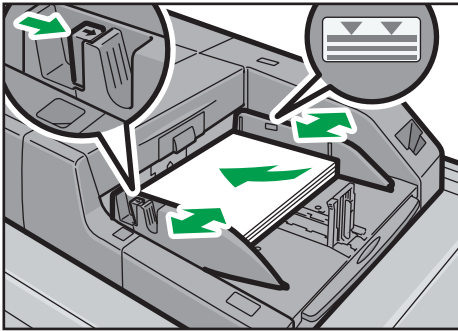
Use the multi bypass tray (Tray 7) to use OHP transparencies, translucent paper, and paper that cannot be loaded in the paper trays.

**★ Important**

- The maximum number of sheets you can load at the same time depends on paper type. Do not stack paper over the limit mark. For the maximum number of sheets you can load, see page 118 "Recommended Paper Sizes and Types".
- Check the paper edges are aligned at the left side.
- When loading a low number of sheets, be sure not to squeeze the side fences in too tightly. If the side fences are squeezed too tightly against the paper, the edges may crease, the paper may misfeed, or if it weighs between 52.3–63.0 g/m<sup>2</sup> (14.0–16.9 lb. Bond), it may wrinkle.

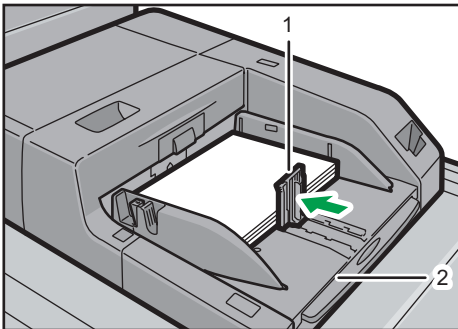
**1. Set the side fences to the paper size, and then square the paper and load it print side up.**

Do not stack paper over the limit mark.



CWW309

**2. Set the end fence.**



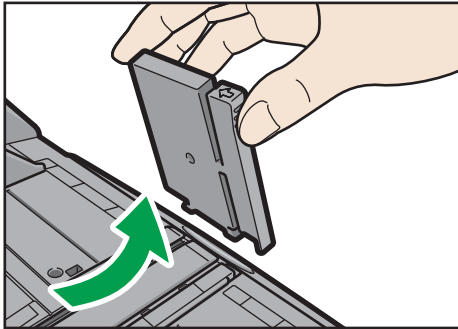
CWW311

**1. End fence**

**2. Extender**

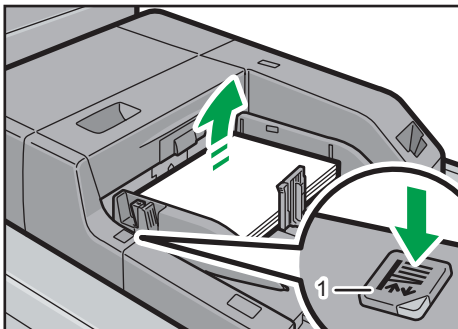
To remove the end fence, slide it to the right by pressing the stopper down.





CWW312

### 3. Press the elevator switch on the multi bypass tray (Tray 7).



CWW313

#### 1. Elevator switch

The lamp of the elevator switch is blinking while the tray is going up, and keeps lit when it stops.

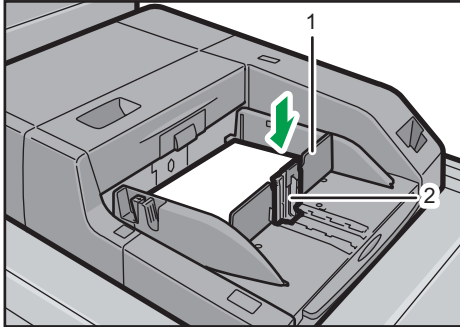
Press the elevator switch to move down the tray if you want to either add paper or remove jammed ones.

#### ↓ Note

- Pull the extender out when loading A4, 8 1/2 × 11 or larger sheets in the multi bypass tray (Tray 7).
- Letterhead paper must be loaded in a specific orientation. For details, see page 114 "Loading Orientation-fixed Paper or Two-sided Paper".
- You can load envelopes into the multi bypass tray (Tray 7). Envelopes must be loaded in a specific orientation. For details, see page 135 "Envelopes".
- Specify the sizes of paper that are not automatically detected. For details about the sizes that can be detected automatically, see page 118 "Recommended Paper Sizes and Types". For details about how to specify sizes, see "Copying from the Multi Bypass Tray (Tray 7)", Copy/ Document Server.
- When copying from the multi bypass tray (Tray 7), see "Copying from the Multi Bypass Tray (Tray 7)", Copy/ Document Server.

## Loading tab stock into the multi bypass tray (Tray 7)

When setting tab stock, always use the tab fence. Tabs must be set at the right side of the multi bypass tray (Tray 7).




CWW308

1. Tab fence
2. End fence

## Loading Paper into the Large Capacity Tray

The LCT is identified as Tray 4, Tray 5, and Tray 6.

 **Region A** (mainly Europe)

Tray 6 can hold A4 paper only. If you want to print on A5, B5 JIS, 8 1/2 × 11, or 5 1/2 × 8 1/2 from Tray 6, contact your service representative.

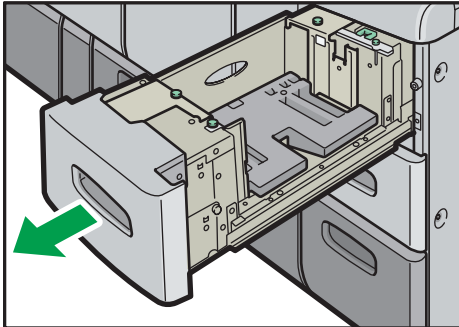
 **Region B** (mainly North America)

Tray 6 can hold 8 1/2 × 11 paper only. If you want to print on A5, B5 JIS, A4, or 5 1/2 × 8 1/2 from Tray 6, contact your service representative.

### **Important**

- Check the paper edges are aligned at the left side.

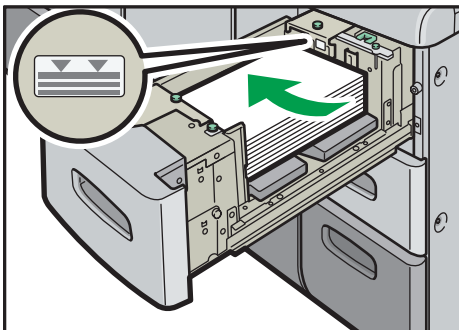
1. Check that paper in the paper tray is not being used, and then pull the tray carefully out until it stops.



CWW315

2. Load paper into the paper tray with print side up.

Do not stack paper over the limit mark.



CWW316

3. Carefully push the paper tray fully in.

#### ↓ Note

- Various sizes of paper can be loaded in Tray 4 and Tray 5 by adjusting the positions of side fence and end fence. For details, see "Changing the Paper Size in the Large Capacity Tray", Paper Specifications and Adding Paper ③.

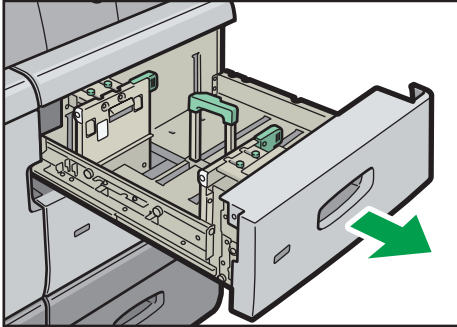
## Loading Paper into the Wide Large Capacity Tray

The Wide LCT is identified as Tray 4, Tray 5, and Tray 6.

#### ★ Important

- Check that the paper edges are aligned with the left side.

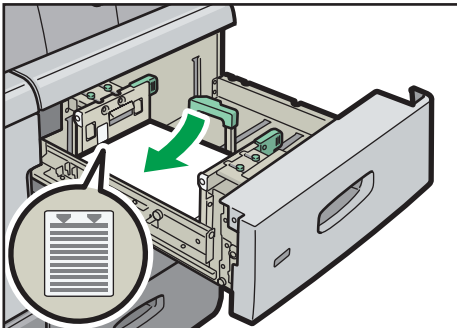
1. Check that paper in the paper tray is not being used, and then pull the tray carefully out until it stops.



CWW319

2. Load paper into the paper tray with print side up.


Do not stack paper over the limit mark.



CWW320

3. Carefully push the paper tray fully in.

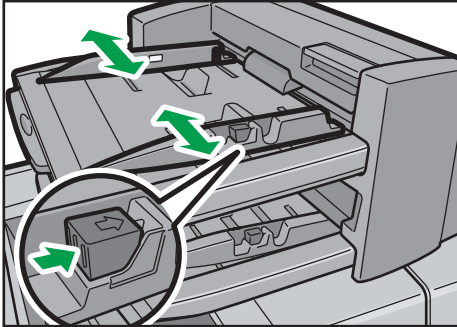
**Note**

- If you select Paper Weight 5 to 7, [Coated: Glossy], [Coated: Matted], or [Label Paper] in [Tray Paper Settings], air is blown out automatically to fan the paper loaded in the wide LCT. Fan this paper before loading it. For details, see page 101 "Fanning the paper".
- Various sizes of paper can be loaded in the wide LCT by adjusting the positions of side fences and end fence. For details, see "Changing the Paper Size in the Wide Large Capacity Tray", Paper Specifications and Adding Paper .
- You can load envelopes in the wide LCT. When loading envelopes, place them in the correct orientation. For details, see page 135 "Envelopes".

## Loading Paper into the Interposer

### ★ Important

- Do not place anything on top of or leave documents on the sensor. This may lead to the paper size not being correctly scanned or paper jams.
- While pressing the release lever, align the side fences with the paper size to be loaded.

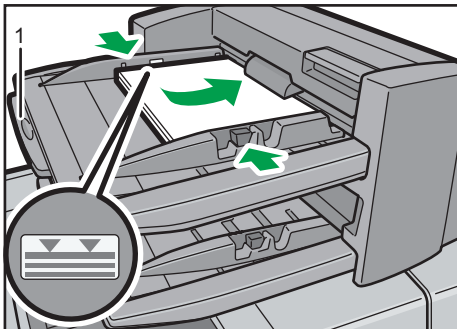


CWW321

- Load paper orderly.

Do not stack paper over the limit mark.


Align the side fences gently against the paper you loaded, if necessary.







CWW322

- Paper extender


### ↓ Note

- Load paper with its printed side up (the front side). If you are using the booklet finisher, load sheets print side down.
- Load paper in the interposer in the same orientation as paper in the paper tray.
- The staple position or punch hole position will be on the left side of the paper, when you are facing the machine.
- When loading paper larger than A4 ( $8\frac{1}{2} \times 11$ ), pull out the paper extender.
- To load the paper in the interposer, align the orientation of originals in the ADF as shown below.

Interposer	ADF
	
	

## Loading Cover Sheets into the Interposer of the Perfect Binder

### ★ Important

- The length/size of cover sheets depends on the thickness of the spine.
- Load paper in the  orientation.
- Do not place anything on top of or leave documents on the sensor. This may lead to the paper size not being correctly detected or paper jams.

### Estimating the thickness of the spine

This section explains how to calculate the approximate spine thickness and the cover sheet length and size.

Note that the length and size of a cover sheet depends on the thickness of the book block spine.

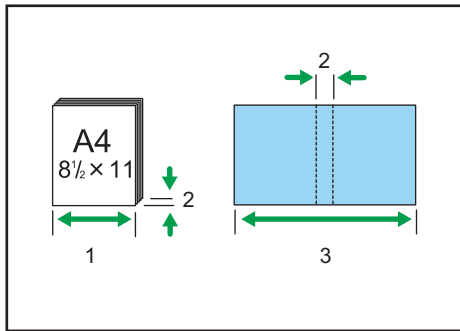
The following list shows examples for A4 or  $8\frac{1}{2} \times 11$  size, 80.0 g/m<sup>2</sup> (20.0 lb. Bond) paper:

- 10-sheet book block: 1 mm (0.04 inches)
- 30-sheet book block: 3 mm (0.12 inches)
- 50-sheet book block: 5 mm (0.20 inches)
- 80-sheet book block: 8 mm (0.32 inches)
- 100-sheet book block: 10 mm (0.40 inches)
- 200-sheet book block: 20 mm (0.80 inches)

Specify the cover sheet size based on the thickness of the book block spine. Use the following equation to calculate the length of the cover sheet:

Minimum length of cover sheet (mm/inch) = "length of book block sheet (mm/inch)" × 2 + "thickness of spine (mm/inch)"

To perfect bind a booklet with the following dimensions, specify a cover sheet length of at least 440 mm (17.4 inches):












CJWW369

1. Length of book block sheet
2. Thickness of spine
3. Length of cover sheet

### Orientation and binding position of covers and originals

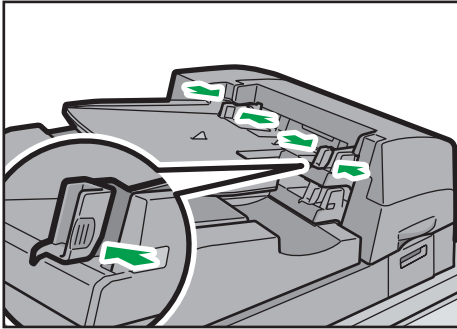
This section explains the orientation and binding positions of covers and originals.

Place covers and originals in the orientation in which they are read.

	Placing the cover in the interposer	Placing the book block sheet in the ADF	Binding position
Left binding			
Top binding *1			
Right binding			

\*1 Select  (unreadable orientation) in Original Orientation, and then select top binding.

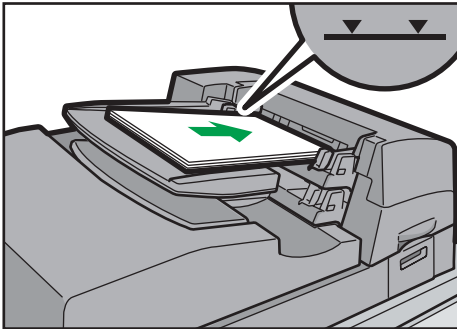
1. While lightly pinching the side fence, align it with the paper size to be loaded.



CWW323

2. Load paper face up and neatly stacked.

Do not stack paper over the limit mark.



CWW324

**Note**

- You cannot perfect bind a booklet if the thickness of the book block's spine exceeds 23 mm (0.9 inches).
- Depending on your machine, the procedure for selecting the orientation of covers and originals for the printer function might be slightly different. For details, refer to the procedure for your machine.
- When loading thick paper of 251.0 g/m<sup>2</sup> (138.8 lb. Index) or heavier in the interposer trays of the perfect binder, make sure the grain of the paper is perpendicular to the feed direction.
- If you are loading sheets that are likely to stick together (such as sheets of coated paper), be sure to fan them thoroughly before loading. Fanning them will help prevent jams and allow them to be fed in one sheet at a time.
- The perfect binding process may scratch glossy paper.

## Loading Orientation-fixed Paper or Two-sided Paper

Orientation-fixed (top to bottom) or two-sided paper (for example, letterhead paper, punched paper, or copied paper) might not be printed correctly, depending on how the originals and paper are placed.





## Settings for the User Tools

- Copier mode

Specify [Yes] for [Letterhead Setting] in [Input / Output] under the Copier / Document Server Features menu, and then place the original and paper as shown below.



- Printer mode

Specify [Auto Detect] or [On (Always)] for [Letterhead Setting] in [System] under the Printer Features menu, and then place the paper as shown below.



For details about the letterhead settings, see "Input / Output", Copy/ Document Server , or "System", Print .




## Original orientation and paper orientation

The meanings of the icons are as follows:















Icon	Meaning
	Place or load paper scanned or printed side face up.
	Place or load paper scanned or printed side face down.

- Original orientation








Original orientation	Exposure glass	ADF
Readable orientation		








Original orientation	Exposure glass	ADF
Unreadable orientation	<ul style="list-style-type: none"> <li>• Copy </li> <li>• Scanner </li> </ul>	

- Paper orientation
  - Copier mode

Copy side	Tray 1	Trays 2–3	LCT	Multi bypass tray (Tray 7) or wide LCT
One-sided		 	 	 
Two-sided		 	 	 

- Printer mode

Print side	Tray 1	Trays 2–3	LCT	Multi bypass tray (Tray 7) or wide LCT
One-sided		 	 	 

Print side	Tray 1	Trays 2–3	LCT	Multi bypass tray (Tray 7) or wide LCT
Two-sided		 	 	 

**Note**

- In copier mode:
  - For details about how to make two-sided copies, see page 53 "Duplex Copying".
- In printer mode:
  - To print on letterhead paper when [Auto Detect] is specified for [Letterhead Setting], you must specify [Letterhead] as the paper type in the printer driver's settings.
  - If a print job is changed partway through printing from one-sided to two-sided printing, one-sided output after the first copy may be printed facing a different direction. To ensure all paper is output facing the same direction, specify different input trays for one-sided and two-sided printing. Note also that two-sided printing must be disabled for the tray specified for one-sided printing.
  - For details about how to make two-sided prints, see page 72 "Printing on Both Sides of Sheets".

# Recommended Paper









## Recommended Paper Sizes and Types

This section describes recommended paper sizes and types.

### ★ Important



- If you use paper that curls, either because it is too dry or too damp, a staple clogging or paper jam may occur.
- Do not use paper designed for inkjet printers, as these may stick to the fusing unit and cause a misfeed.
- When you load OHP transparencies, check the front and back of the sheets, and place them correctly, or a misfeed might occur.

### Tray 1

Paper type and weight	Paper size	Paper capacity
52.3–256.0g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	 Region <b>A</b> A4   Region <b>B</b> 8 1/2 × 11 	1,000 sheets × 2
52.3–256.0g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	*1  Region <b>A</b> 8 1/2 × 11   Region <b>B</b> A4 	1,000 sheets × 2



\*1 To load paper any of the sizes specified above, contact your service representative.





## Trays 2 and 3



Paper type and weight	Paper size	Paper capacity
52.3–256.0g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Paper sizes that can be detected automatically: A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8½ × 14, 8½ × 13, 8½ × 11, 8¼ × 13, 8 × 13, 7¼ × 10½, 5½ × 8½, 8K, 16K, 12 × 18	500 sheets
52.3–256.0g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Select the paper size using the Tray Paper Settings menu: 8¼ × 14, 8 × 10, 11 × 15, 11 × 14, 10 × 15, 10 × 14, 13 × 18, SRA3, SRA4, 226 × 310 mm, 310 × 432 mm	500 sheets
52.3–256.0g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Custom size:  Region A Vertical: 139.7–330.2 mm Horizontal: 139.7–457.2 mm  Region B Vertical: 5.50–13.00 inches Horizontal: 5.50–18.00 inches	500 sheets
Translucent paper	A3, A4, B4 JIS, B5 JIS	*1
OHP transparencies	A4	*1

\*1 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.

**Multi bypass tray (Tray 7)**

Paper type and weight	Paper size	Paper capacity
52.3–216.0 g/m <sup>2</sup> (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	Paper sizes that can be detected automatically:  <b>Region A</b> A3, A4, A5, A6, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 11, 8 × 13, 5 1/2 × 8 1/2, 12 × 18  <b>Region B</b> A3, A4, A5, A6, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 11, 8 × 13, 5 1/2 × 8 1/2, 12 × 18	500 sheets

Paper type and weight	Paper size	Paper capacity
52.3–216.0 g/m <sup>2</sup> (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	<p>*1</p> <p> <b>Region A</b></p> <p>B5 JIS<sup>□</sup>, B6 JIS<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 14<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 13<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 11<sup>□</sup>, 8<sup>1</sup>/<sub>4</sub> × 14<sup>□</sup>, 8<sup>1</sup>/<sub>4</sub> × 13<sup>□</sup>, 8 × 10<sup>□</sup>, 7<sup>1</sup>/<sub>4</sub> × 10<sup>1</sup>/<sub>2</sub><sup>□</sup>, 5<sup>1</sup>/<sub>2</sub> × 8<sup>1</sup>/<sub>2</sub><sup>□</sup>, 8K<sup>□</sup>, 16K<sup>□</sup>, 11 × 15<sup>□</sup>, 11 × 14<sup>□</sup>,</p> <p>10 × 15<sup>□</sup>, 10 × 14<sup>□</sup>, 13 × 19<sup>1</sup>/<sub>5</sub><sup>□*2</sup>, 13 × 19<sup>□*2</sup>, 12<sup>3</sup>/<sub>5</sub> × 19<sup>1</sup>/<sub>5</sub><sup>□*2</sup>, 12<sup>3</sup>/<sub>5</sub> × 18<sup>1</sup>/<sub>2</sub><sup>□*2</sup>, 13 × 18<sup>□*2</sup>, SRA3<sup>□*2</sup>, SRA4<sup>□*2</sup>, SRA4<sup>□</sup>, 226 × 310 mm<sup>□*2</sup>, 226 × 310 mm<sup>□</sup>, 310 × 432 mm<sup>□*2</sup></p> <p> <b>Region B</b></p> <p>A4<sup>□</sup>, A5<sup>□</sup>, B5 JIS<sup>□</sup>, B6 JIS<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 14<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 13<sup>□</sup>, 8<sup>1</sup>/<sub>4</sub> × 14<sup>□</sup>, 8<sup>1</sup>/<sub>4</sub> × 13<sup>□</sup>, 8 × 10<sup>□</sup>, 7<sup>1</sup>/<sub>4</sub> × 10<sup>1</sup>/<sub>2</sub><sup>□</sup>, 8K<sup>□</sup>, 16K<sup>□</sup>, 11 × 15<sup>□</sup>, 11 × 14<sup>□</sup>, 10 × 15<sup>□</sup>,</p> <p>10 × 14<sup>□</sup>, 13 × 19<sup>1</sup>/<sub>5</sub><sup>□*2</sup>, 13 × 19<sup>□*2</sup>, 12<sup>3</sup>/<sub>5</sub> × 19<sup>1</sup>/<sub>5</sub><sup>□*2</sup>, 12<sup>3</sup>/<sub>5</sub> × 18<sup>1</sup>/<sub>2</sub><sup>□*2</sup>, 13 × 18<sup>□*2</sup>, SRA3<sup>□*2</sup>, SRA4<sup>□*2</sup>, SRA4<sup>□</sup>, 226 × 310 mm<sup>□*2</sup>, 226 × 310 mm<sup>□</sup>, 310 × 432 mm<sup>□*2</sup></p>	500 sheets
52.3–216.0 g/m <sup>2</sup> (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	<p>Custom size: *3</p> <p> <b>Region A</b></p> <p>Vertical: 100.0–330.2 mm *4 Horizontal: 139.7–487.7 mm</p> <p> <b>Region B</b></p> <p>Vertical: 3.94–13.00 inches *4 Horizontal: 5.50–19.20 inches</p>	500 sheets

Paper type and weight	Paper size	Paper capacity
Translucent paper	A3, A4, B4 JIS, B5 JIS	*5
OHP transparencies	A4, 8 1/2 × 11	*5
Tab stock*6	A4, 8 1/2 × 14, 8 1/2 × 11	*5
Envelopes	 <b>Region A</b> Vertical: 100.0–330.2 mm*4 Horizontal: 139.7–487.7 mm  <b>Region B</b> Vertical: 3.94–13.00 inches*4 Horizontal: 5.50–19.20 inches	10 sheets

- \*1 Select the paper size. For details, see "Changing Tray Paper Settings", Paper Settings.
- \*2 The paper sizes specified above cannot be used if the LCT is installed.
- \*3 Enter the paper size. For details, see "Changing Tray Paper Settings", Paper Settings.
- \*4 When the LCT is installed, the maximum custom width is 305.0 mm (12.1 inches). When the wide LCT is installed, the maximum custom width is 330.2 mm (13.1 inches).
- \*5 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.
- \*6 The tab fence is required.





















**LCT (Trays 4 and 5)**

Paper type and weight	Paper size	Paper capacity
52.3–216.0 g/m <sup>2</sup> (14.0 lb. Bond–79.9 lb. Cover) Paper Weight 1–Paper Weight 5	Select the paper size using the paper size selector: A4, A5, B5 JIS, 8 1/2 × 11, 5 1/2 × 8 1/2	1,000 sheets
Translucent paper	A4, B5 JIS	*1
Label paper*2	A4, 8 1/2 × 11	*1
OHP transparencies	A4, 8 1/2 × 11	*1
Tab stock*3	A4, 8 1/2 × 11	*1





- \*1 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.
- \*2 You can load paper into Tray 5 only.
- \*3 The tab sheet holder is required.





**LCT (Tray 6)**



Paper type and weight	Paper size	Paper capacity
52.3–163.0 g/m <sup>2</sup> (14.0 lb. Bond–60.0 lb. Cover) Paper Weight 1–Paper Weight 4	 <b>Region A</b> A4   <b>Region B</b> 8 1/2 × 11 	2,550 sheets
52.3–163.0 g/m <sup>2</sup> (14.0 lb. Bond–60.0 lb. Cover) Paper Weight 1–Paper Weight 4	*1  <b>Region A</b> A5  , B5 JIS  , 8 1/2 × 11  , 5 1/2 × 8 1/2    <b>Region B</b> A4  , A5  , B5 JIS  , 5 1/2 × 8 1/2  	2,550 sheets
Translucent paper	A4  , B5 JIS 	*2
OHP transparencies	A4  , 8 1/2 × 11 	*2

- \*1 To load paper any of the sizes specified above, contact your service representative.
- \*2 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.

**Wide LCT (Trays 4 and 6)**



Paper type and weight	Paper size	Paper capacity
52.3–256.0 g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Paper sizes that can be detected automatically:  <b>Region A</b> A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8 <sup>1</sup> / <sub>2</sub> × 11, 8 × 13, 5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> , 12 × 18  <b>Region B</b> A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8 <sup>1</sup> / <sub>2</sub> × 11, 8 × 13, 5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> , 12 × 18	1,000 sheets


Paper type and weight	Paper size	Paper capacity
52.3–256.0 g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Select the paper size using the Tray Paper Settings menu:  <b>Region A</b> A6 <sup>*</sup> , B5 JIS <sup>*</sup> , B6 JIS <sup>*</sup> , 8 <sup>1</sup> / <sub>2</sub> × 14 <sup>*</sup> , 8 <sup>1</sup> / <sub>2</sub> × 13 <sup>*</sup> , 8 <sup>1</sup> / <sub>2</sub> × 11 <sup>*</sup> , 8 <sup>1</sup> / <sub>4</sub> × 14 <sup>*</sup> , 8 <sup>1</sup> / <sub>4</sub> × 13 <sup>*</sup> , 8 × 10 <sup>*</sup> , 7 <sup>1</sup> / <sub>4</sub> × 10 <sup>1</sup> / <sub>2</sub> <sup>*</sup> , 5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> <sup>*</sup> , 8K <sup>*</sup> , 16K <sup>*</sup> , 11 × 15 <sup>*</sup> , 11 × 14 <sup>*</sup> , 10 × 15 <sup>*</sup> , 10 × 14 <sup>*</sup> , 13 × 19 <sup>1</sup> / <sub>5</sub> <sup>*</sup> , 13 × 19 <sup>*</sup> , 12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> <sup>*</sup> , 12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> <sup>*</sup> , 13 × 18 <sup>*</sup> , SRA3 <sup>*</sup> , SRA4 <sup>*</sup> , 226 × 310 mm <sup>*</sup> , 310 × 432 mm <sup>*</sup>  <b>Region B</b> A4 <sup>*</sup> , A5 <sup>*</sup> , A6 <sup>*</sup> , B5 JIS <sup>*</sup> , B6 JIS <sup>*</sup> , 8 <sup>1</sup> / <sub>2</sub> × 14 <sup>*</sup> , 8 <sup>1</sup> / <sub>2</sub> × 13 <sup>*</sup> , 8 <sup>1</sup> / <sub>4</sub> × 14 <sup>*</sup> , 8 <sup>1</sup> / <sub>4</sub> × 13 <sup>*</sup> , 8 × 10 <sup>*</sup> , 7 <sup>1</sup> / <sub>4</sub> × 10 <sup>1</sup> / <sub>2</sub> <sup>*</sup> , 8K <sup>*</sup> , 16K <sup>*</sup> , 11 × 15 <sup>*</sup> , 11 × 14 <sup>*</sup> , 10 × 15 <sup>*</sup> , 10 × 14 <sup>*</sup> , 13 × 19 <sup>1</sup> / <sub>5</sub> <sup>*</sup> , 13 × 19 <sup>*</sup> , 12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> <sup>*</sup> , 12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> <sup>*</sup> , 13 × 18 <sup>*</sup> , SRA3 <sup>*</sup> , SRA4 <sup>*</sup> , 226 × 310 mm <sup>*</sup> , 310 × 432 mm <sup>*</sup>	1,000 sheets
52.3–256.0 g/m <sup>2</sup> (14.0 lb. Bond–141.0 lb. Index) Paper Weight 1–Paper Weight 6	Custom size:  <b>Region A</b> Vertical: 100.0–330.2 mm <sup>*1</sup> Horizontal: 139.7–487.7 mm  <b>Region B</b> Vertical: 3.94–13.00 inches <sup>*1</sup> Horizontal: 5.50–19.20 inches	1,000 sheets
Translucent paper	A3 <sup>*</sup> , A4 <sup>*</sup> , B5 JIS <sup>*</sup>	<sup>*2</sup>



Paper type and weight	Paper size	Paper capacity
OHP transparencies	A4, 8 1/2 × 11	*2
Tab stock*3	A4, 8 1/2 × 11	*2
Envelopes	<p> <b>Region A</b></p> <p>Vertical: 100.0–330.2 mm *1 Horizontal: 139.7–487.7 mm</p> <p> <b>Region B</b></p> <p>Vertical: 3.94–13.00 inches *1 Horizontal: 5.50–19.20 inches</p>	10 sheets

- \*1 The postcard side fences are required to load paper that is between 100.0 and 139.2 mm (3.94 and 5.49 inches).
- \*2 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.
- \*3 The tab fence is required.

**Wide LCT (Tray 5)**



Paper type and weight	Paper size	Paper capacity
<p>40.0–300.0 g/m<sup>2</sup> (10.7 lb. Bond–165.0 lb. Index)</p> <p>Paper Weight 0–Paper Weight 7</p>	<p>Paper sizes that can be detected automatically:</p> <p> <b>Region A</b></p> <p>A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 11, 8 × 13, 5 1/2 × 8 1/2, 12 × 18</p> <p> <b>Region B</b></p> <p>A3, A4, A5, B4 JIS, B5 JIS, 11 × 17, 8 1/2 × 11, 8 × 13, 5 1/2 × 8 1/2, 12 × 18</p>	2,000 sheets





Paper type and weight	Paper size	Paper capacity
<p>40.0–300.0 g/m<sup>2</sup> (10.7 lb. Bond–165.0 lb. Index)</p> <p>Paper Weight 0–Paper Weight 7</p>	<p>Select the paper size using the Tray Paper Settings menu:</p> <p> <b>Region A</b></p> <p>A6<sup>*</sup>, B5 JIS, B6 JIS<sup>*</sup>,  8 1/2 × 14, 8 1/2 × 13,  8 1/2 × 11, 8 1/4 × 14,  8 1/4 × 13, 8 × 10, 7 1/4  × 10 1/2, 5 1/2 × 8 1/2,  8K, 16K,</p> <p>11 × 15, 11 × 14, 10 ×  15, 10 × 14, 13 ×  19 1/5, 13 × 19, 12 3/5  × 19 1/5, 12 3/5 × 18 1/2  , 13 × 18, SRA3,  SRA4, 226 × 310 mm  , 310 × 432 mm</p> <p> <b>Region B</b></p> <p>A4, A5, A6<sup>*</sup>, B5 JIS  , B6 JIS<sup>*</sup>, 8 1/2 × 14,  8 1/2 × 13, 8 1/4 × 14,  8 1/4 × 13, 8 × 10, 7 1/4  × 10 1/2, 8K, 16K,  11 × 15, 11 × 14, 10 ×  15, 10 × 14, 13 ×  19 1/5, 13 × 19, 12 3/5  × 19 1/5, 12 3/5 × 18 1/2  , 13 × 18, SRA3,  SRA4, 226 × 310 mm  , 310 × 432 mm</p>	<p>2,000 sheets</p>

Paper type and weight	Paper size	Paper capacity
40.0–300.0 g/m <sup>2</sup> (10.7 lb. Bond–165.0 lb. Index) Paper Weight 0–Paper Weight 7	Custom size:  <b>Region A</b> Vertical: 100.0–330.2 mm <sup>*1</sup> Horizontal: 139.7–487.7 mm  <b>Region B</b> Vertical: 3.94–13.00 inches <sup>*1</sup> Horizontal: 5.50–19.20 inches	2,000 sheets
Translucent paper	A3  , A4  , B5 JIS 	*2
OHP transparencies	A4  , 8 1/2 × 11 	*2
Tab stock <sup>*3</sup>	A4  , 8 1/2 × 11 	*2
Label paper	A4  , 8 1/2 × 11 	*2
Envelopes	 <b>Region A</b> Vertical: 100.0–330.2 mm <sup>*1</sup> Horizontal: 139.7–487.7 mm  <b>Region B</b> Vertical: 3.94–13.00 inches <sup>*1</sup> Horizontal: 5.50–19.20 inches	10 sheets

- \*1 The postcard side fences are required to load paper that is between 100.0 and 139.2 mm (3.94 and 5.49 inches).
- \*2 Do not stack paper over the limit mark. The maximum number of sheets you can set at once depends on the paper's thickness and condition.
- \*3 The tab fence is required.







## Interposer

Paper type and weight	Paper size	Paper capacity
<p>64.0–216.0 g/m<sup>2</sup> (17.1 lb. Bond–79.9 lb. Cover)</p> <p>Paper Weight 2–Paper Weight 5</p>	<p>Paper sizes that can be detected automatically:</p> <p> <b>Region A</b></p> <p>A3☐, A4☐☐, A5☐☐, B4 JIS☐, B5 JIS☐, 11 × 17☐, 8<sup>1</sup>/<sub>2</sub> × 11☐, 8 × 13☐, 5<sup>1</sup>/<sub>2</sub> × 8<sup>1</sup>/<sub>2</sub>☐, 12 × 18☐</p> <p> <b>Region B</b></p> <p>A3☐, A4☐, A5☐, B4 JIS☐, B5 JIS☐, 11 × 17☐, 8<sup>1</sup>/<sub>2</sub> × 11☐☐, 8 × 13☐, 5<sup>1</sup>/<sub>2</sub> × 8<sup>1</sup>/<sub>2</sub>☐☐, 12 × 18☐</p>	<p>220 sheets × 2</p>

Paper type and weight	Paper size	Paper capacity
<p>64.0–216.0 g/m<sup>2</sup> (17.1 lb. Bond–79.9 lb. Cover)</p> <p>Paper Weight 2–Paper Weight 5</p>	<p>Select the paper size using the Tray Paper Settings menu:</p> <p> <b>Region A</b></p> <p>B5 JIS, 8 1/2 × 14, 8 1/2 × 13, 8 1/2 × 11, 8 1/4 × 14, 8 1/4 × 13, 8 × 10, 7 1/4 × 10 1/2, 5 1/2 × 8 1/2, 8K, 16K,</p> <p>11 × 15, 11 × 14, 10 × 15, 10 × 14, 13 × 19 1/5, 13 × 19, 12 3/5 × 19 1/5, 12 3/5 × 18 1/2, 13 × 18, SRA3, SRA4, 226 × 310 mm, 310 × 432 mm</p> <p> <b>Region B</b></p> <p>A4, A5, B5 JIS, 8 1/2 × 14, 8 1/2 × 13, 8 1/4 × 14, 8 1/4 × 13, 8 × 10, 7 1/4 × 10 1/2, 8K, 16K, 11 × 15,</p> <p>11 × 14, 10 × 15, 10 × 14, 13 × 19 1/5, 13 × 19, 12 3/5 × 19 1/5, 12 3/5 × 18 1/2, 13 × 18, SRA3, SRA4, 226 × 310 mm, 310 × 432 mm</p>	<p>220 sheets × 2</p>
<p>64.0–216.0 g/m<sup>2</sup> (17.1 lb. Bond–79.9 lb. Cover)</p> <p>Paper Weight 2–Paper Weight 5</p>	<p>Custom size:</p> <p> <b>Region A</b></p> <p>Vertical: 139.7–330.2 mm</p> <p>Horizontal: 139.7–487.7 mm</p> <p> <b>Region B</b></p> <p>Vertical: 5.50–13.00 inches</p> <p>Horizontal: 5.50–19.20 inches</p>	<p>220 sheets × 2</p>



## Interposer of the perfect binder

Paper type and weight	Paper size	Paper capacity
90.0–300.0 g/m <sup>2</sup> (24.1 lb. Bond–165.0 lb. Index) Paper Weight 3–Paper Weight 7	Paper sizes that can be detected automatically:  <b>Region A</b> A3□, 8K□, 13 × 19□  <b>Region B</b> 11 × 17□, 12 × 18□, 13 × 19□	200 sheets (or up to 24 mm in height) × 2
90.0–300.0 g/m <sup>2</sup> (24.1 lb. Bond–165.0 lb. Index) Paper Weight 3–Paper Weight 7	Select the paper size using the Tray Paper Settings menu:  <b>Region A</b> B4 JIS□, 11 × 17□, 12 × 18□, 11 × 15□, 13 × 19 <sup>1</sup> / <sub>5</sub> □, 12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> □, 12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> □, 13 × 18□, SRA3□, 310 × 432 mm□  <b>Region B</b> A3□, B4 JIS□, 8K□, 11 × 15□, 13 × 19 <sup>1</sup> / <sub>5</sub> □, 12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> □, 12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> □, 13 × 18□, SRA3□, 310 × 432 mm□	200 sheets (or up to 24 mm in height) × 2
90.0–300.0 g/m <sup>2</sup> (24.1 lb. Bond–165.0 lb. Index) Paper Weight 3–Paper Weight 7	Custom size:  <b>Region A</b> Vertical: 257.0–330.2 mm Horizontal: 364.0–487.7 mm  <b>Region B</b> Vertical: 10.12–13.00 inches Horizontal: 14.34–19.20 inches	200 sheets (or up to 24 mm in height) × 2

## Paper thickness


Paper thickness *1	Metric	Bond paper	Cover paper	Index paper
Paper Weight 0*2	40.0–52.2 g/m <sup>2</sup>	10.7–13.9 lb. Bond	14.8–18.9 lb. Cover	22.1–28.9 lb. Index
Paper Weight 1*2	52.3–63.0 g/m <sup>2</sup>	14.0–16.9 lb. Bond	19.0–23.0 lb. Cover	29.0–34.9 lb. Index
Paper Weight 2	63.1–80.0 g/m <sup>2</sup>	17.0–21.0 lb. Bond	23.1–29.9 lb. Cover	35.0–44.0 lb. Index
Paper Weight 3	80.1–105.0 g/m <sup>2</sup>	21.1–28.0 lb. Bond	30.0–38.9 lb. Cover	44.1–58.0 lb. Index
Paper Weight 4	105.1–163.0 g/m <sup>2</sup>	28.1–43.0 lb. Bond	39.0–60.0 lb. Cover	58.1–90.0 lb. Index
Paper Weight 5	163.1–220.0 g/m <sup>2</sup>	43.1–58.9 lb. Bond	60.1–80.9 lb. Cover	90.1–121.0 lb. Index
Paper Weight 6	220.1–256.0 g/m <sup>2</sup>	59.0–68.0 lb. Bond	81.0–94.0 lb. Cover	121.1–141.0 lb. Index
Paper Weight 7	256.1–300.0 g/m <sup>2</sup>	68.1–80.0 lb. Bond	94.1–110.0 lb. Cover	141.1–165.0 lb. Index







\*1 Print quality will decrease if the paper you are using is close to the minimum or maximum weight. Change the paper weight setting to thinner or thicker.



\*2 When loading paper of 40.0–63.0 g/m<sup>2</sup> (10.7–16.9 lb. Bond), the edges may crease or the paper misfeed depending on the paper type.

### Note

- Certain types of paper, such as translucent paper or OHP transparencies, may produce noise when delivered. This noise does not indicate a problem and print quality is unaffected.
- The paper capacity described in the tables above is an example. Actual paper capacity might be lower, depending on the paper type.
- When loading paper, make sure the stack height does not exceed the limit mark of the paper tray.
- If multiple sheet feeding occurs, fan sheets thoroughly or load sheets one by one from the multi bypass tray (Tray 7).
- You can specify whether or not the machine auto detects multi-sheet feeds in paper from every tray. In the Adjustment Settings for Operators menu, you can also specify whether current jobs are suspended or continued when a multi-sheet feed is detected. However, depending on the condition

of the paper, the machine may not detect a multi-sheet feed correctly. For details about Adjustment Settings for Operators, see "Adjustment Settings for Operators", Paper Settings .

- Flatten out curled sheets before loading them.
- The Adjust Paper Curl function might not be able to fully remove curl, depending on the type of paper and the direction of its grain. If long grain paper does not uncurl properly, try short grain paper instead. For details about the Adjust Paper Curl function, see "Adjustment Settings for Operators", Paper Settings .
- Depending on the paper's size, weight, and type, the copy/print speed may be slower than usual.
- When loading thick paper of 163.1–300.0 g/m<sup>2</sup> (60.1 lb. Cover–165.0 lb. Index), see page 134 "Thick paper".
- When loading envelopes, see page 135 "Envelopes".
- When copying or printing onto letterhead paper, the paper placing orientation is different depending on which function you are using. For details, see page 114 "Loading Orientation-fixed Paper or Two-sided Paper".
- If you load paper of the same size and same type in two or more trays, the machine automatically feeds from one of the trays in which [Yes] is selected for [Apply Auto Paper Select] when the first tray in use runs out of paper. This function is called Auto Tray Switching. This saves interrupting a copy run to replenish paper when making a large number of copies. You can specify the paper type of the paper trays under [Paper Type] tab. For details, see "Tray Paper Settings", Paper Settings . For the setting procedure of the Auto Tray Switching function, see "General Features", Copy/ Document Server .
- When loading label paper:
  - We recommend that you use specified label paper.
  - It is recommended to load the paper in  orientation.
  - Select [Label Paper] for [Paper Type] in [Tray Paper Settings], and select an appropriate paper thickness under [Paper Weight].
- When loading OHP transparencies:
  - We recommend that you use specified OHP transparencies.
  - It is recommended to place one sheet at a time.
  - When copying onto OHP transparencies, see "Copying onto OHP Transparencies", Copy/ Document Server .
  - Fan OHP transparencies thoroughly whenever you use them. This prevents OHP transparencies from sticking together, and from feeding incorrectly.
  - Remove copied or printed sheets one by one.
  - It is recommended to load the paper in  orientation.
- When loading translucent paper:
  - It is recommended to place one sheet at a time.

- When loading translucent paper, always use long grain paper, and set the paper direction according to the grain.
- Translucent paper easily absorbs humidity and becomes curled. Remove curl in the translucent paper before loading. For details about settings for flattening out curled paper, see "Adjustment Settings for Operators", Paper Settings .
- Remove copied or printed sheets one by one.
- When loading coated paper:
  - If you want to use glossy paper, select [Coated: Glossy] for [Paper Type]. If you want to use matted paper (including silk, dull, and satin paper), select [Coated: Matted] for [Paper Type]. For details about the settings for using coated paper with custom paper, see "Registering a Custom Paper", Paper Settings .
  - When loading coated paper or glossy paper, always fan the paper before using it.
  - If a paper jam occurs or if the machine makes a strange noise when feeding stacks of coated paper, feed the coated paper one sheet at a time.
  - Before you print on coated paper or NCR paper from the Wide LCT for the first time, contact your service representative.
  - To load coated paper into the wide LCT, you must specify [Coated: Glossy] or [Coated: Matted] as the paper type and select an appropriate paper thickness under [Paper Weight].

## Thick paper

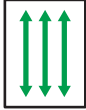
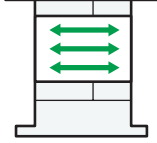
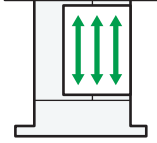

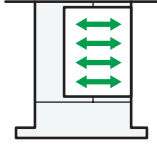
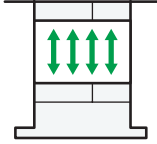
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### 8


This section gives you various details about and recommendations concerning thick paper.

When loading thick paper of 163.1 g/m<sup>2</sup> (60.1 lb. Cover) or heavier in Trays 1–3, the wide LCT, multi bypass tray (Tray 7), or Trays 4 and 5 of the LCT, follow the recommendations below to prevent misfeeds and loss of image quality.

- When loading thick paper into Trays 1–3, be sure to load at least 20 sheets. Also, be sure to position the side fences flush against the paper stack.
- Jams and misfeeds can occur when printing on thick smooth paper. To prevent such problems, be sure to fan smooth paper thoroughly before loading them. If paper continues to become jammed or feed in together even after they are fanned, load them one by one from the multi bypass tray (Tray 7).
- When loading thick paper, set the paper direction according to its grain, as shown in the following diagram. Not doing so might cause a paper jam, marked edges or the paper edges to be folded. Using paper that is 209.0 g/m<sup>2</sup> (77.4 lb. Cover) or heavier may also cause a paper jam.

Direction of paper grain	Paper 64.0 g/m <sup>2</sup> (17.1 lb. Bond) or less	Paper heavier than 64.0 g/m <sup>2</sup> (17.1 lb. Bond)
		
		

### ↓ Note

- Select [Paper Weight 5], [Paper Weight 6], or [Paper Weight 7] as the paper thickness for the tray in [Tray Paper Settings].
- Even if thick paper is loaded as described above, normal operations and print quality might still not be possible, depending on the paper type.
- Prints might have prominent vertical creases.
- Prints might be noticeably curled. Flatten out prints if they are creased or curled. For details about settings for flattening out curled paper, see "Adjustment Settings for Operators", Paper Settings .


## Envelopes

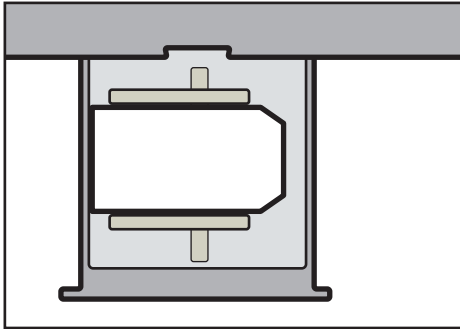
This section describes loading envelopes.

### ★ Important



- **Misfeeds might occur depending on the length and shape of the flaps.**
- **Only envelopes that are at least 139.7 mm (5.5 inches) wide can be loaded.**

To print on envelopes, load them into the Wide LCT or multi bypass tray (Tray 7), and be sure to specify an appropriate paper type.

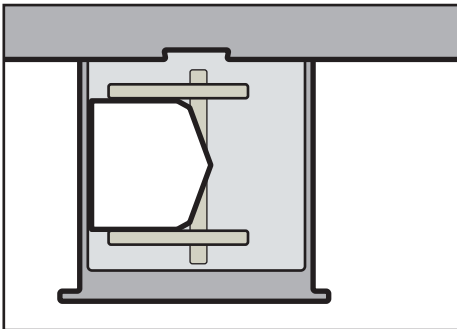
To load envelopes, be sure to unfold their flaps and set them in the  orientation with print side face up.



CDL070

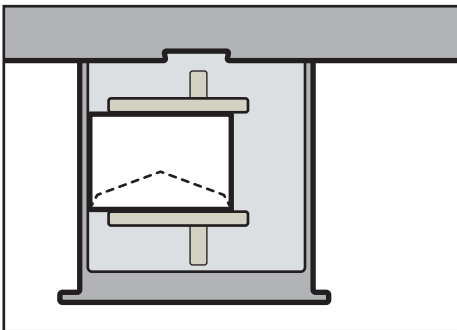
If you are copying onto side-opening envelopes in the  orientation, flaps must be at the right side of the wide LCT or multi bypass tray (Tray 7). If you are copying in the  orientation, flaps must be at the bottom side of the wide LCT or multi bypass tray (Tray 7). Be sure to load the envelopes with print side face up.

- Loading envelopes in the  orientation



CDL081

- Loading envelopes in the  orientation



CWW373



### Recommended envelopes

For information about recommended envelopes, contact your local dealer.

## Storage of envelopes

Keep envelopes stored in sealed plastic bags and remove only the quantity needed. Do not add envelopes during printing, as this might cause misfeeds.

### Note

- Be sure to specify the size of the envelope and flap size in [Tray Paper Settings]. For details, see "Changing to a Custom Paper Size", Paper Specifications and Adding Paper .
- When using envelopes, set [Paper Weight] in [Tray Paper Settings] to the same value as two sheets of the paper used for the envelopes.
- Before loading envelopes, press down on them to remove any air inside and to flatten any edges or creases. When loading envelopes, make sure they do not go over the limit mark.
- Place one envelope at a time if you still get any of the following results:
  - The envelope jams
  - The envelope is not fed
  - Multiple envelopes are fed at the same time
- Humidity levels of over 50% can cause envelopes to come out creased or misprinted.
- Certain types of envelopes might come out creased, dirtied, or misprinted. If you are printing a solid color or image on an envelope, lines may appear where the overlapped edges of the envelope make it thicker.
- If the horizontal size of the envelope is 297 mm (11.7 inches) or less, a paper misfeed might occur. If this happens, turn off Skew Detection. For details, see "Adjustment Settings for Operators", Paper Settings .
- When printing on envelopes thicker than 127.0 g/m<sup>2</sup> (47.0 lb. Cover), do not use [Adjust  $\hat{\smile}$  Curl: Strong] or [Adjust  $\smile$  Curl: Strong] for [Adjust Paper Curl] of [Adjustment Settings for Operators].

## Paper Storage

- When storing paper, the following precautions should always be followed:
  - Do not store paper where it will be exposed to direct sunlight.
  - Avoid storing paper in humid areas (humidity: 70% or less).
  - Store all your thick paper in the same environment - a room where the temperature is 20–25°C (68–77°F) and the humidity is 30–65%.
  - Store on a flat surface.
  - Do not store paper vertically.
- Once opened, store paper in plastic bags.


## Registering a Custom Paper

You can register up to 100 custom papers.

Check the product name, size, and type of your paper before registering it.

Check that the size and type of your paper are compatible with the paper tray that you want to use. Tray compatibility depends on the paper's size and type. For details about the paper sizes and types that can be used, see page 118 "Recommended Paper Sizes and Types".

### Note

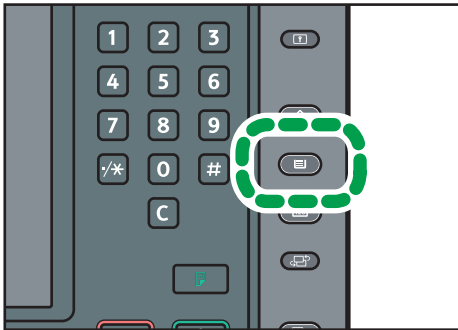
- When the number of registered custom papers reaches the maximum, you will not be able to register a new custom paper. Delete any unnecessary custom papers from the list, and then try registering again. For details, see "Deleting a Custom Paper", Paper Settings .

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## Selecting the Paper's Name from the Paper Library

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1. Press the [Paper Setting] key.

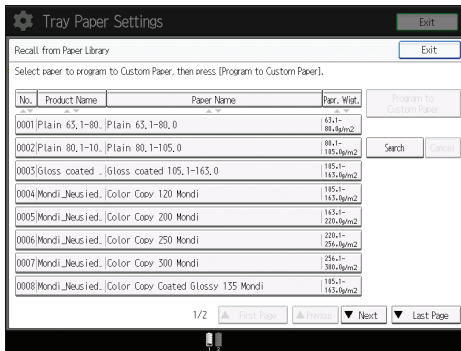


2. Press [Edit Custom Paper].
3. Press [Recall from Paper Library].
4. Select the name of the paper that you want to register.

Press [Previous] or [Next] to scroll through the list to find the paper that you want to select.

You can select two or more types of paper.






5. Press [Program to Custom Paper].
6. Press [Yes].
7. Press [Exit] twice.
8. Press the [Paper Setting] key.

You can also close the [Tray Paper Settings] screen by pressing [Exit].

#### ↓ Note

- You can check and change the settings of the registered custom paper such as the paper size setting on the [Edit Custom Paper] screen. For details about modifying the custom paper, see "Modifying a Custom Paper", Paper Settings .

## Registering a Paper Whose Paper Name is Not Displayed in the Paper Library

8

If the paper you want is not in the library's paper list or you don't know the name of the paper, use the following procedures:

- Selecting the paper's type from the paper library

The paper library contains the optimum printing conditions not only for each commercially available paper but also for each type of paper.

You can select the type of paper from the paper library and register it as a custom paper even if you don't know the name of the paper. The selectable paper types are as follows: Plain, Gloss coated, Matte coated, Envelope, Transparency, and Translucent. Each type is divided into several categories according to weight.

- Manually specifying a paper's type and weight

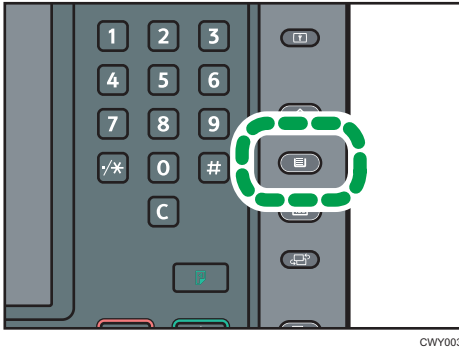
You can register a custom paper by manually specifying its type and weight.

### Selecting the paper's type from the paper library

You can select the type of paper from the paper library and register it as a custom paper.

The selectable paper types are as follows: Plain, Gloss coated, Matte coated, Envelope, Transparency, and Translucent.

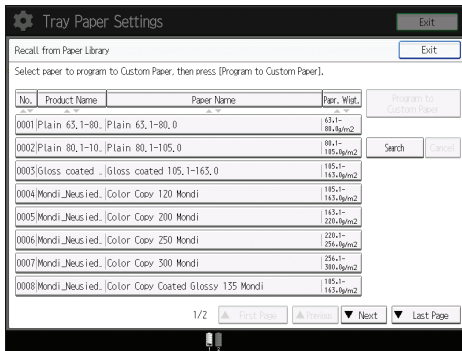
**1. Press the [Paper Setting] key.**



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- 2. Press [Edit Custom Paper].**
- 3. Press [Recall from Paper Library].**
- 4. Select the most appropriate combination of type and weight for your paper.**


The list of paper types appears on the first and following pages in the paper library. Press [▲Previous] or [▼Next] to scroll through the list to find the paper that you want to select.



- 5. Press [Program to Custom Paper].**
- 6. Press [Yes].**
- 7. Press [Exit] twice.**
- 8. Press the [Paper Setting] key.**

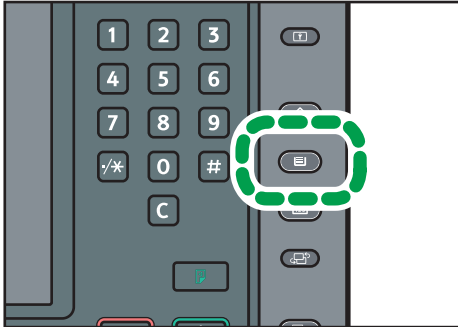
You can also close the [Tray Paper Settings] screen by pressing [Exit].

**Note**

- You can check and change the settings of the registered custom paper such as the paper size setting on the [Edit Custom Paper] screen. For details about modifying the custom paper, see "Modifying a Custom Paper", Paper Settings .

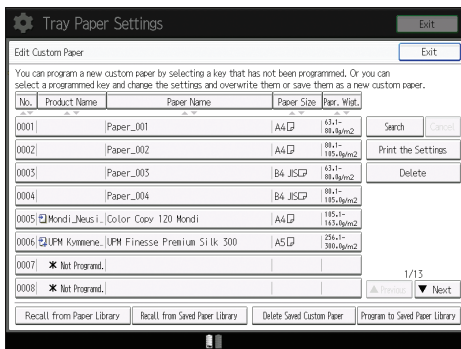
## Manually specifying a paper's type and weight

1. Press the [Paper Setting] key.



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2. Press [Edit Custom Paper].
3. Select a number that is [**\***Not Programd.].  
Press [**▲**Previous] or [**▼**Next] to scroll through the list.



4. Press [Change] for [Paper Name].
5. Enter the name of the paper, and then press [OK].
6. Press [Change] for [Paper Size].
7. Select a paper size, and then press [OK].
8. Press [Change] for [Paper Weight].
9. Specify the paper's weight, and then press [OK].  
Press [Change] if you changed the paper weight.
10. Press [Change] for [Paper Type].
11. Specify the paper type, and then press [OK].  
Press [Change] if you changed the paper type.

**12. Specify other items, such as [Coated Paper Type], [Paper Color], [Prepunched or Not], [Apply Duplex], and [Apply Auto Paper Select] as necessary.**

If you change the [Coated Paper Type], [Paper Color], or [Prepunched or Not] and press [OK], a message appears to notify you that the [Advanced Settings] will be initialized. To apply the changes for those settings, select [Change]. To cancel the changes, select [Do not Change].


**13. Press [OK].**

**14. Press [Exit].**

**15. Press the [Paper Setting] key.**

You can also close the [Tray Paper Settings] screen by pressing [Exit].

**Note**

- If you want to use glossy paper, select [Glossy] for [Coated Paper Type]. If you want to use matte paper (including silk, dull, and satin paper), select [Matted] for [Coated Paper Type].
- For details about custom paper settings, see "Custom Paper Settings", Paper Settings .
- For details about [Advanced Settings], contact your machine administrator.

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## Registering a New Custom Paper by Modifying an Existing Paper

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You can open and modify the settings of a registered custom paper and register them as a new custom paper.

This function is useful when registering paper that is the same type as an existing paper, but a different size.

Depending on which settings you modify, details of a newly registered custom paper will be as follows:

- When the settings of the selected custom paper are not changed:  
All settings of the selected custom paper are copied to the newly registered custom paper.
- When the settings [Paper Name], [Paper Size], [Apply Duplex], [Apply Auto Paper Select], or [Advanced Settings] of the selected custom paper are changed:  
The changes are applied to the newly registered custom paper.
- When the settings [Paper Weight], [Paper Type], [Coated Paper Type], [Paper Color], or [Prepunched or Not] of the selected custom paper are changed:  
The changes are applied to the newly registered custom paper and its advanced settings are reset to their default values according to the changes that are applied to the settings.

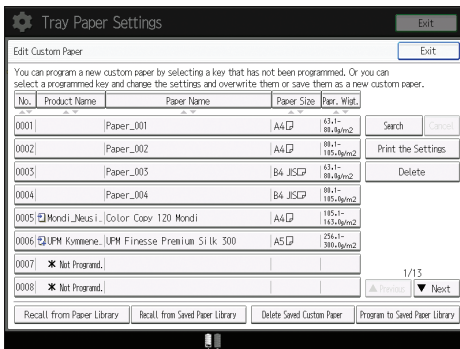
When modifying a custom paper that is registered from the paper library, you can change its [Paper Name], [Paper Size], [Apply Duplex], and [Apply Auto Paper Select] settings. You can also confirm the brand name and the version of data from [Product Name].

### 1. Press the [Paper Setting] key.



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2. Press [Edit Custom Paper].
3. Select a number that is [**\*Not Programd.**].  
Press [**▲Previous**] or [**▼Next**] to scroll through the list.




4. Press [Use Another Custom Paper's Settings].
5. Select the custom paper whose settings you want to modify.
6. Press [OK].
7. Change the settings for custom paper (such as paper's name, size, and type), as necessary.

If you change the [Paper Weight], [Paper Type], [Coated Paper Type], [Paper Color], or [Prepunched or Not] and press [OK], a message appears to notify you that the [Advanced Settings] will be initialized. To apply the changes for those settings, select [Change]. To cancel the changes, select [Do not Change].

8. Press [OK].
9. Press [Exit].
10. Press the [Paper Setting] key.  
You can also close the [Tray Paper Settings] screen by pressing [Exit].

 **Note**

- For details about custom paper settings, see "Custom Paper Settings", Paper Settings .
- For details about [Advanced Settings], contact your machine administrator.

# Adding Toner

This section explains precautions when adding toner, how to send scanned documents when the toner has run out, and how to dispose of used toner.

## **WARNING**

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

## **WARNING**

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

## **WARNING**

- Do not use a vacuum cleaner to remove spilled toner (including used toner). Absorbed toner may cause a fire or explosion due to electrical contact flickering inside the vacuum cleaner. However, it is possible to use a vacuum cleaner that is explosion-proof and dust ignition-proof. If toner is spilled on the floor, remove the spilled toner slowly using a wet cloth, so that the toner is not scattered.

## **CAUTION**

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

## **CAUTION**

- Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

## **CAUTION**

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

## **CAUTION**

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

### CAUTION

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

### CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.

### CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your skin. If toner comes into contact with your skin, wash the affected area thoroughly with soap and water.

### CAUTION

- When replacing a toner or waste toner container or consumables with toner, make sure that the toner does not splatter. Put the waste consumables in a bag after they are removed. For consumables with a lid, make sure that the lid is shut.

### Important

- Always replace the toner cartridge when a notification appears on the machine.
- Fault may occur if you use toner other than the recommended type.
- Leave the machine on when replacing toner. If you turn off the main power when replacing toner, the settings will be lost and you cannot restart printing, or the machine may not be able to detect that a toner cartridge is inserted.
- Store toner where it will not be exposed to direct sunlight, temperatures above 35°C (95°F), or high humidity.
- Store toner on a flat surface.
- Do not shake the toner cartridge with its mouth down after removing it. Residual toner may scatter.
- Do not remove the toner cartridge straight after installing it. If you do, the toner may spill out.
- Do not repeatedly install and remove toner cartridges. This will result in toner leakage.
- When a toner cartridge is being used, it cannot be removed. Do not remove the cartridge forcibly.

Follow the instruction on the screen regarding how to replace a toner cartridge.

If one of the toner cartridge is empty, you can keep printing by using the other cartridge. You can change the toner cartridge during printing.

Be sure to set the new toner cartridge in the left hole first when both toner cartridges are empty.



After replacing a toner cartridge, be sure to close the toner cartridge cover. The machine stops printing if you leave the toner cartridge cover open.

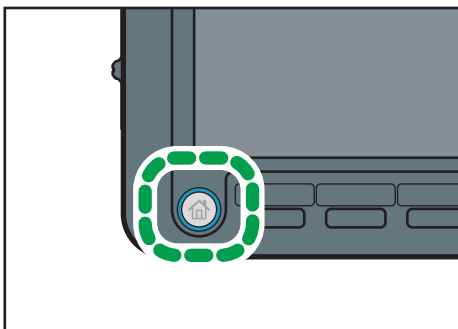
### ↓ Note

- If "Toner Cartridge is almost empty." appears, the toner has almost run out. Have a replacement toner cartridge at hand.
- You can check the name of the required toner and the replacement procedure using the [Add Toner] screen.
- For details about how to check contact number where you can order supplies, see "Inquiry", Maintenance and Specifications.
- Do not remove the outer cap of the toner cartridge before shaking it. Wait until you install the toner cartridge before removing the cap.
- Do not remove the inner cap.
- If you cannot get it to click in, pull out the toner cartridge a little, slightly rotate it to the left or right, then try again.
- Do not remove toner cartridges that are being used or install toner cartridges that are partially used. The remaining toner amount displayed on the screen will not always correspond with the actual amount in the cartridge, causing the machine to unexpectedly run out of toner.
- Do not install an empty toner cartridge.

## Sending Scanned Documents When Toner Has Run Out

When the machine has run out of toner, the indicator on the display lights. Note that even if there is no toner left, you can still send scanned documents.

1. Press the [Home] key on the bottom left of the control panel, and press the [Scanner] icon on the [Home] screen.



2. Perform transmission operation.

 **Note**

- Any reports are not printed.

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## Disposing of Used Toner

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This section describes what to do with used toner.

Toner cannot be re-used.

Pack used toner containers in the container's box or a bag to prevent the toner from leaking out of the container when you dispose of it.

 **Region A** (mainly Europe)

If you want to discard your used toner container, please contact your local sales office. If you discard it by yourself, treat it as general plastic waste material.

 **Region B** (mainly North America)

Please see our local company website for information on the recycling of supply products, or you can recycle items according to the requirements of your local municipalities or private recyclers.

# Menu Items and Functions

All items in Adjustment Settings for Operators appear regardless of which of the machine's optional components are installed. If you change the settings of options that are not installed, the changes will have no effect.

## Machine: Image Position

For details about the following items, see "Machine: Image Position", Paper Settings .

No.	Item	Description
0101	Adjust Image Position With Feed Direction	Adjust the horizontal position of the print image.
0106	Select Test Pattern for Image Position Adjustment	Select the test image used when adjusting the image position.
0108	ADF Double Feed Detection	Specify whether or not to detect double feeding of paper loaded in the ADF. This function is available only on Type 3.

## Machine: Image Quality

For details about the following items, see "Machine: Image Quality", Paper Settings .

No.	Item	Description
0202	Adjust Image Density	Execute image density control manually.
0208	Avoid Ppr Trnsf Shock Jitter: Feed Interval Adj	Adjust the interval at which paper is fed from the paper tray when printing consecutive sheets of paper.

## Machine: Paper Feed/ Output

For details about the following items, see "Machine: Paper Feed/ Output", Paper Settings .

No.	Item	Description
0301	Double Feed Detection	Specify whether or not to detect double feeding of paper.
0302	When Double Feed is Detected	Specify how the machine behaves when it detects a double feed.
0303	After Double Feed Paper is Automatically Ejected	Specify how the machine responds when it detects a double feed.


No.	Item	Description
0304	Skew Detection	Specify whether or not to detect paper skew.
0310	Adjust Paper Curl	Specify the method for straightening curled sheets. Select the method according to the direction and degree of curl.

**Machine: Maintenance**

For details about the following items, see "Machine: Maintenance", Paper Settings .


No.	Item	Description
0502	Execute Photoconductor Refreshing	Remove dust on the drum surface.
0517	Temperature / Humidity inside the Machine	Display the internal temperature and humidity.
0518	Temperature / Humidity outside the Machine	Display the external temperature and humidity.

**Finishing: Finisher**

For details about the following items, see "Finishing: Finisher", Paper Settings .


No.	Item	Description
0601	Adjust Staple Position for Booklet	Adjust the horizontal position of the booklet staples when using Booklet Finisher SR5060.
0602	Adjust Folding Position for Booklet	Adjust the horizontal folding position when using Booklet Finisher SR5060.
0606	Adjust Punch Position Across Feed Direction	Adjust the vertical position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.
0607	Adjust Punch Position With Feed Direction	Adjust the horizontal position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.
0609	Set Number of Folds for Booklet	Specify the number of booklet folds when using the Booklet Finisher SR5060.

**Finishing: Fold**

For details about the following items, see "Finishing: Fold", Paper Settings .

No.	Item	Description
0701	Half Fold Position (Multi-sheet Fold)	Adjust the fold position of half folded sheets when using the multi-folding unit.
0702	Letter Fold-out Position 1 (Multi-sheet Fold)	Adjust the fold position for the bottom segment of letter fold-out sheets when using the multi-folding unit.
0703	Letter Fold-out Position 2 (Multi-sheet Fold)	Adjust the overall fold size of letters fold-out sheets when using the multi-folding unit.
0704	Letter Fold-in Position 1 (Multi-sheet Fold)	Adjust the fold position of the bottom segment of letter fold-in sheets when using the multi-folding unit.
0705	Letter Fold-in Position 2 (Multi-sheet Fold)	Adjust the fold position of letters fold-in sheets when using the multi-folding unit.

### Finishing: Perfect Binder

For details about the following items, see "Finishing: Perfect Binder", Paper Settings .

No.	Item	Description
0801	Cover Sheet Position for Perfect Binding With Feed Dir	Adjust the horizontal alignment of the cover sheet position when performing perfect binding.
0802	Cover Sheet Position for Perfect Binding Across Feed Dir	Adjust the vertical alignment of the cover sheet position when performing perfect binding.
0803	Adjust Perfect Binding Finishing Angle	Square the top, bottom, and outside edges when trimming a deck of paper.
0804	Adjust Applying Binding Glue	Adjust the amount of binding glue for perfect binding.


















# 9. Troubleshooting

This chapter describes basic troubleshooting procedures.

## When a Status Icon Is Displayed

This section describes the status icons displayed when the machine requires the user to remove misfed paper, to add paper, or to perform other procedures.

Status icons	Status
 : Paper Misfeed icon	Appears when a paper misfeed occurs. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting  .
 : Original Misfeed icon	Appears when an original misfeed occurs. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting  .
 : Load Paper icon	Appears when paper runs out. For details about loading paper, see "Loading Paper ", Paper Specifications and Adding Paper  .
 : Add Toner icon	Appears when toner runs out. For details about adding toner, see "Adding Toner", Maintenance and Specifications  .
 : Add Staple icon	Appears when staples run out. For details about adding staples, see "Adding Staples", Maintenance and Specifications  .
 : Waste Toner Full icon	Appears when the waste toner bottle is full. Contact your service representative.
 : Hole Punch Receptacle Full icon	Appears when the hole punch receptacle is full. For details about removing punch waste, see "Removing Punch Waste", Troubleshooting  .
 : Waste Staple Full icon	Appears when the waste staple receptacle is full. For details about removing staple waste, see "Removing Staple Waste", Troubleshooting  .

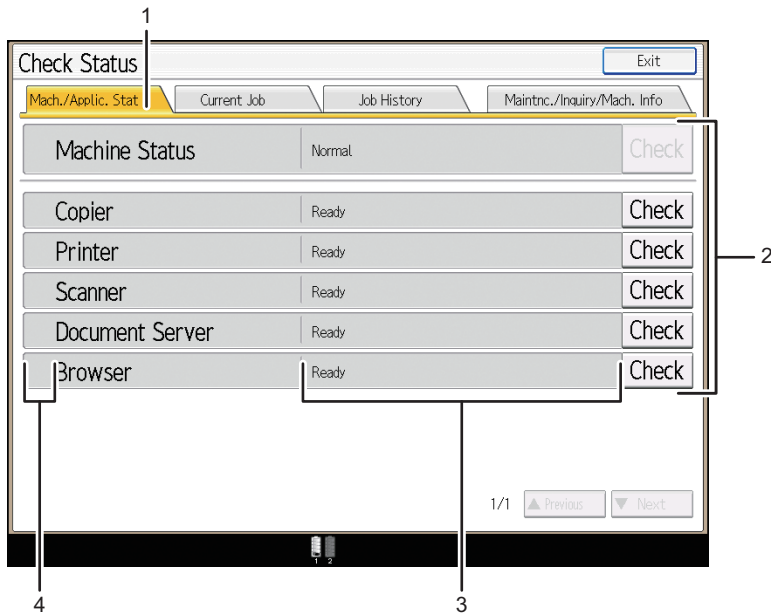
Status icons	Status
🔧 : Service Call icon	Appears when the machine is malfunctioning or requires maintenance.
🔒 : Open Cover icon	Appears when one or more covers of the machine are open.



# When the Indicator Lamp for the [Check Status] Key Is Lit or Flashing

If the indicator lamp for the [Check Status] key lights up or flashes, press the [Check Status] key to display the [Check Status] screen. Check the status of each function in the [Check Status] screen.

[Check Status] screen



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## 1. [Mach./Applic. Stat] tab

Indicates the status of the machine and each function.

## 2. [Check]

If an error occurs in the machine or a function, press [Check] to view details.

Pressing [Check] displays an error message or the corresponding function screen. Check the error message displayed on the function screen and take the appropriate action. For details about how to resolve the problems described in error messages, see "When Messages Appear", Troubleshooting 🗨️.

## 3. Messages

Displays a message that indicates the status of the machine and each function.

## 4. Status icons




The status icons that can be displayed are described below:

🔄: The function is performing a job.

⚠️: An error has occurred on the machine.

❗: The function cannot be used because an error has occurred in the function or machine. This icon may also appear if the toner is running low.

The following table explains problems that cause the indicator lamp for the [Check Status] key to light or flash.


Problems	Causes	Solutions
Documents and reports do not print out.	The paper output tray is full.	Remove the prints from the tray.
Documents and reports do not print out.	There is no paper left.	Load paper. For details about loading paper, see "Loading Paper", Paper Specifications and Adding Paper  .
An error has occurred.	A function which has the status "Error Occurred" in the [Check Status] screen is defective.	Press [Check] in the function which the error has occurred. Then check the displayed message, and take appropriate action. For details about error messages and their solutions, see "When Messages Appear", Troubleshooting  . You can use other functions normally.
The machine is unable to connect to the network.	A network error has occurred.	<ul style="list-style-type: none"> <li>• Check that the machine is correctly connected to the network, and that the machine is correctly set. For details about how to connect the network, see "Connecting the Machine", Connecting the Machine/ System Settings .</li> <li>• For details about connecting to the network, contact your administrator.</li> <li>• If the indicator lamp is still lit even after trying to solve the problem as described here, contact your service representative.</li> </ul>

# When the Machine Makes a Beeping Sound

The following table describes the meaning of the various beep patterns that the machine produces to alert users about left originals and other machine conditions.






Beep patterns	Meanings	Causes
Single short beep	Panel/screen input accepted.	A control panel or screen key was pressed.
Short, then long beep	Panel/screen input rejected.	An invalid key was pressed on the control panel or screen, or the entered password was incorrect.
Single long beep	Job completed successfully.	A Copier/Document Server Features job has finished.
Two long beeps	Machine has warmed up.	When the power is turned on or the machine exits Sleep mode, the machine has fully warmed up and is ready for use.
Five long beeps	Soft alert	An auto reset was performed through the simple screen of the Copier/Document Server function or the Scanner function.
Five long beeps repeated four times.	Soft alert	An original has been left on the exposure glass or paper tray is empty.
Five short beeps repeated five times.	Strong alert	The machine requires user attention because paper has jammed, the toner needs replenishing, or other problems have occurred.





## ↓ Note





- Users cannot mute the machine's beep alerts. When the machine beeps to alert users of a paper jam or toner request, if the machine's covers are opened and closed repeatedly within a short space of time, the beep alert might continue, even after normal status has resumed.
- You can select to enable or disable beep alerts. For details about Panel Key Sound, see "General Features", Connecting the Machine/ System Settings .




## When You Have Problems Operating the Machine

Problems	Causes	Solutions
The machine does not turn on.	The AC power switch has not been turned on.	Turn on the AC power switch. For details about the AC power switch, see "General Requirements", Maintenance and Specifications  .
When the machine is turned on, the only icon that appears on the home screen is the [Copier] icon.	Functions other than the copier function are not yet ready. Functions appear on the home screen when they become ready for use. Time required varies by function.	Wait a little longer.
The machine has just been turned on and the User Tools screen is displayed, but the User Tools menu has items missing.	Functions other than the copier function are not yet ready. Functions appear in the User Tools menu when they become ready for use. Time required varies by function.	Wait a little longer.
The indicator lamp remains lit and the machine does not enter Sleep mode even though the [Energy Saver] key was pressed.	In some cases, the machine does not enter Sleep mode when the [Energy Saver] key is pressed.	Before you press the [Energy Saver] key, check that the status of the machine does not prevent it from entering Sleep mode. For details about statuses that inhibit Sleep mode, see "Saving Energy", Getting Started  .
The display is turned off.	The machine is in Low Power mode.	Touch the display panel or press one of the keys on the control panel to cancel Low Power mode.
The display is turned off.	The machine is in Sleep mode.	Press the [Energy Saver] key or the [Check Status] key to cancel Sleep mode.


Problems	Causes	Solutions
Nothing happens when the [Check Status] key or the [Energy Saver] key is pressed.	The power is turned off.	Make sure the main power indicator is off, and then turn on the power.
The power turns off automatically.	The Weekly Timer setting is set to [Main Power Off].	Change the Weekly Timer setting. For details about the Weekly Timer setting, see "Timer Settings", Connecting the Machine/ System Settings  .
The user code entry screen is displayed.	Users are restricted by User Code Authentication.	For details about how to log in when User Code Authentication is enabled, see "When the Authentication Screen is Displayed", Getting Started  .
The Authentication screen appears.	Basic Authentication, Windows Authentication, LDAP Authentication or Integration Server Authentication is set.	Enter your login user name and login password. For details about the Authentication screen, see "When the Authentication Screen is Displayed", Getting Started  .
An error message remains, even if misfed paper is removed.	<ul style="list-style-type: none"> <li>When a misfeed message appears, it remains until you open and close the cover as required.</li> <li>Paper is still jammed in the tray.</li> </ul>	After removing the misfed paper, fully open the front cover, and then close it. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting  .
An error message remains displayed even if the indicated cover is closed.	One or more covers that are not indicated are still open.	Close all the covers of the machine.
Original images are printed on the reverse side of the paper.	You may have loaded the paper incorrectly.	Load the paper correctly. For details about loading paper, see "Loading Paper", Paper Specifications and Adding Paper  .

Problems	Causes	Solutions
Misfeeds occur frequently.	Using curled paper often causes misfeeds, soiled paper edges, or slipped positions while performing staple or stack printing.	<ul style="list-style-type: none"> <li>• Take the stiffness out of the paper with your hands to straighten out the curl.</li> <li>• Load the paper up side down so that the curled edges face downward. For details about recommended paper, see "Recommended Paper", Paper Specifications and Adding Paper .</li> <li>• Lay cut paper on a flat surface to prevent paper from curling, and do not lean it against the wall. For details about the proper way to store paper, see "Paper Storage", Paper Specifications and Adding Paper .</li> </ul>
Misfeeds occur frequently.	The tray's side or end fences may not be set properly.	<ul style="list-style-type: none"> <li>• Remove the misfed paper. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting .</li> <li>• Check that the side or end fences are set properly. Also, check that the side fences are locked. For details about setting the side and end fences, see "Changing the Paper Size", Paper Specifications and Adding Paper .</li> </ul>

Problems	Causes	Solutions
Misfeeds occur frequently.	Paper of undetectable size has been loaded.	<ul style="list-style-type: none"> <li>Remove the misfed paper. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting .</li> <li>If you load a paper size that is not selected automatically, you need to specify the paper size with the control panel. For details about specifying paper size with the control panel, see "Changing to a Size That Is Not Automatically Detected", Paper Specifications and Adding Paper .</li> </ul>
Misfeeds occur frequently.	There is a foreign object on the finisher tray.	<ul style="list-style-type: none"> <li>Remove the misfed paper. For details about removing jammed paper, see "Removing Jammed Paper", Troubleshooting .</li> <li>Do not place anything on the finisher tray.</li> </ul>
Misfeeds occur frequently.	The staple cartridge is not set correctly.	Set the staple cartridge properly. For details about how to add staples, see "Adding Staples", Maintenance and Specifications  .


Problems	Causes	Solutions
<p>Misfeeds occur when printing to envelopes.</p>	<p>The envelopes are curled.</p>	<p>Make sure you fully flatten curled envelopes before you load them. Do not stack envelopes over the specified limit for the paper tray. If misfeeds still occur after the envelopes have been flattened, load envelopes on the tray one at a time and print them individually. For details about how to load envelopes, see "Envelopes", Paper Specifications and Adding Paper .</p>
<p>When printing to envelopes, the envelopes may be fed in together, or the envelopes may not be fed.</p>	<p>The envelopes are curled.</p>	<p>Make sure you fully flatten curled envelopes before you load them. Do not stack envelopes over the specified limit for the paper tray. If misfeeds still occur after the envelopes have been flattened, load envelopes on the tray one at a time and print them individually. For details about how to load envelopes, see "Envelopes", Paper Specifications and Adding Paper .</p>
<p>Cannot print in duplex mode.</p>	<p>You have selected a paper tray that is not set for duplex printing.</p>	<p>Change the setting for "Apply Duplex" in [Tray Paper Settings] to enable duplex printing for the paper tray. For details about setting "Apply Duplex", see "Tray Paper Settings", Paper Settings .</p>




Problems	Causes	Solutions
Cannot print in duplex mode.	You have selected a paper type that cannot be used for duplex printing.	In [Tray Paper Settings], select a paper type that can be used for duplex printing. For details about setting "Paper Type", see "Tray Paper Settings", Paper Settings  .
An error has occurred when the Address Book is changed from the display panel or Web Image Monitor.	The Address Book cannot be changed while deleting the multiple stored documents.	Wait a while, and then retry the operation.
The Address Book cannot be changed from the display panel.	The Address Book cannot be changed while it is being backed up from Web Image Monitor or other tools running on the computer.	<ul style="list-style-type: none"> <li>• Wait until the Address Book backup is complete, and then try to change the Address Book again.</li> <li>• If an SC997 error occurs, press [Exit].</li> </ul>
Cannot use Web Image Monitor to print documents stored in Document Server.	When [Print Volum. Use Limit.] is specified, users cannot print beyond their print volume use limitations. Print jobs selected by users who have reached their print volume use limitations will be canceled.	<ul style="list-style-type: none"> <li>• For details about specifying [Print Volum. Use Limit.], see Security Guide .</li> <li>• To view the status of a print job, see [Print Job History]. In Web Image Monitor, click [Job] on the [Status/Information] menu. And then click [Print Job History] in "Document Server".</li> </ul>
The function does not run or cannot be used.	If you are not able to carry out your job, it may be that the machine is being used by another function.	Wait until the current job is completed before trying again. For details about function compatibility, see "When Multiple Functions Cannot Be Executed Simultaneously", Troubleshooting  .

Problems	Causes	Solutions
The function does not run or cannot be used.	The function cannot be performed while the Address Book is being backed up from Web Image Monitor or other tools running on the computer.	Wait a while. When the Address Book backup is complete, the function will be performed.
Paper is bent.	Paper may be bent when it is ejected from the finisher upper tray.	Change the output tray to the finisher shift tray.
The print image is not properly positioned on the paper.	The machine has not detected the paper type and/or width correctly.	Contact the machine administrator or your service representative.
The print image is not properly positioned on the paper.	The print position is not aligned properly.	Contact the machine administrator or your service representative.

## Fold

Problems	Causes	Solutions
Wrinkling occurs when Gate Fold, Letter Fold-in, or Letter Fold-out is applied.	Wrinkling can occur if Gate Fold, Letter Fold-in, or Letter Fold-out is applied to B4 JIS (Japanese Industrial Standard) $\square$ , A3 $\square$ , 8 1/2" $\times$ 14" $\square$ , 11" $\times$ 17" $\square$ , 12" $\times$ 18" $\square$ , 8K $\square$ , or larger sizes of paper.	When applying Gate Fold, Letter Fold-in, or Letter Fold-out to paper larger than A4, we recommend you enable image reduction and use paper no larger than A4 $\square$ .
When you print Z-folded paper, the machine indicates that the output tray is full even though the amount of output paper on the tray is less than the stack capacity.	The Z-fold support tray is not set.	Set the Z-fold support tray for finisher or multi-folding unit. For details about how to add the Z-fold support tray, see "Finishing", Copy/ Document Server  .
The multi-folding unit outputs sheets with creased edges when Gate Fold is applied.	The paper is curled.	<ul style="list-style-type: none"> <li>Remove the paper, and then reload it upside down.</li> <li>Remove the paper, and then reload it in the opposite direction.</li> </ul>


Problems	Causes	Solutions
The position of the fold is incorrect when Letter Fold-in is applied to a B5 JIS sheet.	Multi-sheet Fold has been specified when only one sheet is being printed.	In [Output/Customize Function/Finisher] on the initial copier screen, under [Folding Unit], select [Letter Fold-in]. Press [Change], and then set "Multi-sheet Fold" to [Off]. For details about how to specify the Multi-sheet Fold function, see "Fold", Copy/ Document Server  .

#### Note



- If you cannot make copies as you want because of the paper type, paper size, or paper capacity problems, use the recommended paper. For details about recommended paper, see page 118 "Recommended Paper".






## When Multiple Functions Cannot Be Executed Simultaneously



If you are not able to carry out your job, it may be that the machine is being used by another function. Wait until the current job is completed before trying again. In certain cases, you can carry out another job using a different function while the current job is being performed.






For details about function compatibility, see "Function Compatibility", Troubleshooting .





## Messages Displayed When Using the Copy/Document Server Function

Messages	Causes	Solutions
"Adjusting the temperature of the binding glue."	The binding glue is being heated.	Wait until the glue has reached the correct temperature for binding.
"Cannot delete the folder because it contains locked files. Please contact the file administrator."	The folder cannot be deleted because it contains a locked original.	Unlock the locked original to delete it. For details about locked files, see Security Guide  .
"Cannot detect original size."	The original placed on the exposure glass is a non-standard size.	<ul style="list-style-type: none"> <li>Place the original on the exposure glass again. Face the original down.</li> <li>If the machine cannot detect the size of the original, specify the size manually - do not use Auto Paper Select mode or the Auto Reduce / Enlarge function. For details about specifying the settings, see "Sizes Detectable with Auto Paper Select", Paper Specifications and Adding Paper .</li> </ul>
"Cannot detect original size."	Original is not placed, or the original placed on the exposure glass is a non-standard size.	<ul style="list-style-type: none"> <li>Place the original correctly.</li> <li>Specify the paper size.</li> <li>When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.</li> </ul>


Messages	Causes	Solutions
"Cannot display preview of this page."	The image data may have been corrupted.	Press [Exit] to display the preview screen without a thumbnail. If the selected document contains several pages, press [Switch] on the "Display Page" area to change the page, and then a preview of the next page will appear.
"Cannot punch this paper size."	The Punch function cannot be used with paper size selected.	Select a proper paper size. For details about proper paper sizes, see "Specifications for Punch Unit", Maintenance and Specifications  .
"Cannot staple paper of this size."	The Staple function cannot be used with paper size selected.	Select a proper paper size. For details about proper paper sizes, see "Specifications for Finisher SR5050" or "Specifications for Booklet Finisher SR5060", Maintenance and Specifications  .
"Check paper size."	An irregular paper size is set.	If you press the [Start] key, the copy will start using the selected paper.
"Duplex is not available with this paper size."	A paper size not available in Duplex mode has been selected.	Select a proper paper size. For details about proper paper sizes, see "Duplex Copying", Copy/ Document Server  .
"Exceeded the maximum number of sheets that can be used. Copying will be stopped."	The number of pages the user is permitted to copy has been exceeded.	For details about how to check the number of copies available per user, see Security Guide  .
"Exceeded the maximum number of multi-sheet fold. Printing will be cancelled."	A print job was canceled because more than the maximum number of Multi-sheet Fold was specified.	Specify fewer sheets for the Multi-sheet Fold function. For details about the maximum number of Multi-sheet Fold, see "Specifications for Multi-Folding Unit", Maintenance and Specifications  .

Messages	Causes	Solutions
"Exceeded max. No. of sheets possible for Ring Binding."	The number of sheets per set exceeds the limit for Ring Binding.	Check the maximum number of sheets that can be ring bound. For details about the limit for Ring Binding, see "Specifications for Ring Binder", Maintenance and Specifications  .
"File being stored exceeded max. number of pages per file. Copying will be stopped."	The scanned originals have too many pages to store as one document.	Press [Exit], and then store again with an appropriate number of pages.
"Magazine or Booklet mode is not available due to mixed image mode."	You selected the "Magazine" or "Booklet" function for originals scanned using different functions, such as copy and printer.	Make sure originals for the "Magazine" or "Booklet" function are scanned using the same function.
"Maximum number of sets is n." (A figure is placed at n.)	The number of copies exceeds the maximum copy quantity.	You can change the maximum copy quantity from [Max. Copy Quantity] in [General Features] under [Copier / Document Server Features]. For details about Max. Copy Quantity, see "General Features", Copy/ Document Server  .
"Memory is full. nn originals have been scanned. Press [Print] to copy scanned originals. Do not remove remaining originals." ( "n" in the message represents a changeable number.)	The scanned originals exceed the number of pages that can be stored in memory.	<ul style="list-style-type: none"> <li>• Press [Print] to copy the scanned originals and cancel the scanning data.</li> <li>• Press [Clear Memory] to cancel the scanning data and not copy.</li> </ul>
"Perfect Binding is not available for different paper sizes."	Mixed Sizes mode is specified.	Cancel Mixed Sizes mode, or specify the Auto Reduce / Enlarge function.


Messages	Causes	Solutions
"Perfect Binding is not available with the settings."	Perfect Binding is not possible under the settings that you have specified.	Check the current settings. For details about which functions are not available when Perfect Binding is specified, see "Perfect Binding", Copy/Document Server  .
"Perfect Binding is not available with this finishing size."	Perfect Binding cannot be used with the finishing size that you have specified.	Select a proper finishing size. For details about proper finishing sizes, see "Specifications for Perfect Binder", Maintenance and Specifications  .
"Perfect Binding is not available with this No. of sheets."	Perfect Binding is not possible with the number of sheets that you have specified.	<ul style="list-style-type: none"> <li>• Check the number of sheets.</li> <li>• Specify the proper number of sheets.</li> </ul> For details about the proper number of sheets, see "Specifications for Perfect Binder", Maintenance and Specifications  .
"Contains incorrect setting(s) for Perfect Binding."	Perfect Binding cannot be used with the paper size that you have specified.	Select a proper paper size. For details about proper paper sizes, see "Specifications for Perfect Binder", Maintenance and Specifications  .
"Press [Continue] to scan and copy remaining originals."	The machine checked if the remaining originals should be copied after the scanned originals were printed.	Remove all copies, and then press [Continue] to continue copying. Press [Stop] to stop copying.
"Ring Binding is not available for different paper sizes."	Mixed Sizes mode is specified.	Cancel Mixed Sizes mode, or specify the Auto Reduce / Enlarge function.
"Ring Binding is not available with the selected position."	Ring Binding cannot be applied in the position that you have specified.	Select a proper binding position. For details about proper binding positions, see "Ring Binding", Copy/ Document Server  .

Messages	Causes	Solutions
"Ring Binding is not available with the settings."	Ring Binding is not possible under the settings that you have specified.	Check the current settings. For details about which functions are not available when Ring Binding is specified, see "Ring Binding", Copy/ Document Server  .
"Ring Binding is not available with this paper size."	Ring Binding cannot be used with the paper size that you have specified.	Select a proper paper size. For details about proper paper sizes, see "Specifications for Ring Binder", Maintenance and Specifications  .
"Stapling capacity exceeded."	The number of sheets per set is over the stapler capacity.	Check the stapler capacity. For details about the stapler capacity, see "Specifications for Finisher SR5050" or "Specifications for Booklet Finisher SR5060", Maintenance and Specifications  .
"The selected folder is locked. Please contact the file administrator."	An attempt was made to edit or use a locked folder.	For details about locked folders, see Security Guide  .



 **Note**

- If you cannot make copies as you want because of the paper type, paper size or paper capacity problems, use recommended paper. For details about recommended paper, see page 118 "Recommended Paper".
- If you set [Memory Full Auto Scan Restart] in [Input / Output] of User Tools to [On], even if the memory becomes full, the memory overflow message will not be displayed. The machine will make copies of the scanned originals first, and then automatically proceed to scan and to copy the remaining originals. In this case, the resulting sorted pages will not be sequential. For details about Memory Full Auto Scan Restart, see "Input / Output", Copy/ Document Server .

**When Using the Connect Copy Function**

Messages	Causes	Solutions
"Cannot connect to the sub-machine. Check the status of the sub-machine."	<ul style="list-style-type: none"> <li>• The  icon is lit.</li> <li>• The hard disk of the sub-machine is malfunctioning.</li> </ul>	Press [Exit] on the main machine and follow the instructions on the display.



Messages	Causes	Solutions
"Cannot print from the sub-machine. Check the status of the sub-machine."	A paper or staple jam has occurred on the sub-machine, or toner or other supplies need to be replaced.	<ul style="list-style-type: none"> <li>Follow the instructions displayed. For details about adding toner, see "Adding Toner", Maintenance and Specifications . For details about jammed paper or jammed staples, see "Removing Jammed Paper" or "Removing Jammed Staples", Troubleshooting .</li> <li>If the sub-machine's display indicates that a cover is open, follow the instructions displayed.</li> </ul>
"Cannot print from the sub-machine. Check the status of the sub-machine."	The sub-machine's User Tools menu is open.	Press the [User Tools] key to close the User Tools menu.
"Cannot print from the sub-machine. Sub-machine will be disconnected."	The sub-machine has stopped due to power failure or communication error.	Continue copying using the main machine.
"Fold is available only when Sort mode is selected in Connect Copy."	Sort has not been selected with fold.	Select the Sort function.
"No stamp data in the sub-machine."	Stamp data on the sub-machine has been deleted.	Reprogram the stamp on the sub-machine.
"Sub-machine does not have the same paper setting(s)."	Paper type or tray settings on the two machines do not match.	Make the same settings on both machines.
"Sub-machine is in Interrupt mode."	The sub-machine is in Interrupt mode.	Press the [Interrupt] key on the sub-machine to cancel Interrupt mode.
"Sub-machine paper settings must be the same to use this tray."	Paper tray settings on the two machines do not match.	Make the same settings on both machines.
"The Cover Sheet setting(s) of the sub-machine is different from the main machine."	Cover Sheet settings on the two machines do not match.	Make the same settings on both machines.

Messages	Causes	Solutions
"The Designation Sheet n setting(s) of sub-machine is different from main machine." ("n" in the message represents a changeable number.)	Designation Sheet settings on the two machines do not match.	Make the same settings on both machines.
"The Slip Sheet setting(s) of the sub-machine is different from the main machine."	Slip Sheet settings on the two machines do not match.	Make the same settings on both machines.


# Messages Displayed When Using the Printer Function


This section describes the principal messages that appear on the display panel, error logs or reports. If other messages appear, follow their instructions.



## Messages Displayed on the Control Panel When Using the Printer Function


### ★ Important

- Before turning on and off the power, see page 43 "Turning On/Off the Power".

Messages	Causes	Solutions
"Exceeded max. No. of sheets possible for Ring Binding."	The number of sheets per set exceeds the limit for Ring Binding.	Check the maximum number of sheets that can be ring bound. For details about the limit for Ring Binding, see "Specifications for Ring Binder", Maintenance and Specifications  .
"Hardware Problem: Ethernet"	An error has occurred in the Ethernet interface.	Turn off the power, and then back on again. If the message appears again, contact your service representative.
"Hardware Problem: HDD"	An error has occurred in the hard disk.	Turn off the power, and then back on again. If the message appears again, contact your service representative.
"Hardware Problem: USB"	An error has occurred in the USB interface.	Turn off the power, and then back on again. If the message appears again, contact your service representative.

Messages	Causes	Solutions
<p>"Hardware Problem: Wireless Card"</p> <p>(A "wireless LAN board" or "Bluetooth interface unit" is referred to as a "wireless card".)</p>	<p>The wireless LAN board can be accessed, but an error was detected.</p>	<p>Turn off the power, and then confirm the wireless LAN board is inserted correctly. After confirmation, turn on the power again. If the message appears again, contact your service representative.</p>
<p>"Hardware Problem: Wireless Card"</p> <p>(A "wireless LAN board" or "Bluetooth interface unit" is referred to as a "wireless card".)</p>	<ul style="list-style-type: none"> <li>• The Bluetooth interface unit was connected while the machine was turned on.</li> <li>• The Bluetooth interface unit was removed while the machine was turned on.</li> </ul>	<p>Turn off the power, and then confirm the Bluetooth interface unit is inserted correctly. After confirmation, turn on the power again. If the message appears again, contact your service representative.</p>
<p>"Load following paper in n. To force print, select another tray and press [Continue]."</p> <p>(A figure is placed at n.)</p>	<p>The printer driver settings are incorrect or the tray does not contain paper of the size selected in the printer driver.</p>	<p>Check that the printer driver settings are correct, and then load paper of the size selected in the printer driver into the input tray. For details about how to change the paper size, see "Changing the Paper Size", Paper Specifications and Adding Paper .</p>
<p>"Paper in staple tray. Open cover and remove paper."</p>	<p>If printing is stopped before it is finished, paper may remain in the finisher.</p>	<p>Remove the paper remaining in the finisher.</p>

Messages	Causes	Solutions
<p>"Paper size and type are mismatched. Select another tray from the following and press [Continue]. To cancel job, press [Job Reset]. Paper size and type can also be changed in User Tools."</p>	<p>The printer driver settings are incorrect or the tray does not contain paper of the size or type selected in the printer driver.</p>	<ul style="list-style-type: none"> <li>• Check that the printer driver settings are correct, and then load paper of the size selected in the printer driver into the input tray. For details about how to change the paper size, see "Changing the Paper Size", Paper Specifications and Adding Paper .</li> <li>• Select the tray manually to continue printing, or cancel a print job. For details about how to select the tray manually, or cancel a print job, see "If an Error Occurs with the Specified Paper Size and Type", Print .</li> </ul>
<p>"Paper size of n is mismatched. Select another tray from the following and press [Continue]. Paper type can also be changed in User Tools." (A tray name is placed at n.)</p>	<p>The size of the paper in the tray does not match the paper size specified in the printer driver.</p>	<p>Select a tray containing paper that is the same size as the specified paper size.</p>
<p>"Parallel I/F board has a problem."</p>	<p>An error has occurred in the IEEE 1284 interface board.</p>	<p>Turn off the power, and then back on again. If the message appears again, contact your service representative.</p>

Messages	Causes	Solutions
"Perfect Binding is not available with this No. of sheets."	Perfect Binding is not possible with the number of sheets that you have specified.	<ul style="list-style-type: none"> <li>• Check the number of sheets.</li> <li>• Specify the proper number of sheets.</li> </ul> <p>For details about the proper number of sheets, see "Specifications for Perfect Binder", Maintenance and Specifications .</p>
"Contains incorrect setting(s) for Perfect Binding."	Perfect Binding cannot be used with the paper size that you have specified.	Select a proper paper size. For details about proper paper sizes, see "Specifications for Perfect Binder", Maintenance and Specifications  .
"Printer font error."	An error has occurred in the font settings.	Contact your service representative.
"Problems with the wireless card. Please call service." (A "wireless LAN board" or "Bluetooth unit" is referred to as a "wireless card".)	The machine has detected a Bluetooth failure, or it could not detect a Bluetooth unit. It may be incorrectly installed.	Check that the Bluetooth unit is installed properly, or contact your service representative.
"Cannot print because both the main and designation (chapter) sheets are set to the same paper tray. Press [Job Reset] to cancel the job. To print the job again specify different trays."	The tray selected for other pages is the same as the one for slip sheets.	Reset the job. Be sure the tray you select for slip sheets is not providing paper for other pages.

## When using direct print from a memory storage device

Messages	Causes	Solutions
"Exceeded the limit value for total data size of the selected files. Cannot select more files."	<ul style="list-style-type: none"> <li>The size of the selected file exceeds 1 GB.</li> <li>The total size of the selected files exceeds 1 GB.</li> </ul>	<p>Files or groups of files larger than 1 GB cannot be printed.</p> <ul style="list-style-type: none"> <li>When the total size of the multiple files that are selected exceeds 1 GB, select files separately.</li> <li>When the size of the selected file exceeds 1 GB, print from a memory storage device using a function other than the Direct printing function.</li> </ul> <p>You cannot select files of different formats at the same time.</p>
"Unable to access the specified memory storage device."	<ul style="list-style-type: none"> <li>An error occurred when the machine accessed the memory storage device or a file stored on the memory storage device.</li> <li>An error occurred when the user used the Direct printing function to print from a memory storage device.</li> </ul>	<p>Save the file to a different memory storage device, and then try to print again.</p>



## Messages Printed on the Error Logs or Reports When Using the Printer Function

This section describes likely causes of and possible solutions for the error messages that are printed on the error logs or reports.




## When print jobs are canceled




Messages	Causes	Solutions
"91: Error"	Printing was canceled by the auto job cancel function due to a command error.	Check that the data is valid.
"A function which cannot be used with Fold mode was set. The job has been cancelled."	A print job was cancelled because a function(s) not available with Fold was selected.	Cancel the function(s) not available with Fold. For details about the functions not available with Fold, see "Fold", Print  .
"A function which cannot be used with Perfect Binding was set. The job was cancelled."	A function not available with Perfect Binding has been selected.	For details about which functions are not available with Perfect Binding, see "Perfect Binding", Print  .
"A function which cannot be used with Ring Binding was set. The job was cancelled."	A function not available with Ring Binding has been selected.	For details about which functions are not available with Ring Binding, see "Ring Binding", Print  .
"An error occurred while processing an Unauthorized Copy Prevention job. The job was cancelled."	You tried to store a file in the Document Server when the [Unauthorized Copy Prevention] was specified.	On the printer driver, select a job type other than [Document Server] in "Job Type:" or deselect [Unauthorized Copy Prevention].
"An error occurred while processing an Unauthorized Copy Prevention job. The job was cancelled."	The [Enter User Text:] field on the [Unauthorized Copy Prevention for Pattern Details] screen is blank.	On the printer driver's [Detailed Settings] tab, click [Effects] in "Menu:". Select [Unauthorized Copy Prevention], and then click [Details] to display [Unauthorized Copy Prevention for Pattern Details]. Enter text in [Enter User Text:].
"An error occurred while processing an Unauthorized Copy Prevention job. The job was cancelled."	The resolution is set to a value less than 600 dpi when [Unauthorized Copy Prevention] is specified.	On the printer driver, set the resolution to 600 dpi or higher, or deselect [Unauthorized Copy Prevention].



Messages	Causes	Solutions
"Collate has been cancelled."	Collate was canceled.	Turn off the power, and then back on again. If the message appears again, contact your service representative.
"Exceeded the maximum unit count for Print Volume Use. The job has been cancelled."	The number of pages the user is permitted to print has been exceeded.	For details about Print Volum. Use Limit., see Security Guide  .
"Exceeded the maximum number of multi-sheet fold. The job has been cancelled."	The maximum number of Multi-sheet Fold was exceeded.	Specify fewer sheets for the Multi-sheet Fold function. For details about the maximum number of Multi-sheet Fold, see "Specifications for Multi-Folding Unit", Maintenance and Specifications  .
"Fold is not available with the settings. The job has been cancelled."	Fold function is not available with the current settings.	Check the paper settings. For details about the limitations of the Fold function, see "Fold", Print  .
"Receiving data failed."	Data reception was aborted.	Resend the data.
"Sending data failed."	The machine received a command to stop transmission from the printer driver.	Check if the computer is working correctly.
"The selected paper size is not supported. This job has been cancelled."	Job Reset is automatically performed if the specified paper size is incorrect.	Specify the correct paper size, and then print the file again.
"The selected paper type is not supported. This job has been cancelled."	Job Reset is automatically performed if the specified paper type is incorrect.	Specify the correct paper type, and then print the file again.
"Z-fold error."	Z-folding was canceled.	Check the tray, paper orientation, print orientation, and Z-fold settings again.


## When there is a problem with the print settings


Messages	Causes	Solutions
"Booklet/Half Fold Error"	The job was canceled because you specified invalid settings for saddle stitching or Half Fold.	Check the settings for saddle stitching or Half Fold.
"Classification Code is incorrect."	The Classification Code has not been entered, or has been entered incorrectly.	Enter the correct Classification Code.
"Classification Code is incorrect."	The Classification Code is not supported with the printer driver.	Select [Optional] for "Classification Code". For details about how to specify Classification Code settings, see "Configuring Classification Codes", Print  .
"Duplex has been cancelled."	Duplex printing was canceled.	<ul style="list-style-type: none"> <li>Select the proper paper size for the duplex function. For details about proper paper sizes, see "Specifications for the Main Unit", Maintenance and Specifications .</li> <li>Change the setting for "Apply Duplex" in [Tray Paper Settings] to enable duplex printing for the paper tray. For details about setting "Apply Duplex", see "Tray Paper Settings", Paper Settings .</li> </ul>
"Exceeded max. pages. Collate is incomplete."	The number of pages exceeds the maximum number of sheets that you can use Collate with.	Reduce the number of pages to print.

Messages	Causes	Solutions
"Exceeded the maximum number of multi-sheet fold (Half Fold)."	The maximum number of multi-sheet folds (Half Fold) was exceeded.	Specify fewer sheets. For details about the maximum number of multi-sheet folds (Half Fold), see "Specifications for Multi-Folding Unit", Maintenance and Specifications  .
"Output tray has been changed."	The output tray was changed because the paper size of the specified output tray is limited.	Specify the proper output tray.
"Perfect Binding is not available with the settings."	Perfect Binding is not possible under the settings that you have specified.	Check the current settings. For details about which functions are not available when Perfect Binding is specified, see "Perfect Binding", Print  .
"Perfect Binding is not available with this number of sheets."	Perfect Binding is not possible with the number of sheets that you have specified.	<ul style="list-style-type: none"> <li>• Check the number of sheets.</li> <li>• Specify the proper number of sheets.</li> </ul> For details about the proper number of sheets, see "Specifications for Perfect Binder", Maintenance and Specifications  .

Messages	Causes	Solutions
"Print overrun."	Images were discarded while printing.	<p><b>PCL 6</b></p> <p>Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.</p> <p><b>PostScript 3</b></p> <p>Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.</p>
"Punch has been cancelled."	Punch printing was canceled.	Check the paper orientation, print orientation, and punch position. Certain settings can produce print results that might not be as expected.
"Ring Binding is not available with the settings."	Ring Binding is not possible under the settings that you have specified.	Check the current settings. For details about which functions are not available when Ring Binding is specified, see "Ring Binding", Copy/ Document Server  .
"Staple has been cancelled."	Stapling printing was canceled.	Check the paper orientation, paper quantity, print orientation, and staple position. Certain settings can produce print results that might not be as expected.

## When documents cannot be stored in the Document Server

Messages	Causes	Solutions
"Document Server is not available to use. Cannot store."	You cannot use the Document Server function.	<ul style="list-style-type: none"> <li>For details about using Document Server function, contact your administrator.</li> <li>For details about how to set permissions, see Security Guide .</li> </ul>
"Exceeded max. capacity of Document Server. Cannot store."	The hard disk became full after a file was stored.	<ul style="list-style-type: none"> <li>Delete some of the files stored in the Document Server.</li> <li>Reduce the file size to be sent.</li> </ul>
"Exceeded max. number of files of Document Server. Cannot store."	The maximum file capacity of the Document Server was exceeded.	Delete some of the files stored in the Document Server.
"Exceeded max. number of files. (Auto)"	While using the error job store function to store Normal Print jobs as Hold Print files, the maximum file capacity for file storage or Hold Print file management (automatic) was exceeded.	Delete Hold Print files (automatic) or unneeded files stored in the machine.
"Exceeded max. number of pages of Document Server. Cannot store."	The maximum page capacity of the Document Server was exceeded.	<ul style="list-style-type: none"> <li>Delete some of the files stored in the Document Server.</li> <li>Reduce the number of pages to send.</li> </ul>
"Exceeded max. number of pages. (Auto)"	While using the error job store function to store Normal Print jobs as Hold Print files, the maximum page capacity was exceeded.	<ul style="list-style-type: none"> <li>Delete unneeded files stored in the machine.</li> <li>Reduce the number of pages to print.</li> </ul>

Messages	Causes	Solutions
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. memory."	The hard disk became full after a file was stored.	<ul style="list-style-type: none"> <li>Delete some of the files stored in the Document Server.</li> <li>Reduce the file size to be sent.</li> </ul>
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. number of files."	The maximum file capacity of the Document Server was exceeded.	Delete the files stored in the Document Server.
"The print job has been cancelled because capture file(s) could not be stored: Exceeded max. number of pages per file."	The maximum page capacity of the Document Server was exceeded.	<ul style="list-style-type: none"> <li>Delete some of the files stored in the Document Server.</li> <li>Reduce the number of pages to send.</li> </ul>
"The specified folder in Document Server is locked. Cannot store."	The specified folder is locked.	Unlock the folder or specify another folder number that can be used. For details about locked folders, see Security Guide  .

### When there is not enough free hard disk space

Messages	Causes	Solutions
"HDD is full."	When printing with the PostScript 3 printer driver, the hard disk capacity for fonts and forms has been exceeded.	Delete unneeded forms or fonts registered in the machine.
"HDD is full."	The hard disk became full while printing a Sample Print, Locked Print, Hold Print, or Stored Print file.	<ul style="list-style-type: none"> <li>Delete unneeded files stored in the machine.</li> <li>Reduce the data size of the Sample Print, Locked Print, Hold Print, or Stored Print file.</li> </ul>

Messages	Causes	Solutions
"HDD is full. (Auto)"	The hard disk became full while using the error job store function to store Normal Print jobs as Hold Print files.	<ul style="list-style-type: none"> <li>Delete unneeded files stored in the machine.</li> <li>Reduce the data size of the Temporary Print file and/or the Stored Print file.</li> </ul>

### When there is not enough memory



Messages	Causes	Solutions
"84: Error"	There is no work area available for image processing.	Decrease the number of files sent to the machine.

### When there is a problem with a parameter



Messages	Causes	Solutions
"86: Error"	Parameters of the control code are invalid.	Check the print settings.

### When the user lacks privileges to perform an operation

Messages	Causes	Solutions
"No response from the server. Authentication has failed."	A timeout occurred while connecting to the server for LDAP authentication or Windows Authentication.	Check the status of the server.
"Printing privileges have not been set for this document."	The PDF document you have tried to print has no privileges to print.	Contact the owner of the document.
"You do not have a privilege to use this function. This job has been cancelled."	The entered login user name or login password is not correct.	Check that the login user name and login password are correct.

Messages	Causes	Solutions
"You do not have a privilege to use this function. This job has been cancelled."	The logged in user is not allowed to use the selected function.	For details about how to set permissions, see Security Guide  .
"You do not have a privilege to use this function. This operation has been cancelled."	The logged in user does not have the privileges to register programs or change the paper tray settings.	For details about how to set permissions, see Security Guide  .

### When a user cannot be registered

Messages	Causes	Solutions
"Auto-registration of user information has failed."	Automatic registration of information for LDAP Authentication or Windows Authentication failed because the Address Book is full.	For details about automatic registration of user information, see Security Guide  .
"Information for user authentication is already registered for another user."	The user name for LDAP or Integration Server authentication was already registered in a different server with a different ID, and a duplication of the user name occurred due to a switching of domains (servers), etc..	For details about user authentication, see Security Guide  .

### When other errors occur

Messages	Causes	Solutions
"98: Error"	The machine could not access the hard disk correctly.	Turn off the power, and then back on again. If the message appears frequently, contact your service representative.




Messages	Causes	Solutions
"Command Error"	An RPCS command error occurred.	<ul style="list-style-type: none"> <li>• Check if the communication between the computer and the machine is working correctly.</li> <li>• Check if the correct printer driver is being used.</li> <li>• Check if the machine's memory size is set correctly in the printer driver.</li> <li>• Check that the printer driver is the most up-to-date version available.</li> </ul>
"Compressed Data Error."	The printer detected corrupt compressed data.	<ul style="list-style-type: none"> <li>• Check the connection between the computer and the printer.</li> <li>• Check that the program you used to compress the data is functioning correctly.</li> </ul>
"Data storage error."	You tried to print a Sample Print, Locked Print, Hold Print, or Stored Print file, or to store a file in the Document Server when the hard disk was malfunctioning.	Contact your service representative.
"Error has occurred."	A syntax error, etc., occurred.	Check that the PDF file is valid.
"Exceeded max. number of files to print for temporary / stored jobs."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum file capacity was exceeded.	Delete unneeded files stored in the machine.
"Exceeded max. number of pages to print for temporary / stored jobs."	While printing a Sample Print, Locked Print, Hold Print, or Stored Print file, the maximum page capacity was exceeded.	<ul style="list-style-type: none"> <li>• Delete unneeded files stored in the machine.</li> <li>• Reduce the number of pages to print.</li> </ul>

Messages	Causes	Solutions
"Failed to obtain file system."	PDF direct printing could not be performed because the file system could not be obtained.	Turn off the power, and then back on again. If the message appears again, contact your service representative.
"File system is full."	PDF file does not print out because the capacity of the file system is full.	<ul style="list-style-type: none"> <li>• Delete all unnecessary files from the hard disk.</li> <li>• Decrease the file size sent to the machine.</li> </ul>
"Folding Unit Error."	There is a problem with the multi-folding unit.	Contact your service representative.
"I/O buffer overflow."	An input buffer overflow occurred.	<ul style="list-style-type: none"> <li>• In [Printer Features], under [Host Interface], select [I/O Buffer], and then set the maximum buffer size to a larger value.</li> <li>• Reduce the number of files being sent to the machine.</li> </ul>

Messages	Causes	Solutions
"Insufficient Memory"	A memory allocation error occurred.	<p><b>PCL 6</b></p> <p>Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.</p> <p>On the printer driver's [Detailed Settings] tab, click [Print Quality] in "Menu:", and then select [Raster] in the "Vector/Raster:" list. In some cases, it will take a long time to complete a print job.</p> <p><b>PostScript 3</b></p> <p>Select a lower resolution on the printer driver. For details about how to change the resolution setting, see the printer driver Help.</p>
"Memory Retrieval Error"	A memory allocation error occurred.	Turn off the power, and then back on again. If the message appears again, replace the RAM. For details about replacing the RAM, contact your service representative.
"Paper Type Error"	The specified paper type name is not set in the machine.	Re-obtain the latest paper type information set in the machine.

If printing does not start, contact your service representative.

**Note**




- The contents of errors may be printed on the Configuration Page. Check the Configuration Page in conjunction with the Error Log. For details about how to print the Configuration Page, see "List / Test Print", Print .


# Messages Displayed When Using the Scanner Function

## Messages Displayed on the Control Panel When Using the Scanner Function

This section describes likely causes of and possible solutions for the error messages that appear on the control panel. If a message not described here appears, act according to the message.



Messages	Causes	Solutions
"Cannot find the specified path. Please check the settings."	The destination computer name or folder name is invalid.	Check whether the computer name and the folder name for the destination are correct.
"Cannot find the specified path. Please check the settings."	An anti-virus program or a firewall is preventing the machine connecting to your computer.	<p>Anti-virus programs and firewalls can prevent client computers from establishing connection with this machine.</p> <ul style="list-style-type: none"> <li>• If you are using anti-virus software, add the program to the exclusion list in the application settings. For details about how to add programs to the exclusion list, see the anti-virus software Help.</li> <li>• To prevent a firewall blocking the connection, register the machine's IP address in the firewall's IP address exclusion settings. For details about the procedure for excluding an IP address, see your operating system's Help.</li> </ul>
"Entered user code is not correct. Please re-enter."	You have entered an incorrect user code.	Check the authentication settings, and then enter a correct user code.

Messages	Causes	Solutions
"Exceeded max. number of alphanumeric characters for the path."	The maximum number of specifiable alphanumeric characters in a path has been exceeded.	The maximum number of characters which can be entered for the path is 256. Check the number of characters you entered, and then enter the path again.
"Exceeded max. number of alphanumeric characters."	The maximum enterable number of alphanumeric characters has been exceeded.	Check the maximum number of characters which can be entered, and then enter it again. For details about the maximum enterable number of characters, see "Values of Various Set Items for Transmission/Storage / Delivery Function", Scan  .
"Programmed. Cannot program the destination(s) that is not programmed in the address book."	The destinations selected while registering to the program contain a folder destination for which one of the following destinations is set:  manually entered destination, delivery server destination, WSD destination, or DSM destination	WSD destinations and DSM destinations cannot be registered to the program because they cannot be registered in the address book. For manually entered and delivery server destinations, register the destinations in the address book, and then try to register them to the program again.
"Scanner journal is full. Please check Scanner Features."	"Print & Delete Scanner Journal" in [Scanner Features] is set to [Do not Print: Disable Send], and Scanner Journal is full.	Print or delete Scanner Journal. For details about Scanner Features, see "General Settings", Scan  .
"The entered file name contains invalid character(s). Enter the file name again using any of the following 1 byte characters. " 0 to 9 ", " A to Z ", " a to z ", ". - _ ""	The file name contains a character that cannot be used.	Check the file name set at the time of scanning. For details about characters that can be used in file names, see "Specifying the File Name", Scan  .

Messages	Causes	Solutions
"The entered file name contains invalid character(s). Enter the file name again using any of the following 1 byte characters. " 0 to 9 ", " A to Z ", " a to z ", " . - _ ""	The file name contains a character that cannot be used.	Check the file name specified at the time of scanning. The file name specified in the Sending Scan Files to Folders function cannot contain the following characters: \ / : * ? " < >   The file name cannot start or end with a period ".".
"The program is recalled. Cannot recall the destination(s) for which access privileges are required."	The program contains a destination for which the currently logged-in user does not have permission to view.	For details about how to set permissions, see Security Guide  .
"The program is recalled. Cannot recall the destination(s) that is deleted from the address book."	The destination stored in the program could not be called because it was deleted from the address book.	Enter the destination directly to send data separately.
"The program is recalled. Cannot recall the folder destination(s) with protection code(s)."	Destinations registered in the program contain a folder destination for which the protection code is set.	A destination for which the protection code is set cannot be called by the program. Cancel the protection code setting or send scanned files to the destination separately.

**When documents cannot be scanned properly**



Messages	Causes	Solutions
"All the pages are detected as blank. No file was created."	No PDF file was created because all the pages of the scanned original were detected as blank when [On] is specified for [Delete Blank Page] in [OCR Settings].	<ul style="list-style-type: none"> <li>• Check whether the original is set upside down.</li> <li>• Change [OCR Scanned PDF: Blank Page Sensitivity] in [Scanner Features] to "Sensitivity Level 1".</li> </ul>

Messages	Causes	Solutions
"Check original's orientation."	Documents may sometimes not be scanned depending on a combination of items such as the specified scaling factor and document size.	Change the orientation of the original, and then try to scan the original again.
"Exceeded max. data capacity." "Check scanning resolution, then press Start key again."	The scanned data exceeded maximum data capacity.	Specify the scan size and resolution again. Note that it may not be possible to scan very large originals at a high resolution. For details about the settings for the scanner function, see "Relationship between Resolution and Scan Size", Scan  .
"Exceeded max. data capacity." "Check the scanning resolution, then reset n original(s)." ( "n" in the message represents a changeable number.)	The scanned original exceeded maximum data capacity.	Specify the scan size and resolution again. Note that it may not be possible to scan very large originals at a high resolution. For details about the settings for the scanner function, see "Relationship between Resolution and Scan Size", Scan  .
"Exceeded max. data capacity." "Check the resolution and the ratio and then press the Start key again."	The data being scanned is too large for the scale ratio specified in [Specify Size].	Reduce the resolution or [Specify Size] value, and then try to scan the original again.
"Exceeded max. number of files which can be used in Document Server at the same time."	The maximum number of files that can be stored in the Document Server has been exceeded.	Check the files stored by the other functions, and then delete unneeded files. For details about how to delete files, see "Deleting Stored Documents", Copy/ Document Server  .


Messages	Causes	Solutions
<p>"Not all of the image will be scanned."</p>	<p>If the scaling factor specified in "Specify Reproduction Ratio" is too large, part of the image may be lost.</p>	<ul style="list-style-type: none"> <li>• Reduce the scaling factor in "Specify Reproduction Ratio", and then try to scan the original again.</li> <li>• If displaying the entire image is not necessary, press the [Start] key to start scanning with the current scaling factor.</li> </ul>
<p>"Not all of the image will be scanned."</p>	<p>Using [Specify Size] to scale down a large document may cause part of the image to be lost.</p>	<ul style="list-style-type: none"> <li>• Specify a large size in [Specify Size], and then try to scan the original again.</li> <li>• If displaying the entire image is not necessary, press the [Start] key to start scanning with the current scaling factor.</li> </ul>
<p>"The size of the scanned data is too small." "Check the resolution and the ratio and then press the Start key again."</p>	<p>The data being scanned is too small for the scale ratio specified in [Specify Size].</p>	<p>Specify a higher resolution or a large size in [Specify Size], and then try to scan the original again.</p>



## When documents cannot be scanned because the memory is full

Messages	Causes	Solutions
"Memory is full. Cannot scan. The scanned data will be deleted."	Because of insufficient hard disk space, the first page could not be scanned.	<ul style="list-style-type: none"> <li>• Wait for a while, and then retry the scan operation.</li> <li>• Reduce the scan area or scanning resolution. For details about changing scan area and scanning resolution, see "Scan Settings" of "Various Scan Settings", Scan .</li> <li>• Delete unneeded stored files. For details about how to delete stored files, see "Deleting a Stored File", Scan .</li> </ul>
"Memory is full. Do you want to store scanned file?"	Because there is not enough free hard disk space in the machine for storing in the Document Server, only some of the pages could be scanned.	Specify whether to use the data or not.
"Memory is full. Scanning has been cancelled. Press [Send] to send the scanned data, or press [Cancel] to delete."	Because there is not enough free hard disk space in the machine for delivering or sending by e-mail while storing in the Document Server, only some of the pages could be scanned.	Specify whether to use the data or not.


## When data transmission fails

Messages	Causes	Solutions
"Authentication with the destination has failed. Check settings. To check the current status, press [Scanned Files Status]."	The entered user name or password was invalid.	<ul style="list-style-type: none"> <li>• Check that the user name and password are correct.</li> <li>• Check that the ID and password for the destination folder are correct.</li> <li>• A password of 128 or more characters may not be recognized.</li> </ul>
"Exceeded max. E-mail size. Sending E-mail has been cancelled. Check [Max. E-mail Size] in Scanner Features."	The file size per page has reached the maximum e-mail size specified in [Scanner Features].	<ul style="list-style-type: none"> <li>• Increase the e-mail size limit in [Max. Email Size].</li> <li>• Change the [Divide &amp; Send Email] setting to [Yes (per Page)] or [Yes (per Max. Size)].</li> </ul> <p>For details about these settings, see "Send Settings", Scan .</p>
"Sending the data has failed. The data will be resent later."	A network error has occurred and a file was not sent correctly.	Wait until sending is retried automatically after the preset interval. If sending fails again, contact your administrator.
"Transmission has failed. Insufficient memory in the destination hard disk. To check the current status, press [Scanned Files Status]."	Transmission has failed. There was not enough free space on the hard disk of the SMTP server, FTP server, or client computer at the destination.	Allocate sufficient space.
"Transmission has failed. To check the current status, press [Scanned Files Status]."	While a file was being sent, a network error occurred and the file could not be sent correctly.	If the same message appears again after scanning again, the cause could be a mixed network, or else network settings were changed during WSD scanner transmission. For details about network error, contact your administrator.

## When data cannot be sent because a currently used file is selected



Messages	Causes	Solutions
"Selected file is currently in use. File name cannot be changed."	You cannot change the name of a file whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the file name.
"Selected file is currently in use. Password cannot be changed."	You cannot change the password of a file whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the password.
"Selected file is currently in use. User name cannot be changed."	You cannot change the sender's name whose status is "Waiting..." or that is being edited with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then change the user name.
"Some of selected files are currently in use. They could not be deleted."	You cannot delete a file which is waiting to be transmitted ("Waiting..." status displayed) or whose information is being changed with DeskTopBinder.	Cancel transmission ("Waiting..." status cleared) or the DeskTopBinder setting, and then delete the file.

## When data cannot be sent because there are too many documents or pages

Messages	Causes	Solutions
"Exceeded max. number of pages per file. Do you want to store the scanned pages as 1 file?"	The file being stored has exceeded the maximum number of pages for one file.	Specify whether to store the data or not. Scan the pages that were not scanned, and then store them as a new file. For details about storing files, see "Storing and Saving the Scanned Documents", Scan  .
"Exceeded max. number of stored files. Cannot send the scanned data as capturing files is unavailable."	Too many files are waiting to be delivered.	Try again after they have been delivered.

Messages	Causes	Solutions
"Exceeded max. page capacity per file. Press [Send] to send the scanned data, or press [Cancel] to delete."	The number of scanned pages exceeded the maximum page capacity.	Select whether to send the data that has already been scanned.
"Exceeded maximum number of file to store. Delete all unnecessary files."	Too many files are waiting to be delivered.	Try again after they have been delivered.


### When the WSD scanner function cannot be used

Messages	Causes	Solutions
"Cannot communicate with PC. Contact the administrator."	WSD (Device) protocol or WSD (Scanner) protocol is disabled.	For details about how to enable or disable the WSD protocol, see Security Guide  .
"Cannot start scanning because communication was failed."	Scan Profile is not set on the client computer.	Set Scan Profile. For details about how to do this, see "Creating a New Scan Profile", Scan  .
"Cannot start scanning because communication was failed."	The [Take no action] setting has been selected on the client computer, forcing the client computer to remain inactive when it receives scan data.	Open scanner properties, click the [Events] tab, and then select [Start this program] as the computer's response on receipt of scan data. For details, see your operating system's Help.
"Cannot start scanning. Check the setting(s) on the PC."	The Scan Profile might be incorrectly configured.	Check the Scan Profile configuration.

Messages	Causes	Solutions
"Could not send the data because the PC timed out before it was sent."	<p>A time out occurred when using WSD Scanner. Time outs occur when too much time passes between scanning an original and sending its data. The followings are likely causes of time outs:</p> <ul style="list-style-type: none"> <li>• Too many originals per set.</li> <li>• Misfed originals.</li> <li>• Transmission of other jobs.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the number of originals, and then scan again.</li> <li>• Remove any misfed original, and then scan again.</li> <li>• Use Scanner Journal to check there are no jobs awaiting transmission, and then scan again.</li> </ul>

### When documents cannot be stored on a memory storage device

Messages	Causes	Solutions
"Cannot write on the memory storage device because remaining free space is insufficient."	<ul style="list-style-type: none"> <li>• The memory storage device is full and scan data cannot be saved.</li> <li>• Even if the memory storage device appears to have sufficient free space, data might not be saved if the maximum number of files that can be saved is exceeded.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the memory storage device.</li> <li>• If the document is scanned as single-page or divided multiple pages, data already written to the memory storage device is saved as is. Replace the memory storage device, and then press [Retry] to save the remaining data, or press [Cancel] to redo the scan.</li> </ul>
"Cannot write on the memory storage device because the device is write-protected."	The memory storage device is write-protected.	Unlock the write-protection on the memory storage device.

Messages	Causes	Solutions
"Cannot write on the memory storage device. Check the memory storage device and machine settings."	The memory storage device is faulty, or the file name contains a character that cannot be used.	<ul style="list-style-type: none"> <li>• Check to see if the memory storage device is defective.</li> <li>• Check the memory storage device. It might be unformatted, or its format might be incompatible with this machine.</li> <li>• Check the file name set at the time of scanning. For details about the characters that can be used in file names, see "Specifying the File Name", Scan .</li> </ul>
"Exceeded max. page capacity per file. Press [Write] to write the scanned data to the memory storage device, or press [Cancel] to delete."	The scan could not be completed because the maximum number of pages that can be scanned by this machine was exceeded during writing to the memory storage device.	Reduce the number of documents to be written to the memory storage device, and then try again.
"Memory is full. Press [Write] to write the current scanned data to the memory storage device, or press [Cancel] to delete."	The scan could not be completed because there was insufficient hard disk memory at the time of saving to the memory storage device.	Select whether or not to save the scanned document to the memory storage device.


## Messages Displayed on the Client Computer

This section describes likely causes of and possible solutions for the main error messages displayed on the client computer when using the TWAIN driver. If a message not described here appears, act according to the message.

Messages	Causes	Solutions
"Any of Login User Name, Login Password or Driver Encryption Key is incorrect."	The entered login user name, login password, or driver encryption key was invalid.	Check your login user name, login password, or driver encryption key, and then enter them correctly. For details about login user name, login password, and driver encryption key, see Security Guide ③.
"Authentication succeeded. However, the access privileges for scanner function has been denied."	The logged in user name does not have permission for scanner function.	For details about how to set permissions, see Security Guide ③.
"Cannot add any more scanning mode."	The maximum number of registerable scan modes has been exceeded.	The maximum number of modes that can be stored is 100. Delete unneeded modes.
"Cannot detect the paper size of the original. Specify the scanning size."	The set original was misaligned.	<ul style="list-style-type: none"> <li>Place the original correctly.</li> <li>Specify the scan size.</li> <li>When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.</li> </ul>
"Cannot specify any more scanning area."	The maximum number of registerable scan areas has been exceeded.	The maximum number of scanning areas that can be stored is 100. Delete unneeded scanning areas.

Messages	Causes	Solutions
"Clear Misfeed(s) in ADF."	A paper misfeed has occurred inside the ADF.	<ul style="list-style-type: none"> <li>Remove the jammed originals, and then insert them again. For details about jammed paper, see "Removing Jammed Paper", Troubleshooting 8.</li> <li>When a misfeed occurs, replace the jammed originals.</li> <li>Check whether the originals are suitable to be scanned by the machine.</li> </ul>
"Error has occurred in the scanner driver."	An error has occurred in the driver.	<ul style="list-style-type: none"> <li>Check whether the network cable is connected correctly to the client computer.</li> <li>Check whether the Ethernet board of the client computer is recognized correctly by Windows.</li> <li>Check whether the client computer can use the TCP/IP protocol.</li> </ul>
"Error has occurred in the scanner."	The application-specified scan conditions have exceeded the setting range of the machine.	Check whether the scanning settings made with the application exceed the setting range of the machine.
"Fatal error has occurred in the scanner."	An unrecoverable error has occurred on the machine.	An unrecoverable error has occurred in the machine. Contact your service representative.





Messages	Causes	Solutions
"Insufficient memory. Close all other applications, then restart scanning."	Memory is insufficient.	<ul style="list-style-type: none"> <li>• Close all the unnecessary applications running on the client computer.</li> <li>• Uninstall the TWAIN driver, and then reinstall it after restarting the computer.</li> </ul>
"Insufficient memory. Reduce the scanning area."	Scanner memory is insufficient.	<ul style="list-style-type: none"> <li>• Reset the scan size.</li> <li>• Lower the resolution.</li> <li>• Set with no compression. For details about the settings, see TWAIN driver Help.</li> </ul> <p>The problem may be due to the following causes:</p> <ul style="list-style-type: none"> <li>• Scanning cannot be performed if large values are set for brightness when using halftone or high resolution. For details about the relationship between scan settings, see "Relationship between Resolution and Scan Size", Scan .</li> <li>• If a misfeed occurs, you might not scan an original. Remove the misfeed, and then scan the original again.</li> </ul>
"Invalid Winsock version. Please use version 1.1 or higher."	You are using an invalid version of Winsock.	Install the operating system of the computer or copy Winsock from the operating system CD-ROM.

Messages	Causes	Solutions
"No response from the scanner."	The machine or client computer is not connected to the network correctly.	<ul style="list-style-type: none"> <li>• Check whether the machine or client computer is connected to the network correctly.</li> <li>• Disable the client computer's own firewall. For details about firewall, see Windows Help.</li> </ul>
"No response from the scanner."	The network is crowded.	Wait for a while, and then try to reconnect.
"Scanner is in use for other function. Please wait."	A function of the machine other than the Scanner function is being used such as the Copier function.	<ul style="list-style-type: none"> <li>• Wait for a while, and then reconnect.</li> <li>• Cancel the job that is being processed. Press the [Stop] key. Follow the instructions in the message that appears and exit the function that is running.</li> </ul>
"Scanner is not available on the specified device."	The TWAIN scanner function cannot be used on this machine.	Contact your service representative.
"Scanner is not ready. Check the scanner and the options."	The ADF cover is open.	Check whether the ADF cover is closed.
"The name is already in use. Check the registered names."	You tried to register a name that is already in use.	Use another name.


### When there is a problem connecting to the scanner

Messages	Causes	Solutions
"Cannot connect to the scanner. Check the network Access Mask settings in User Tools."	An access mask is set.	For details about an access mask, contact your administrator.

Messages	Causes	Solutions
"Cannot find "XXX" scanner used for the previous scan. "YYY" will be used instead." ( "XXX" and "YYY" indicate scanner names.)	The main power of the previously used scanner is not set to "On".	Check whether the main power of the scanner used for the previous scan is turned on.
"Cannot find "XXX" scanner used for the previous scan. "YYY" will be used instead." ( "XXX" and "YYY" indicate scanner names.)	The machine is not connected to the network correctly.	<ul style="list-style-type: none"> <li>• Check that the previously used scanner is connected to the network correctly.</li> <li>• Cancel the personal firewall of the client computer. For details about firewall, see Windows Help.</li> <li>• Use an application such as telnet to make sure SNMPv1 or SNMPv2 is set as the machine's protocol. For details about how to check this, see "Remote Maintenance Using telnet", Connecting the Machine/ System Settings .</li> <li>• Select the scanner used for the previous scan.</li> </ul>
"Communication error has occurred on the network."	A communication error has occurred on the network.	Check whether the client computer can use the TCP/IP protocol.
"Scanner is not available. Check the scanner connection status."	The machine's power is off.	Turn on the power.


Messages	Causes	Solutions
<p>"Scanner is not available. Check the scanner connection status."</p>	<p>The machine is not connected to the network correctly.</p>	<ul style="list-style-type: none"> <li>• Check whether the machine is connected to the network correctly.</li> <li>• Deselect the personal firewall function of the client computer. For details about firewall, see Windows Help.</li> <li>• Use an application such as telnet to make sure SNMPv1 or SNMPv2 is set as the machine's protocol. For details about how to check this, see "Remote Maintenance Using telnet", Connecting the Machine/ System Settings .</li> </ul>
<p>"Scanner is not available. Check the scanner connection status."</p>	<p>Network communication is not available because the machine's IP address could not be obtained from the host name. If only "IPv6" is set to [Active], the IPv6 address might not be obtained.</p>	<ul style="list-style-type: none"> <li>• Check whether the machine's host name is specified in the Network Connection Tool. For the WIA driver, check the [Network Connection] tab in the properties.</li> <li>• Use Web Image Monitor to set "LLMNR" of "IPv6" to [Active].</li> <li>• In Windows XP, IPv6 address cannot be obtained from the host name. Specify the machine's IPv6 address in the Network Connection Tool.</li> </ul>

## When Other Messages Appear


Messages	Causes	Solutions
<p>"Cannot connect with the wireless card. Turn the main power switch off, then check the card."</p> <p>(A "wireless LAN board" or "Bluetooth interface unit" is referred to as a "wireless card".)</p>	<ul style="list-style-type: none"> <li>• The wireless LAN board was not inserted when the machine was turned on.</li> <li>• The wireless LAN board was pulled out after the machine was turned on.</li> <li>• The settings are not updated although the unit is detected.</li> </ul>	<p>Turn off the power, and then confirm the wireless LAN board is inserted correctly. After confirmation, turn on the power again. If the message appears again, contact your service representative.</p>
<p>"Cannot connect with the Bluetooth interface. Check the Bluetooth interface."</p>	<ul style="list-style-type: none"> <li>• The Bluetooth interface unit was installed while the machine was turned on.</li> <li>• The Bluetooth interface unit was removed while the machine was turned on.</li> </ul>	<p>Turn off the power, and then confirm that the Bluetooth interface unit was installed correctly. After confirmation, turn on the power again. If the message appears again, contact your service representative.</p>
<p>"Clean the scanning glass. (Located next to the exposure glass.)"</p>	<p>The scanning glass or guide plate of the ADF is dirty.</p>	<p>Clean them. See "Maintaining Your Machine", Maintenance and Specifications .</p>

Messages	Causes	Solutions
<p>"Following output tray is full. Remove paper."</p>	<p>The output tray is full.</p>	<ul style="list-style-type: none"> <li>Remove paper from the output tray to resume printing. If paper is destined for the finisher shift tray, to prevent paper from falling off the tray press the [Stop] key to suspend printing, and then remove the paper. Press [Continue] on the display panel to resume printing.</li> <li>When using the multi-folding unit, the number of sheets per copy paper stack differs depending on the paper type and fold type.</li> </ul>
<p>"Internal cooling fan is active."</p>	<p>Large print runs will cause the machine's interior to heat up, triggering the cooling fan.</p>	<p>The fan will emit noise, but this is normal and the machine will be operable while the fan is running. The amount of paper that can be printed and the total operation time until the fan starts running depends on the temperature of the location at which the machine is installed.</p>
<p>"Self checking..."</p>	<p>The machine is performing image adjustment operations.</p>	<p>The machine may perform periodic maintenance during operations. The frequency and duration of maintenance depends on the humidity, temperature, and printing factors such as number of prints, paper size, and paper type. Wait for the machine to get ready.</p>

## When There Is a Problem Scanning or Storing Originals

Messages	Causes	Solutions
"Cannot detect original size. Select scan size."	The machine failed to detect the size of the original.	<ul style="list-style-type: none"> <li>Place the original correctly.</li> <li>Specify the scan size, and then place the originals again.</li> <li>When placing an original directly on the exposure glass, the lifting/lowering action of the ADF triggers the automatic original size detection process. Lift the ADF by 30 degrees or more.</li> </ul>
"Captured file exceeded max. number of pages per file. Cannot send the scanned data."	The maximum number of pages per file has been exceeded.	Reduce the number of pages in the transmitted file, and then resend the file. For details about the maximum number of pages per file, see "Storage Function", Scan  .
"Original(s) is being scanned for a different function."	Another function of the machine is being used.	Cancel the job in progress. Press [Exit], and then press the [Stop] key. Follow the instructions in the message that appears and exit the function that is running.

## When the Home Screen Cannot Be Edited

Messages	Causes	Solutions
"The image data size is not valid. See the manual for required data."	The image data size is not valid.	For details about file size for shortcut image, see "Displaying an Image on the [Home] Screen", Convenient Functions  .

Messages	Causes	Solutions
"The format of the image data is not valid. See the manual for required data."	The file format of the shortcut image to be added is not supported.	The file format of shortcut images to be added must be PNG. Specify the image again.


### When the Address Book Is Updated

Messages	Causes	Solutions
"Updating the destination list has failed. Try again?"	A network error has occurred.	<ul style="list-style-type: none"> <li>• Check whether the server is connected.</li> <li>• Anti-virus programs and firewalls can prevent client computers from establishing connection with this machine.</li> <li>• If you are using anti-virus software, add the program to the exclusion list in the application settings. For details about how to add programs to the exclusion list, see the anti-virus software Help.</li> <li>• To prevent a firewall blocking the connection, register the machine's IP address in the firewall's IP address exclusion settings. For details about the procedure for excluding an IP address, see your operating system's Help.</li> </ul>





Messages	Causes	Solutions
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	The destination list is being updated from the network using Web Image Monitor.	Wait until the message disappears. Do not turn off the power while this message is displayed. Depending on the number of destinations to be updated, there may be some delay before you can resume operation. Operation is not possible while this message is displayed.
"Updating the destination list... Please wait. Specified destination(s) or sender's name has been cleared."	A specified destination or sender's name was cleared when the destination list in the delivery server was updated.	Specify the destination or sender's name again.

### When Data Cannot Be Sent Due to a Problem with the Destination


Messages	Causes	Solutions
"Some invalid destination(s) contained. Do you want to select only valid destination(s)?"	The specified group contains e-mail destinations and/or folder destinations, either of which are incompatible with the specified transmission method.	In the message that appears at each transmission, press [Select].
"SMTP authentication E-mail address and Administrator E-mail address mismatch."	The SMTP authentication e-mail address and the administrator's e-mail address do not match.	For details about how to set SMTP authentication, see "File Transfer", Connecting the Machine/ System Settings  .

## When the Machine Cannot Be Operated Due to a Problem with the User Certificate



Messages	Causes	Solutions
"The destination cannot be selected because its encryption certificate is not currently valid."	The user certificate (destination certificate) has expired.	A new user certificate must be installed. For details about the user certificate (destination certificate), see Security Guide  .
"The group destination cannot be selected because it contains a destination with a encryption certificate that is not currently valid."	The user certificate (destination certificate) has expired.	A new user certificate must be installed. For details about the user certificate (destination certificate), see Security Guide  .
"Transmission cannot be performed because the encryption certificate is not currently valid."	The user certificate (destination certificate) has expired.	A new user certificate must be installed. For details about the user certificate (destination certificate), see Security Guide  .
"XXX cannot be YYY because the device certificate used for the S/MIME signature is not currently valid." (XXX and YYY indicate the user action.)	The device certificate (S/MIME) has expired.	A new device certificate (S/MIME) must be installed. For details about how to install a device certificate (S/MIME), see Security Guide  .
"XXX cannot be YYY because there is a problem with the device certificate used for the S/MIME signature. Check the device certificate." (XXX and YYY indicate the user action.)	There is no device certificate (S/MIME), or the certificate is invalid.	For details about the device certificate (S/MIME), see Security Guide  .

Messages	Causes	Solutions
"XXX cannot be YYY because the Digital Signature's device certificate is not currently valid." (XXX and YYY indicate the user action.)	The device certificate (PDF with digital signature or PDF/A with digital signature) has expired.	A new device certificate (PDF with digital signature or PDF/A with digital signature) must be installed. For details about how to install a device certificate (PDF with digital signature or PDF/A with digital signature), see Security Guide  .
"XXX cannot be YYY because there is a problem with the Digital Signature's device certificate. Check the device certificate." (XXX and YYY indicate the user action.)	There is no device certificate (PDF with digital signature or PDF/A with digital signature), or the certificate is invalid.	A new device certificate (PDF with digital signature or PDF/A with digital signature) must be installed. For details about how to install a device certificate (PDF with digital signature or PDF/A with digital signature), see Security Guide  .



 **Note**

- If an e-mail cannot be sent and a message appears which states that there is a problem with the device certificate or user certificate, a new certificate must be installed. For details about how to install a new certificate, see Security Guide .


## When Problems Occur While Logging In


Messages	Causes	Solutions
"Authentication has failed."	The entered login user name or login password is not correct.	For details about the correct login user name and login password, see Security Guide  .
"Authentication has failed."	The machine cannot perform authentication.	For details about authentication, see Security Guide  .

### When the User Lacks Privileges to Perform an Operation

Messages	Causes	Solutions
"You do not have the privileges to use this function."	The logged in user name does not have permission for the selected function.	For details about how to set permissions, see Security Guide  .
"The selected file(s) contained file(s) without access privileges. Only file(s) with access privileges will be deleted."	You have tried to delete files without the authority to do so.	To check your access permission for stored documents, or to delete a document you do not have permission to delete, see Security Guide  .

### When the LDAP Server Cannot Be Used

Messages	Causes	Solutions
"Connection with LDAP server has failed. Check the server status."	A network error has occurred and connection has failed.	<ul style="list-style-type: none"> <li>• Try the operation again. If the message is still shown, the network may be busy.</li> <li>• Check the settings for LDAP server in [System Settings]. For details about settings for LDAP server, see "Programming the LDAP server", Connecting the Machine/ System Settings .</li> </ul>

Messages	Causes	Solutions
"Exceeded time limit for LDAP server search. Check the server status."	A network error has occurred and connection has failed.	<ul style="list-style-type: none"> <li>• Try the operation again. If the message is still shown, the network may be busy.</li> <li>• Check that the correct settings for LDAP server are listed in [Administrator Tools] of [System Settings]. For details about LDAP server, see "Programming the LDAP server", Connecting the Machine/System Settings .</li> </ul>
"LDAP server authentication has failed. Check the settings."	A network error has occurred and connection has failed.	Make settings correctly for the user name and the password for LDAP server authentication.



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MEMO







# Operating Instructions

# Driver Installation Guide



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# 1. Introduction

This chapter explains the software included on the supplied CD-ROM.

## Start Installer

To connect this machine to a client computer and use its printer and scanner functions, the software included on the provided CD-ROM must be installed on the client computer.

The installer starts automatically when you insert the provided CD-ROM into the CD-ROM drive of a client computer running under Windows or Windows Server. You can then install the various software included on the CD-ROM.

The contents (display item) of the installer are as follows:

### Quick Install

Installs the PCL 6 printer driver, and configures the Standard TCP/IP port to establish a connection with a network printer.

For details, see page 14 "Quick Install".

### PCL Printer Drivers

Installs the PCL 6 and/or PCL 5e printer drivers.

For details about installing the driver, see page 16 "Installing the Printer Driver for a Network Connection" or page 29 "Installing the Printer Driver for a Local Connection".

### PostScript 3 Printer Driver

Installs the PostScript 3 printer driver.

For details about installing the driver, see page 16 "Installing the Printer Driver for a Network Connection" or page 29 "Installing the Printer Driver for a Local Connection".

### TWAIN Driver

This software enables you to utilize image data from other TWAIN compliant applications.

For details about installing the driver, see page 43 "Installing the TWAIN Driver".

### Font Manager

This software enables you to use screen fonts.

For details about installing the software, see page 41 "Installing Font Manager".

### Select Language

Changes the interface language.

### Browse This CD-ROM

Browses the contents of this CD-ROM.

### Exit

Quits Installer.

 **Note**

- Manage Printers permission is required to install the driver. Log on as an Administrators group member.
- Auto Run might not work automatically with certain OS settings. If this is the case, double-click "Setup.exe", located on the CD-ROM root directory, or click [Run SETUP.EXE] in the [AutoPlay] dialog box.
- If you want to cancel Auto Run, hold down the left [Shift] key while inserting the CD-ROM. Keep the [Shift] key held down until the computer stops reading the CD-ROM.

# Software and Utilities Included on the CD-ROM

This section explains the software and utilities CD-ROM provided with this machine.

## Note

- For the latest information on the corresponding operating system, see "Readme.txt" file in the root folder.
- For the latest information on Windows terminal service, Citrix Presentation Server, and Citrix Xen App, see the manufacturer's Web site.

## Printer Drivers

Printing requires installation of a printer driver for your operating system. The following drivers are included on the CD-ROM.

Operating System <sup>*1</sup>	Printer Language		
	PCL 5e	PCL 6	PostScript 3
Windows XP <sup>*2</sup>	OK	OK	OK
Windows Vista <sup>*3</sup>	OK	OK	OK
Windows 7 <sup>*4</sup>	OK	OK	OK
Windows 8 <sup>*5</sup>	OK	OK	OK
Windows Server 2003 <sup>*6</sup>	OK	OK	OK
Windows Server 2008 <sup>*7</sup>	OK	OK	OK
Windows Server 2012 <sup>*8</sup>	OK	OK	OK
Mac OS X <sup>*9</sup>	—	—	OK

\*1 Windows operating system supports both versions (32/64 bit)

\*2 Microsoft Windows XP Professional Edition/Microsoft Windows XP Home Edition

\*3 Microsoft Windows Vista Ultimate/Microsoft Windows Vista Enterprise/Microsoft Windows Vista Business/  
Microsoft Windows Vista Home Premium/Microsoft Windows Vista Home Basic

\*4 Microsoft Windows 7 Home Premium/Microsoft Windows 7 Professional/Microsoft Windows 7 Ultimate/  
Microsoft Windows 7 Enterprise

\*5 Microsoft Windows 8/Microsoft Windows 8 Pro/Microsoft Windows 8 Enterprise

- \*6 Microsoft Windows Server 2003 Standard Edition/Microsoft Windows Server 2003 Enterprise Edition/  
Microsoft Windows Server 2003 R2 Standard Edition/Microsoft Windows Server 2003 R2 Enterprise  
Edition
- \*7 Microsoft Windows Server 2008 Standard/Microsoft Windows Server 2008 Enterprise/Microsoft  
Windows Server 2008 R2 Standard/Microsoft Windows Server 2008 R2 Enterprise
- \*8 Microsoft Windows Server 2012 Foundation/Microsoft Windows Server 2012 Essentials/Microsoft  
Windows Server 2012 Standard
- \*9 Mac OS X 10.5 or later

### PCL printer drivers

Two kinds of PCL printer driver (PCL 5e and PCL 6) are included. These drivers allow your computer to communicate with this machine via a printer language.

### Adobe® PostScript® printer driver and PPD files

Adobe PostScript printer driver allows the computer to communicate with the printer using a printer language. PPD files allow the printer driver to enable specific printer functions.

#### ↓ Note

- Some applications may require installation of the PCL 5e printer driver. In this case, you can install PCL 5e without having to install PCL 6.
- For details about installing the driver, see page 16 "Installing the Printer Driver for a Network Connection" or page 29 "Installing the Printer Driver for a Local Connection".

### Supported languages

The languages supported in each printer driver are as follow:

Supported languages	Printer Language			
	PCL 5e *1	PCL 6 *2	PostScript 3 *2	PPD (Mac OS X)
English	○	○	○	○
German	○	○	○	○
French	○	○	○	○
Italian	○	○	○	○
Spanish	○	○	○	○
Dutch	○	○	○	○
Swedish	○	○	○	○
Norwegian	○	○	○	○

Supported languages	Printer Language			
	PCL 5e <sup>*1</sup>	PCL 6 <sup>*2</sup>	PostScript 3 <sup>*2</sup>	PPD (Mac OS X)
Danish	○	○	○	○
Finnish	○	○	△	△
Hungarian	○	○	△	△
Czech	○	○	△	△
Polish	○	○	△	△
Portuguese	○	○	△	△
Russian	○	○	△	△
Catalan	○	○	△	△
Turkish	○	○	△	△
Brazilian Portuguese	△	○	△	△
Greek	△	○	△	△

○: Supported

△: Supported, but the printer language is displayed in English

\*1 The PCL 5e printer driver does not support Brazilian Portuguese and Greek. Use the English version of the driver.

\*2 The PCL 6 and PostScript 3 printer drivers use the same interface language as the one specified by your operating system. However, the PostScript 3 printer will be displayed in English if your operating system uses one of the following languages: Finnish, Hungarian, Czech, Polish, Portuguese, Russian, Catalan, Turkish, Brazilian Portuguese, Greek.

## TWAIN Driver

This driver is required to scan an original using a scanner. To use the machine as a network TWAIN scanner, this driver must be installed.

### File path

The driver is included in the following folder on the CD-ROM:

\X86\DRIVERS\TWAIN

### System requirements

- Hardware

PC/AT-compatible machines that support the following operating system properly

- Operating system \*1

Windows XP/Vista/7/8

Windows Server 2003/2003 R2/2008/2008 R2/2012

\*1 TWAIN scanner runs on a 64-bit operating system, but is not compatible with 64-bit applications. Use it with 32-bit applications.

### Supported languages

The TWAIN driver uses the same interface language as the one specified by your operating system.

#### ↓ Note

- For details about installing the driver, see page 43 "Installing the TWAIN Driver".

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## Font Manager

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For installing new screen fonts, or organizing and managing fonts already in the system. For details about Font Manager, see the manual on the CD-ROM.

### File path

The software is included in the following folder on the CD-ROM:

\FONTMAN\DISK1

#### ↓ Note

- For details about installing the software, see page 41 "Installing Font Manager".

## For Mac OS X Users

If you are using Mac OS X, the following limitations apply to each function:

- When using the scanner function, the TWAIN driver cannot be used.
- When using the printer function, use the printer driver for Mac OS X.

For details, see page 49 "Installing the Printer Driver Under Mac OS X".





# 2. Installing the Printer Driver

This chapter explains how to install and configure the printer drivers for use on the Windows operating system. Installing procedures on Windows 7 is shown as an example except where indicated.

## Confirming the Connection Method

This machine supports network and local connection.

Before installing the printer driver, check how the machine is connected. Follow the driver installation procedure that is appropriate to the connection method.

### Network Connection

This machine can be used as a Windows printing port or network printer.

#### Using the Windows printing port

Network connections can be established through Ethernet and Wireless LAN.

Available ports are determined based on the combination of Windows operating system version and connection method used.

#### Windows XP, Windows Server 2003/2003 R2

Connection Method	Available Ports
<ul style="list-style-type: none"><li>Ethernet</li><li>Wireless LAN</li></ul>	<ul style="list-style-type: none"><li>Standard TCP/IP port</li><li>IPP port</li><li>LPR port</li><li>SmartDeviceMonitor for Client port</li></ul>

#### Windows Vista/7, Windows Server 2008/2008 R2

Connection Method	Available Ports
<ul style="list-style-type: none"><li>Ethernet</li><li>Wireless LAN</li></ul>	<ul style="list-style-type: none"><li>Standard TCP/IP port</li><li>IPP port</li><li>LPR port</li><li>WSD port</li><li>SmartDeviceMonitor for Client port</li></ul>

**Windows 8, Windows Server 2012**

Connection Method	Available Ports
<ul style="list-style-type: none"> <li>• Ethernet</li> <li>• Wireless LAN</li> </ul>	<ul style="list-style-type: none"> <li>• Standard TCP/IP port</li> <li>• IPP port</li> <li>• LPR port</li> <li>• WSD port</li> </ul>

**Note**

- For details about how to install the printer driver for each type of port, see page 16 "Installing the Printer Driver for the Selected Port".

**Using as a network printer**

This machine can be used as a remote printer using the Windows or NetWare print server function.

Client OS	Using Server
<ul style="list-style-type: none"> <li>• Windows XP</li> <li>• Windows Server 2003/2003 R2</li> </ul>	<ul style="list-style-type: none"> <li>• Windows XP print server</li> <li>• Windows Vista print server</li> <li>• Windows 7 print server</li> <li>• Windows 8 print server</li> <li>• Windows Server 2003/2003 R2 print server</li> <li>• Windows Server 2008/2008 R2 print server</li> <li>• Windows Server 2012 print server</li> <li>• NetWare print server (using IPv4 only)</li> <li>• NetWare file server (using IPv4 only)</li> </ul>
<ul style="list-style-type: none"> <li>• Windows Vista</li> <li>• Windows 7</li> <li>• Windows 8</li> <li>• Windows Server 2008/2008 R2</li> <li>• Windows Server 2012</li> </ul>	<ul style="list-style-type: none"> <li>• Windows XP print server</li> <li>• Windows Vista print server</li> <li>• Windows 7 print server</li> <li>• Windows 8 print server</li> <li>• Windows Server 2003/2003 R2 print server</li> <li>• Windows Server 2008/2008 R2 print server</li> <li>• Windows Server 2012 print server</li> </ul>

**Note**

- For details about how to install the printer driver to print server, see page 25 "Using as a Network Printer".

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## Local Connection

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Local connections can be established via USB, parallel and Bluetooth connections.

**Note**

- For details about how to install the printer driver for each method of connections, see page 29 "Installing the Printer Driver for a Local Connection".

# Quick Install

You can install the printer drivers easily from the CD-ROM provided with this machine.

Using Quick Install, the PCL 6 printer driver is installed under network environment, and the Standard TCP/IP port will be set.

## ★ Important

- **Manage Printers permission is required to install the drivers. Log on as an Administrators group member.**

### 1. Quit all applications. (Do not close this manual.)

### 2. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

### 3. Select an interface language, and then click [OK].

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

### 4. Click [Quick Install].

### 5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

### 6. Click [Next].

### 7. Select the machine model you want to use in the [Select Printer] dialog box.

### 8. Click [Install].

### 9. Configure the user code, default printer, and shared printer as necessary.

### 10. Click [Continue].

The installation starts.

If the [User Account Control] dialog box appears, and then click [Yes] or [Continue].

### 11. Click [Finish].

When you are prompted to restart your computer, restart it by following the instructions that appear.

### 12. Click [Exit] in the first window of the installer, and then take out the CD-ROM.

## ↓ Note

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:

1. On the Charm Bar, click [Search], and then click [Computer].
2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".

# Installing the Printer Driver for a Network Connection

This section describes the installation procedure of the printer drivers for network connection.

## ★ Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

## ↓ Note

- If the [User Account Control] dialog box appears during the driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears during the driver installation procedure, click [Install this driver software anyway].
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See page 45 "Messages Displayed When Installing the Printer Driver".

## Installing the Printer Driver for the Selected Port

Describes the driver installation procedure for each printer port. See the installation procedure for the printer port you are using.

## ★ Important

- **To use the SmartDeviceMonitor for Client port, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client. For details about SmartDeviceMonitor for Client, see "Software that You Can Download", Getting Started.**

Port Type	Printer Driver Type	Reference
Standard TCP/IP port	PCL PS3	page 17 "Using the Standard TCP/IP port"
IPP port	PCL PS3	page 18 "Using the IPP port"
LPR port	PCL PS3	page 19 "Using the LPR port"
WSD port	PCL PS3	page 20 "Using the WSD port"
SmartDeviceMonitor for Client port	PCL PS3	page 23 "Using the SmartDeviceMonitor for Client port"

## Using the Standard TCP/IP port

PCL PS3

**1. Quit all applications. (Do not close this manual.)**

**2. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

**3. Select an interface language, and then click [OK].**

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**4. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver].**

**5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

If installing the PostScript 3 printer driver, proceed to step 7.

**6. Select a printer driver you want to use, and then click [Next].**

**7. Select [Specify a new port], and then click [Next].**

**8. Select [Standard TCP/IP Port], and then click [Next].**

**9. Click [Next].**

**10. Enter the machine name or IP address, and then click [Next].**

When the device type selection appears, select "RICOH Network Printer C model".

**11. Click [Finish].**

**12. Select the [Printer Name:] check box of the machine model you want to use.**

**13. Configure the user code, default printer, and shared printer as necessary.**

**14. Click [Continue].**

The installation starts.

**15. Click [Finish].**

Select one of the options to restart the computer either now or later, and then click [Finish].

### Note

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:

1. On the Charm Bar, click [Search], and then click [Computer].

2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".

## Using the IPP port

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PCL PS3

2

### ★ Important

- To print via IPP-SSL, use the SmartDeviceMonitor for Client port.
- Installation of the certificate is especially necessary for users who want to print via IPP-SSL from Windows Vista/7/8 or Windows Server 2008/2008 R2/2012. For details, consult your administrator.
- If a certificate authority issues a certificate that must be authenticated by an intermediate certificate authority, and the certificate is installed on this machine, an intermediate certificate must be installed on the client computer. Otherwise, validation by the certificate authority will not be performed correctly.
- If validation cannot be performed properly, a warning message informing you that installation is not possible might appear when you try to add a printer using IPP-SSL under Windows Vista/7/8 or Windows Server 2008/2008 R2/2012. To enable authentication from the client computer, install the intermediate certificate on the client computer, and then reestablish connection.
- Intermediate certificates cannot be installed on this machine.

1. Quit all applications. (Do not close this manual.)

2. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

3. Click [Add a printer].

If you are using a computer that is running Windows 8 or Windows Server 2012, proceed to Step 5.

4. Click [Add a network, wireless or Bluetooth printer].

5. Click [The printer that I want isn't listed].

6. In the [Select a shared printer by name] box, enter "http://(machine's IP address or host name)/printer (or ipp)" as the printer's address, and then click [Next].

7. Click [Have Disk...].

8. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

9. Click [Browse...], and then specify a location for the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:



- PCL 5e
  - 32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\Language\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL5E\X64\Language\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

10. Click **[Open]**.
11. Click **[OK]** to close the **[Install From Disk]** window.
12. Select the manufacturer and model name of the machine you want to use, and then click **[OK]**.

The installation starts.

13. Follow the instructions that appear. Modify settings such as printer name and default printer configuration, as necessary. You can also print a test page.
14. Click **[Finish]**.

If a check box for setting the machine as a default printer appears, configure as necessary.

## Using the LPR port

PCL PS3

1. Quit all applications. (Do not close this manual.)
2. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

3. Select an interface language, and then click **[OK]**.

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

4. Click **[PCL Printer Drivers]** or **[PostScript 3 Printer Driver]**.

5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to step 7.

6. Select a printer driver you want to use, and then click [Next].
7. Select [Specify a new port], and then click [Next].
8. Select [LPR Port], and then click [Next].
9. Enter the machine name or IP address in the [Name or address of server providing lpd:] box.
10. Enter "lp" in the [Name of printer or print queue on that server:] box, and then click [OK].
11. Select the [Printer Name:] check box of the machine model you want to use.
12. Configure the user code, default printer, and shared printer as necessary.
13. Click [Continue].

The installation starts.

14. Click [Finish].

Select one of the options to restart the computer either now or later, and then click [Finish].

#### Note

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:
  1. On the Charm Bar, click [Search], and then click [Computer].
  2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".

## Using the WSD port

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PCL  PS3

#### Important

- The WSD port can be used under Windows Vista/7/8, or Windows Server 2008/2008 R2/2012.
- You can connect to the printer only if both the printer and computer are on the same network segment, or "Network discovery" is enabled. For details, see Windows Help.

### Windows Vista, Windows Server 2008

1. Quit all applications. (Do not close this manual.)
2. On the [Start] menu, click [Network].
3. Right-click the machine's icon, and then click [Install].

4. Click **[Locate and install driver software (recommended)]**.
5. Click **[Browse my computer for driver software (advanced)]**.
6. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Close].

7. Click **[Browse...]**, and then specify the location of the INF file.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5e
  - 32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\Language\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL5E\X64\Language\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

8. Click **[Next]**.
9. Click **[Close]**.

If installation is successful, the icon of the printer connected to the WSD port will appear in the window for configuring printers.

#### **Note**

- The port name that follows "WSD" uses random character strings. It cannot be changed freely.
- To stop the installation, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the printer's icon in the [Network] window, and then click [Uninstall].

#### **Windows 7/8, Windows Server 2008 R2/2012**

1. **Quit all applications. (Do not close this manual.)**
2. **On the [Start] menu, click [Computer].**

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Computer].
3. **Click [Network].**
4. **Right-click the machine's icon, and then click [Install].**

**5. On the [Start] menu, click [Devices and Printers].**

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

**6. Click [Add a printer].**

**7. Click [Add a local printer].**

**8. Check the [Use an existing port:] check box, and select WSD port.**

**9. Click [Next].**

**10. Click [Have Disk...].**

**11. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Close].

**12. Click [Browse...], and then specify the location of the INF file.**

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5e  
32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\Language\DISK1  
64-bit driver D:\X64\DRIVERS\PCL5E\X64\Language\DISK1
- PCL 6  
32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3  
32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**13. Click [Open].**

**14. Click [OK] to close the [Install From Disk] window.**

**15. Select the manufacturer and model name of the machine you want to use, and then click [Next].**

**16. Follow the instructions that appear. Modify settings such as printer name, default printer, and printer sharing configuration, as necessary. You can also print a test page.**

**17. Click [Finish].**

If installation is successful, the icon of the printer connected to the WSD port will appear in the window for configuring printers.

**Note**

- To stop installation of the selected driver, click [Cancel] before the installation is complete. When re-installing the WSD Port, right-click the machine's icon in the [Network] window, and then click [Uninstall].

**Using the SmartDeviceMonitor for Client port**

PCL PS3

To use this function, you must first download SmartDeviceMonitor for Client from the manufacturer's Web site and install it on your computer. Contact your local dealer for information on downloading SmartDeviceMonitor for Client.

**1. Quit all applications. (Do not close this manual.)****2. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

**3. Select an interface language, and then click [OK].**

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**4. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver].****5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

If installing the PostScript 3 printer driver, proceed to step 7.

**6. Select a printer driver you want to use, and then click [Next].****7. Select [Specify a new port], and then click [Next].****8. Select [SmartDeviceMonitor], and then click [Next].****9. To configure port settings using TCP/IP, click [TCP/IP], and then click [Search].**

To configure port settings using IPP, proceed to step 11.

**10. Select the machine you want to use, and then click [OK].**

Only machines that respond to a broadcast from the computer appear. To use a machine not listed here, click [Specify Address], and then enter the IP address or host name of the machine.

Proceed to step 16.

**11. To configure port settings using IPP, click [IPP].****12. In the [Printer URL] box, enter "http://machine's IP address/printer" as the machine's address.**

If the server authentication is issued, enter "https://machine's IP address/printer" to enable SSL (a protocol for encrypted communication). Example IP address: 192.168.15.16

http://192.168.15.16/printer

https://192.168.15.16/printer

You can enter "http://machine's IP address/ipp" as the machine's address.

- 13. Enter a name for identifying the machine in the [IPP Port Name] box. Use a name different from the one of any existing ports.**

If a name is not specified here, the address entered in the [Printer URL] box becomes the IPP port name.

- 14. Click [Detailed Settings] to make necessary settings.**

For details about the settings, see SmartDeviceMonitor for Client Help.

- 15. Click [OK].**

- 16. Select the [Printer Name:] check box of the machine model you want to use.**

- 17. Configure the user code, default printer, and shared printer as necessary.**

- 18. Click [Continue].**

The installation starts.

- 19. Click [Finish].**

Select one of the options to restart the computer either now or later, and then click [Finish].

## Changing the port settings for SmartDeviceMonitor for Client

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Follow the procedure below to change the SmartDeviceMonitor for Client settings, such as TCP/IP protocol.

### Windows XP, Windows Server 2003/2003 R2

- 1. On the [Start] menu, click [Printers and Faxes].**
- 2. Click the icon of the machine you want to use. On the [File] menu, click [Properties].**
- 3. Click the [Ports] tab, and then click [Configure Port].**

The [Port Configuration:] window appears.

### Windows Vista, Windows Server 2008:

- 1. On the [Start] menu, click [Control Panel].**
- 2. Click [Printer].**
- 3. Right-click the icon of the machine you want to use, and then click [Properties].**
- 4. Click the [Ports] tab, and then click [Configure Port].**

The [Port Configuration:] window appears.

### Windows 7, Windows Server 2008 R2:

- 1. On the [Start] menu, click [Devices and Printers].**

2. Right-click the icon of the machine you want to use, and then click [Printer properties].
3. Click the [Ports] tab, and then click [Configure Port].

The [Port Configuration:] window appears.

#### ↓ Note

- User, proxy, and timeout settings can be configured for IPP.
- For details about these settings, see SmartDeviceMonitor for Client Help.

## Using as a Network Printer

Describes the driver installation procedure for each print server. See the installation procedure for the print server you are using.

Server OS	Client OS	Printer Driver Type	Reference
Windows Server	Windows	<input type="checkbox"/> PCL <input type="checkbox"/> PS3	page 25 "Using Windows print server"
NetWare	Windows	<input type="checkbox"/> PCL <input type="checkbox"/> PS3	page 26 "Using NetWare print server"

## Using Windows print server

PCL  PS3

1. Quit all applications. (Do not close this manual.)
2. Insert the provided CD-ROM into the computer's CD-ROM drive.
 

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].
3. Select an interface language, and then click [OK].
 

For details about the languages supported in the printer drivers, see page 6 "Supported languages".
4. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver].
5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].
 

If installing the PostScript 3 printer driver, proceed to step 7.
6. Select a printer driver you want to use, and then click [Next].

7. Select [Specify a new port], and then click [Next].
8. Select [Network Printer], and then click [Next].
9. Double-click the computer name you want to use as a print server in the [Browse for Printer] window.
10. Select the machine you want to use, and then click [OK].
11. Select the [Printer Name:] check box of the machine model you want to use.
12. Configure the user code, default printer, and shared printer as necessary.
13. Click [Continue].
14. Click [Finish].

The installation starts.

Select one of the options to restart the computer either now or later, and then click [Finish].

**Note**

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:
  1. On the Charm Bar, click [Search], and then click [Computer].
  2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".
- If you print with a print server connected to the machine using the SmartDeviceMonitor for Client port, Recovery Printing and Parallel Printing cannot be used from the client computer.
- If you print under a print server, notification functions of SmartDeviceMonitor for Client may not be used with the client computer.

## Using NetWare print server

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PCL PS3

1. **Quit all applications. (Do not close this manual.)**
2. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].
3. **Select an interface language, and then click [OK].**

For details about the languages supported in the printer drivers, see page 6 "Supported languages".
4. **Click [PCL Printer Drivers] or [PostScript 3 Printer Driver].**



5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].

If installing the PostScript 3 printer driver, proceed to step 7.

6. Select a printer driver you want to use, and then click [Next].
7. Select [Specify a new port], and then click [Next].
8. Select [Network Printer], and then click [Next].
9. Double-click the name of the NetWare file server on the network tree.

The created queue is displayed.

10. Select the print queue, and then click [OK].
11. Check that the port of the selected printer is displayed in [Port :].
12. Click [Continue].

The installation starts.

13. Click [Finish] in the [Select Program] dialog box.
14. After the installation is completed, select one of the options to restart the computer either now or later, and then click [Finish].

Restart the computer to complete installation.

15. After restarting the computer, on the [Start] menu, select [Printers and Faxes].
16. Right-click the machine's icon, and then click [Properties].
17. Click the [NetWare Settings] tab.
18. Clear the [Form Feed] and [Enable Banner] check boxes.

Do not select these check boxes since they are automatically selected by the printer driver. If you select the check boxes, the printer may not print correctly.

19. Click [OK].

#### Note

- The protocol is set to inactive as default. Enable the protocol on the control panel or Web Image Monitor.

## Notes when using NetWare

### Form Feed

Do not use NetWare to configure form feed. Form feed is controlled by the printer driver on Windows. If NetWare form feed is configured, the printer may not print properly.

Follow the procedure below to disable form feed according to the operating system used:

- Clear the [Form feed] check box on the [NetWare Settings] tab in the printer properties dialog box.

### **Banner Page**

Do not use NetWare to configure banner page.

Follow the procedure below to disable banner page according to the operating system used:

- Clear the [Enable banner] check box on the [NetWare Settings] tab in the printer properties dialog box.

## **2**

### **When using the PostScript 3 Printer Driver**

Follow the procedure below to set up the PostScript 3 printer driver.

1. On the [Start] menu, select [Printers and Faxes].
2. Right-click the printer's icon, and then click [Properties].
3. Click the [Device Settings] tab.
4. Select [No] on the [Send CTRL-D Before Each Job:] and [Send CTRL-D After Each Job:], and then click [Apply].
5. Click [OK].

### **Printing after Resetting the Printer**

Printer to print server connection requires 30–40 seconds to resume after the printer is reset. During this period, jobs may be accepted (depending on NetWare specifications) but not printed.

To print after resetting the printer as the remote printer, check on the print server that the remote printer is disconnected, or wait for two minutes before trying to print.

# Installing the Printer Driver for a Local Connection

This section describes the installation procedure of the printer drivers for USB, parallel, or Bluetooth connection.

## ★ Important

- **Manage Printers permission is required to install the driver. Log on as an Administrators group member.**

## ↓ Note

- If the [User Account Control] dialog box appears in driver installation procedure, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears in driver installation procedure, click [Install this driver software anyway].
- A message appears if there is a newer version of the printer driver already installed. If there is, you cannot install the printer driver using Auto Run. If you still want to install the printer driver, use [Add Printer]. See page 45 "Messages Displayed When Installing the Printer Driver".

## USB Connection

This section explains how to install the printer drivers using USB.

Before installing, check that only the operating system is running on the computer and no print jobs are in progress.

If the printer driver has already been installed, and plug and play is enabled, the icon of the printer connected to the "USB" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

If the printer driver is not installed, follow the plug-and-play instructions of the machine to install it from the CD-ROM provided with this machine.

## ↓ Note

- To disable Auto Run, press the left Shift key when inserting the CD-ROM into the drive and keep it pressed until the computer finishes reading from the CD-ROM.

## Windows XP, Windows Server 2003/2003 R2

1. **Quit all applications. (Do not close this manual.)**
2. **Check that the power of the machine is off.**

**3. Connect the machine and computer using the USB cable.**

Connect the USB cable firmly.

**4. Turn on the power of the machine.**

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

**5. Select [No, not this time], and then click [Next].**

**6. Click [Install from a list or specific location [Advanced]], and then click [Next].**

**7. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If Auto Run starts, click [Cancel] and then [Exit].

**8. Select the [Search removable media (floppy, CD-ROM...)] check box under [Search for the best driver in these locations.], and then click [Next].**

**9. Select the name of the machine whose driver you want to install.**

Check the location where the source files of the printer driver is stored.

If the CD-ROM drive is D, the source files are stored in the following locations:

- PCL 5e  
32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\Language\DISK1  
64-bit driver D:\X64\DRIVERS\PCL5E\X64\Language\DISK1
- PCL 6  
32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3  
32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**10. Click [Next].**

The installation starts.

**11. Click [Finish].**

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

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## Windows Vista, Windows Server 2008

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**1. Quit all applications. (Do not close this manual.)**

**2. Check that the power of the machine is off.****3. Connect the machine and computer using a USB cable.**

Connect the USB cable firmly.

**4. Turn on the power of the machine.**

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

**5. In the [Found New Hardware] window, click [Locate and install driver software (recommended)].****6. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Close].

**7. Select the name of the machine whose driver you want to install.**

Check the location where the source files of the printer driver is stored.

If the CD-ROM drive is D, the source files are stored in the following locations:

- PCL 5e
  - 32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\Language\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL5E\X64\Language\DISK1
- PCL 6
  - 32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3
  - 32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1
  - 64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**8. Click [Next].**

The installation starts.

**9. Click [Close].**

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

---

## Windows 7/8, Windows Server 2008 R2/2012

**1. Quit all applications. (Do not close this manual.)****2. Check that the power of the machine is off.**

**3. Connect the machine and computer using a USB cable.**

Connect the USB cable firmly.

**4. Turn on the power of the machine.**

Found New Hardware Wizard starts, and USB Printing Support is installed automatically.

**5. Click [Devices and Printers] from the [Start] menu.**

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

**6. Double-Click the icon of machine you want to use in the [Unspecified] category.**

**7. Click the [Hardware] tab.**

**8. Click [Properties].**

**9. Click the [General] tab.**

**10. Click [Change settings].**

**11. Click [Driver] tab.**

**12. Click [Update Driver...].**

**13. Click [Browse my computer for driver software].**

**14. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Close].

**15. Click [Browse], and then select the printer driver location.**

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5e  
32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\{(Language)\DISK1  
64-bit driver D:\X64\DRIVERS\PCL5E\X64\{(Language)\DISK1
- PCL 6  
32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3  
32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**16. Click [Next].**

The installation starts.

**17. Click [Close].**

If the printer driver has already been installed and plug and play is enabled, the icon of the printer connected to the "USB001" port is added to the [Printers], [Printers and Faxes], or [Devices and Printers] window.

The number after "USB" varies depending on the number of printers connected.

---

## Parallel Connection

---

2

**1. Quit all applications. (Do not close this manual.)****2. Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

**3. Select an interface language, and then click [OK].**

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

**4. Click [PCL Printer Drivers] or [PostScript 3 Printer Driver].****5. The software license agreement appears in the [License Agreement] dialog box. After reading the agreement, click [I accept the agreement.], and then click [Next].**

If installing the PostScript 3 printer driver, proceed to step 7.

**6. Select a printer driver you want to use, and then click [Next].****7. Select [Specify a new port], and then click [Next].****8. Select [Local Port], and then click [Next].****9. Enter a port name, and then click [OK].****10. Select the [Printer Name:] check box of the machine model you want to use.****11. Configure the user code, default printer, and shared printer as necessary.****12. Click [Continue].**

The installation starts.

**13. Click [Finish].**

Select one of the options to restart the computer either now or later, and then click [Finish].

 **Note**

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:

1. On the Charm Bar, click [Search], and then click [Computer].
2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".

---

## Bluetooth Connection

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2

### ★ Important

- The Bluetooth unit and the wireless LAN unit cannot be used simultaneously.

## Supported profiles and restrictions

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### Supported Profiles

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

### Restrictions on SPP, HCRP

- A maximum of two Bluetooth adaptor or Bluetooth-equipped computers can be connected at the same time using the Bluetooth interface: one by SPP, one by HCRP.
- When connecting more than one Bluetooth adaptor or Bluetooth-equipped computer at the same time, the first device that establishes connection is selected. When selecting the connection between the other devices, cancel the first established connection.
- SPP connection does not support bidirectional communications.
- HCRP connection supports bidirectional communications.

### Restrictions on BIP

- PostScript 3 must be installed on the printer to connect via BIP.
- Only one Bluetooth adaptor or Bluetooth-equipped computer can be connected via BIP.
- Only JPEG images can be printed using BIP.
- User codes are disabled for BIP.
- You cannot print if print functions are restricted.
- Some printers do not support BIP.

## Adding a Bluetooth printer

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If your computer is running SP1 or an earlier version of Windows XP, there are additional applications that you must install. For details about these, see the Help supplied with your Bluetooth device.



**★ Important**

- To connect to a Bluetooth printer, your computer must have a Bluetooth device installed. Make sure a Bluetooth device is installed on your computer.

**Windows XP, Windows Server 2003/2003 R2**

1. Quit all applications. (Do not close this manual.)
2. On the [Start] menu, click [Printers and Faxes].
3. Click [Add a printer].
4. Click [Next].
5. Click [Bluetooth Printer], and then click [Next].

The computer begins searching for available Bluetooth printers.

If a new printer is discovered, the [Found New Hardware Wizard] window appears. To ignore a discovered device and continue searching, click [Cancel]. The computer resumes searching for other available Bluetooth printers.

6. Click [No, I will not connect], and then click [Next].
7. Click [Install from a list or specific location (Advanced)], and then click [Next].
8. Insert the CD-ROM provided with this machine into your computer's CD-ROM drive, select the [Search removable media (floppy, CD-ROM...)] check box, and then click [Next].
9. If the [Hardware Installation] window appears, click [Continue].
10. If the installation was successful, click [Finish].
11. Select [Test Print], and then click [Next].
12. Click [Finish].

**↓ Note**

- Actual Bluetooth printer operations will vary according to your Bluetooth device and/or Bluetooth-installed computer. For details, see the Help supplied with your Bluetooth device and/or Bluetooth-equipped computer.
- After printing the test page, check it. If there is a problem with the test page, click [Troubleshooting] in the test print window. If there is no problem with the test page, click [Close] to close the window.

**Windows Vista, Windows Server 2008**

1. Quit all applications. (Do not close this manual.)
2. On the [Start] menu, click [Control Panel].
3. In the "Hardware and Sound" area, click [Printers].
4. In the top part of the window, click [Add a printer].

5. In the [Add Printer] window, select [Add a network, wireless or Bluetooth printer], and then click [Next].

The computer begins searching for available Bluetooth devices.

6. From the list of discovered devices, select the machine you want to use, and then click [Next].

All discovered wireless printers appear in the list of discovered printers, not only Bluetooth printers.

Make sure the machine you select is a Bluetooth printer.

7. Insert the CD-ROM provided with this machine into your computer's CD-ROM drive, and then click [Browse my computer for driver software (advanced)] on the [Found New Hardware] display.

8. In the [Found New Hardware] window, select the printer driver you want to use, and then click [Next].

The installation starts.

9. If the [Windows Security] window appears, click [Install this driver software anyway].

10. Click [Close].

11. If you want to change the printer name, enter the new name in the [Printer Name Settings] window.

12. If you want to print a test page, click [Printing Test Page] on the "Test Print" page.

Otherwise, click [Finish].

#### Note

- After printing the test page, check it. If there is a problem with the test page, click [Troubleshooting] in the test print window. If there is no problem with the test page, click [Close] to close the window.

### Windows 7/8, Windows Server 2008 R2/2012

1. Quit all applications. (Do not close this manual.)

2. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

3. Click [Add a printer].

4. Click [Add a network, wireless or Bluetooth printer].

The computer begins searching for available Bluetooth devices.

5. From the list of discovered devices, select the machine you want to use, and then click [Next].

6. If you want to change the printer name, enter the new name in the [Printer Name:], and then click [Next].

7. To share the printer, configure the necessary settings, and then click [Next].
8. If you want to print a test page, click [Print a test page] on the "Test Print" page.  
Otherwise, click [Finish].

 **Note**

- After printing the test page, check it. If there is a problem with the test page, click [Troubleshooting] in the test print window. If there is no problem with the test page, click [Close] to close the window.

# Configuring Option Settings for the Printer

When bidirectional communication works correctly, your computer obtains information about option, paper size and paper feed direction settings from the machine automatically. Bidirectional communication also allows you to monitor machine status.

When bidirectional communication is disabled, you have to set up option, paper size and paper feed direction settings on your computer manually.

## ★ Important

- **Manage Printers permission is required to enable bidirectional communication or to configure the option settings. Log on as an Administrators group member.**

## Conditions for Bidirectional Communication

To support bidirectional communication, the following conditions must be met:

### When connected with parallel cables

- The computer must support bidirectional communication.
- The interface cable must support bidirectional communication.
- The machine must be connected to the computer using the standard parallel cables and parallel connectors.

### When connected with the network

- The Standard TCP/IP port must be used.
- In addition to the above, one of the following conditions must also be met:
  - The TCP/IP protocol or the IPP protocol is used. (When using the IPP protocol, the IPP port name must include the IP address.)

### When connected with USB

- The machine must be connected to the computer's USB port using the USB interface cable.
- The computer must support bidirectional communication.
- [Enable bidirectional support] must be selected, and [Enable printer pooling] must not be selected on the [Ports] tab with the printer driver.

## ↓ Note

- The PCL 6 and PostScript 3 printer drivers support bidirectional communication and automatic printer status updates.
- To obtain printer information automatically using the bidirectional communication function of the PCL 6 or PostScript 3 printer driver, you must select the [Automatically Update Printer Information] check box on the [Accessories] tab in the printer driver's properties window.

- The PCL 5e printer driver supports bidirectional communication. You can update the printer status manually.

---

## If Bidirectional Communication is Disabled

---

This section describes how to set up option, paper size and paper feed direction settings on your computer manually.

2

### 1. Open the printer window.

- Windows XP, Windows Server 2003:  
On the [Start] menu, select [Printers and Faxes].
- Windows Vista, Windows Server 2008:  
On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- Windows 7, Windows Server 2008 R2:  
On the [Start] menu, select [Devices and Printers].
- Windows 8, Windows Server 2012:  
Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

### 2. Open the printer properties dialog box.

- Windows XP/Vista, Windows Server 2003/2008:  
Right-click the machine's icon, and then click [Properties].
- Windows 7/8, Windows Server 2008 R2/2012:  
Right-click the machine's icon, and then click [Printer properties].

### 3. Click the [Accessories] tab.

If options in the [Accessories] tab are disabled, bidirectional connection is enabled. In this case, no change is necessary for option settings.

### 4. Select options installed from the [Options] area, and then make the necessary settings.

### 5. Click [Change Input Tray Settings...].

### 6. In [Input Tray:] select which trays to use, and then, in [Paper Size:] select the size of the paper that you want to load in each tray.

Click [Modify Input Tray/Paper Size] to apply the setting for each tray.

### 7. Click [OK].

### 8. Click [OK] to close the printer properties window.

 **Note**

- For details about making option settings for the machine using a Mac OS X, see page 52 "Configuring Option Settings for the Printer Under Mac OS X".

# Installing Font Manager

## ★ Important

- Manage Printers permission is required to install Font Manager. Log on as an Administrators group member.
- The operating systems compatible with Font Manager are Windows XP/Vista.

1. Quit all applications. (Do not close this manual.)
2. Insert the provided CD-ROM into the computer's CD-ROM drive.

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

3. Select an interface language, and then click [OK].
4. Click [Font Manager].
5. Follow the instructions on the display.

## ↓ Note

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:
  1. On the Charm Bar, click [Search], and then click [Computer].
  2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".





# 3. Installing the Scanner Driver

This chapter explains how to install the TWAIN driver on a client computer. Installing procedures on Windows 7 is shown as an example except where indicated.

## Installing the TWAIN Driver

To use the network TWAIN scanner, you must install the TWAIN driver on a client computer.

1. **Quit all applications. (Do not close this manual.)**
2. **Insert the provided CD-ROM into the computer's CD-ROM drive.**

If the [AutoPlay] dialog box appears, click [Run SETUP.EXE].

If you are using a computer that is running Windows 8 or Windows Server 2012, click the drive and CD-ROM names when these appear in the upper right corner of the screen, and then click [Run SETUP.EXE].

3. **Select an interface language, and then click [OK].**

For details about the languages supported in the TWAIN driver, see page 7 "TWAIN Driver".

4. **Click [TWAIN Driver].**
5. **The installer of the TWAIN driver starts. Follow the instructions.**

### Note

- The [Auto Play] dialog box is displayed only for a few seconds under Windows 8 and Windows Server 2012. If the [AutoPlay] dialog box disappears, use the following procedure to replay the CD-ROM:
  1. On the Charm Bar, click [Search], and then click [Computer].
  2. Double-click the CD-ROM drive in which the provided CD-ROM is set, and then click "Setup.exe".
- Before you start the installation, check the system requirements for the TWAIN driver. For details about the system requirements, see page 5 "Software and Utilities Included on the CD-ROM".
- When the installation is complete, a message about restarting the client computer may appear. In this case, restart the client computer.
- After the installation is complete, a folder with the name of the machine in use is added in [Programs] or [All Programs] on the [Start] menu. Help can be displayed from here.
- Notes on using the network TWAIN scanner are provided in "Readme.txt". Be sure to read them before use.

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## **Installing a TWAIN-Compliant Application on the Same Client Computer**

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To use this machine as a network TWAIN scanner, a TWAIN-compliant application, such as DeskTopBinder, must be installed on the client computer.

You can download DeskTopBinder from the manufacturer's Web site and then install it on the client computer. For details about DeskTopBinder, see "Software that You Can Download", Getting Started.

# 4. Troubleshooting

This chapter provides solutions for driver installation and USB connection problems.

## Messages Displayed When Installing the Printer Driver

This section describes what to do if a message appears when installing the printer driver.

Message number 58 or 34 indicates that the printer driver cannot be installed using Auto Run. Install the printer driver using Add Printer Wizard.

Message number 58 appears if there is a newer version of the printer driver already installed.

4

### 1. Open the printer window.

- Windows XP, Windows Server 2003/2003 R2:  
On the [Start] menu, select [Printers and Faxes].
- Windows Vista, Windows Server 2008:  
On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- Windows 7, Windows Server 2008 R2:  
On the [Start] menu, select [Devices and Printers].
- Windows 8, Windows Server 2012:  
Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

### 2. Click [Add a printer].

### 3. Follow the instructions in Add Printer Wizard.

If the CD-ROM drive is D, the source files of the printer driver are stored in the following locations:

- PCL 5e  
32-bit driver D:\X86\DRIVERS\PCL5E\XP\_VISTA\{(Language)\DISK1  
64-bit driver D:\X64\DRIVERS\PCL5E\X64\{(Language)\DISK1
- PCL 6  
32-bit driver D:\X86\DRIVERS\PCL6\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PCL6\X64\MUI\DISK1
- PostScript 3  
32-bit driver D:\X86\DRIVERS\PS\XP\_VISTA\MUI\DISK1  
64-bit driver D:\X64\DRIVERS\PS\X64\MUI\DISK1

For details about the languages supported in the printer drivers, see page 6 "Supported languages".

#### 4. Specify a port.

##### **Note**

- Available ports vary according to your Windows operating system or the type of interface. For details, see page 11 "Confirming the Connection Method".

## If USB Connection Fails

This section describes how to troubleshoot a problem related to USB connections.

Problem	Causes	Solutions
The machine is not automatically recognized.	The USB cable is not connected properly.	Disconnect the USB cable from the computer, and then turn off the main power switch. Turn on the main power switch again. When the machine has fully booted up, reconnect the USB cable.
Windows has already configured the USB settings.	Check whether the computer has identified the machine as an unsupported device.	Open Windows' Device Manager, and then, under [Universal Serial Bus controllers], remove any conflicting devices. Conflicting devices have a [!] or [?] icon by them. Take care not to accidentally remove required devices. For details, see Windows Help.
The machine does not recognize the USB connection even when a USB cable is inserted.	If the USB cable is connected while the machine is off, the machine might not recognize the USB connection.	Press the operation switch, and then disconnect the USB cable from the computer. When the machine has returned to the ready condition, reconnect the USB cable.



# 5. Installing the Printer Driver Under Mac OS X

This chapter explains how to install and configure the printer drivers for use on the Mac OS X operating system.

## Installing the PPD Files

To print using the printer specific features under Mac OS X, install the PPD files.

### ★ Important

- You need an administrator name and a password (phrase). For details, consult your network administrator.
- For the latest information on the corresponding operating system, see "Readme.txt" file in the root folder.

1. Quit all applications. (Do not close this manual.)
2. Insert the provided CD-ROM into the computer's CD-ROM drive.
3. Double-click the CD-ROM drive icon.
4. Double-click the [Mac OS X] folder.
5. Double-click the [(brand name)] folder.
6. Double-click the [MacOSX PPD Installer] folder.
7. Double-click the package file icon.
8. Follow the instructions on the screen.

### ↓ Note

- The PPD files will be automatically installed in the following location:
- `\Library\Printers\PPDs\Contents\Resources\`

## Registering the Printer

To use the machine, the printer must be registered in the printer list.

Make sure the machine and computer are connected and turned on, and perform the following procedure.

For how to connect the machine to the computer, see "Connecting the Machine", Connecting the Machine/ System Settings.

### ↓ Note

- When printing with a USB connection to a Macintosh computer, the printer language does not change automatically. Use the control panel on this machine to change the printer language to [Auto Detect] or [PS] before printing.
- The operating procedure under Mac OS X differs depending on the version of the operating system. Consult the procedure described in this manual, and make the necessary settings according to the manual of each version.

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## USB Connection

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### ★ Important

- **Make sure the computer and the printer are connected using the USB cable, and the power of the devices are turned on beforehand.**

1. **Start System Preferences.**
2. **Click [Print & Fax] or [Print & Scan].**
3. **Click the [+] button.**
4. **Click [Default].**
5. **Select the printer that has "USB" indicated in the [Kind] column.**
6. **Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.**

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 49 "Installing the PPD Files".

7. **Click [Add].**

If the option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.

8. **Quit System Preferences.**



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## Network Connection

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1. **Start System Preferences.**
2. **Click [Print & Fax] or [Print & Scan].**
3. **Click the [+] button.**
4. **Click [Default].**
5. **Select the printer that has "Bonjour" indicated in the [Kind] column.**

If the printer name is not displayed, select the icon that corresponds to your network environment (TCP/IP, etc.).
6. **Select the printer you are using from the [Print Using:] or [Use:] pop-up menu.**

If the printer you are using is not selected in [Print Using:] or [Use:], select its manufacturer, [Select a driver to use...], or [Select Printer Software...] in the pop-up menu, and then select the PPD file of the printer. For the location of the PPD files, see page 49 "Installing the PPD Files".
7. **Click [Add].**

If the option settings need to be configured, click [Configure...] in the dialog box that appears, and then configure the option settings.
8. **Quit System Preferences.**

# Configuring Option Settings for the Printer Under Mac OS X

This section explains how to configure the printer driver.

1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Select the printer you are using, and then click [Options & Supplies...].
4. Click [Driver], and then configure settings as needed.
5. Click [OK].
6. Quit System Preferences.

 **Note**

- If the option you want to select is not displayed, PPD files may not be set up correctly. To complete the setup, check the name of the PPD file displayed in the dialog box.

# 6. Appendix

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## Updating or Deleting the Driver

### ★ Important

- Administrator permission is required to update or delete the driver in use. Log on as an Administrators group member.
- For driver updates, select a driver that is compatible with the printer and driver type you are using. An error may result if you select a driver that is not compatible with the printer and driver type.

### ↓ Note

- If the [User Account Control] dialog box appears, click [Yes] or [Continue].
- If the [Windows Security] dialog box appears, click [Install this driver software anyway].

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## Updating the Driver

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6

### Printer driver

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You can download the most recent version of the driver from the manufacturer's Web site. Download the latest driver, and then perform the following procedure.

#### 1. Open the printer window.

- Windows XP, Windows Server 2003:  
On the [Start] menu, select [Printers and Faxes].
- Windows Vista, Windows Server 2008:  
On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
- Windows 7, Windows Server 2008 R2:  
On the [Start] menu, select [Devices and Printers].
- Windows 8, Windows Server 2012:  
Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].

#### 2. Open the printer properties dialog box.

- Windows XP/Vista, Windows Server 2003/2008:  
Right-click the machine's icon, and then click [Properties].
- Windows 7/8, Windows Server 2008 R2/2012:

Right-click the machine's icon, and then click [Printer properties].

3. Click the [Advanced] tab.
4. Click [New Driver...], and then click [Next].
5. Click [Have Disk...].
6. Click [Browse...], and then select the driver location.
7. Click [OK].
8. Select the machine model, and then click [Next].

The driver update starts.

9. Click [Finish].
10. Click [OK] to close the printer properties window.
11. Restart the computer.

## PPD files(Mac OS X), TWAIN driver

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You can download the most recent version of the drivers from the manufacturer's Web site.

Delete the old version of the driver first, and then install the new driver. For details about how to delete the driver, see page 54 "Deleting the Driver".

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## Deleting the Driver

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### Printer driver

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#### Windows XP, Windows Server 2003/2003 R2

1. On the [Start] menu, click [Printers and Faxes].
2. Right-click the icon of the machine you want to delete, and then click [Delete].
3. Click [Server Properties] on the [File] menu.
4. Click the [Drivers] tab.
5. Select the driver you want to delete, and then click [Remove].
6. Click [Yes].
7. Click [Close] to close the print server properties window.

#### Windows Vista, Windows Server 2008

1. On the [Start] menu, select [Control Panel], and then click [Printers] in [Hardware and Sound] category.
2. Right-click the icon of the machine you want to delete, and then click [Delete].

3. On the [File] menu, point to [Run as administrator], and then click [Server Properties...].
4. Click the [Drivers] tab.
5. Select the driver you want to delete, and then click [Remove...].
6. Select [Remove driver and driver package.], and then click [OK].
7. Click [Yes].
8. Click [Delete].
9. Click [OK].
10. Click [Close] to close the print server properties window.

#### Windows 7/8, Windows Server 2008 R2/2012

1. On the [Start] menu, click [Devices and Printers].

If you are using a computer that is running Windows 8 or Windows Server 2012, click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [View devices and printers].
2. Right-click the icon of the machine you want to delete, and then click [Remove Device].
3. Click [Yes].
4. Click any machine icon, and then click [Print server properties].
5. Click the [Drivers] tab.
6. Click the [Change Driver Settings] button if it is displayed.
7. Select the driver you want to delete, and then click [Remove...].
8. Select [Remove driver and driver package.], and then click [OK].
9. Click [Yes].
10. Click [Delete].
11. Click [OK].
12. Click [Close] to close the print server properties window.

#### PPD files(Mac OS X)

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1. Start System Preferences.
2. Click [Print & Fax] or [Print & Scan].
3. Select the printer you want to delete, click the [−] button.

## TWAIN driver

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### 1. Start uninstaller.

- **Windows XP, Windows Server 2003/2003 R2:**

On the [Start] menu, select [Control Panel], and then click [Add or Remove Programs].

- **Windows Vista/7, Windows Server 2008/2008 R2:**

On the [Start] menu, select [Control Panel], and then click [Uninstall a program].

- **Windows 8, Windows Server 2012:**

Click [Search] on the Charm Bar, and then click [Control Panel]. When the [Control Panel] window appears, click [Uninstall a program].

### 2. Remove the TWAIN driver.

- **Windows XP, Windows Server 2003/2003 R2:**

1. Select the driver you want to delete.

2. Click [Change/Remove].

- **Windows Vista/7/8, Windows Server 2008/2008 R2 /2012:**

1. Select the driver you want to delete.

2. Click [Uninstall/Change] or [Uninstall].

### 3. Quit uninstaller.

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- The product names of Windows XP are as follows:
  - Microsoft<sup>®</sup> Windows<sup>®</sup> XP Professional Edition
  - Microsoft<sup>®</sup> Windows<sup>®</sup> XP Home Edition
- The product names of Windows Vista are as follows:
  - Microsoft<sup>®</sup> Windows Vista<sup>®</sup> Ultimate
  - Microsoft<sup>®</sup> Windows Vista<sup>®</sup> Business
  - Microsoft<sup>®</sup> Windows Vista<sup>®</sup> Home Premium
  - Microsoft<sup>®</sup> Windows Vista<sup>®</sup> Home Basic
  - Microsoft<sup>®</sup> Windows Vista<sup>®</sup> Enterprise
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MEMO







# Operating Instructions

## Guide to Paper



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# Introduction

This manual explains paper characteristics and methods for handling paper to get favorable print quality and consistent performance from the machine. For more information about paper weights and sizes that are supported by the machine, see the manuals supplied with the machine.

The machine supports regular and coated paper, as well as a variety of other types of paper. However, the characteristics and conditions of certain types of paper may result in low print quality. In addition, the characteristics and conditions of the paper may vary even with the same product. Therefore, we recommend evaluating paper before using the paper with the machine. For details, consult your sales representative or service representative.



# 1. Characteristics and Conditions of Paper

---

This chapter describes the characteristics and conditions of paper.

## Characteristics of Paper

This section describes how the characteristics of paper affect the quality of printing and the movement of paper in the machine.

There are many types of paper. The paper you use should satisfy the conditions noted in page 8 "Paper Specifications".

---

### Composition of Paper

---

#### ★ Important

- **Do not use acidic paper because it accelerates the deterioration of the photoconductor unit and surrounding parts.**

Paper that uses ground-wood pulp and cotton contains calcium carbonate ( $\text{CaCO}_3$ ) and other natural impurities. Do not use paper whose calcium carbonate ratio is high because calcium carbonate reduces the life of the OPC drum and fusing unit. For the values for the calcium carbonate ratio, see page 8 "Paper Specifications".

Do not use coated paper that contains components that dissolve or vaporize when exposed to high temperatures.

---

### Friction Characteristics

---

The friction characteristics of paper are important to transfer the paper correctly from the paper tray through the inside of the machine.

If the paper's friction coefficient is too large or too small, the paper may not feed correctly through the machine. If the friction coefficient is not uniform, it is likely to feed multiple sheets at one time.

Use printing paper with uniform friction characteristics to print from the machine. For the values for the friction coefficients, see page 8 "Paper Specifications".

---

### Surface Smoothness

---

The smoothness of the surface of the paper is important to get high print quality and also stable paper feeds.

If an area has solid printing, it may not be uniform when using paper with a rough surface. On the other hand, the toner may not fuse to the paper properly if the surface of the paper is too smooth. In addition, if paper has a smooth surface, each of the sheets is likely to stick together, and therefore the paper may not feed correctly inside the machine.

Printing on embossed paper may produce irregularities in print quality or deterioration in the ability to fuse toner. Moreover, the paper may not feed correctly in the machine.

For the values for the surface smoothness of paper, see page 8 "Paper Specifications".

---

## Resistance to Heat

---

Paper is exposed to high temperatures inside the machine when toner is fused to the paper. Because of this, it is necessary for the paper to maintain the same qualities even when exposed to high temperatures.

Use a paper that does not dissolve, vaporize, change color, or cause set-off printing when exposed to high temperatures during the fusing process. Also, do not use paper that peels off in layers.

---

## Moisture Content

---

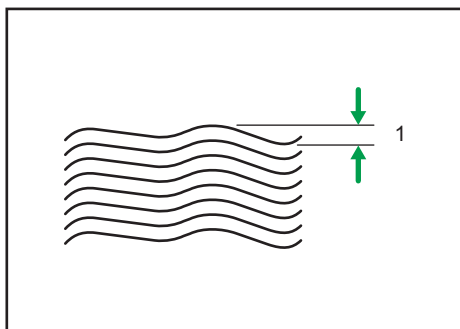
The moisture content of paper affects the condition of the paper and print quality.

If the moisture content ratio is too high, the edge of the paper may warp and become wavy. In addition, the paper may wrinkle during printing and reduce print quality, such as decreasing print density.

### Wavy paper

If the humidity is high in the place where the paper is stored, paper that is exposed to air may absorb moisture and the edges may become wavy. The paper may not feed through the machine, or feed at an angle because the heights of the edge and the center part of wavy paper are different. Also, wrinkling, and curling may occur during printing.

Use paper that has a difference of 2 mm (0.08 inches) or less between the top sheet's highest and lowest point when the maximum number of sheets of paper is loaded in the paper.



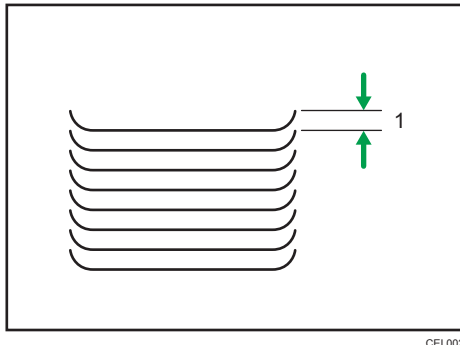
CEL001

### 1. 2 mm (0.08 inches) or less

#### Warped paper

If the humidity is low in the place where paper is stored, paper that is exposed to air may lose moisture and the edges may shrink. Paper with wavy edges feeds at an angle and may cause paper jams.

Use paper that has a difference of 6 mm (0.24 inches) or less between the stack's central area and the edge when the maximum number of sheets of paper is loaded in the paper.



### 1. 6 mm (0.24 inches) or less

For the values for moisture content of paper, see page 8 "Paper Specifications".

## Clark Stiffness

Represents the flexibility of paper.

If the Clark stiffness is low, paper is easy to bend. It is also susceptible to moisture content and heat, so paper with a low Clark stiffness may shrink at its edges or curl during printing. In addition, soft paper is likely to twine around the paper rollers or belts, which may cause paper jams.

For the values for the Clark stiffness of paper, see page 8 "Paper Specifications".

## Bending Stiffness

Represents the flexibility of paper.

Hard paper has a high bending stiffness. If paper has a high bending stiffness, it is difficult to bend through the paper rollers and the pathways inside the machine and may cause paper jams.

For the values for the bending stiffness of paper, see page 8 "Paper Specifications".

## Surface Resistivity

Represents the electrical resistance on the paper's surface.

It may affect the quality of printing and the movement of paper in the machine.

For the values for the surface resistivity of paper, see page 8 "Paper Specifications".

## Paper Specifications

Use the following tables as a guide when you select paper.

### Uncoated paper

Item	Specifications
Ash content (%) *1	15% or less
Calcium carbonate (CaCO <sub>3</sub> ) ratio (%)	15% or less
Cut edge	Height of burrs: 0.05 mm (0.002 inches) or less
Cutting tolerance	Length: ±0.5 mm (0.02 inches) Angle: 90° ± 0.1°
Clark stiffness	40 or more
Bending stiffness	Less than 1800
Smoothness (s)	80 or more
Static friction coefficient	0.35 to 0.67
Moisture content (%)	3.7 to 5.5%
Surface resistivity (Ω)	5×10 <sup>9</sup> to 1×10 <sup>12</sup>

\*1 Measured by combustion at 900°C (1652°F)

### Coated paper

Item	Specifications
Ash content (%) *1	22% or less
Calcium carbonate (CaCO <sub>3</sub> ) ratio (%)	20% or less
Cut edge	Height of burrs: 0.05 mm (0.002 inches) or less

Item	Specifications
Cutting tolerance	Length: $\pm 0.5$ mm (0.02 inches) Angle: $90^\circ \pm 0.1^\circ$
Clark stiffness	40 or more
Bending stiffness	Less than 1800
Air permeability (s)	5000 or less
Static friction coefficient	0.35 to 0.67
Moisture content (%)	3.7 to 5.5%
Surface resistivity ( $\Omega$ )	$5 \times 10^9$ to $1 \times 10^{12}$

\*1 Measured by combustion at  $900^\circ\text{C}$  ( $1652^\circ\text{F}$ )

# Condition of Paper

1

In addition to the composition and characteristics of paper, the condition of the paper greatly affects the print results.

---

## Rips, Wrinkles, and Folds

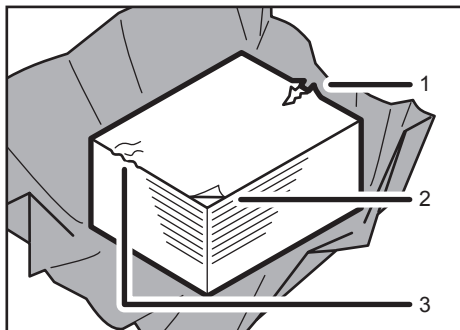
---

Use clean paper in good condition that has no folds, rips, or wrinkles.

Check the condition of the paper before placing it in the paper tray, and remove any sheets that are not in good condition.

### Rips, Wrinkles, and Folded Corners

Use paper that has no rips, wrinkles, or folded corners. If sheets of paper have rips, wrinkles or the like, a paper jam in the paper rollers or surrounding mechanisms may occur or paper may be fed at an angle.



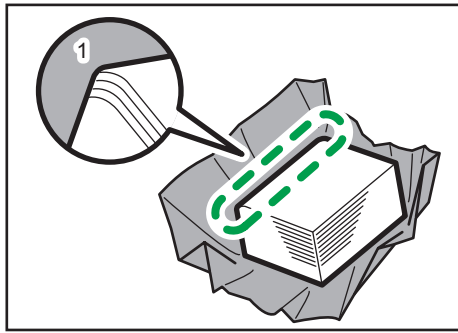
CEL003

1. Rip
2. Folded corner
3. Wrinkles

### Rounded Edges

When paper is placed in storage, the edge of the paper on the top or the bottom may become rounded from being stacked. This is called rounded edges. Using paper like this may cause a paper jam inside the machine or to be fed at an angle.





CEL004

### 1. Rounded edges

## Curls

Curled paper has a major effect on the print quality and end result.

Curled paper can cause such things as paper jams and wrinkles. Also, paper that is output may not stack evenly in the output tray.

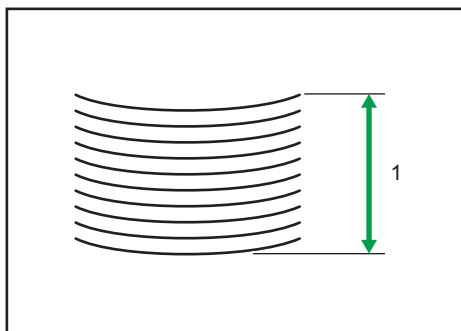
If heat is applied to the paper during the printing process, the entire sheet of paper may curl. Be sure to pay special attention to preprinted paper because it is likely to curl. Paper may also partially curl after printing if the moisture content is not evenly distributed.

Also, the extent of the curl may vary depending on the printing surface of the paper. If the paper curls after printing, turn over the paper in the paper tray and try again.

## How to Measure Curled Paper

You need to measure the extent of the curl of your paper before printing on it.

Use paper that has a maximum curl of not greater than 10 mm (0.39 inches).



CEL006

### 1. 10 mm (0.39 inches) or less

**1. Print on paper under the following printing conditions:**

- One-sided printing
- Print 10 sheets
- Output the paper with the printed side face down

**2. Place the curled paper on a table or flat surface with the curl facing up.**

**3. Measure the height of the tip of the curl at each corner of the stack of paper.**

Do this measurement within one minute after printing.

**Note**

- If the weight of the paper is 221 g/m<sup>2</sup> or more, measure one sheet of paper.

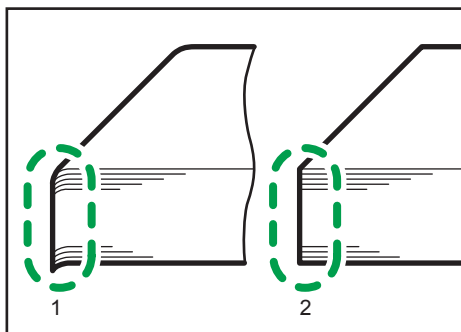
---

## Cut Edge

---

The condition of the cut edge of the paper affects print performance. Use paper that has a clean edge with no burrs.

Cut paper is made by stacking many sheets together and cutting them. The cut edge of paper cut with a sharp cutter is straight, but if the cutter is dull, then the cut edge is uneven and has thin protrusions on the edge of the paper. These are called burrs.



CEL007

**1. Cut edge from a dull cutter**

**2. Cut edge from a sharp cutter**

Burrs may cause the paper to feed at an angle, feed multiple sheets at one time, or result in misfeeds through the machine. They may also cause paper jams in the machine and shorten the life of the fusing unit.

If a paper jam occurs, turn over the paper in the paper tray. Changing the orientation of the burrs can reduce the tendency for paper to jam.

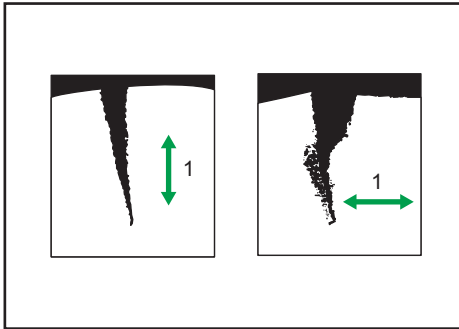
Remove as much of the paper dust particles caused by the burrs as possible. These particles may reduce the print quality.

## Grain Direction

Paper used for printing is produced with the grain of the paper in one direction. The paper's grain direction affects how paper curls or changes shape, as well as the movement of the paper in the machine.

Paper can be loaded in paper trays regardless of grain direction. If the paper curls or changes shape, or a paper jam occurs, change the direction of grain in relation to the paper feed direction by reloading the paper. This should help resolve the problem.

Tear a sheet of paper to check the direction of the grain. The tear in the paper is straight if it is in the same direction as the paper's grain direction. The tear in the paper is not straight if it is not in the same direction as the paper's grain direction.



CEL008

### 1. Grain direction



## 2. Handling Paper

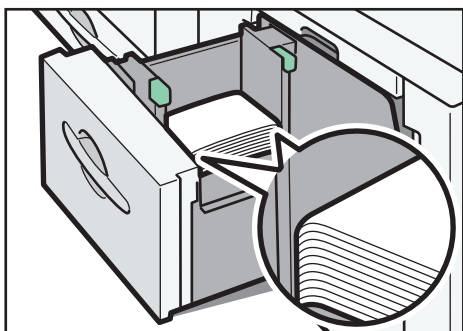
This chapter describes precautions regarding loading and storing paper, and important points about how to use special types of paper.

### Loading Paper

2

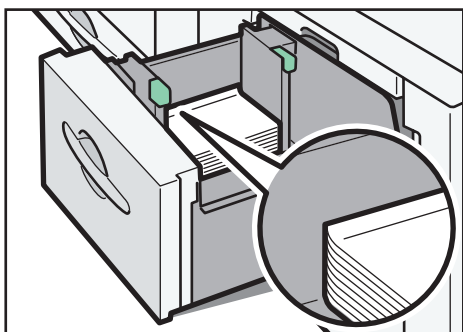
Note the following points for preventing problems related to paper, such as paper feeding at an angle or paper jams.

- Open the package and take out the paper immediately before using it. Do not store the paper in an open package for a long time. The package is moisture proof to prevent the paper from absorbing moisture.
- If you load paper when only a few sheets of paper remain in the tray, multiple sheet feeding may occur. Remove any remaining paper, stack it with the new sheets of paper, and then fan the entire stack before loading it into the tray.
- When loading curled paper, if the top and bottom edges of the paper are curled, load it so they curl down. If the left and right edges of the paper are curled, load it so they curl up.
  - The top and bottom edges of the paper are curled.



CEL010

- The left and right edges of the paper are curled.



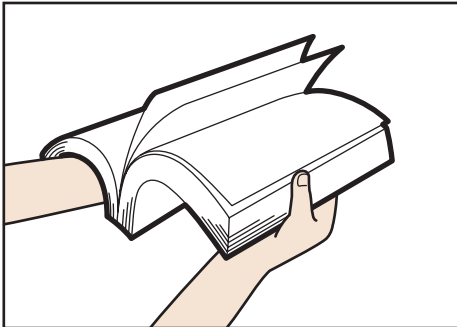
CEL009

- If printed sheets are curled, turn over the paper that is in the paper tray being used. By doing this, the amount of curl may be reduced.
- The paper in the paper tray may change shape if the air conditioner is turned off for a long period, such as at nighttime or on weekends. Check the condition of the paper in the paper tray before using the machine. If the paper has curled or become wavy, reload it correctly or remove the paper that has changed shape.
- Keep the temperature and humidity of the room in which the machine is located as constant as possible.
- If the machine you are using has a function to compensate for curled paper, you can specify curl compensation in the machine's settings. See the manuals supplied with the machine for details about how to configure this setting.

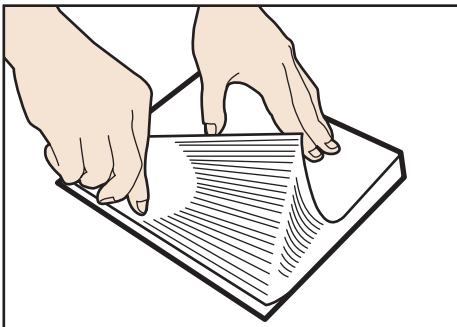
### How to Fan a Stack of Paper

Sheets of paper that stick together may cause multiple sheet feeding or paper jams. Fan the stack of paper before loading it in the paper tray.

Hold the stack of paper in both hands, shuffle the sheets of paper. Otherwise, place the stack of paper on a flat surface, place one hand on the side of the paper and shuffle the other side with your other hand.



CEL011



CEL012

Refer to the above methods, and select the easiest method for the type and size of paper that you are loading.

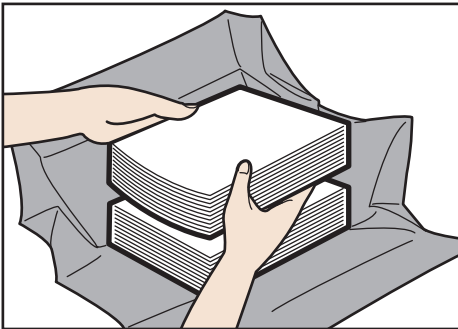
**Note**

- See the manuals supplied with the machine for the procedure to load paper in the paper tray.

## How to Hold Paper

When holding a large amount of paper, split it up into stacks of 200 to 500 sheets each.

The stack of paper may become uneven or parts may stick out if you pick up a large amount of paper at one time. Paper that sticks out will be folded when it is placed in the paper tray and may cause paper jams.

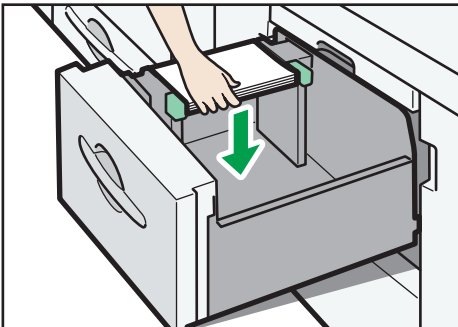


CEL013

## How to Place Paper

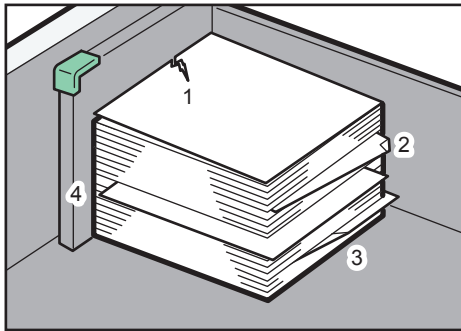
To load paper into the tray, face the paper directly downward and slowly put it into the paper tray.

Do not put paper into the tray by placing a large amount at one time and sliding it along the side of the tray. Some sheets may fold and cause a paper jam.



CEL014

After placing the paper in the paper tray, make sure it is loaded correctly. Remove any paper that is torn or folded. Make sure that no paper is sticking out of the stack. If any paper is sticking out, remove it.



CEL015

1. Rip
2. Folded corner
3. Inside fold
4. Sticking out



# Storing Paper

Temperature, humidity, other environmental factors, and the method of paper storage all greatly affect the paper's condition.

The moisture content of paper changes as the temperature changes, causing the paper to curl and become wavy. The changes in the paper's conditions may cause paper jams and wrinkles generated during printing. Pay attention to the following points when storing paper:

- The temperature of the storage area must be between 20 and 25°C (68 and 77°F) and the humidity must be between 30 and 65%.
- If there is a large temperature difference between the storage area and the area near the machine, keep some paper near the machine for a few days before you use it, so it can adjust to the temperature near the machine.
- Once a package of paper is open, seal it completely in a plastic bag or moisture-proof paper to prevent it from absorbing moisture from the air.
- Do not expose the paper to direct sunlight.
- If stacking directions are indicated on paper boxes, stack the boxes according to the directions. Do not stack paper on end, even if it is still in the box.
- Do not place paper on the floor. Keep paper on a surface such as a palette, table, or cabinet in a temperature and humidity controlled room.

## Precautions during Transport

Note the following points when transporting paper:

- Use a palette if you are transporting many boxes. Do not throw or hit boxes while transporting them. Stacking many boxes may reduce the condition of the paper in the boxes, either because the shape of the lower boxes may change or the upper boxes may fall and become damaged. Therefore, do not stack boxes higher than necessary.
- If you wrap the paper in paper, use wrapping paper that is strong enough to not rip during transport. We recommend using wrapping paper that is moisture proof.

# Using Special Types of Paper

## ★ Important

- Refer to the tables on page 8 "Paper Specifications" as a guide when you select special types of paper to use with the machine.

While this machine supports coated and special types of paper, the characteristics and conditions of certain types of paper may result in low print quality.

We recommend evaluating special types of paper before using them in the machine. It is impossible to confirm the consistency of feeding, and the effect on consumable parts and components without long-term testing, but you can determine the basic characteristics, such as print quality and toner adhesion, by printing around 500 sheets.

## ↓ Note

- The special types of paper that you can use with the machine depend on the machine. For details, see the manuals supplied with the machine.

---

## Coated Paper

---

In terms of density and surface conditions, coated paper is very different from regular paper. Coated paper may not feed correctly and the print quality may not be very good because of the low toner adhesion and image quality. For the characteristics of coated paper that can be used with the machine, see page 8 "Paper Specifications".

Thinly coated paper may cause paper jams in the machine and thickly coated paper has poor toner adhesion that may damage the machine. Also, many coated papers cannot endure the heat and pressure that occur during printing, and may wrinkle during printing.

Fan coated paper before loading it in the paper tray. For details about fanning coated paper, see the manuals supplied with the machine.

---

## Recycled Paper

---

Recycled paper is made from a mixture of new pulp and pulp made from old paper, such as newspapers and magazines. Because of this, the characteristics of recycled paper vary greatly depending on the brand and manufacturer. We recommend evaluating recycled paper before using it.

---

## Preprinted Paper

---

If you want to print on preprinted paper on which a frame or company name is printed, consult your sales representative or service representative.

When printing on preprinted paper, note the following:

- Toner may not adhere to preprinted images as well as it does to plain white paper. Check the print quality in advance.
- Before using preprinted paper, check that the ink is completely dry. Also, make sure that the ink does not transfer to the rollers and make the inside of the machine dirty.
- The machine does not support preprinted paper on which images and/or text are printed using toner.
- To print on paper on which a frame is printed, print in an area 2.5 mm (0.10 inches) or more from the frame.

Major precautions about ink used for preprinted paper are as follows:

- Use a non-volatile oil based and heat resistant ink for preprinted paper. Do not use ink that melts, vaporizes, dissolves, or delaminates when exposed to heat. For details, see page 6 "Resistance to Heat".
- Use the minimum amount of ink on preprinted paper. Use screen printing to print on large areas.
- Do not use powders, such as corn starch, rosin, or talc, to dry ink on preprinted paper.
- Do not use the following types of ink on preprinted paper:
  - Rapid binding ink
  - Evaporative drying ink
  - Low-temperature fixing ink
  - Precipitation drying ink
  - Penetration drying ink
  - Soy ink

---

## Colored Paper

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Colored paper is paper that is treated lightly with colorant throughout. Some colors of paper cannot be used. For details, contact your sales representative or service representative.

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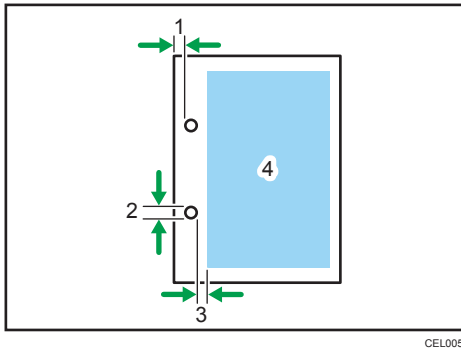
## Prepunched Paper

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Prepunched paper must be smooth and flat to be used in the machine. Prepunched paper that is warped or torn cannot be used. Before printing on prepunched paper, remove any dust or trimmings that were produced during the punching process.

To print on prepunched paper, print in an area 3 mm (0.12 inches) or more from the edge of the hole.

The holes in the paper must be within the following conditions:



1. 5 mm (0.20 inches) or more
2. 8 mm (0.31 inches) or less
3. 3 mm (0.12 inches) or more
4. Acceptable print area

The conditions for using prepunched paper depend on the machine and its configurations. For some typical conditions for prepunched paper, see page 27 "Prepunched Paper That Can Be Used".

---

## OHP Film

---

OHP film is made from polyester and specially coated so toner adheres to it. An OHP film has one printable side. Printing cannot be done on both sides.

Fan OHP film before loading it in the paper tray so the sheets do not stick together. For details about how to fan paper, see page 15 "Loading Paper".

---

## Label Paper, Pressure-sensitive Paper

---

Some labels and pressure-sensitive paper have use-by dates. Purchase only as much as you can use within the time limit. Contact your paper retailer regarding use-by dates and storage methods.



# 3. Appendix

The chapter describes the specifications for prepunched paper and provides a paper weight conversion table.

## Paper Weight Conversion Table

The weight of paper is measured as basis weight or ream weight.

Basis weight is the weight of one square meter of a sheet of paper, measured in units of g/m<sup>2</sup>. Ream weight is the weight in pounds of 500 sheets of the paper. The basic size varies depending on the type (grade) of paper.

The basic sizes for each grade are as follow:

- Bond, Ledger: 17" × 22"
- Offset, Text: 25" × 38"
- Cover: 20" × 26"
- Index: 25<sup>1</sup>/<sub>2</sub>" × 30<sup>1</sup>/<sub>2</sub>"

The following table shows the relationship between basis and ream weight.

Basis weight (g/m <sup>2</sup> )	Ream weight			
	Bond / Ledger (lb.)	Offset / Text (lb. text)	Cover (lb. cover)	Index (lb. index)
60	16 *	40 *	22	33
67	18	45	25	37
75	20 *	50 *	28	42
90	24 *	60 *	33	50
105	28 *	70 *	39	58
109	29	73	40 *	60
118	31	80	44	65
132	35	89	48	73
135	36	90	50 *	75
146	39	99	54	81
150	40	100	56	83

Basis weight (g/m <sup>2</sup> )	Ream weight			
	Bond / Ledger (lb.)	Offset / Text (lb. text)	Cover (lb. cover)	Index (lb. index)
163	43	110	60 *	90 *
165	44	111	61	92
177	47	120	65 *	97
199	53	135	74	110 *
203	54	137	75	113
216	58	146	80 *	120
244	65	165	90 *	135
252	67	170	93	140 *
271	72	183	100 *	150
285	76	192	105	158
308	82	208	114	170 *

Asterisks (\*) indicate the most common weights for that category.

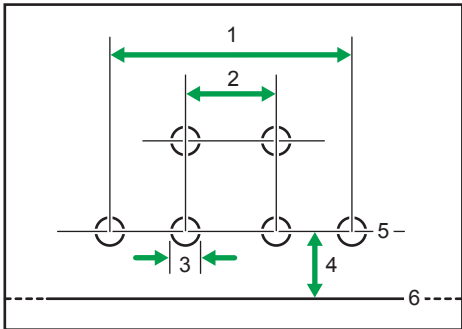


# Prepunched Paper That Can Be Used

The following are typical conditions for using prepunched paper in the machine.

Contact your service representative if you want to use prepunched paper not described below.

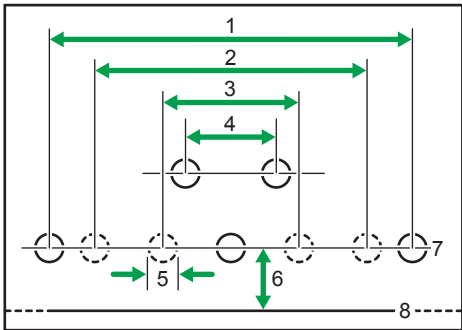
## Europe (2/4 holes) and Northern Europe (4 holes)



CEL016

1. Europe: 240 mm (9.45 inches) / Northern Europe: 112 mm (4.41 inches)
2. Europe: 80 mm (3.15 inches) / Northern Europe: 70 mm (2.76 inches)
3. Europe: 6 mm (0.24 inches) / Northern Europe: 6.5 mm (0.26 inches)
4. 12 mm (0.47 inches)
5. Punch hole
6. Paper edge

## North America (2/3/7 holes)



CEL019

1. 216 mm (8.50 inches)
2. 178 mm (7.01 inches)
3. 108 mm (4.25 inches)
4. 70 mm (2.76 inches)
5. 8 mm (0.31 inches)

6. 2 holes: 12 mm (0.47 inches) / 3 and 7 holes: 9.5 mm (0.37 inches)
7. Punch hole
8. Paper edge

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MEMO

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MEMO

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MEMO







## **INSTRUCTIONS FOR SERVICE TECHNICIANS**

### **Coated paper**

#### **(1) For Customers at Installation**

If operators intend to use coated paper for the first time, replace the parts listed below at installation.

If they have already experienced frequent Jam "U" (A3/DLT LCIT) errors after installation, they should call for service and request replacement of the parts listed in the table below.

#### **(2) Parts Replacement at Installation or Servicing**

Replace the following three parts at the feed station in the A3/DLT LCIT where coated paper is being fed and causing jams with coated paper:

<b>Name</b>	<b>Part Number</b>
Pick-up roller	AF030071
Feed roller	AF031071
Separation roller	AF032041

#### **Important**

Please remember that the durability and service life of these parts is lower than the replaced rollers. For more details, please refer to the Service Manual.





# Operating Instructions

## Security Guide



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## Functions That Require Options

The following functions require certain options and additional functions.

- Detect Data Security for Copying  
Copy Data Security Unit

For details about other functions that require options, see "Functions Requiring Optional Configurations", Getting Started.

---

## Main Software Names

Product name	Names in the text
DeskTopBinder Lite and DeskTopBinder Professional <sup>*1</sup>	DeskTopBinder
ScanRouter EX Professional <sup>*1</sup> and ScanRouter EX Enterprise <sup>*1</sup>	the ScanRouter delivery software

\*1 This product is no longer sold.



# 1. Getting Started

This chapter describes the precautions to take when using the machine's security features and how to configure the administrator settings.

## Before Configuring the Security Function Settings

### ★ Important

- **If the security settings are not configured, the data in the machine is vulnerable to attack.**
- To prevent this machine being stolen or willfully damaged, etc., install it in a secure location.
- Purchasers of this machine must make sure that people who use it do so appropriately, in accordance with operations determined by the machine administrator and supervisor. If the administrator or supervisor does not make the required security settings, there is a risk of security breaches by users.
- Before setting this machine's security features and to ensure appropriate operation by users, administrators must read the Security Guide completely and thoroughly, paying particular attention to the section entitled "Before Configuring the Security Function Settings".
- Administrators must inform users regarding proper usage of the security functions.
- If this machine is connected to a network, its environment must be protected by a firewall or similar.
- For protection of data during the communication stage, apply the machine's communication security functions and connect it to devices that support security functions such as encrypted communication.
- Administrators should routinely examine the machine's logs to check for irregular and unusual events.

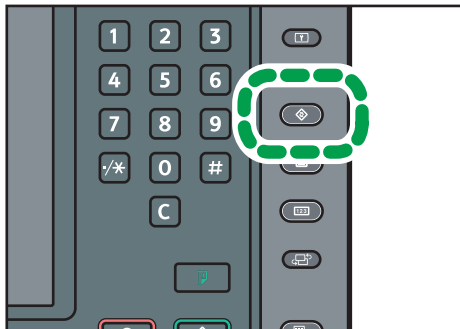
# Before Using This Machine

This section explains how to enable encryption of transmitted data and configure the administrator account. If you want a high level of security, make the following setting before using the machine.

## 1. Turn the machine on.

For details about turning on the main power, see "Turning On/Off the Power", Getting Started.

## 2. Press the [User Tools] key.



## 3. Press [System Settings].

## 4. Press [Interface Settings].

## 5. Specify IPv4 Address.

For details on how to specify the IPv4 address, see "Interface Settings", Connecting the Machine/System Settings.

## 6. Press [File Transfer] in [System Settings].

## 7. Press [Administrator's E-mail Address], and then specify the e-mail address of the administrator of this machine.

## 8. Create and install the device certificate from the control panel.

For information on how to install the device certificate, see page 123 "Protecting the Communication Path via a Device Certificate".

As the e-mail address for the device certificate, enter the address specified in Step 7.

## 9. Change the administrator's user name and password.

For details about specifying administrators' user names and passwords, see page 18 "Registering and Changing Administrators".

## 10. Connect the machine to the general usage network environment.

### ↓ Note

- To enable higher security, see page 258 "Additional Information for Enhanced Security".

# Administrators and Users

This section explains the terms "administrator", "supervisor", "user", and "owner" as used in this manual.

## Administrator

There are four types of administrators for the machine: user administrator, machine administrator, network administrator, and file administrator.

Their main role is to specify the settings for operating the machine. Their access privileges depend on the administrator type. Administrators cannot perform normal operations, such as copying and printing.

## Supervisor

There is only one supervisor. The supervisor can specify each administrator's password. For normal operations, a supervisor is not required, because administrators specify their own passwords.

## User

Users are people using the machine for normal operations, such as copying and printing.

## Owner

A user who has registered files in the machine under the copier, printer, or other functions is called an owner.



# Administrators

1

Administrators manage user access to the machine and various other important functions and settings.

When an administrator controls limited access and settings, first select the machine's administrator and enable the authentication function before using the machine. When the authentication function is enabled, the login user name and login password are required in order to use the machine. The role of administrator for this machine is divided into four categories according to their function: user administrator, machine administrator, network administrator, and file administrator. Sharing administrator tasks eases the burden on individual administrators while at the same time limiting unauthorized operations by an administrator. Multiple administrator roles can be assigned to one administrator and one role can also be shared by more than one administrator. A supervisor can also be set up, who can then change the administrators' passwords.

Administrators cannot use functions such as copying and printing. To use these functions, the administrator must be authenticated as the user.

For instructions on registering the administrator, see page 18 "Registering and Changing Administrators", and for instructions on changing the administrator's password, see page 25 "Supervisor". For details on Users, see page 29 "Users".

## Important

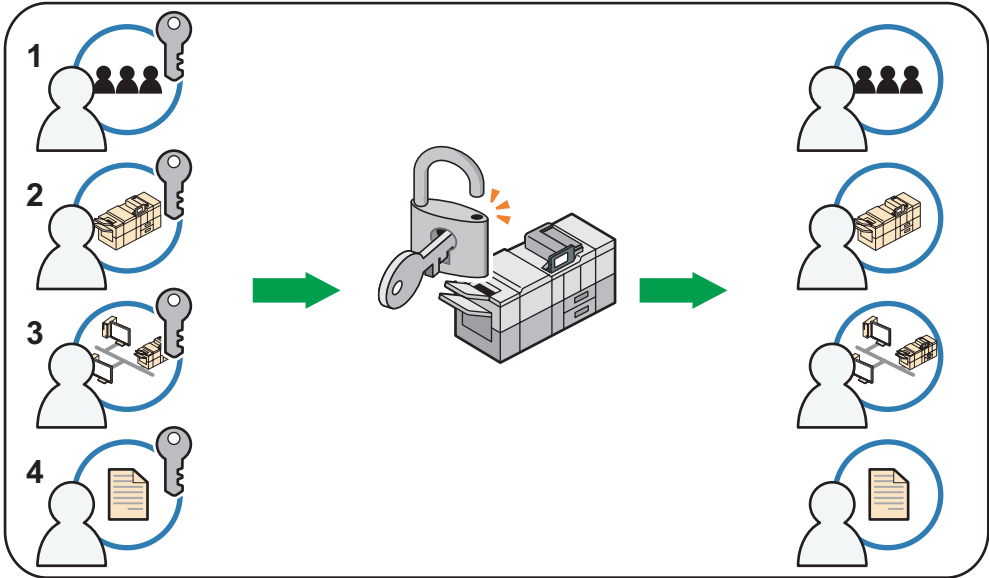
- **If user authentication is not possible because of a problem with the hard disk or network, you can use the machine by accessing it using administrator authentication and disabling user authentication. Do this if, for instance, you need to use the machine urgently.**

# Configuring Administrator Authentication

Administrator authentication requires the login user name and password for verifying administrators attempting to specify the machine's settings or access them from a network. When registering an administrator, you cannot use a login user name already registered in the Address Book. Administrators are handled differently from the users registered in the Address Book. Windows authentication, LDAP authentication and Integration Server Authentication are not performed for an administrator, so an administrator can log in even if the server is unreachable due to a network problem. Each administrator is identified by a login user name. One person can act as more than one type of administrator if multiple administrator privileges are granted to a single login user name. For instructions on registering the administrator, see page 18 "Registering and Changing Administrators".

You can specify the login user name, login password, and encryption password for each administrator. The encryption password is used for encrypting data transmitted via SNMPv3. It is also used by applications such as SmartDeviceMonitor for Admin/Device Manager NX Lite that use SNMPv3. Administrators are limited to managing the machine's settings and controlling user access, so they cannot use functions such as copying and printing. To use these functions, the administrator must register as a user in the Address Book and then be authenticated as the user. Specify administrator authentication, and then specify user authentication. For details about specifying authentication, see page 31 "Configuring User Authentication".

### Roles of each administrator



CZB009

#### 1. User administrator

This is the administrator who manages personal information in the Address Book.

A user administrator can register/delete users in the Address Book or change users' personal information.

Users registered in the Address Book can also change and delete their own information.

If any of the users forget their password, the user administrator can delete it and create a new one, allowing the user to access the machine again.

## 2. Machine administrator

This is the administrator who mainly manages the machine's default settings. You can set the machine so that the default for each function can only be specified by the machine administrator. By making this setting, you can prevent unauthorized people from changing the settings and allow the machine to be used securely by its many users.

## 3. Network administrator

This is the administrator who manages the network settings. You can set the machine so that network settings such as the IP address and settings for sending and receiving e-mail can only be specified by the network administrator.

By making this setting, you can prevent unauthorized users from changing the settings and disabling the machine, and thus ensure correct network operation.

## 4. File administrator

This is the administrator who manages permission to access stored files. You can specify passwords to allow only registered users with permission to view and edit files stored in Document Server. By making this setting, you can prevent data leaks and tampering due to unauthorized users viewing and using the registered data.

### ↓ Note

- Administrator authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.
- You can specify User Code Authentication without specifying administrator authentication.

---

## Specifying Administrator Privileges

---

To specify administrator authentication, set "Administrator Authentication Management" to [On]. If this setting is enabled, administrators will be able to configure only settings allocated to them.

To log in as an administrator, use the default login user name and login password.

When you log in as an administrator, the default login user name is "admin". The password is not configured by default.

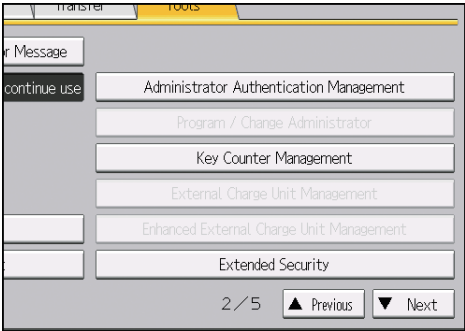
For details about logging in and logging out with administrator authentication, see page 22 "Administrator Login Method" and page 24 "Administrator Logout Method".

### ★ Important

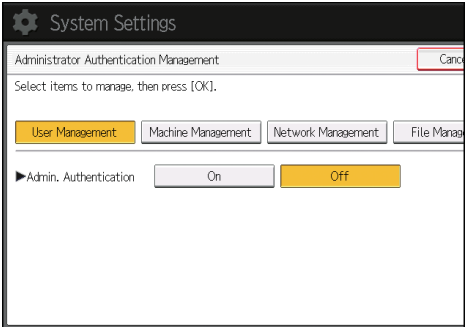
- If you have enabled "Administrator Authentication Management", make sure not to forget the administrator login user name and login password. If an administrator login user name or login password is forgotten, a new password must be specified using the supervisor's privilege. For details on supervisor privileges, see page 25 "Supervisor".

1. Press the [User Tools] key.

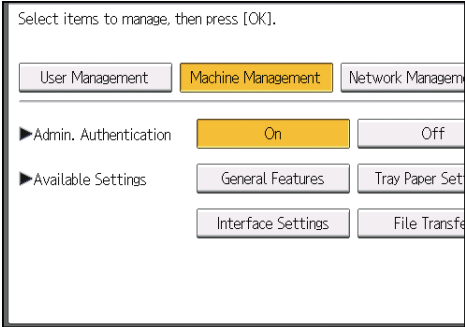
- 2. Press [System Settings].
- 3. Press [Administrator Tools].
- 4. Press [▼Next].
- 5. Press [Administrator Authentication Management].



- 6. Press [User Management], [Machine Management], [Network Management], or [File Management] to select which settings to manage.



- 7. Set "Admin. Authentication" to [On].  
"Available Settings" appears.
- 8. Select the settings to manage from "Available Settings".



The selected settings will be unavailable to users.  
The available settings depend on the administrator type.

To specify administrator authentication for more than one category, repeat Steps 6 to 8.

**9. Press [OK].**

**10. Press the [User Tools] key.**

1

## Registering and Changing Administrators

If administrator authentication has been specified, we recommend only one person take each administrator role.

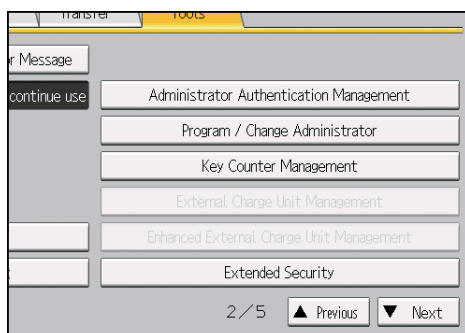
The sharing of administrator tasks eases the burden on individual administrators while also restricting unauthorized operations by a single administrator. You can register up to four login user names (Administrators 1-4) to which you can grant administrator privileges.

An administrator's privileges can only be changed by an administrator with the relevant privileges.

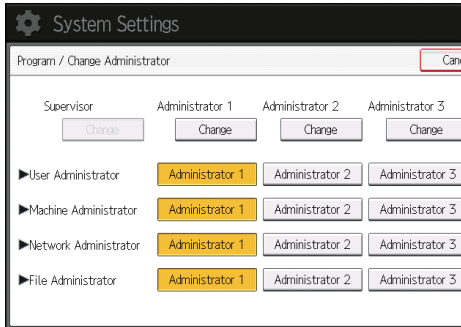
Be sure to assign all administrator privileges so that each administrator privilege is associated with at least one administrator.

For details about logging in and logging out with administrator authentication, see page 22 "Administrator Login Method" and page 24 "Administrator Logout Method".

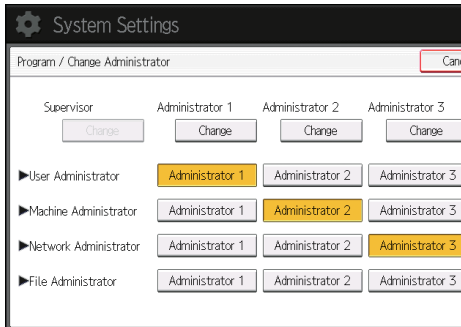
- 1. Log in as an administrator from the control panel.**
- 2. Press [System Settings].**
- 3. Press [Administrator Tools].**
- 4. Press [▼Next].**
- 5. Press [Program / Change Administrator].**



- In the line for the administrator whose privilege you want to specify, press [Administrator 1], [Administrator 2], [Administrator 3] or [Administrator 4], and then press [Change].



When allocating administrators' privileges to one person each, select one administrator under each category as shown below.



To combine the privileges of multiple administrators, assign multiple administrators to a single administrator.

For example, to assign machine administrator privilege and user administrator privilege to [Administrator 1], press [Administrator 1] in the lines for the machine administrator and the user administrator.

- Press [Change] for "Login User Name".
- Enter the login user name, and then press [OK].
- Press [Change] for "Login Password".
- Enter the login password, and then press [OK].

Follow the password policy to strengthen the login password.

For details about the password policy and how to specify it, see page 249 "Specifying the Extended Security Functions".

- Re-enter the login password for confirmation, and then press [OK].
- Press [Change] for "Encryption Password".
- Enter the encryption password, and then press [OK].

**14. Re-enter the encryption password for confirmation, and then press [OK].**

**15. Press [OK] twice.**

You will be automatically logged out.

**Note**

- For the characters that can be used for login user names and passwords, see page 20 "Usable characters for user names and passwords".

---

## Usable characters for user names and passwords

---

The following characters can be used for login user names and passwords. Names and passwords are case sensitive.

- Upper case letters: A to Z (26 characters)
- Lower case letters: a to z (26 characters)
- Numbers: 0 to 9 (10 characters)
- Symbols: (space) ! " # \$ % & ' ( ) \* + , - . / : ; < = > ? @ [ \ ] ^ \_ ` { | } ~ (33 characters)

### Login user name

- Cannot contain spaces, colons or quotation marks.
- Cannot be comprised of numbers only or cannot be left blank.
- Can be up to 32 characters long.

### Login password

- The maximum password length for administrators and supervisors is 32 characters; for users it is 128 characters.
- Make passwords using a combination of capitals, small letters, numbers, and symbols. The more characters, the harder it is for others to guess.
- If the password's complexity and minimum length have been configured in [Password Policy] in [Extended Security], only passwords meeting the requirements can be specified. For details about specifying the password policy, see "Password Policy" in page 249 "Specifying the Extended Security Functions".

---

## Using Web Image Monitor to Configure Administrator Authentication

---

Using Web Image Monitor, you can log in to the machine and change the administrator settings. For details about logging in and logging out with administrator authentication, see page 22 "Administrator Login Method" and page 24 "Administrator Logout Method".

- 1. Log in as an administrator from Web Image Monitor.**
- 2. Point to [Device Management], and then click [Configuration].**

3. Click **[Administrator Authentication Management]** or **[Program/Change Administrator]** under "Device Settings".
4. Change the settings as desired.
5. Log out.

**Note**

- For details about Web Image Monitor, see Web Image Monitor Help.



# Administrator Login Method

If administrator authentication has been specified, log in using an administrator's user name and password. Supervisors log in the same way.

## Logging in Using the Control Panel

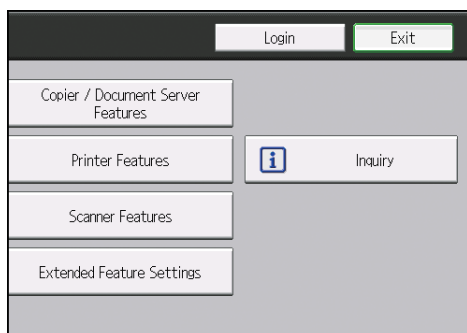
1. Press the [User Tools] key.
2. Press the [Login/Logout] key.



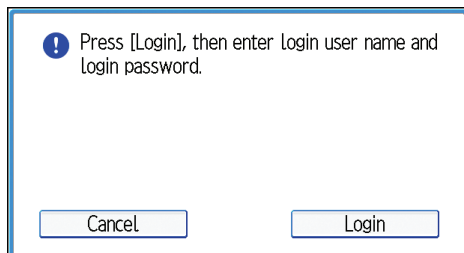
C1WW226

The login screen appears.

The login screen can also be made to appear by pressing [Login] in the User Tools menu.



3. Press [Login].



**4. Enter the login user name, and then press [OK].**

The default login name for administrators is "admin" and "supervisor" for supervisors.

**5. Enter the login password, and then press [OK].**

There is no preset default password for administrators or supervisors. Therefore, leave the password field blank and press [OK].

"Authenticating... Please wait." appears, followed by the screen for specifying the default.

**Note**

- If user authentication has already been specified, a screen for authentication appears. To log in as an administrator, enter the administrator's login user name and login password.
- If you log in using administrator privilege, the name of the administrator logging in appears. When you log in with a user name that has multiple administrator privileges, one of the administrator privileges associated with that name is displayed.
- If you try to log in from an operating screen, "You do not have the privileges to use this function. You can only change setting(s) as an administrator." appears. Press the [User Tools] key to change the default.

## Logging in Using Web Image Monitor

**1. Open a Web browser.****2. Enter "http://(the machine's IP address or host name)/" in the address bar.**

When entering an IPv4 address, do not begin segments with zeros. For example: If the address is "192.168.001.010", you must enter it as "192.168.1.10" to connect to the machine.

Enter the IPv6 address with brackets before and after, like this: [2001:db8::9abc].

If you set "Permit SSL/TLS Communication" to [Ciphertext Only], enter "https://(the machine's IP address or host name)/" to access the machine.

**3. Click [Login] at the top right of the window.****4. Enter the login name and password of an administrator, and then click [Login].**

The default login name for administrators is "admin" and that for supervisors is "supervisor". No login password is set up.

**Note**

- The Web browser might be configured to auto complete login dialog boxes by retaining user names and passwords. This function reduces security. To prevent the browser retaining user names and passwords, disable the browser's auto complete function.

# Administrator Logout Method

1

If administrator authentication has been specified, be sure to log out after completing settings. Supervisors log out in the same way.

---

## Logging out Using the Control Panel

---

1. Press the [Login/Logout] key.
2. Press [Yes].

### ↓ Note

- You can log out using the following procedures also.
  - Press the [Energy Saver] key.

---

## Logging out Using Web Image Monitor

---

1. Click [Logout] at the top right of the window.

### ↓ Note

- Delete the cache memory in Web Image Monitor after logging out.

# Supervisor

The supervisor can delete an administrator's password and specify a new one.

If any of the administrators forgets their password or if any of the administrators changes, the supervisor can assign a new password. If you have logged in using the supervisor's user name and password, you cannot use normal functions or specify system settings. The methods for logging in and out are the same as for administrators. See page 22 "Administrator Login Method" and page 24 "Administrator Logout Method".

## ★ Important

- The default login user name is "supervisor". No login password is set up. We recommend changing the login user name and login password.
- For the characters that can be used for login user names and passwords, see page 20 "Usable characters for user names and passwords".
- Be sure not to forget the supervisor login user name and login password. If you do forget them, a service representative will have to return the machine to its default state. This will result in the machine setting data, counters, logs and other data being lost; consequently, the service call may not be free of charge.

## ↓ Note

- You cannot specify the same login user name for the supervisor and the administrators.
- Using Web Image Monitor, you can log in as the supervisor and delete an administrator's password or specify a new one.

---

## Resetting the Administrator's Password

---

### 1. Log in as the supervisor from the control panel.

For details on how to log in, see page 22 "Administrator Login Method".

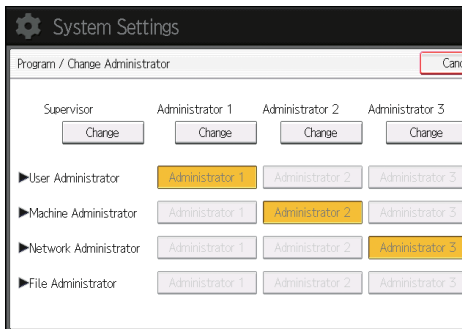
### 2. Press [System Settings].

### 3. Press [Administrator Tools].

### 4. Press [▼Next].

### 5. Press [Program / Change Administrator].

## 6. Press [Change] for the administrator you wish to reset.



## 7. Press [Change] for "Login Password".

## 8. Enter the login password, and then press [OK].

## 9. Re-enter the login password for confirmation, and then press [OK].

## 10. Press [OK] twice.

You will be automatically logged out.

### Note

- The supervisor can change the administrators' login passwords but not their login user names.

## Changing the Supervisor

This section describes how to change the supervisor's login name and password.

To do this, you must enable the user administrator's privileges through the settings under "Administrator Authentication Management". For details, see page 16 "Specifying Administrator Privileges".

### 1. Log in as the supervisor from the control panel.

For details on how to log in, see page 22 "Administrator Login Method".

### 2. Press [System Settings].

### 3. Press [Administrator Tools].

### 4. Press [▼Next].

### 5. Press [Program / Change Administrator].

### 6. Under "Supervisor", press [Change].

### 7. Press [Change] for "Login User Name".

### 8. Enter the login user name, and then press [OK].

### 9. Press [Change] for "Login Password".

### 10. Enter the login password, and then press [OK].

### 11. Re-enter the login password for confirmation, and then press [OK].

**12. Press [OK] twice.**

You will be automatically logged out.



# 2. Configuring User Authentication

This chapter describes how to specify user authentication and explains the functions that are enabled by user authentication.

## Users

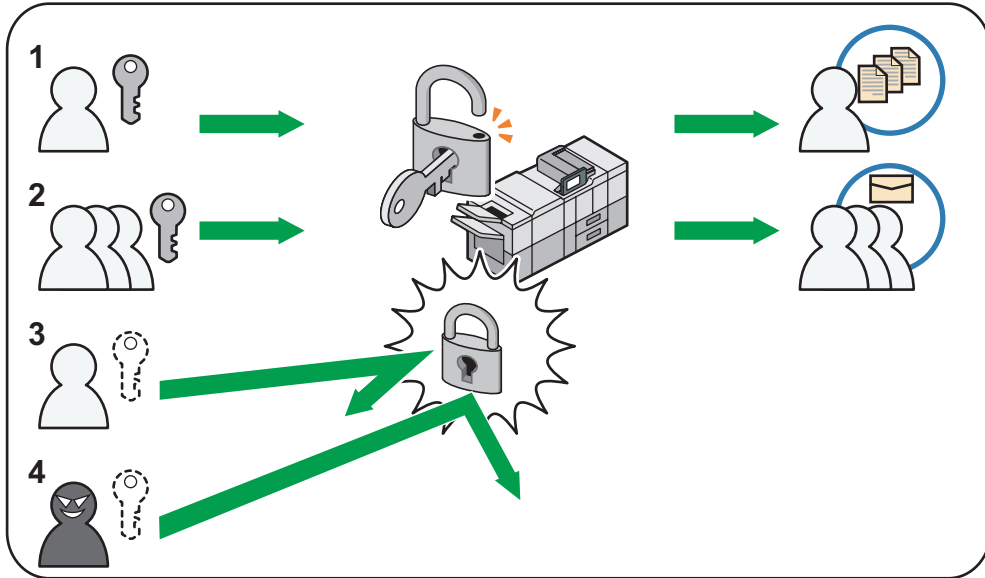
A user performs normal operations on the machine, such as copying and printing. Users are managed using the information in the machine's Address Book, and can only use the functions they are permitted to access by administrators. By enabling user authentication, you can allow only people registered in the Address Book to use the machine. Users can be managed in the Address Book by the user administrator. For details about administrator, see page 14 "Administrators". For details about user registration in the Address Book, see "Registering User Information", Connecting the Machine/ System Settings or Web Image Monitor Help.



# About User Authentication

User authentication is a system requiring the login user name and password for verifying users to operate the machine or access the machine over the network.

2



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**1. User**

A user performs normal operations on the machine, such as copying and printing.

**2. Group**

A group performs normal operations on the machine, such as copying and printing.

**3. Unauthorized user**

**4. Unauthorized access**

# Configuring User Authentication

There are five types of user authentication methods: User Code authentication, Basic authentication, Windows authentication, LDAP authentication, and Integration Server authentication. To use user authentication, select an authentication method on the control panel, and then make the required settings for the authentication. The settings depend on the authentication method. Specify administrator authentication, and then specify user authentication.

## ★ Important

- If user authentication is not possible because of a problem with the hard disk or network, you can use the machine by accessing it using administrator authentication and disabling user authentication. Do this if, for instance, you need to use the machine urgently.
- You cannot use more than one authentication method at the same time.

### User authentication configuration flow

Configuration procedure	Details
Configuring administrator authentication	page 16 "Specifying Administrator Privileges" page 18 "Registering and Changing Administrators"
Configuring user authentication	Specify user authentication. Five types of user authentication are available: <ul style="list-style-type: none"> <li>• page 34 "User Code Authentication"</li> <li>• page 37 "Basic Authentication"</li> <li>• page 42 "Windows Authentication"</li> <li>• page 51 "LDAP Authentication"</li> <li>• page 56 "Integration Server Authentication"</li> </ul>

### User authentication methods

Type	Details
User Code authentication	Authentication is performed using eight-digit user codes. Authentication is applied to each user code, not to each user. It is necessary to register the user code in the machine's address book in advance.

Type	Details
Basic authentication	<p>Authentication is performed using the machine's address book.</p> <p>It is necessary to register users in the machine's address book in advance.</p> <p>Authentication can be applied to each user.</p>
Windows authentication	<p>Authentication is performed using the domain controller of the Windows server on the same network as the machine.</p> <p>Authentication can be applied to each user.</p>
LDAP authentication	<p>Authentication is performed using the LDAP server on the same network as the machine.</p> <p>Authentication can be applied to each user.</p>
Integration Server authentication	<p>Authentication is performed using an external authentication server on the same network as the machine.</p> <p>This establishes an environment in which authentication is applied collectively to users of devices (such as MFPs and computers) over the network.</p> <p>Authentication can be applied to each user.</p> <p>To create an external authentication server, software including Authentication Manager (e.g., Remote Communication Gate S) is required.</p>

A user's e-mail address obtained via Windows, LDAP, or Integration Server authentication can be used as the sender's fixed address ("From") when sending e-mails in the scanner mode in order to prevent ID fraud.

#### If the user authentication method is switched halfway

- A user code account, that has no more than eight digits and is used for User Code authentication, can be carried over and used as a login user name even after the authentication method has switched from User Code authentication to Basic authentication, Windows authentication, LDAP authentication, or Integration Server authentication. In this case, since the User Code authentication does not have a password, the login password is set as blank.
- When authentication switches to an external authentication method (Windows authentication, LDAP authentication, or Integration Server authentication), authentication will not occur, unless the external authentication device has the carried over user code account previously registered. However, the user code account will remain in the Address Book of the machine despite an authentication failure.

- From a security perspective, when switching from User Code authentication to another authentication method, we recommend that you delete accounts you are not going to use, or set up a login password. For details about deleting accounts, see "Deleting a Registered Name", Connecting the Machine/ System Settings. For details about changing passwords, see page 39 "Specifying Login User Names and Passwords".

**Note**

- After turning the main power on, extended features may not appear in the list of user authentication items in the User Authentication Management menu. If this happens, wait a while and then open the User Authentication Management menu again.
- User authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

# User Code Authentication

This is an authentication method for limiting access to functions according to a user code. The same user code can be used by more than one user.

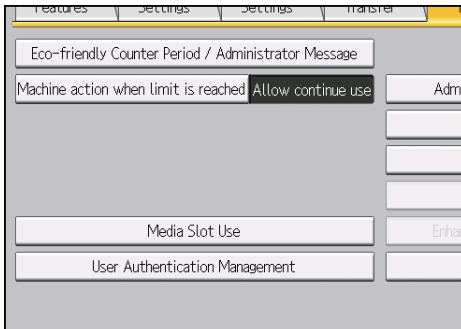
For details about specifying user codes, see "Registering a User Code", Connecting the Machine/System Settings.

For details about specifying the user code on the printer driver or TWAIN driver, see the driver help.

## ★ Important

- To control the use of DeskTopBinder for the delivery of files stored in the machine, select Basic authentication, Windows authentication, LDAP authentication, or Integration Server authentication.

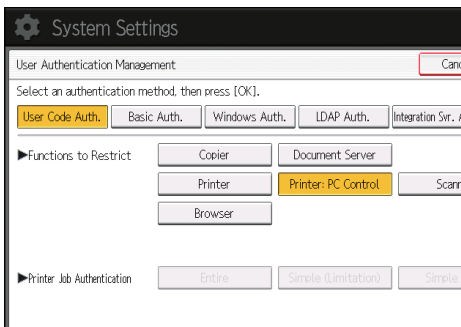
- Log in as the machine administrator from the control panel.
- Press [System Settings].
- Press [Administrator Tools].
- Press [▼Next].
- Press [User Authentication Management].



- Select [User Code Auth.].

If you do not want to use user authentication management, select [Off].

- In "Functions to Restrict" and "Extended Features to Restrict", select the functions you want to restrict.



The selected functions are subject to User Code authentication. User Code authentication is not applied to the functions not selected.

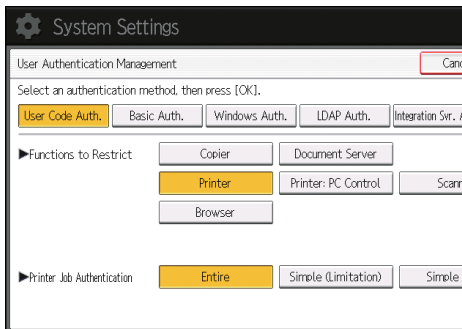
The Extended Features to Restrict menu appears only if an extended feature is installed in the machine.

For details about limiting available functions for individuals or groups, see page 78 "Limiting Available Functions".

**8. Under "Functions to Restrict", either deselect [Printer: PC Control] or select [Printer].**

If you do not want to specify printer job authentication, proceed to step 14.

**9. Select the "Printer Job Authentication" level.**

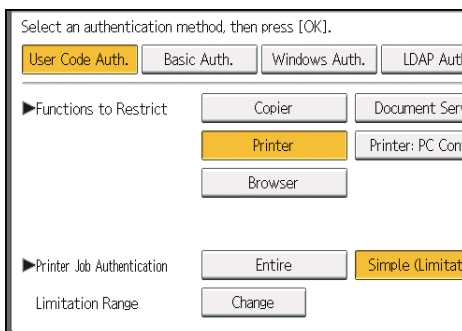


For a description of the printer job authentication levels, see page 61 "Printer Job Authentication".

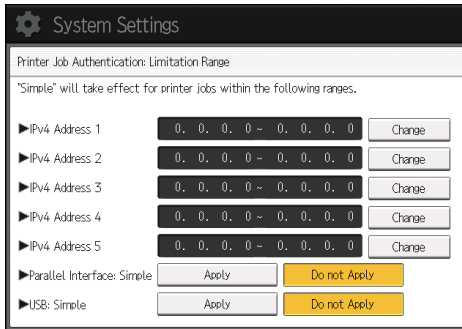
If you select [Entire] or [Simple (All)], proceed to step 13.

If you select [Simple (Limitation)], proceed to step 10.

**10. Press [Change].**



**11. Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**



2

You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

**12. Press [Exit].**

**13. Press [OK].**

**14. Press the [Login/Logout] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

# Basic Authentication

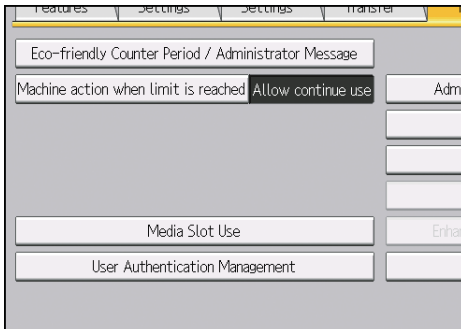
Specify this authentication method when using the machine's Address Book to authenticate each user. Using Basic authentication, you can not only manage the machine's available functions but also limit access to stored files and to the Address Book. Under Basic authentication, the administrator must specify the functions available to each user registered in the Address Book. For details about limitation of functions, see page 39 "Authentication Information Stored in the Address Book".

2

## Specifying Basic Authentication

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [User Authentication Management].

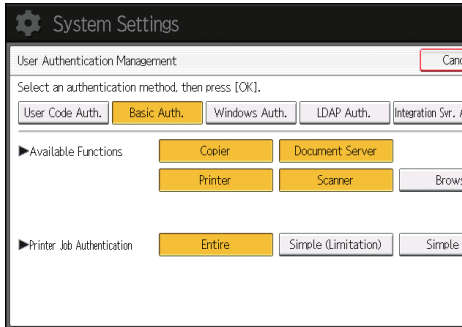


6. Select [Basic Auth.].

If you do not want to use user authentication management, select [Off].



**7. In "Available Functions" and "Available Extended Features", select the machine functions you want to permit.**



The functions you select here become the default Basic Authentication settings that will be assigned to all new users of the Address Book.

The Available Extended Features menu appears only if an extended feature is installed in the machine.

For details about specifying available functions for individuals or groups, see page 78 "Limiting Available Functions".

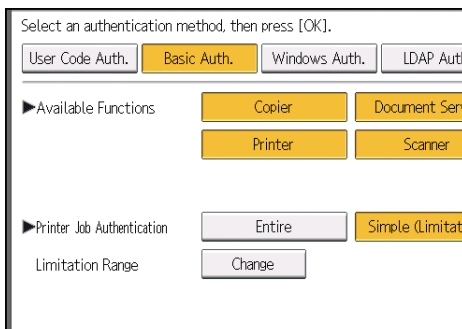
**8. Select the "Printer Job Authentication" level.**

For a description of the printer job authentication levels, see page 61 "Printer Job Authentication".

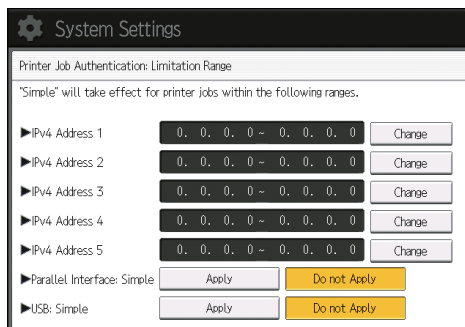
If you select [Entire] or [Simple (All)], proceed to step 12.

If you select [Simple (Limitation)], proceed to step 9.

**9. Press [Change].**



## 10. Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".



You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

### 11. Press [Exit].

### 12. Press [OK].

### 13. Press the [Login/Logout] key.

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

## Authentication Information Stored in the Address Book

If you have enabled user authentication, you can specify access limits and usage limits to the machine's functions for each user or group of users. Specify the necessary settings in the Address Book entry of each user. For details about limiting which functions of the machine are available, see page 78 "Limiting Available Functions".

Users must have a registered account in the Address Book in order to use the machine when user authentication is specified. For details about user registration in the Address Book, see "Registering User Information", Connecting the Machine/ System Settings.

User authentication can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

## Specifying Login User Names and Passwords

In "Address Book Management", specify the login user name and login password to be used for "User Authentication Management".

For the characters that can be used for login user names and passwords, see page 20 "Usable characters for user names and passwords".

### 1. Log in as the user administrator from the control panel.

2. Press [Address Book Mangmnt].

3. Select the user.

Press [New Program] to add new or select from list below to edit. Selection can be made by pressing [OK].

Program / Change      Delete

-----

All Users      E-mail

Frequent	AB	CD	EF	GH	IJK	LMN	OPQ	RST	VWX					
[00001] ABCD COMPAN NY	[00002] YOKOHAMA OFFICE	[00003] BERLIN OFFICE	[00004] LONDON OFFICE	[00005] NEW YORK OFFICE	[00006] TOKYO OFFICE	[00007] KYOTO OFFICE	[00008] BEIJING OFFICE	[00009] SHANGHAI OFFICE	[00010] HONG KONG OFFICE	[00011] Folder01	[00012] Folder02	[00013] Folder03	[00014] Folder04	[00015] Folder05

4. Press [Auth. Info].

Names      Auth. Info      Protection      E-mail

▶ Name      ABCD COMPANY      ▶ Index

Change

▶ Key Display      ABCD COMPANY      ▶ Register

Change

▶ Display Priority      05

1: High - 10: Low      Change

5. Press [Change] for "Login User Name".

6. Enter a login user name, and then press [OK].

7. Press [Change] for "Login Password".

8. Enter a login password, and then press [OK].

9. Re-enter the login password for confirmation, and then press [OK].

10. Press [OK].

11. Press [Exit].

12. Log out.

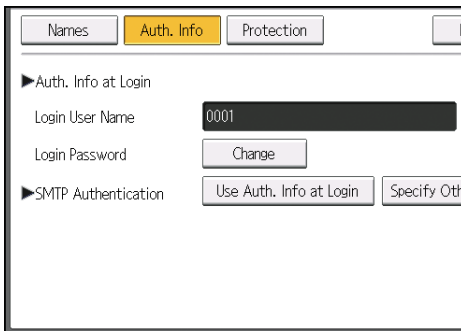
## Specifying Login Details

The login user name and password specified in "Address Book Management" can be used as the login information for "SMTP Authentication", "Folder Authentication", and "LDAP Authentication".

If you do not want to use the login user name and password specified in "Address Book Management" for "SMTP Authentication", "Folder Authentication", or "LDAP Authentication", see "Registering Folders" and "Registering SMTP and LDAP Authentication", Connecting the Machine/ System Settings.

### ★ Important

- When using "Use Auth. Info at Login" for "SMTP Authentication", "Folder Authentication", or "LDAP Authentication", a user name other than "other", "admin", "supervisor" or "HIDE\*\*\*" must be specified. The symbol "\*\*\*" represents any character.
1. Log in as the user administrator from the control panel.
  2. Press [Address Book Mangmnt].
  3. Select the user.
  4. Press [Auth. Info].
  5. Select [Use Auth. Info at Login] in "SMTP Authentication".



For folder authentication, select [Use Auth. Info at Login] in "Folder Authentication".

For LDAP authentication, select [Use Auth. Info at Login] in "LDAP Authentication".

If the function you want to select is not displayed, press [▼Next].

6. Press [OK].
7. Press [Exit].
8. Log out.

# Windows Authentication

Specify this authentication when using the Windows domain controller to authenticate users who have their accounts on the directory server. Users cannot be authenticated if they do not have their accounts in the directory server. Under Windows authentication, you can specify the access limit for each group registered in the directory server. The Address Book stored in the directory server can be registered to the machine, enabling user authentication without first using the machine to register individual settings in the Address Book. Obtaining user information can prevent the use of false identities because the sender's address (From:) is determined by the authentication system when scanned data is sent.

The first time you access the machine, you can use the functions available to your group. If you are not registered in a group, you can use the functions available under "\*Default Group". To limit which functions are available to which users, first make settings in advance in the Address Book.

To automatically register user information such as e-mail addresses under Windows authentication, it is recommended that communication between the machine and domain controller be encrypted using SSL. To do this, you must create a server certificate for the domain controller. For details about creating a server certificate, see page 50 "Creating the Server Certificate".

Windows authentication can be performed using one of two authentication methods: NTLM or Kerberos authentication. The operational requirements for both methods are listed below.

## Operational requirements for NTLM authentication

To specify NTLM authentication, the following requirements must be met:

- This machine supports NTLMv1 authentication and NTLMv2 authentication.
- A domain controller has been set up in a designated domain.
- This function is supported by the operating systems listed below. To obtain user information when running Active Directory, use LDAP. If you are using LDAP, we recommend you use SSL to encrypt communication between the machine and the LDAP server. Encryption by SSL is possible only if the LDAP server supports TLSv1 or SSLv3.
  - Windows Server 2003/2003 R2
  - Windows Server 2008/2008 R2
  - Windows Server 2012

## Operational requirements for Kerberos authentication

To specify Kerberos authentication, the following requirements must be met:

- A domain controller must be set up in a designated domain.
- The operating system must support KDC (Key Distribution Center). To obtain user information when running Active Directory, use LDAP. If you are using LDAP, we recommend you use SSL to encrypt communication between the machine and the LDAP server. Encryption by SSL is possible only if the LDAP server supports TLSv1 or SSLv3. Compatible operating systems are listed below.
  - Windows Server 2003/2003 R2

- Windows Server 2008/2008 R2
- Windows Server 2012

To use Kerberos authentication under Windows Server 2008, Service Pack 2 or later must be installed.

- Transmission between the machine and the KDC server is encrypted if Kerberos authentication is enabled. For details about specifying encrypted transmission, see page 168 "Kerberos Authentication Encryption Setting".

### ★ Important

- During Windows Authentication, data registered in the directory server, such as the user's e-mail address, is automatically registered in the machine. If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.
- Users managed in other domains are subject to user authentication, but they cannot obtain items such as e-mail addresses.
- If Kerberos authentication and SSL encryption are set at the same time, e-mail addresses cannot be obtained.
- If you created a new user in the domain controller and selected "User must change password at next logon" at password configuration, first log on to the computer and change the password.
- If the authenticating server only supports NTLM when Kerberos authentication is selected on the machine, the authenticating method will automatically switch to NTLM.
- When using Windows authentication, the login name is case sensitive. If you make a mistake, the user's login name will be added to the address book. You should delete the added user.
- If the "Guest" account on the Windows server is enabled, even users not registered in the domain controller can be authenticated. When this account is enabled, users are registered in the Address Book and can use the functions available under "\*\*Default Group".

### ↓ Note

- For the characters that can be used for login user names and passwords, see page 20 "Usable characters for user names and passwords".
- When accessing the machine subsequently, you can use all the functions available to your group and to you as an individual user.
- Users who are registered in multiple groups can use all the functions available to those groups.
- Under Windows Authentication, you do not have to create a server certificate unless you want to automatically register user information such as e-mail addresses using SSL.

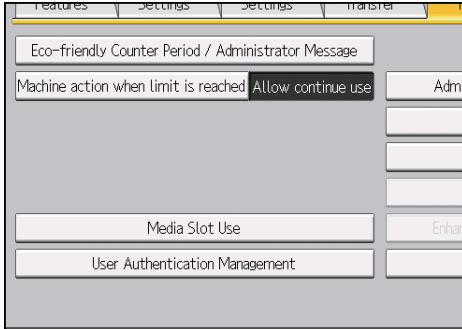
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## Specifying Windows Authentication

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Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

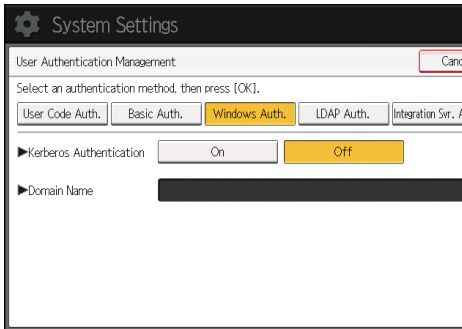
1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [User Authentication Management].



6. Select [Windows Auth.].

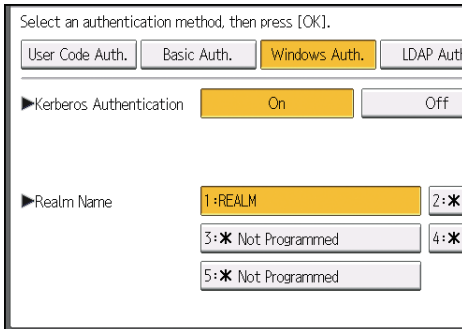
If you do not want to use user authentication management, select [Off].

7. If you want to use Kerberos authentication, press [On].



If you want to use NTLM authentication, press [Off] and proceed to step 9.

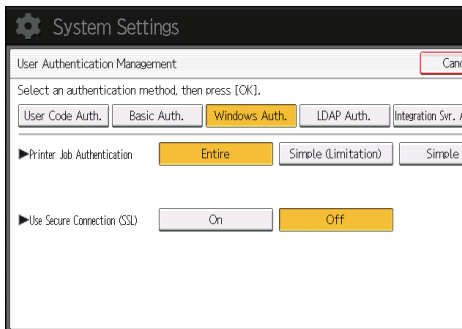
8. Select Kerberos authentication realm and proceed to step 10.



To enable Kerberos authentication, a realm must be registered beforehand. The realm name must be registered in capital letters. For details about registering a realm, see "Programming the Realm", Connecting the Machine/ System Settings.

Up to 5 realms can be registered.

9. Press [Change] for "Domain Name", enter the name of the domain controller to be authenticated, and then press [OK].
10. Press [▼Next].
11. Select the "Printer Job Authentication" level.

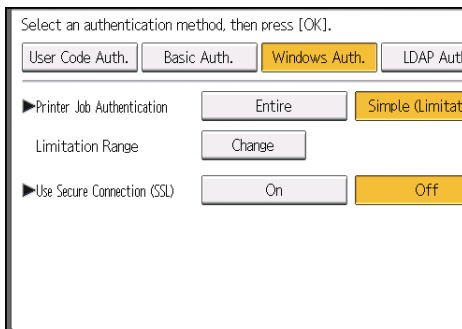


For a description of the printer job authentication levels, see page 61 "Printer Job Authentication".

If you select [Entire] or [Simple (All)], proceed to step 15.

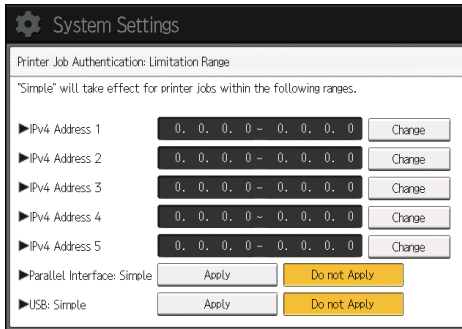
If you select [Simple (Limitation)], proceed to step 12.

12. Press [Change].





**13. Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**



You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

**14. Press [Exit].**

**15. Press [On] for "Use Secure Connection (SSL)".**

If you are not using secure sockets layer (SSL) for authentication, press [Off].

If you have not registered a global group, proceed to step 22.

If you have registered a global group, proceed to step 16.

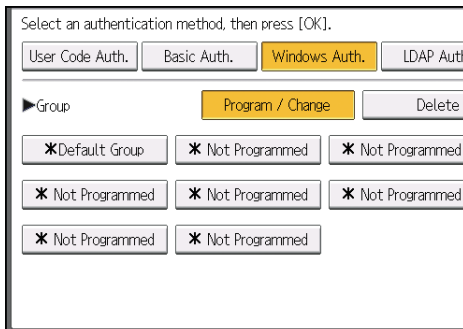
If global groups have been registered under Windows server, you can limit the use of functions for each global group.

You need to create global groups in the Windows server in advance and register in each group the users to be authenticated. You also need to register in the machine the functions available to the global group members. Create global groups in the machine by entering the names of the global groups registered in the Windows Server. (Keep in mind that group names are case sensitive.) Then specify the machine functions available to each group.

If global groups are not specified, users can use the available functions specified in [\*Default Group]. If global groups are specified, users not registered in global groups can use the available functions specified in [\*Default Group]. By default, all functions are available to \*Default Group members. Specify the limitation on available functions according to user needs.

**16. Press [▼Next].**

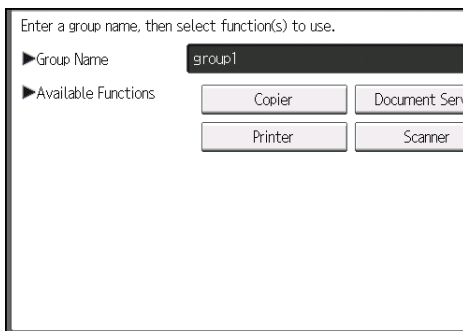
17. Under "Group", press [Program / Change], and then press [\* Not Programmed].



18. Press [Change] for "Group Name", and then enter the group name.

19. Press [OK].

20. In "Available Functions" and "Available Extended Features", select the machine functions you want to permit.



Windows Authentication will be applied to the selected functions.

Users can use the selected functions only.

The Available Extended Features menu appears only if an extended feature is installed in the machine.

For details about specifying available functions for individuals or groups, see page 78 "Limiting Available Functions".

21. Press [OK].

22. Press [OK].

23. Press the [Login/Logout] key.

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

---

## Installing Internet Information Services (IIS) and Certificate Services

---

Specify this setting if you want the machine to automatically obtain e-mail addresses registered in Active Directory.

We recommend you install Internet Information Services (IIS) and Certificate services as the Windows components.

Install the components, and then create the server certificate.

If they are not installed, install them as follows:


---

### Installation under Windows Server 2008 R2

---

1. On the [Start] menu, point to [Administrative Tools], and then click [Server Manager].
2. Click [Roles] in the left column, click [Add Roles] from the [Action] menu.
3. Click [Next>].
4. Select the "Web Server (IIS)" and "Active Directory Certificate Services" check boxes, and then click [Next>].  
If a confirmation message appears, click [Add Features].
5. Read the content information, and then click [Next>].
6. Check that [Certification Authority] is checked, and then click [Next>].
7. Select [Enterprise], and then click [Next>].
8. Select [Root CA], and then click [Next>].
9. Select [Create a new private key], and then click [Next>].
10. Select a cryptographic service provider, key length, and hash algorithm to create a new private key, and then click [Next>].
11. In "Common name for this CA:", enter the Certificate Authority name, and then click [Next>].
12. Select the validity period, and then click [Next>].
13. Leave the "Certificate database location:" and the "Certificate database log location:" settings set to their defaults, and then click [Next>].
14. Read the notes, and then click [Next>].
15. Select the role service you want to use, and then click [Next>].
16. Click [Install].
17. When the installation is complete, click [Close].
18. Close [Server Manager].

## Installation under Windows Server 2012

1. On the Start screen, click [Server Manager].
2. On the [Manage] menu, click [Add Roles and Features].
3. Click [Next>].
4. Select [Role-based or feature-based installation], and then click [Next>].
5. Select a server.
6. Select the "Active Directory Certificate Services" and "Web Server (IIS)" check boxes, and then click [Next>].  
If a confirmation message appears, click [Add Features].
7. Check the features you want to install, and then click [Next>].
8. Read the content information, and then click [Next>].
9. Make sure that [Certification Authority] is selected in the [Role Services] area in [Active Directory Certificate Services], and then click [Next>].
10. Read the content information, and then click [Next>].
11. Check the role services you want to install under [Web Server (IIS)], and then click [Next>].
12. Click [Install].
13. After completing the installation, click the Server Manager's Notification icon , and then click [Configure Active Directory Certificate Services on the destination server].
14. Click [Next>].
15. Click [Certification Authority] in the [Role Services] area, and then click [Next>].
16. Select [Enterprise CA], and then click [Next>].
17. Select [Root CA], and then click [Next>].
18. Select [Create a new private key], and then click [Next>].
19. Select a cryptographic provider, key length, and hash algorithm to create a new private key, and then click [Next>].
20. In "Common name for this CA:", enter the Certificate Authority name, and then click [Next>].
21. Select the validity period, and then click [Next>].
22. Leave the "Certificate database location:" and the "Certificate database log location:" settings set to their defaults, and then click [Next>].
23. Click [Configure].
24. If the message "Configuration succeeded" appears, click [Close].

---

## Creating the Server Certificate

---

After installing Internet Information Services (IIS) and Certificate services Windows components, create the Server Certificate as follows:

Windows Server 2008 R2 is used to illustrate the procedure.

2

- 1. On the [Start] menu, point to [Administrative Tools], and then click [Internet Information Services (IIS) Manager].**

Under Windows Server 2012, click [Internet Information Services (IIS) Manager] on the Start screen.

When the confirmation message appears, click [Yes].

- 2. In the left column, click the server name, and then double-click [Server Certificates].**
- 3. In the right column, click [Create Certificate Request...].**
- 4. Enter all the information, and then click [Next].**
- 5. In "Cryptographic service provider:", select a provider, and then click [Next].**
- 6. Click [...], and then specify a file name for the certificate request.**
- 7. Specify a location in which to store the file, and then click [Open].**
- 8. Close [Internet Information Services (IIS) Manager] by clicking [Finish].**

# LDAP Authentication

Specify this authentication method when using the LDAP server to authenticate users who have their accounts on the LDAP server. Users cannot be authenticated if they do not have their accounts on the LDAP server. The Address Book stored in the LDAP server can be registered to the machine, enabling user authentication without first using the machine to register individual settings in the Address Book. When using LDAP authentication, to prevent the password information being sent over the network unencrypted, it is recommended that communication between the machine and LDAP server be encrypted using SSL. You can specify on the LDAP server whether or not to enable SSL. To do this, you must create a server certificate for the LDAP server. For details about creating a server certificate, see page 50 "Creating the Server Certificate". The setting for using SSL can be specified in the LDAP server setting.

Using Web Image Monitor, you can enable a function that checks whether the SSL server is trustworthy when you connect to the server. For details about specifying LDAP authentication using Web Image Monitor, see Web Image Monitor Help.

When you select Cleartext authentication, LDAP Simplified authentication is enabled. Simplified authentication can be performed with a user attribute (such as cn, or uid), instead of the DN.

To enable Kerberos for LDAP authentication, a realm must be registered beforehand. The realm must be programmed in capital letters. For details about registering a realm, see "Programming the Realm", Connecting the Machine/ System Settings.

## ★ Important

- During LDAP authentication, the data registered in the LDAP server, such as the user's e-mail address, is automatically registered in the machine. If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.
- Under LDAP authentication, you cannot specify access limits for groups registered in the directory server.
- Do not use double-byte Japanese, Traditional Chinese, Simplified Chinese, or Hangul characters when entering the login user name or password. If you use double-byte characters, you cannot authenticate using Web Image Monitor.
- If using Active Directory in LDAP authentication when Kerberos authentication and SSL are set at the same time, e-mail addresses cannot be obtained.
- Under LDAP authentication, if "Anonymous Authentication" in the LDAP server's settings is not set to Prohibit, users who do not have an LDAP server account might still be able to gain access.
- If the LDAP server is configured using Windows Active Directory, "Anonymous Authentication" might be available. If Windows authentication is available, we recommend you use it.

## Operational requirements for LDAP authentication

To specify LDAP authentication, the following requirements must be met:

- The network configuration must allow the machine to detect the presence of the LDAP server.

- When SSL is being used, TLSv1 or SSLv3 can function on the LDAP server.
- The LDAP server must be registered in the machine.
- When registering the LDAP server, the following setting must be specified.
  - Server Name
  - Search Base
  - Port Number
  - SSL communication
  - Authentication  
Select either Kerberos, DIGEST, or Cleartext authentication.
  - User Name  
You do not have to enter the user name if the LDAP server supports "Anonymous Authentication".
  - Password  
You do not have to enter the password if the LDAP server supports "Anonymous Authentication".

For details about registering an LDAP server, see "Programming the LDAP server", Connecting the Machine/ System Settings.

 **Note**

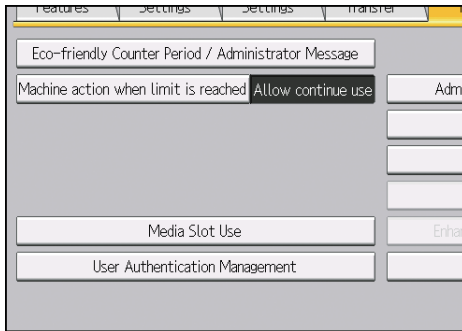
- For the characters that can be used for login user names and passwords, see page 20 "Usable characters for user names and passwords".
- In LDAP simple authentication mode, authentication will fail if the password is left blank. To allow blank passwords, contact your service representative.
- The first time an unregistered user accesses the machine after LDAP authentication has been specified, the user is registered in the machine and can use the functions available under "Available Functions" during LDAP authentication. To limit the available functions for each user, register each user and corresponding "Available Functions" setting in the Address Book, or specify "Available Functions" for each registered user. The "Available Functions" setting becomes effective when the user accesses the machine subsequently.
- Transmission between the machine and the KDC server is encrypted if Kerberos authentication is enabled. For details about specifying encrypted transmission, see page 168 "Kerberos Authentication Encryption Setting".

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

1. **Log in as the machine administrator from the control panel.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**

4. Press [▼Next].

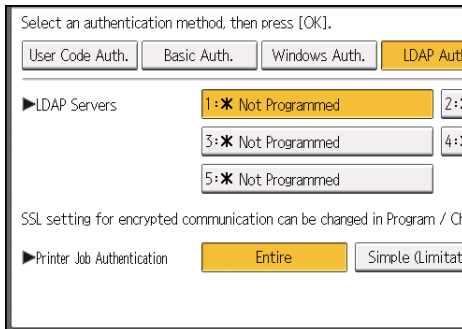
5. Press [User Authentication Management].



6. Select [LDAP Auth.].

If you do not want to use user authentication management, select [Off].

7. Select the LDAP server to be used for LDAP authentication.



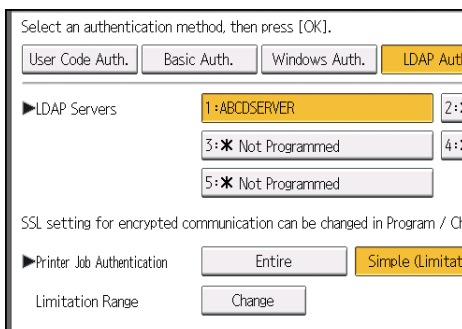
8. Select the "Printer Job Authentication" level.

For a description of the printer job authentication levels, see page 61 "Printer Job Authentication".

If you select [Entire] or [Simple (All)], proceed to step 12.

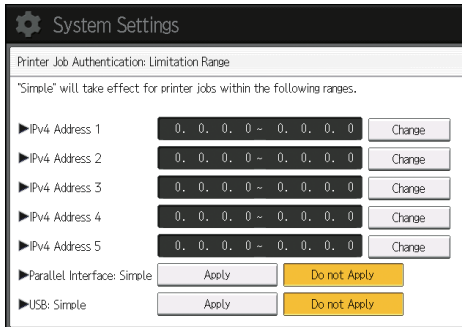
If you select [Simple (Limitation)], proceed to step 9.

9. Press [Change].





**10. Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".**

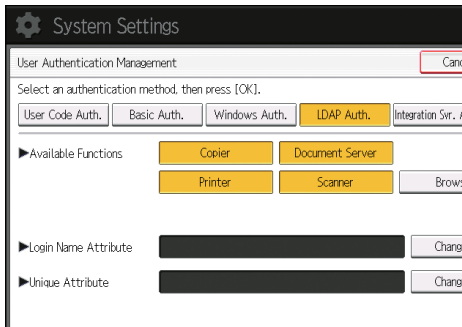


You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

**11. Press [Exit].**

**12. Press [▼Next].**

**13. In "Available Functions" and "Available Extended Features", select the machine functions you want to permit.**



LDAP authentication will be applied to the selected functions.

Users can use the selected functions only.

The Available Extended Features menu appears only if an extended feature is installed in the machine.

For details about specifying available functions for individuals or groups, see page 78 "Limiting Available Functions".

**14. Press [Change] for "Login Name Attribute".**

**15. Enter the login name attribute, and then press [OK].**

Use the login name attribute as a search criterion to obtain information about an authenticated user. You can create a search filter based on the login name attribute, select a user, and then retrieve the user information from the LDAP server so it is transferred to the machine's Address Book.

To specify multiple login attributes, place a comma (,) between them. The search will return hits for either or both attributes.

Also, if you place an equals sign (=) between two login attributes (for example: cn=abcde, uid=xyz), the search will return only hits that match the attributes. This search function can also be applied when Cleartext authentication is specified.

When authenticating using the DN format, login attributes do not need to be registered.

The method for selecting the user name depends on the server environment. Check the server environment and enter the user name accordingly.

**16. Press [Change] for "Unique Attribute".**

**17. Enter the unique attribute and then press [OK].**

Specify unique attribute on the machine to match the user information in the LDAP server with that in the machine. By doing this, if the unique attribute of a user registered in the LDAP server matches that of a user registered in the machine, the two instances are treated as referring to the same user. You can enter an attribute such as "serialNumber" or "uid". Additionally, you can enter "cn" or "employeeNumber", provided it is unique. If you do not specify the unique attribute, an account with the same user information but with a different login user name will be created in the machine.

**18. Press [OK].**

**19. Press the [Login/Logout] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

## Integration Server Authentication

For external authentication, the Integration Server authentication collectively authenticates users accessing the server over the network, providing a server-independent, centralized user authentication system that is safe and convenient.

For example, if the delivery server and the machine share the same Integration Server authentication, single sign-on is possible using DeskTopBinder.

To use the Integration Server authentication, software featuring Authentication Manager (e.g., Remote Communication Gate S) is required. For details about supported software, contact your sales representative.

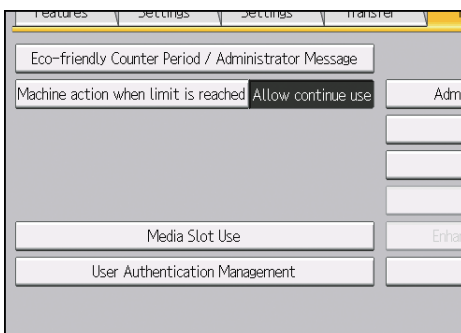
Using Web Image Monitor, you can specify that the server reliability and site certificate are checked every time you access the SSL server. For details about specifying SSL using Web Image Monitor, see Web Image Monitor Help.

### ★ Important

- During Integration Server Authentication, the data registered in the server, such as the user's e-mail address, is automatically registered in the machine. If user information on the server is changed, information registered in the machine may be overwritten when authentication is performed.
- The default administrator name for ScanRouter System and Remote Communication Gate S is "Admin". This is different from the default administrator name for the machine, which is "admin".

Before beginning to configure the machine, make sure that administrator authentication is properly configured under "Administrator Authentication Management".

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [User Authentication Management].



6. Select [Integration Svr. Auth.].

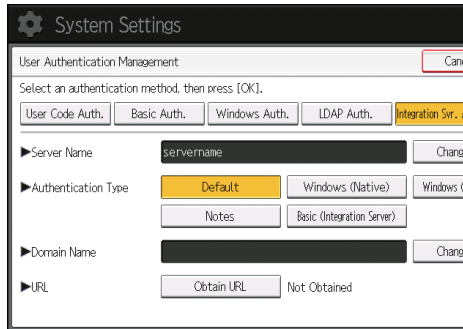
If you do not want to use user authentication management, select [Off].

**7. Press [Change] for "Server Name".**

Specify the name of the server for external authentication.

**8. Enter the server name, and then press [OK].**

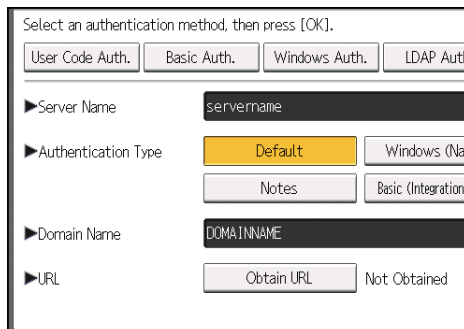
Enter the IPv4 address or host name.

**9. In "Authentication Type", select the authentication system for external authentication.**

Select an available authentication system. For general usage, select [Default].

**10. Press [Change] for "Domain Name".****11. Enter the domain name, and then press [OK].**

You cannot specify a domain name under an authentication system that does not support domain login.

**12. Press [Obtain URL].**

The machine obtains the URL of the server specified in "Server Name".

If "Server Name" or the setting for enabling SSL is changed after obtaining the URL, the URL is "Not Obtained".

**13. Press [Exit].**

If you have not registered a group on the external authentication system being used, proceed to Step 20.

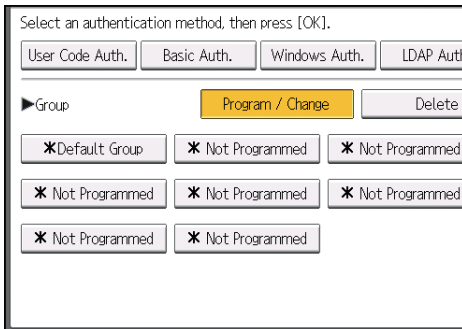
If you have registered a group, proceed to step 14.

If you set "Authentication Type" to [Windows (Native)] or [Windows (NT Compatible)], you can use the global group.

If you set "Authentication Type" to [Notes], you can use the Notes group. If you set "Authentication Type" to [Basic (Integration Server)], you can use the groups created using the Authentication Manager.

14. Press [▼Next].

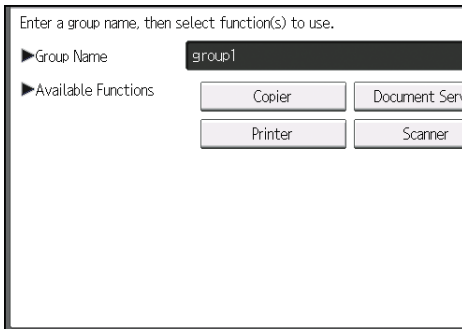
15. Press [Program / Change] for "Group", and then press [\* Not Programmed].



16. Press [Change] for "Group Name", and then enter the group name.

17. Press [OK].

18. In "Available Functions" and "Available Extended Features", select the machine functions you want to permit.



Authentication will be applied to the selected functions.

Users can use the selected functions only.

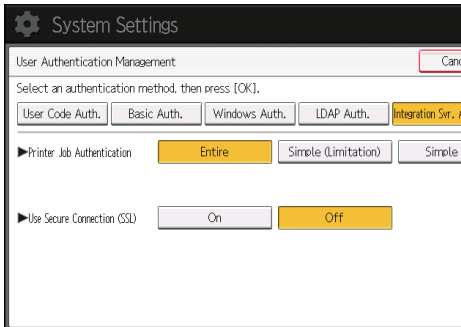
The Available Extended Features menu appears only if an extended feature is installed in the machine.

For details about specifying available functions for individuals or groups, see page 78 "Limiting Available Functions".

19. Press [OK].

20. Press [▼Next].

## 21. Select the "Printer Job Authentication" level.



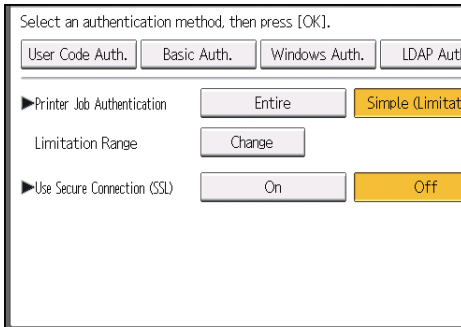
If you cannot see this item, press [▼Next] to display more settings.

For a description of the printer job authentication levels, see page 61 "Printer Job Authentication".

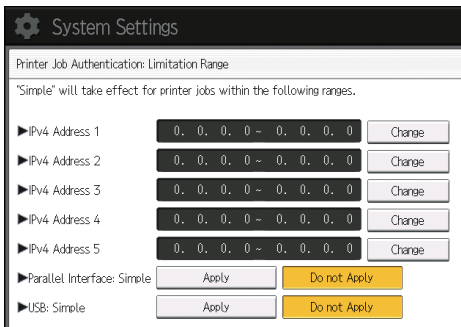
If you select [Entire] or [Simple (All)], proceed to step 25.

If you select [Simple (Limitation)], proceed to step 22.

## 22. Press [Change].



## 23. Specify the range in which [Simple (Limitation)] is applied to "Printer Job Authentication".



You can specify the IPv4 address range to which this setting is applied, and whether or not to apply the setting to the parallel and USB interfaces.

## 24. Press [Exit].

**25. Press [On] for "Use Secure Connection (SSL)", and then press [OK].**

To not use secure sockets layer (SSL) for authentication, press [Off].

**26. Press [OK].**

**27. Press the [Login/Logout] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

# Printer Job Authentication

Printer job authentication is a function allowing user authentication to be applied to print jobs.

User authentication is supported by the PCL and PostScript3 drivers. The PostScript3 driver supports User Code authentication only.

---

## Printer Job Authentication Levels

---

The security level for "Entire" is the highest, followed by "Simple (Limitation)", and at the bottom, "Simple (All)".

- Entire

Select this to authenticate all print jobs and remote configuration.

The machine authenticates all printer jobs and remote settings, and cancels jobs and settings that fail authentication.

To print in an environment that does not support authentication, select [Simple (All)] or [Simple (Limitation)].

- Simple (Limitation)

Select this to restrict the range of [Simple (All)].

The specified range can be printed regardless of the authentication. Authentication will be applied to addresses outside this range.

You can specify whether to apply [Simple (All)] to parallel connection, USB connection, and the user's IPv4 address. The range of application to IPv6 addresses can be configured from Web Image Monitor.

- Simple (All)

Select this if you want to print with a printer driver or device that cannot be identified by the machine or if authentication is not required for printing.

Printer jobs and settings without authentication information are performed without being authenticated.

The machine authenticates printer jobs and remote settings that have authentication information, and cancels the jobs and settings that fail authentication.

Unauthorized users may be able to use the machine since printing is allowed without user authentication.

---

## Printer Job Types

---

Depending on the combination of printer job authentication level and printer job type, the machine may not print properly. Set an appropriate combination according to the operating environment.



When user authentication is disabled, printing is possible for all job types.

**Printer job types: A printer job is specified when:**

1. The [User Authentication] check box is selected in the PCL printer driver or in the PCL universal driver.
2. The [User Authentication] and [With Encryption] check boxes are selected in the PCL mini-driver\*.
  - \* The authentication function cannot be used with IA-64 OS.
3. The [User Authentication] check box is selected in the PCL mini-driver.
4. The [User Authentication] check box is not selected in the PCL printer driver or in the PCL mini-driver\*.
  - \* The authentication function cannot be used with IA-64 OS.
5. When the User Code is entered using the PostScript 3 printer driver or PS3 universal driver. This also applies to recovery/parallel printing using a PCL printer driver that does not support authentication.
6. When the User Code is not entered using the PostScript 3 printer driver or PS3 universal driver. This also applies to recovery/parallel printing using a PCL printer driver that does not support authentication.
7. A printer job or PDF file is sent from a host computer without a printer driver and is printed via LPR. This can be also applied to Mail to Print.
8. A PDF file is printed via ftp. Personal authentication is performed using the user ID and password used for logging in via ftp. However, the user ID and password are not encrypted.

**Printer job authentication levels and printer job types**

Printer Job Authentication	Simple (All)	Simple (All)	Simple (All)	Entire	Entire	Entire
Driver Encryption Key:Encryption Strength	Simple Encryption	DES	AES	Simple Encryption	DES	AES
Printer Job Type 1	C*1	C*1	C*1	C*1	C*1	C*1
Printer Job Type 2	C*1	C*1	X*1	C*1	C*1	X*1

Printer Job Authentication	Simple (All)	Simple (All)	Simple (All)	Entire	Entire	Entire
Driver Encryption Key:Encryption Strength	Simple Encryption	DES	AES	Simple Encryption	DES	AES
Printer Job Type 3	B	X*1	X*1	B	X*1	X*1
Printer Job Type 4	X	X	X	X	X	X
Printer Job Type 5	A	A	A	B	B	B
Printer Job Type 6	A	A	A	X	X	X
Printer Job Type 7	A	A	A	X	X	X
Printer Job Type 8	B	B	B	B	B	B

\*1 Printing with User Code authentication is classified as B.

A: Printing is possible regardless of user authentication.

B: Printing is possible if user authentication is successful. If user authentication fails, the print job is reset.

C: Printing is possible if user authentication is successful and "Driver Encryption Key" for the printer driver and machine match.

X: Printing is not possible regardless of user authentication, and the print job is reset.

#### Note

- For details about "Driver Encryption Key:Encryption Strength", see page 249 "Specifying the Extended Security Functions".

## "authfree" Command

If [Simple (Limitation)] is selected under printer job authentication, the telnet authfree command can be used to specify exceptions to the printer job authentication.

The default user name for logging into telnet is "admin". The password is not configured by default. For details about logging into and using telnet, see "Remote Maintenance Using telnet", Connecting the Machine/ System Settings.

### View settings

```
msh> authfree
```

If print job authentication exclusion is not specified, authentication exclusion control is not displayed.

### IPv4 address settings

```
msh> authfree "ID" range "start-address" "end-address"
```

### IPv6 address settings

```
msh> authfree "ID" range6 "start-address" "end-address"
```

### IPv6 address mask settings

```
msh> authfree "ID" mask6 "base-address" "masklen"
```

### Parallel/USB settings

```
msh> authfree [parallel|usb] [on|off]
```

- To exclude parallel and USB connections from printer job authentication, set this to "on". The default setting is "off".
- Always specify either "parallel" or "USB".

"parallel" can be specified when an optional IEEE 1284 interface board is installed.

### Authentication exclusion control initialization

```
msh> authfree flush
```

#### Note

- In both IPv4 and IPv6 environments, up to five access ranges can be registered and selected.

# Auto Registration to the Address Book

The personal information of users logging in via Windows, LDAP or Integration Server authentication is automatically registered in the Address Book. Any other information may be specified by copying from other registered users.

2

## Automatically Registered Address Book Items

- Login User Name
- Login Password
- Registration No.
- Name \*<sup>1</sup>
- Key Display \*<sup>1</sup>
- E-mail Address \*<sup>2</sup>
- Protect File(s)  
Permissions for Users / Groups \*<sup>3</sup>

\*<sup>1</sup> If this information cannot be obtained, the login user name is registered in this field.

\*<sup>2</sup> If this information cannot be obtained, auto registration does not work.

\*<sup>3</sup> If [Data Carry-over Setting for Address Book Auto-program] is set to [Carry-over Data], it has priority.

### Note

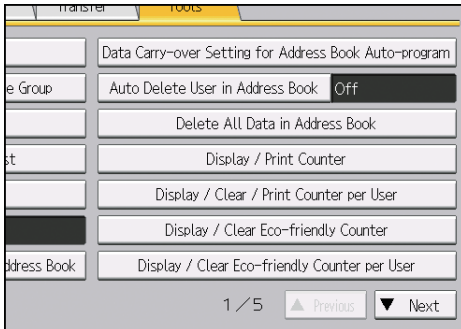
- You can automatically delete old user accounts when performing auto registration if the amount of data registered in the address book has reached the limit. For details, see page 248 "Managing the Address Book".

## Data Carry-over Setting for Address Book Auto-program

Information that is not automatically registered in the Address Book can be copied from an already registered user and then registered.

1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].

**4. Press [Data Carry-over Setting for Address Book Auto-program].**



2

**5. Press [Carry-over Data].**

**6. Use the number keys to enter the registration number of the Address Book to apply the specified setting, and then press [#].**

**7. Press [OK].**

**8. Press the [Login/Logout] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

# User Lockout Function

If an incorrect password is entered several times, the User Lockout function prevents further login attempts under the same user name. Even if the locked out user enters the correct password later, authentication will fail and the machine cannot be used until the lockout period elapses or an administrator or supervisor disables the lockout.

To use the lockout function for user authentication, the authentication method must be set to Basic authentication. Under other authentication methods, the lockout function protects supervisor and administrator accounts only, not general user accounts.

## Lockout setting items

The lockout function settings can be made using Web Image Monitor.

Setting item	Description	Setting values	Default setting
Lockout	Specify whether or not to enable the lockout function.	<ul style="list-style-type: none"> <li>Active</li> <li>Inactive</li> </ul>	<ul style="list-style-type: none"> <li>Inactive</li> </ul>
Number of Attempts before Lockout	Specify the number of authentication attempts to allow before applying lockout.	1-10	5
Lockout Release Timer	Specify whether or not to cancel lockout after a specified period elapses.	<ul style="list-style-type: none"> <li>Active</li> <li>Inactive</li> </ul>	<ul style="list-style-type: none"> <li>Inactive</li> </ul>
Lock Out User for	Specify the number of minutes after which lockout is canceled.	1-9999 min.	60 min.

## Lockout release privileges

Administrators with unlocking privileges are as follows.

Locked out user	Unlocking administrator
general user	user administrator
user administrator, network administrator, file administrator, machine administrator	supervisor

Locked out user	Unlocking administrator
supervisor	machine administrator

## Specifying the User Lockout Function

1. Log in as the machine administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [User Lockout Policy] under "Security".
4. Set "Lockout" to [Active].
5. In the drop-down menu, select the number of login attempts to permit before applying lockout.
6. After lockout, if you want to cancel lockout after a specified time elapses, set "Lockout Release Timer" to [Active].
7. In the "Lock Out User for" field, enter the number of minutes until lockout is disabled.
8. Click [OK].  
User Lockout Policy is set.
9. Log out.

## Canceling Password Lockout

1. Log in as the user administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Address Book].
3. Select the locked out user's account.
4. Click [Detail Input], and then click [Change].
5. Set "Lockout" to [Inactive] under "Authentication Information".
6. Click [OK].
7. Log out.

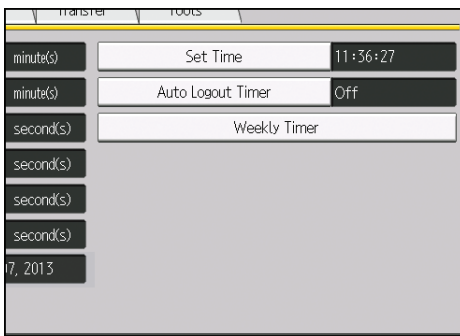
### ↓ Note

- You can cancel the administrator and supervisor password lockout by turning the main power off and then turning it back on again, or by canceling the setting in [Program/Change Administrator] under [Configuration] in Web Image Monitor.

# Auto Logout

After you log in, the machine automatically logs you out if you do not use the control panel within a given time. This feature is called "Auto Logout". Specify how long the machine is to wait before performing Auto Logout.

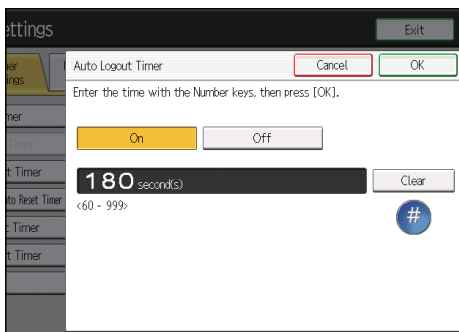
1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Timer Settings].
4. Press [Auto Logout Timer].



5. Select [On].

If you do not want to specify [Auto Logout Timer], select [Off].

6. Enter "60" to "999" (seconds) using the number keys, and then press [#].



If you make a mistake, press [Clear].

7. Press [OK].
8. Press the [Login/Logout] key.

A confirmation message appears.

If you press [Yes], you will be automatically logged out.



### Note

- If a paper jam occurs or toner runs out, the machine might not be able to perform the Auto Logout function.
- You can specify the Auto Logout setting for Web Image Monitor in [Webpage]. For details, see the Web Image Monitor Help.

# Authentication Using an External Device

To authenticate using an external device, see the device manual.

For details, contact your sales representative.



# 3. Restricting Machine Usage

This chapter explains how to restrict use of the machine by the user.

## Restricting Usage of the Destination List

The use of the destination list can be restricted under the scanner function.

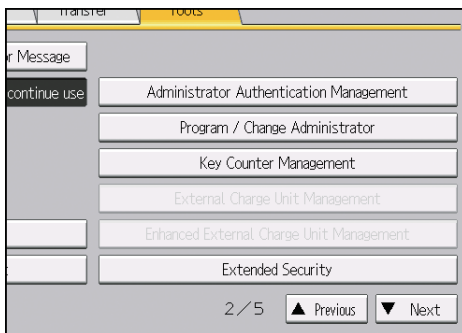
### Restrict Use of Destinations

You can prohibit the sending scanned documents to addresses other than those registered in the Address Book. By enabling this, you can prohibit users from manually entering the e-mail address or folder destination.

### Restrict Adding of User Destinations

With regard to the addresses manually entered for sending scanned documents, you can prohibit their registration into the Address Book using [Prg. Dest.]. Also note that with this setting, only the user administrator can register new users in the Address Book and change the passwords and other information of existing registered users. Also, note that even if you set these functions to [On], the user registered as destination can change their password. Only the user administrator can change items other than the password.

1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Extended Security].



6. Press [▼Next].
7. Set "Restrict Use of Destinations" or "Restrict Adding of User Destinations" to [On].

If you set "Restrict Use of Destinations" to [On], "Restrict Adding of User Destinations" will not appear.

8. Press [OK].

**9. Press the [Login/Logout] key.**

A confirmation message appears.

If you press [Yes], you will be automatically logged out.

# Preventing Changes to Administrator Settings

---

## Limiting the Settings that Can Be Changed by Each Administrator

---

The settings that can be made for this machine vary depending on the type of administrator, allowing the range of operations that can be made to be divided among the administrators.

The following administrators are defined for this machine.

- User administrator
- Machine administrator
- Network administrator
- File administrator

For details on the settings that can be made by each administrator, see page 285 "List of Operation Privileges for Settings".

Register the administrators before using the machine. For instructions on registering the administrator, see page 18 "Registering and Changing Administrators".

---

## Prohibiting Users from Making Changes to Settings

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Makes it possible to prohibit users from changing administrator settings.

Select the item under "Available Settings" in "Administrator Authentication Management" to prevent such changes.

For details on selections in "Available Settings", see page 15 "Configuring Administrator Authentication".

## Specifying Menu Protect

Menu Protect allows you to limit user permission to access the settings in the User Tools menu except for the System Settings. This setting can be used regardless of user authentication. To change the menu protect setting, first enable administrator authentication. For details on how to set administrator authentication, see page 15 "Configuring Administrator Authentication". For a list of settings that users can specify according to the menu protect level, see page 285 "List of Operation Privileges for Settings".

3

If you want to enable "Menu Protect", specify it to [Level 1] or [Level 2]. Select [Level 2] to impose stricter restrictions on users' access permission to the machine settings.

If you want to disable "Menu Protect", specify it to [Off].

---

### Copy Function

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1. Log in as the machine administrator from the control panel.
2. Press [Copier / Document Server Features].
3. Press [Administrator Tools].
4. Press [Menu Protect].
5. Select the menu protect level, and then press [OK].
6. Log out.

---

### Printer Function

---

1. Log in as the machine administrator from the control panel.
2. Press [Printer Features].
3. Press [Data Management].
4. Press [Menu Protect].
5. Select the menu protect level, and then press [OK].
6. Log out.

---

### Scanner Function

---

1. Log in as the machine administrator from the control panel.
2. Press [Scanner Features].
3. Press [Initial Settings].

4. Press [Menu Protect].
5. Select the menu protect level, and then press [OK].
6. Log out.



## Limiting Available Functions

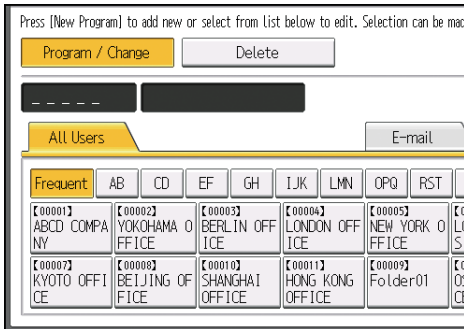
To prevent unauthorized operation, you can specify who is allowed to access each of the machine's functions.

Specify the functions available to registered users. By making this setting, you can limit the functions available to users.

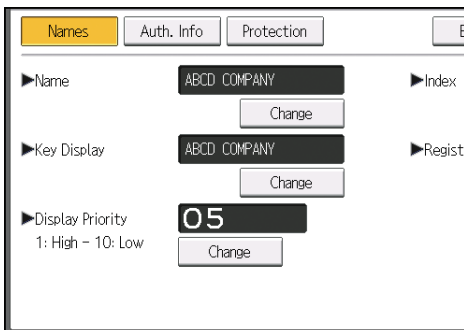
You can place limitations on the use of the copier, Document Server, scanner, printer, browser functions, and extended features.

3

1. Log in as the user administrator from the control panel.
2. Press [Address Book Mangmnt].
3. Select the user.

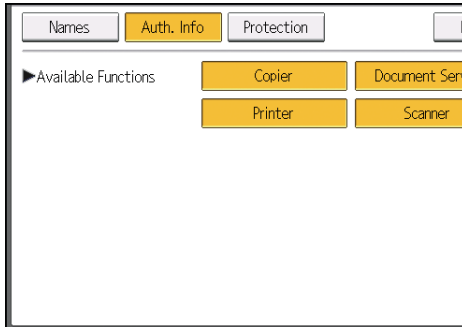


4. Press [Auth. Info].



5. Press [▼Next] twice.

- In "Available Functions" and "Available Extended Features", select the machine functions you want to permit.



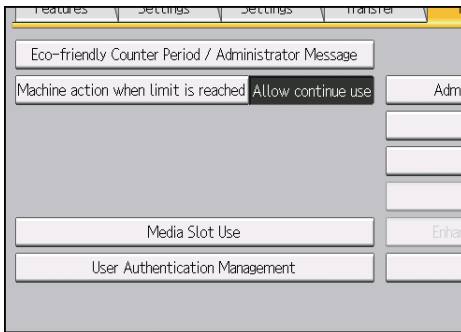
The Available Extended Features menu appears only if an extended feature is installed in the machine.

- Press [OK].
- Log out.

## Restricting Media Slot Access

Specify on the control panel whether or not to allow users to use the media slots. With this setting, you can restrict storing scanned files on a removable memory device, and also restrict printing of files stored on a removable memory device.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Media Slot Use].



6. To restrict storing files on a removable memory device, press [Prohibit] under "Store to Memory Device".
7. To restrict printing of files stored on a removable memory device, press [Prohibit] under "Print from Memory Storage Device".
8. Press [OK].
9. Log out.

### ↓ Note

- If you select [Prohibit] under "Store to Memory Device", the [Store to Memory Device] button is not displayed on the Store File screen of the scanner function.
- If you select [Prohibit] under "Print from Memory Storage Device", the [Print from Memory Storage Device] button is not displayed on the printer function's initial screen.

# Managing Print Volume per User

This function limits how much each user can print. If users reach their maximum print volume, their print jobs are canceled and/or a message indicating so is displayed.

## Print volume

The print volume is calculated by multiplying the number of pages by a unit count.

The unit count can be specified according to the printing condition. For example, if one page is printed with a unit count of 10, the print volume would be 10.

The print volume is tracked for each user.

3

## Setting Items

Item	Explanation	Setting
Machine action when limit is reached	<p>Specify whether to limit print volume and the method for limiting prints.</p> <ul style="list-style-type: none"> <li>• Stop Job When the maximum print volume is reached, both the current job and waiting jobs are canceled.</li> <li>• Finish Job and Limit When the maximum print volume is reached, the current job is allowed to finish, but waiting jobs are canceled.</li> <li>• Allow Continue Use Print volume is not limited.</li> </ul>	<ul style="list-style-type: none"> <li>• Stop Job</li> <li>• Finish Job and Limit</li> <li>• <b>Allow Continue Use</b> (Default setting)</li> </ul>
Print Volume Use Limitation: Unit Count Setting	<p>For each of the four print conditions, specify a per-page unit count between 0 and 200.</p> <p>A print condition is a combination of paper size and function.</p> <p>The default per-page unit count for every print condition is 1.</p> <p>The paper size "Others" refers to paper sizes other than A3 and DLT (11 × 17 in).</p>	<ul style="list-style-type: none"> <li>• Copier:A3/DLT</li> <li>• Printer:A3/DLT</li> <li>• Copier:Others</li> <li>• Printer:Others</li> </ul>

## Things to note when limiting print volume

If the following occurs, the user will not be able to print:

- The login user name or user code registered in the Address Book is changed while the user is logged in and authenticated.

If the following occurs, print volume management will not function correctly:

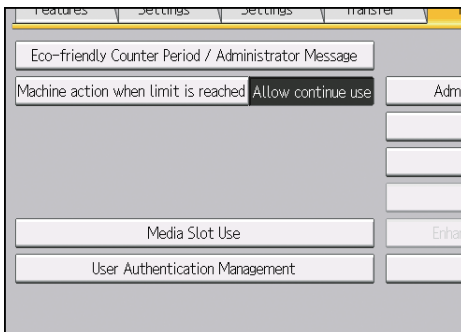
- Under Windows or LDAP authentication, a user logs in to the same user account by using multiple login user names, and these multiple login names are registered in the Address Book as separate users.

The following operations are exempt from print volume limitation:

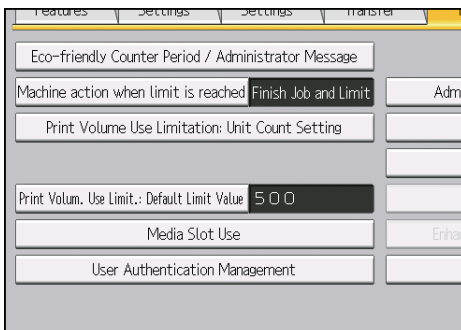
- Printing from an operating system that does not support the current authentication method

## Specifying Limitations for Print Volume

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Machine action when limit is reached].



6. Select [Stop Job] or [Finish Job and Limit], and then press [OK].  
If you do not want to limit print volume, select [Allow Continue Use].
7. Press [Print Volume Use Limitation: Unit Count Setting].



8. For each print condition, use the number keys to enter a per-page unit count between "0" and "200", and then press [#].

Select item.

Copier:A3/DLT	0	Copier:Others
<0 - 200>		
Printer:A3/DLT	0	Printer:Others
<0 - 200>		

If you specify "0" for a print condition, no volume restriction is applied to jobs matching that condition.

9. Press [OK].

10. Log out.

#### ↓ Note

- Limitations for print volume can also be specified in [Print Volume Use Limitation] under "Configuration" in Web Image Monitor.

## Restrictions When User Code Authentication is Enabled

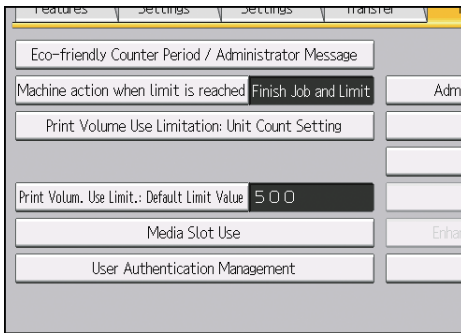
When User Code authentication is enabled, the following restrictions apply to the print volume limitation settings:

- If [PC Control] is selected for the printer function, the values specified for print volume use units might not be applied to users' print counters. Do not select [PC Control] if you want to limit print volume when running User Code authentication.
- Under Basic, Windows, and LDAP authentication, figures displayed on the lower left of the control panel show users how many of the total prints allotted to them by the administrator they have used. Under User Code authentication, users cannot check the print volume they have made, using either the control panel or Web Image Monitor. Under User Code authentication, administrators can inform users of the print volume they have made.
- Log information related to print use limitations is not recorded in the Job Log or Access Log.
- Depending on the settings configured for User Code authentication, users might be able to make prints before logging in, regardless of the print volume limitation set by the administrator. Restrict all functions via "Functions to Restrict" in [User Code Auth.] in [User Authentication Management].

## Specifying the Default Maximum Use Count

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Print Volum. Use Limit.: Default Limit Value].

3

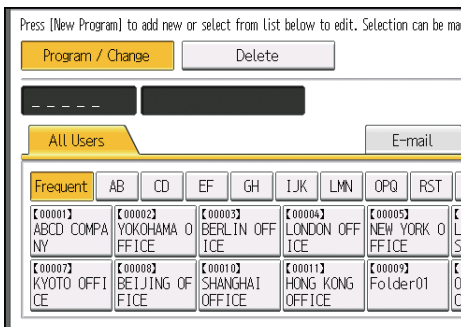


[Print Volum. Use Limit.: Default Limit Value] does not appear if you have selected [Allow Continue Use] in "Machine action when limit is reached".

6. Use the number keys to enter a value between "0" and "999,999" as the maximum available print volume, and then press [#].
7. Press [OK].
8. Log out.

## Specifying the Maximum Use Count per User

1. Log in as the machine administrator from the control panel.
2. Press [Address Book Mangmnt].
3. Select the user whose maximum available print volume you want to specify.



#### 4. Press [Auth. Info].

#### 5. Press [▼Next] twice.

#### 6. Press [Limit] in "Print Volum. Use Limit.".

"Print Volum. Use Limit." does not appear if you have selected [Allow Continue Use] in "Machine action when limit is reached".

If you do not want to limit user's print volume, press [Do not Limit].

#### 7. Press [Change], and then use the number keys to enter a value between "0" and "999,999" as the maximum available print volume, and then press [#].

A user whose maximum print volume is set to "0" can only print jobs whose print conditions match those with a unit value of "0".

#### 8. Press [OK].

#### 9. Log out.

#### ↓ Note

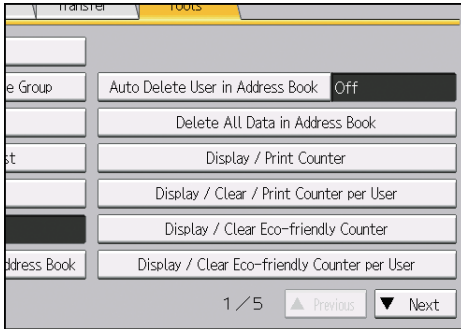
- The maximum print volume for an individual user can also be specified in [Address Book] in Web Image Monitor.

## Checking Print Volume per User

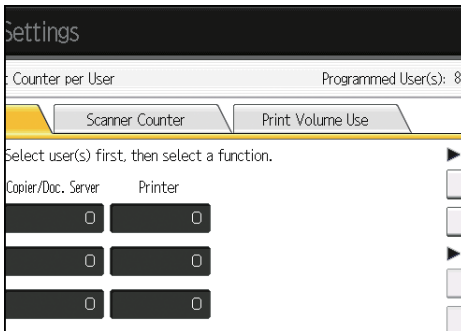
This procedure can be done by any administrator.



1. Log in as the administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Display / Clear / Print Counter per User].



5. Press [Print Volume Use].



Each user's print volume limit and print volume used to date are displayed.

6. After confirming the settings, log out.

**Note**

- Authorized users and the user administrator can also use [Address Book] in Web Image Monitor to check users' print volume use counters.

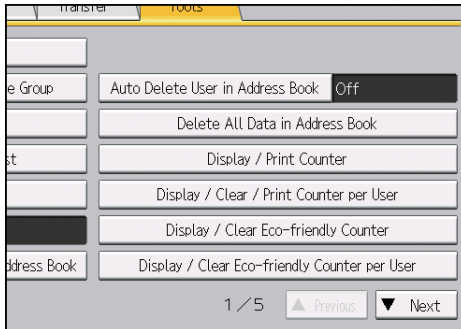
---

## Printing a List of Print Volume Use Counters

---

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].

#### 4. Press [Display / Clear / Print Counter per User].

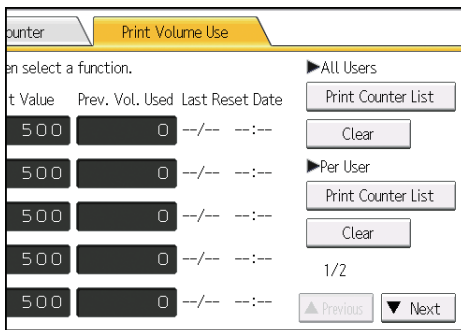


#### 5. Press [Print Volume Use].

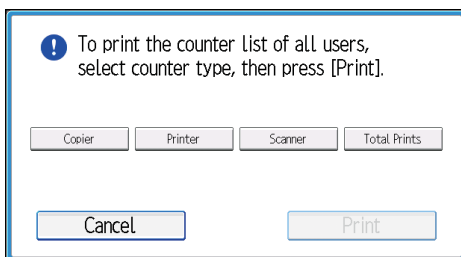
A list of users' print volume use counters is displayed.

To select all the users displayed on the page, press [Select All on the Page].

#### 6. To print a list of the volume use counters of every user, press [Print Counter List] under "All Users". To print a list of the volume use counters of selected users only, select the users whose counters you want to print, and then press [Print Counter List] under "Per User".



#### 7. Select the counter you want to print in the list, and then press [Print].



#### 8. Log out.

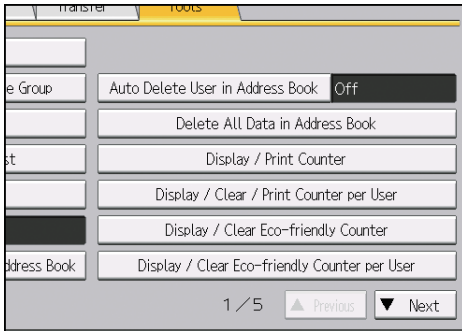
##### Note

- Print volume use counter lists can be printed only if the following paper sizes is loaded in the paper tray: A4, 8 1/2 × 11 in, B4, 8 1/2 × 14 in, A3, or 11 × 17 in.

## Clearing Print Volume Use Counters

Clearing a user's print volume counter or increasing a user's print volume limit allows the user to continue printing beyond his/her original print volume limit.

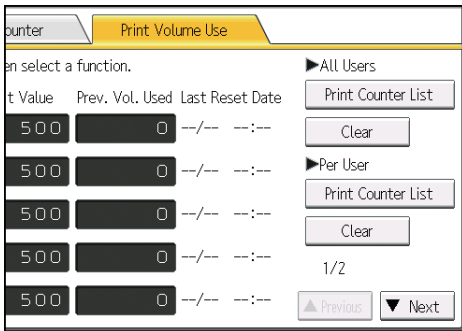
1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Display / Clear / Print Counter per User].



5. Press [Print Volume Use].

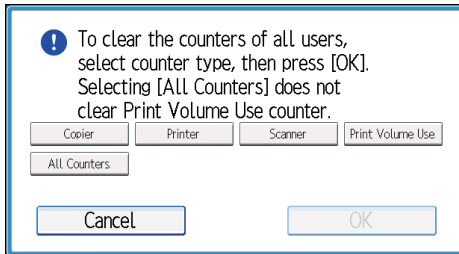
A list of users' print volume use counters is displayed.

6. To clear the print volume use counters of every user, press [Clear] under "All Users". To clear the print volume use counters of selected users only, select the users whose counters you want to clear, and then press [Clear] under "Per User".



To select all the users displayed on the page, press [Select All on the Page].

## 7. Select [Print Volume Use], and then press [OK].



## 8. Log out.

### ↓ Note

- You can also use [Address Book] in Web Image Monitor to clear the print volume use counters. However if you want to clear the print volume use counters of all users simultaneously, use the control panel.

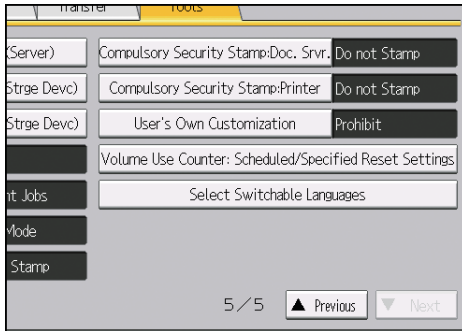
## Configuring the Auto-Reset Function

The print volume counter can be reset at a specified time.

Options	Details
Every Month	Resets the print volume at the specified time/date each month.
Specify Date	Resets the print volume (only once) at the specified time/date.
Specify Cycle	Resets after the specified interval from a reference date, then resets thereafter at the same interval.

- Log in as the machine administrator from the control panel.
- Press [System Settings].
- Press [Administrator Tools].
- Press [▼Next] four times.

5. Press [Volume Use Counter: Scheduled/Specified Reset Settings].



6. Select one of [Every Month], [Specify Date] and [Specify Cycle].

7. Configure the conditions.

8. Press [OK].

9. Log out.

**Note**

- If the machine is turned off at the specified time on the specified date, the print volume will be reset when the power is turned on.
- If you select in [Every Month] a date, such as the 31st, which is missing on some months, the print volume will be reset at 0:00 on the 1st of the month following such a month.

# 4. Preventing Leakage of Information from Machines

This chapter explains how to protect information if it is stored in the machine's memory or on the hard disk.

## Protecting the Address Book

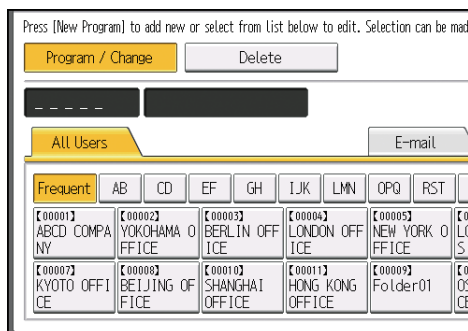
You can specify who is allowed to access the data in the Address Book. To protect the data from unauthorized reading, you can also encrypt the data in the Address Book.

4

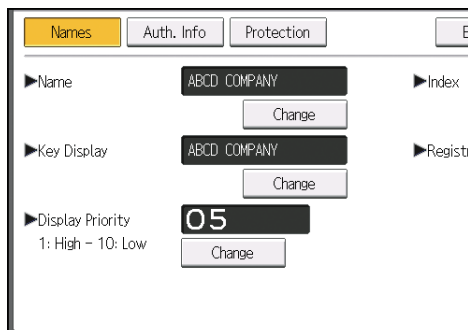
### Specifying Address Book Access Permissions

These access permissions can be specified by the users registered in the Address Book, users with full control privileges, and user administrator.

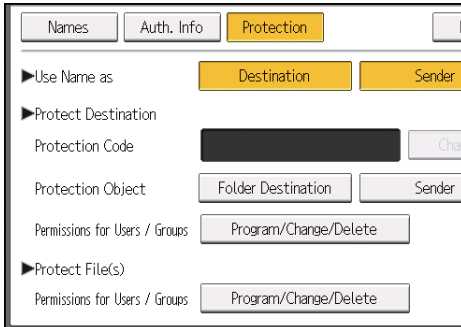
1. Log in as the user administrator from the control panel.
2. Press [Address Book Mangmnt].
3. Select the user whose access permission you want to change.



4. Press [Protection].

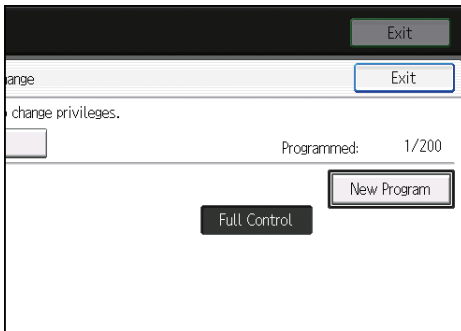


**5. Press [Program/Change/Delete] for "Permissions for Users / Groups", under "Protect Destination".**



4

**6. Press [New Program].**



**7. Select the users or groups to which to apply the access permission.**

You can select more than one user.

By pressing [All Users], you can select all the users.

**8. Press [Exit].**

**9. Select the user to whom you want to assign access permission, and then select the permission.**

Select the permission, from [Read-only], [Edit], [Edit / Delete], or [Full Control].

**10. Press [Exit].**

**11. Press [OK].**

**12. Log out.**

**↓ Note**

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

## Encrypting Data in the Address Book

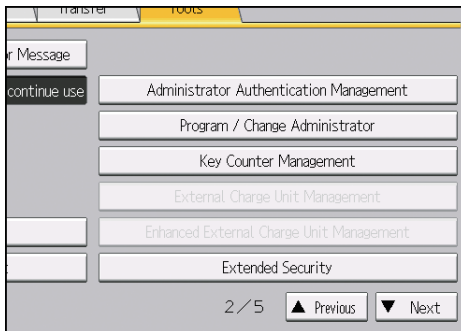
### ★ Important

- The machine cannot be used during encryption.

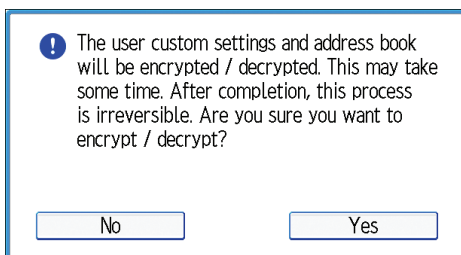
The time it takes to encrypt the data in the Address Book depends on the number of registered users.

Encrypting the data in the Address Book may take a long time.

1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Extended Security].



6. Press [On] for "Encrypt User Custom Settings & Address Book".
7. Press [Change] for "Encryption Key".
8. Enter the encryption key, and then press [OK].  
Enter the encryption key using up to 32 alphanumeric characters.
9. Press [Encrypt / Decrypt].
10. Press [Yes].



Do not switch the main power off during encryption, as doing so may corrupt the data.

If you press [Stop] during encryption, the data is not encrypted.



If you press [Stop] during decryption, the data stays encrypted.

Normally, once encryption is complete, "Encryption / Decryption is successfully complete. Press [Exit]." appears.

**11. Press [Exit].**

**12. Press [OK].**

**13. Log out.**

**↓ Note**

- If you register additional users after encrypting the data in the Address Book, those users are also encrypted.
- The backup copy of the address book data stored in the SD card is encrypted. For details about backing up and then restoring the address book using an SD card, see "Administrator Tools", Connecting the Machine/ System Settings.

# Encrypting Data on the Hard Disk

## CAUTION

- Keep SD cards or USB flash memory devices out of reach of children. If a child accidentally swallows an SD card or USB flash memory device, consult a doctor immediately.

Prevent information leakage by encrypting the Address Book, authentication information, and stored documents as the data is written.

When the data encryption settings are enabled, an encryption key is generated and this is used to restore the data. This key can be changed at any time.

### Data that is encrypted

This function encrypts data that is stored in the machine's NVRAM (memory that remains even after the machine has been turned off) and on the hard disk.

The following data is encrypted:

- Address Book data
- User authentication information
- Data stored in Document Server
- Temporary stored documents
- Logs
- Network I/F setting information
- System settings information

### Note

- If the machine needs to be replaced, the existing data can be transferred to a new machine, even if the data is encrypted. To transfer data, contact your service representative.
- You can back up the machine's data encryption key to an SD card. For details about SD card handling, see "Inserting/Removing a Memory Storage Device", Getting Started.

### Time required for encryption

When setting up encryption, specify whether to start encryption after deleting data (initialize) or encrypt existing data and retain it. If data is retained, it may take some time to encrypt it.

Setting	Data to be kept	Data to be initialized	Required time
File System Data Only	<ul style="list-style-type: none"> <li>• Embedded Software Architecture applications' program/log</li> <li>• Address Book</li> <li>• Registered fonts</li> <li>• Job logs/access logs</li> <li>• Thumbnails of stored documents</li> <li>• Sent/received e-mail</li> <li>• Documents forwarded to the capture server</li> <li>• Spooled jobs</li> </ul>	<ul style="list-style-type: none"> <li>• Stored documents (stored documents in Document Server, Locked Print files / Sample Print files / Stored Print files / Hold Print files</li> <li>• Registered stamps</li> </ul>	Approx. 1 hour 30 minutes
All Data	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	None	Approx. 6 hours 30 minutes
Format All Data	None	All Data: Both the data to be kept and data not kept when [File System Data Only] is specified	Several minutes

**Things to note when enabling encryption settings**

- If you use Embedded Software Architecture application or App2Me, be sure to specify [File System Data Only] or [All Data].
- Note that the machine's settings will not be initialized to their system defaults even if [Format All Data], [File System Data Only], or [All Data] is specified.

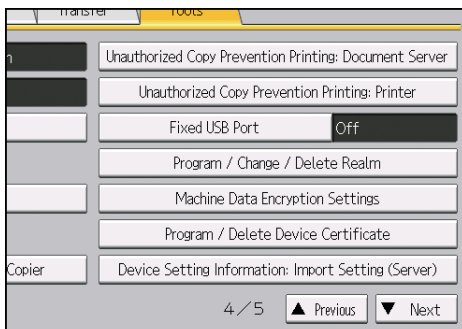
**Enabling the Encryption Settings**

**★ Important**

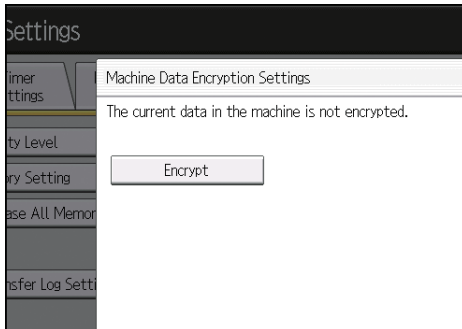
- The machine cannot be operated while data is being encrypted.

- Once the encryption process begins, it cannot be stopped. Make sure that the machine's main power is not turned off while the encryption process is in progress. If the machine's main power is turned off while the encryption process is in progress, the hard disk will be damaged and all data on it will be unusable.
- The encryption key is required for data recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.
- Encryption begins after you have completed the control panel procedure and rebooted the machine by turning off and on the main power switch. If both the erase-by-overwrite function and the encryption function are specified, encryption begins after the data that is stored on the hard disk has been overwritten and the machine has been rebooted with the turning off and on of the main power switch.
- If you use hard disk erase-by-overwrite and encryption simultaneously, and select overwrite three times for "Random Numbers", the process will take up to 10 hours and 15 minutes. Re-encrypting from an already encrypted state takes the same amount of time.
- The "Erase All Memory" function also clears the machine's security settings, with the result that afterward, neither machine nor user administration will be effective. Ensure that users do not save any data on the machine after "Erase All Memory" has completed.
- Rebooting will be faster if there is no data to carry over to the hard disk and if encryption is set to [Format All Data], even if all the data on the hard disk is formatted. Before you perform encryption, we recommend you back up important data such as the Address Book and all data stored in Document Server.
- If the encryption key update was not completed, the printed encryption key will not be valid.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Machine Data Encryption Settings].



**6. Press [Encrypt].**



**7. Select the data to be carried over to the hard disk and not be reset.**

To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].

**8. Select the backup method.**

If you have selected [Save to SD Card], load an SD card into the media slot on the side of the control panel and press [OK] to back up the machine's data encryption key.

For details about inserting the SD card, see "Inserting/Removing a Memory Storage Device", Getting Started.

If you have selected [Print on Paper], press the [Start] key and print out the machine's data encryption key.

**9. Press [OK].**

**10. Press [Exit].**

**11. Press [Exit].**

**12. Log out.**

**13. Turn off the main power switch, and then turn the main power switch back on.**

The machine will start to convert the data on the memory after you turn on the machine. Wait until the message "Memory conversion complete. Turn the main power switch off." appears, and then turn the main power switches off again.

For details about turning off the main power, see "Turning On/Off the Power", Getting Started.

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## Backing Up the Encryption Key

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The encryption key can be backed up. Select whether to save it to an SD card or to print it.

**★ Important**

- **The encryption key is required for data recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.**

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Machine Data Encryption Settings].
6. Press [Back Up Encryption Key].
7. Select the backup method.

If you have selected [Save to SD Card], load an SD card into the media slot on the side of the control panel and press [OK]; once the machine's data encryption key is backed up, press [Exit].

For details about inserting the SD card, see "Inserting/Removing a Memory Storage Device", Getting Started.

If you have selected [Print on Paper], press the [Start] key and print out the machine's data encryption key.

8. Press [Exit].
9. Log out.

---

## Updating the Encryption Key

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You can update the encryption key and create a new key. Updates are possible when the machine is functioning normally.

### ★ Important

- The encryption key is required for recovery if the machine malfunctions. Be sure to store the encryption key safely for retrieving backup data.
- When the encryption key is updated, encryption is performed using the new key. After completing the procedure on the machine's control panel, turn off the main power and restart the machine to enable the new settings. Restarting can be slow when there is data to be carried over to the hard disk.
- If the encryption key update was not completed, the printed encryption key will not be valid.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Machine Data Encryption Settings].
6. Press [Update Encryption Key].

**7. Select the data to be carried over to the hard disk and not be reset.**

To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].

**8. Select the backup method.**

If you have selected [Save to SD Card], load an SD card into the media slot on the side of the control panel and press [OK] to back up the machine's data encryption key.

For details about inserting the SD card, see "Inserting/Removing a Memory Storage Device", Getting Started.

If you have selected [Print on Paper], press the [Start] key and print out the machine's data encryption key.

**9. Press [OK].**

**10. Press [Exit].**

**11. Press [Exit].**

**12. Log out.**

**13. Turn off the main power switch, and then turn the main power switch back on.**

The machine will start to convert the data on the memory after you turn on the machine. Wait until the message "Memory conversion complete. Turn the main power switch off." appears, and then turn the main power switches off again.

For details about turning off the main power, see "Turning On/Off the Power", Getting Started.

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## Canceling Data Encryption

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Use the following procedure to cancel the encryption settings when encryption is no longer necessary.

**★ Important**

- After completing this procedure on the machine's control panel, turn off the main power and restart the machine to enable the new settings. Restarting can be slow when there is data to be carried over to the hard disk.
- When disposing of a machine, completely erase the memory. For details on erasing all of the memory, see page 102 "Deleting Data on the Hard Disk".

**1. Log in as the machine administrator from the control panel.**

**2. Press [System Settings].**

**3. Press [Administrator Tools].**

**4. Press [▼Next] three times.**

**5. Press [Machine Data Encryption Settings].**

**6. Press [Cancel Encryption].**

**7. Select the data to be carried over to the hard disk and not be reset.**

To carry all of the data over to the hard disk, select [All Data]. To carry over only the machine settings data, select [File System Data Only]. To reset all of the data, select [Format All Data].

**8. Press [OK].****9. Press [Exit].****10. Press [Exit].****11. Log out.****12. Turn off the main power switch, and then turn the main power switch back on.**

For details about turning off the main power, see "Turning On/Off the Power", Getting Started.



## Deleting Data on the Hard Disk

The machine's hard disk stores all document data from the copier, printer and scanner functions. It also stores the data of users' Document Server and code counters, and the Address Book.

To prevent data on the hard disk being leaked before disposing of the machine, you can overwrite all data stored on the hard disk. You can also automatically overwrite temporarily-stored data.

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### Conditions for Use

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When you use the erase-by-overwrite function, make sure to use it under the following conditions:

- The machine is used in its normal state (i.e. it is neither damaged, modified nor are there missing components).
- The machine is managed by an administrator who has carefully read and understood this manual, and can ensure the safe and effective use of this machine by general users.

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### Instructions for Use

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- Before turning off the main power of the machine, always make sure that the Data Overwrite icon has turned to "Clear".
- If the machine enters Low Power mode when overwriting is in progress, press the [Energy Saver] key to revive the display in order to check the icon.
- The machine will not enter Sleep mode until overwriting has been completed.
- Should the Data Overwrite icon continue to be "Dirty" even after you have made sure that there is no data to be overwritten, turn off the main power of your machine. Turn it on again and see if the icon changes to "Clear". If it does not, contact your sales or service representative.

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### Auto Erase Memory

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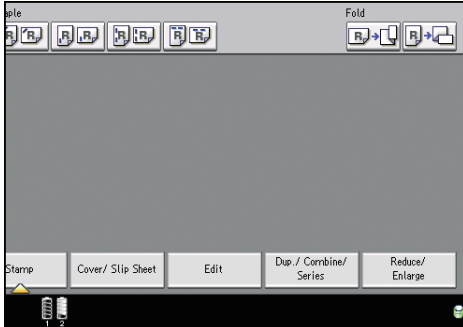
A document scanned in copier, or scanner mode, or print data sent from a printer driver is temporarily stored on the machine's hard disk. Even after the job is completed, it remains in the hard disk as temporary data. Auto Erase Memory erases the temporary data on the hard disk by writing over it.

Overwriting starts automatically once the job is completed.



The copier and printer functions take priority over the Auto Erase Memory function. If a copy or print job is in progress, overwriting will only be done after the job is completed.

## Overwrite icon

When Auto Erase Memory is set to [On], the Data Overwrite icon will be indicated in the bottom right hand corner of the panel display of your machine.



4

Icon	Icon name	Explanation
	Dirty	This icon is lit when there is temporary data to be overwritten, and blinks during overwriting.
	Clear	This icon is lit when there is no temporary data to be overwritten.

### ★ Important

- The Data Overwrite icon will indicate "Clear" when there is a Sample Print/Locked Print/Hold Print/Stored Print job.

### ↓ Note

- If the Data Overwrite icon is not displayed, first check if Auto Erase Memory has been set to [Off]. If the icon is not displayed even though Auto Erase Memory is [On], contact your service representative.

## Methods of overwriting

You can select a method of overwriting from the following:

- NSA  
Temporary data is overwritten twice with random numbers and once with zeros.
- DoD  
Each item of data is overwritten by a random number, then by its complement, then by another random number, and is then verified.
- Random Numbers

Temporary data is overwritten multiple times with random numbers. The number of overwrites can be selected from 1 to 9.

**Note**

- The default method for overwriting is "Random Numbers", and the default number of overwrites is 3.
- NSA stands for "National Security Agency", U.S.A.
- DoD stands for "Department of Defense", U.S.A.

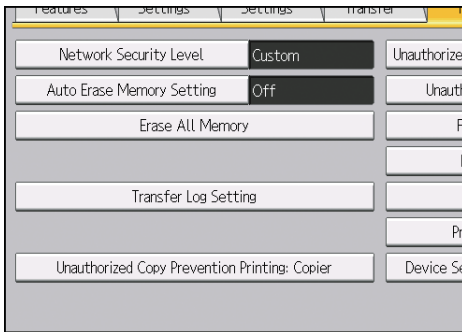
### Using Auto Erase Memory

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**Important**

- When Auto Erase Memory is set to [On], temporary data that remained on the hard disk when Auto Erase Memory was set to [Off] might not be overwritten.
- If the main power switch is turned off before Auto Erase Memory is completed, overwriting will stop and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- Should the main power switch be turned off before Auto Erase Memory is completed, overwriting will continue once the main power switch is turned back on.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on, and then repeat from step 1.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Auto Erase Memory Setting].



6. Press [On].

**7. Select the method of overwriting.**

If you select [NSA] or [DoD], proceed to step 10.

If you select [Random Numbers], proceed to step 8.

**8. Press [Change].****9. Enter the number of times that you want to overwrite using the number keys, and then press [#].****10. Press [OK].**

Auto Erase Memory is set.

**11. Log out.****Note**

- If you enable both overwriting and data encryption, the overwriting data will also be encrypted.

**Canceling Auto Erase Memory****1. Log in as the machine administrator from the control panel.****2. Press [System Settings].****3. Press [Administrator Tools].****4. Press [▼Next] three times.****5. Press [Auto Erase Memory Setting].****6. Press [Off].****7. Press [OK].**

Auto Erase Memory is disabled.

**8. Log out.****Types of data that can or cannot be overwritten**

The following are the types of data that can or cannot be overwritten by "Auto Erase Memory".

**Data overwritten by Auto Erase Memory**

Copier

- Copy jobs

Printer

- Print jobs
- Sample Print/Locked Print/Hold Print/Stored Print jobs

A Sample Print/Locked Print/Hold Print job can only be overwritten after it has been executed. A Stored Print job is overwritten after it has been deleted.

- Spool printing jobs

#### Scanner

- Scanned files sent by e-mail
- Files sent by Scan to Folder
- Documents sent using DeskTopBinder, the ScanRouter delivery software or Web Image Monitor
- Network TWAIN scanner

Data scanned with the network TWAIN scanner when the TWAIN driver's "ADF(Read-ahead)" function is checked will be overwritten by Auto Erase Memory. Data scanned when the "ADF(Read-ahead)" function is not checked will not be overwritten.

## 4

### Data Not overwritten by Auto Erase Memory

- Documents stored by the user in Document Server using the Copier, Printer, or Scanner functions

A stored document can only be overwritten after it has been printed or deleted from Document Server.

- Information registered in the Address Book

Data stored in the Address Book can be encrypted for security. For details, see page 91 "Protecting the Address Book".

- Counters stored under each user code

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## Erase All Memory

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You can erase all the data on the hard disk by writing over it. This is useful if you relocate or dispose of your machine.

The following data will also be erased by Erase All Memory. For details about using the machine after executing Erase All Memory, contact your sales representative.

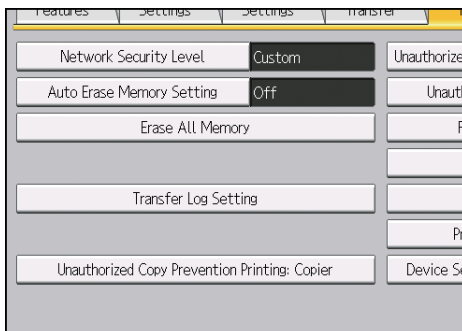
- User codes
- Counters under each user code
- User stamps
- Data stored in the Address Book
- Printer fonts downloaded by users
- Applications using Embedded Software Architecture
- SSL server certificates
- Machine's network settings

### ★ Important

- If the main power switch is turned off before "Erase All Memory" is completed, overwriting will be stopped and data will be left on the hard disk.
- Do not stop the overwrite mid-process. Doing so will damage the hard disk.
- We recommend that before you erase the hard disk, you use SmartDeviceMonitor for Admin/Device Manager NX Lite to back up the user codes, the counters for each user code, and the Address Book. The Address Book can also be backed up using Web Image Monitor. For details, see SmartDeviceMonitor for Admin/Device Manager NX Lite Help or Web Image Monitor Help.
- The only operation possible during the "Erase All Memory" process is pausing. If "Random Numbers" is selected and overwrite three times is set, the "Erase All Memory" process takes up to 3 hours 45 minutes.
- The "Erase All Memory" function also clears the machine's security settings, with the result that afterward, neither machine nor user administration will be effective. Ensure that users do not save any data on the machine after "Erase All Memory" has completed.

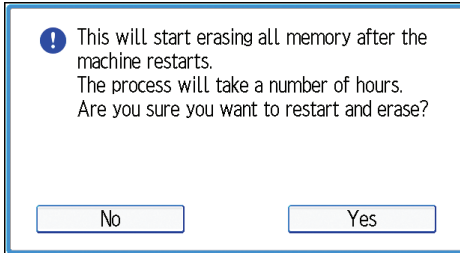
## Using Erase All Memory

1. Disconnect communication cables connected to the machine.
2. Log in as the machine administrator from the control panel.
3. Press [System Settings].
4. Press [Administrator Tools].
5. Press [▼Next] three times.
6. Press [Erase All Memory].



7. Select the method of overwriting.
  - If you select [NSA] or [DoD], proceed to step 10.
  - If you select [Random Numbers], proceed to step 8.
8. Press [Change].

9. Enter the number of times that you want to overwrite using the number keys, and then press [#].
10. Press [Erase].
11. Press [Yes].



12. When overwriting is completed, press [Exit], and then turn off the main power.

For details about turning off the main power, see "Turning On/Off the Power", Getting Started.

**Note**

- Should the main power switch be turned off before "Erase All Memory" is completed, overwriting will start over when the main power switch is turned back on.
- If an error occurs before overwriting is completed, turn off the main power. Turn it on again, and then repeat from step 2.

## Suspending Erase All Memory

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The overwriting process can be suspended temporarily.

**Important**

- Erase All Memory cannot be canceled.
1. Press [Suspend] while Erase All Memory is in progress.
  2. Press [Yes].

Erase All Memory is suspended.

3. Turn off the main power.

For details about turning off the main power, see "Turning On/Off the Power", Getting Started.

**Note**

- To resume overwriting, turn on the main power.

# 5. Enhanced Network Security

This chapter describes the functions for enhancing security when the machine is connected to the network.

## Access Control

The machine can control TCP/IP access.

Limit the IP addresses from which access is possible by specifying the access control range.

For example, if you specify the access control range as [192.168.15.16]-[192.168.15.20], the client PC addresses from which access is possible will be from [192.168.15.16] to [192.168.15.20].

### ★ Important

- Using access control, you can limit access involving LPR, RCP/RSH, FTP, ssh/sftp, Bonjour, SMB, WSD (Device), WSD (Printer), WSD (Scanner)/DSM, IPP, DIPRINT, RHPP, Web Image Monitor, SmartDeviceMonitor for Client, or DeskTopBinder. You cannot limit the monitoring of SmartDeviceMonitor for Client. You cannot limit access involving telnet, or SmartDeviceMonitor for Admin/Device Manager NX Lite, when using the SNMPv1 monitoring.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Access Control] under "Security".
4. To specify the IPv4 address, enter an IP address that has access to the machine in "Access Control Range".

To specify the IPv6 address, enter an IP address that has access to the machine in "Range" under "Access Control Range", or enter an IP address in "Mask" and specify the "Mask Length".

5. Click [OK].
6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].  
If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.
7. Log out.



## Enabling and Disabling Protocols

Specify whether to enable or disable the function for each protocol. By making this setting, you can specify which protocols are available and so prevent unauthorized access over the network. Network settings can be specified on the control panel or by using Web Image Monitor, telnet, SmartDeviceMonitor for Admin/Device Manager NX Lite or Remote Communication Gate S. In the case of SmartDeviceMonitor for Admin/Device Manager NX Lite, use it to start Web Image Monitor and configure the settings from there.

Protocol	Port	Setting method	When disabled
IPv4	-	<ul style="list-style-type: none"> <li>Control panel</li> <li>Web Image Monitor</li> <li>telnet</li> <li>SmartDeviceMonitor for Admin</li> <li>Device Manager NX Lite</li> <li>Remote Communication Gate S</li> </ul>	<p>All applications that operate over IPv4 cannot be used.</p> <p>IPv4 cannot be disabled from Web Image Monitor when using IPv4 transmission.</p>
IPv6	-	<ul style="list-style-type: none"> <li>Control panel</li> <li>Web Image Monitor</li> <li>telnet</li> <li>SmartDeviceMonitor for Admin</li> <li>Device Manager NX Lite</li> <li>Remote Communication Gate S</li> </ul>	<p>All applications that operate over IPv6 cannot be used.</p>
IPsec	-	<ul style="list-style-type: none"> <li>Control panel</li> <li>Web Image Monitor</li> <li>telnet</li> <li>SmartDeviceMonitor for Admin</li> <li>Device Manager NX Lite</li> </ul>	<p>Encrypted transmission using IPsec is disabled.</p>

Protocol	Port	Setting method	When disabled
FTP	TCP:21	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>Functions that require FTP cannot be used.</p> <p>You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".</p>
ssh/sftp	TCP:22	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>Functions that require sftp cannot be used.</p> <p>You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".</p>
telnet	TCP:23	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> </ul>	Commands using telnet are disabled.
SMTP	TCP:25 (variable)	<ul style="list-style-type: none"> <li>• Control panel</li> <li>• Web Image Monitor</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	E-mail notification functions that require SMTP reception cannot be used.

Protocol	Port	Setting method	When disabled
HTTP	TCP:80	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> </ul>	<p>Functions that require HTTP cannot be used.</p> <p>Cannot print using IPP on port 80.</p>
HTTPS	TCP:443	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> </ul>	<p>Functions that require HTTPS cannot be used.</p> <p>@Remote cannot be used.</p> <p>You can also make settings to require SSL transmission using the control panel or Web Image Monitor.</p>
SMB	TCP:139	<ul style="list-style-type: none"> <li>• Control panel</li> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	SMB printing functions cannot be used.
NBT	UDP:137 UDP:138	<ul style="list-style-type: none"> <li>• telnet</li> </ul>	SMB printing functions via TCP/IP, as well as NetBIOS designated functions on the WINS server cannot be used.
SNMPv1,v2	UDP:161	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>Functions that require SNMPv1, v2 cannot be used.</p> <p>Using the control panel, Web Image Monitor or telnet, you can specify that SNMPv1, v2 settings are read-only, and cannot be edited.</p>

Protocol	Port	Setting method	When disabled
SNMPv3	UDP:161	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>Functions that require SNMPv3 cannot be used.</p> <p>You can also make settings to require SNMPv3 encrypted transmission and restrict the use of other transmission methods using the control panel, Web Image Monitor, or telnet.</p>
RSH/RCP	TCP:514	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>Functions that require RSH and network TWAIN functions cannot be used.</p> <p>You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".</p>
LPR	TCP:515	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>LPR functions cannot be used.</p> <p>You can restrict personal information from being displayed by making settings on the control panel using "Restrict Display of User Information".</p>
IPP	TCP:631	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	<p>IPP functions cannot be used.</p>

Protocol	Port	Setting method	When disabled
SSDP	UDP:1900	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> </ul>	Device discovery using UPnP from Windows cannot be used.
Bonjour	UDP:5353	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	Bonjour functions cannot be used.
@Remote	TCP:7443 TCP:7444	<ul style="list-style-type: none"> <li>• Control panel</li> <li>• telnet</li> </ul>	@Remote cannot be used.
DIPRINT	TCP:9100	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	DIPRINT functions cannot be used.
RFU	TCP:10021	<ul style="list-style-type: none"> <li>• Control panel</li> <li>• telnet</li> </ul>	You can attempt to update firmware via FTP.

Protocol	Port	Setting method	When disabled
NetWare	(IPX/SPX)	<ul style="list-style-type: none"> <li>• Control panel</li> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	Cannot print with NetWare. SNMP over IPX cannot be used.
WSD (Device)	TCP:53000 (variable)	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	WSD (Device) functions cannot be used.
WSD (Printer)	TCP:53001 (variable)	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	WSD (Printer) functions cannot be used.
WSD (Scanner)/DSM	TCP:53002 (variable)	<ul style="list-style-type: none"> <li>• Web Image Monitor</li> <li>• telnet</li> <li>• SmartDeviceMonitor for Admin</li> <li>• Device Manager NX Lite</li> <li>• Remote Communication Gate S</li> </ul>	WSD (Scanner) and DSM functions cannot be used.

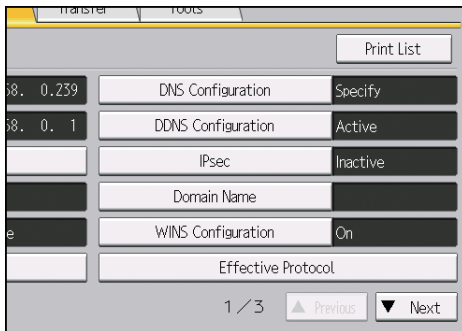
Protocol	Port	Setting method	When disabled
WS-Discovery	UDP/TCP: 3702	<ul style="list-style-type: none"> <li>telnet</li> <li>Remote Communication Gate S</li> </ul>	WSD (Device, Printer, Scanner) search function cannot be used.
RHPP	TCP:59100	<ul style="list-style-type: none"> <li>Web Image Monitor</li> <li>telnet</li> <li>SmartDeviceMonitor for Admin</li> <li>Device Manager NX Lite</li> </ul>	Cannot print with RHPP.
LLTD	-	<ul style="list-style-type: none"> <li>telnet</li> </ul>	Device search function using LLTD cannot be used.
LLMNR	UDP:5355	<ul style="list-style-type: none"> <li>Web Image Monitor</li> <li>telnet</li> </ul>	Name resolution requests using LLMNR cannot be respond.

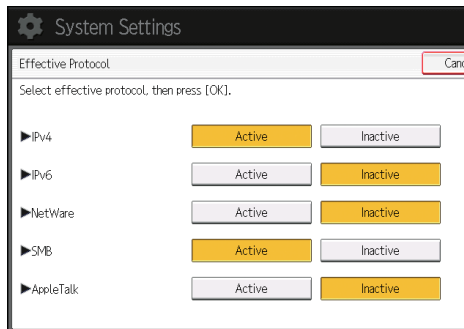
**Note**

- "Restrict Display of User Information" is one of the Extended Security features. For details about making this setting, see page 249 "Specifying the Extended Security Functions".

## Enabling and Disabling Protocols Using the Control Panel

1. Log in as the network administrator from the control panel.
2. Press [System Settings].
3. Press [Interface Settings].
4. Press [Effective Protocol].



**5. Set the desired protocols to active/inactive.****6. Press [OK].****7. Log out.**

---

**Enabling and Disabling Protocols Using Web Image Monitor**

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**5**

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Network Security] under "Security".
4. Set the desired protocols to active/inactive (or open/close).
5. Click [OK].
6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].  
If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.
7. Log out.



## Specifying Network Security Level

This setting lets you change the security level to limit unauthorized access. You can make network security level settings on the control panel, as well as Web Image Monitor. However, the protocols that can be specified differ.

### ★ Important

- With some utilities, communication or login may fail depending on the network security level.

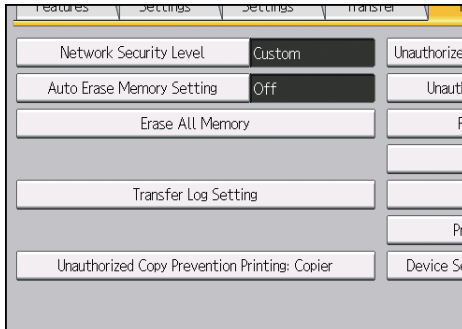
### Network Security Levels

Security Level	Description
[Level 0]	Select [Level 0] to use all features. Use this setting when you have no information that needs to be protected from external threats.
[Level 1]	Select [Level 1] for moderate security to protect important information. Use this setting if the machine is connected to a local area network (LAN).
[FIPS140]	Provides a security strength intermediate between [Level 1] and [Level 2]. You can only use codes recommended by the U.S. government as its coding/authentication algorithm. Settings other than the algorithm are the same as [Level 2].
[Level 2]	Select [Level 2] for maximum security to protect confidential information. Use this setting when it is necessary to protect information from external threats.
[Custom]	For configurations other than the levels above. Configure using Web Image Monitor.

### Specifying Network Security Level Using the Control Panel

1. Log in as the network administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.

### 5. Press [Network Security Level].



### 6. Select the network security level.

Select [Level 0], [Level 1], [Level 2], or [FIPS140].

### 7. Press [OK].

### 8. Log out.

5

## Specifying Network Security Level Using Web Image Monitor

### 1. Log in as the network administrator from Web Image Monitor.

### 2. Point to [Device Management], and then click [Configuration].

### 3. Click [Network Security] under "Security".

### 4. Select the network security level in "Security Level".

### 5. Click [OK].

### 6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

### 7. Log out.

## Status of Functions under Each Network Security Level

### TCP/IP

Function	Level 0	Level 1	FIPS 140	Level 2
TCP/IP	Active	Active	Active	Active
HTTP > Port 80	Open	Open	Open	Open
IPP > Port 80	Open	Open	Open	Open

Function	Level 0	Level 1	FIPS 140	Level 2
IPP > Port 631	Open	Open	Close	Close
SSL/TLS > Port 443	Open	Open	Open	Open
SSL/TLS > Permit SSL/TLS Communication	Ciphertext Priority	Ciphertext Priority	Ciphertext Only	Ciphertext Only
SSL/TLS Version > TLS1.2	Active	Active	Active	Active
SSL/TLS Version > TLS1.1	Active	Active	Active	Active
SSL/TLS Version > TLS1.0	Active	Active	Active	Active
SSL/TLS Version > SSL3.0	Active	Active	Inactive	Inactive
Encryption Strength Setting > AES	128bit/ 256bit	128bit/ 256bit	128bit/ 256bit	128bit/ 256bit
Encryption Strength Setting > 3DES	168bit	168bit	168bit	-
Encryption Strength Setting > RC4	-	-	-	-
DIPRINT	Active	Active	Inactive	Inactive
LPR	Active	Active	Inactive	Inactive
FTP	Active	Active	Active	Active
sftp	Active	Active	Active	Active
ssh	Active	Active	Active	Active
RSH/RCP	Active	Active	Inactive	Inactive
TELNET	Active	Inactive	Inactive	Inactive
Bonjour	Active	Active	Inactive	Inactive
SSDP	Active	Active	Inactive	Inactive
SMB	Active	Active	Inactive	Inactive
NetBIOS over TCP/IPv4	Active	Active	Inactive	Inactive
WSD (Device)	Active	Active	Active	Active
WSD (Printer)	Active	Active	Active	Active

Function	Level 0	Level 1	FIPS 140	Level 2
WSD (Scanner)/DSM	Active	Active	Active	Active
WSD (Encrypted Communication of Device)	Inactive	Inactive	Active	Active
RHPP	Active	Active	Inactive	Inactive

The same settings are applied to IPv4 and IPv6.

TCP/IP setting is not governed by the security level. Manually specify whether to activate or inactivate this setting.

### NetWare

Function	Level 0	Level 1	FIPS 140	Level 2
NetWare	Active	Active	Inactive	Inactive

5

If NetWare is not used on your network, the above settings are not applicable.

### SNMP

Function	Level 0	Level 1	FIPS 140	Level 2
SNMP	Active	Active	Active	Active
Permit Settings by SNMPv1 and v2	On	Off	Off	Off
SNMPv1,v2 Function	Active	Active	Inactive	Inactive
SNMPv3 Function	Active	Active	Active	Active
Permit SNMPv3 Communication	Encryption/ Cleartext	Encryption/ Cleartext	Encryption Only	Encryption Only

### TCP/IP Encryption Strength Setting

Function	Level 0	Level 1	FIPS 140	Level 2
ssh > Encryption Algorithm	DES/3DES/ AES-128/ AES-192/ AES-256/ Blowfish/ Arcfour	3DES/ AES-128/ AES-192/ AES-256/ Arcfour	3DES/ AES-128/ AES-192/ AES-256	3DES/ AES-128/ AES-192/ AES-256

Function	Level 0	Level 1	FIPS 140	Level 2
S/MIME > Encryption Algorithm	3DES-168 bit	3DES-168 bit	3DES-168 bit	AES-256 bit
S/MIME > Digest Algorithm	SHA1	SHA1	SHA1	SHA-256 bit
SNMPv3 > Authentication Algorithm	MD5	SHA1	SHA1	SHA1
SNMPv3 > Encryption Algorithm	DES	DES	AES-128	AES-128
Kerberos Authentication > Encryption Algorithm	AES256-CTS-HMAC-SHA1-96/ AES128-CTS-HMAC-SHA1-96/ DES3-CBC-SHA1/RC4-HMAC/DES-CBC-MD5	AES256-CTS-HMAC-SHA1-96/ AES128-CTS-HMAC-SHA1-96/ DES3-CBC-SHA1/RC4-HMAC	AES256-CTS-HMAC-SHA1-96/ AES128-CTS-HMAC-SHA1-96/ DES3-CBC-SHA1	AES256-CTS-HMAC-SHA1-96/ AES128-CTS-HMAC-SHA1-96
Driver Encryption Key > Encryption Strength	Simple Encryption	DES	AES	AES

# Protecting the Communication Path via a Device Certificate

This machine can protect its communication path and establish encrypted communications using SSL/TLS, IPsec, S/MIME, or IEEE 802.1X. It can also protect PDFs by means of a PDF or PDF/A digital signature.

To use these functions, it is necessary to create and install a device certificate for the machine in advance.

The following types of device certificate can be used:

- Self-signed certificate created by the machine
- Certificate issued by a certificate authority

## ★ Important

- The administrator is required to manage the expiration of certificates and renew the certificates before they expire.
- The administrator is required to check that the issuer of the certificate is valid.
- If SHA256 or SHA512 is selected as the "Algorithm Signature" of the device certificate, Windows XP SP3 or later is required to connect the device using Internet Explorer 6.0.

5

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## Creating and Installing a Device Certificate from the Control Panel (Self-Signed Certificate)

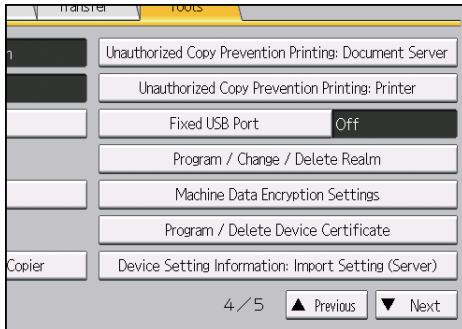
---

Create and install the device certificate using control panel.

This section explains the use of a self-signed certificate as the device certificate.

1. Log in as the network administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.

### 5. Press [Program / Delete Device Certificate].



### 6. Check that [Program] is selected.

### 7. Press [Certificate 1].

Only [Certificate 1] can be created from the control panel.

### 8. Make the necessary settings.

To use the device certificate for S/MIME, PDF Digital Signature, or PDF/A Digital Signature, enter the machine's administrator's e-mail address in the e-mail address setting.

### 9. Press [OK].

"Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

### 10. Log out.

#### ⬇ Note

- Select [Delete] to delete the device certificate from the machine.
- To use the device certificate created on the machine for S/MIME or PDF/A Digital Signature, set "Certification" in Web Image Monitor to [Certificate 1].

## Creating and Installing a Device Certificate from Web Image Monitor (Self-Signed Certificate)

Create and install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a self-signed certificate as the device certificate.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Device Certificate] under "Security".

4. **Check the radio button next to the number of the certificate you want to create.**

To use SSL/TLS, select [Certificate 1]. To use any other protocol, select the certificate number desired.
5. **Click [Create].**

Click [Delete] to delete the device certificate from the machine.
6. **Make the necessary settings.**

To use the device certificate for S/MIME, PDF Digital Signature, or PDF/A Digital Signature, enter the machine's administrator's e-mail address in the e-mail address setting.
7. **Click [OK].**

The setting is changed.
8. **Click [OK].**
9. **If a security warning message appears, check the details, and then select "Continue to this website".**

"Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.
10. **Log out.**

---

## Creating the Device Certificate (Issued by a Certificate Authority)

---

Create the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

1. **Log in as the network administrator from Web Image Monitor.**
2. **Point to [Device Management], and then click [Configuration].**
3. **Click [Device Certificate] under "Security".**
4. **Check the radio button next to the number of the certificate you want to create.**

To use SSL/TLS, select [Certificate 1]. To use any other protocol, select the certificate number desired.
5. **Click [Request].**
6. **Make the necessary settings.**
7. **Click [OK].**

The setting is changed.
8. **Click [OK].**

"Requesting" appears for "Certificate Status".
9. **Log out.**



**10. Apply to the certificate authority for the device certificate.**

The application procedure depends on the certificate authority. For details, contact the certificate authority.

For the application, click  Web Image Monitor Details icon and use the information that appears in "Certificate Details".

**Note**

- The issuing location may not be displayed if you request two certificates at the same time. When you install a certificate, be sure to check the certificate destination and installation procedure.
- Web Image Monitor can be used for creating the device certificate but not for requesting the certificate to the certificate authority.
- Click [Cancel Request] to cancel the request for the device certificate.

**5**

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**Installing the Device Certificate (Issued by a Certificate Authority)**

---

Install the device certificate using Web Image Monitor. For details about the displayed items and selectable items, see Web Image Monitor Help.

This section explains the use of a certificate issued by a certificate authority as the device certificate.

Enter the device certificate contents issued by the certificate authority.

- 1. Log in as the network administrator from Web Image Monitor.**
- 2. Point to [Device Management], and then click [Configuration].**
- 3. Click [Device Certificate] under "Security".**
- 4. Check the radio button next to the number of the certificate you want to install.**

To use SSL/TLS, select [Certificate 1]. To use any other protocol, select the certificate number desired.

- 5. Click [Install].**

- 6. Enter the contents of the device certificate.**

In the certificate box, enter the contents of the device certificate issued by the certificate authority.

If you are installing an intermediate certificate, enter the contents of the intermediate certificate also.

For details about the displayed items and selectable items, see Web Image Monitor Help.

- 7. Click [OK].**

- 8. Wait for about one or two minutes, and then click [OK].**

"Installed" appears under "Certificate Status" to show that a device certificate for the machine has been installed.

- 9. Log out.**

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## Installing an Intermediate Certificate (Issued by a Certificate Authority)

---

This section explains how to use Web Image Monitor to install an intermediate certificate issued by a certificate authority.

If you do not have the intermediate certificate issued by the certificate authority, a warning message will appear during communication. If the certificate authority has issued an intermediate certificate, we recommend installing the intermediate certificate.

1. **Log in as the network administrator from Web Image Monitor.**
2. **Point to [Device Management], and then click [Configuration].**
3. **Click [Device Certificate] under "Security".**
4. **Check the radio button next to the number of the certificate you want to install.**
5. **Click [Install Intermediate Certificate].**
6. **Enter the contents of the intermediate certificate.**

In the certificate box, enter the contents of the intermediate certificate issued by the certificate authority. For details about the items and settings of a certificate, see Web Image Monitor Help.

7. **Click [OK].**
8. **Wait for about one or two minutes, and then click [OK].**

The intermediate certificate will be installed on the device. The "Certificate Details" screen will inform you whether or not the installation of the intermediate certificate was successful. For details about the "Certificate Details" screen, see Web Image Monitor Help.

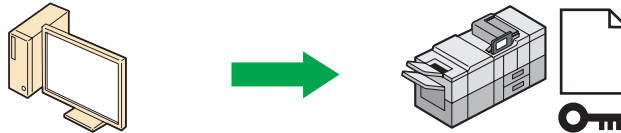
9. **Log out.**

# Configuring SSL/TLS

Configuring the machine to use SSL/TLS enables encrypted communication. Doing so helps prevent data from being intercepted, cracked or tampered with during transmission.

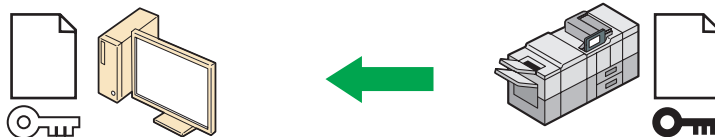
## Flow of SSL/TLS encrypted communications

1. To access the machine from a user's computer, request the SSL/TLS device certificate and public key.



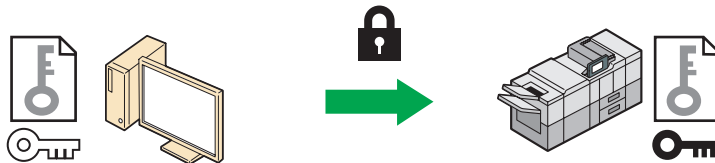
CZB002

2. The device certificate and public key are sent from the machine to the user's computer.



CZB003

3. The shared key created with the computer is encrypted using the public key, sent to the machine, and then decrypted using the private key in the machine.



CZB004

4. The shared key is used for data encryption and decryption, thus achieving secure transmission.



CZB005

## Configuration flow when using a self-signed certificate

1. Creating and installing the device certificate

Create and install a device certificate from the control panel or Web Image Monitor.

## 2. Enabling SSL/TLS

Enable the SSL/TLS setting using Web Image Monitor.

### Configuration flow when using an authority issued certificate

#### 1. Creating a device certificate and applying to the authority

After creating a device certificate on Web Image Monitor, apply to the certificate authority.

The application procedure after creating the certificate depends on the certificate authority.

Follow the procedure specified by the certificate authority.

#### 2. Installing the device certificate

Install the device certificate using Web Image Monitor.

#### 3. Enabling SSL/TLS

Enable the SSL/TLS setting using Web Image Monitor.

### Note

- To confirm whether SSL/TLS configuration is enabled, enter "https://(the machine's IP address or host name)/" in your Web browser's address bar to access this machine. If the "The page cannot be displayed" message appears, check the configuration because the current SSL/TLS configuration is invalid.
- If you enable SSL/TLS for IPP (printer functions), sent data is encrypted, preventing it from being intercepted, analyzed, or tampered with.

## Enabling SSL/TLS

After installing the device certificate in the machine, enable the SSL/TLS setting.

This procedure is used for a self-signed certificate or a certificate issued by a certificate authority.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [SSL/TLS] under "Security".
4. For IPv4 and IPv6, select "Active" if you want to enable SSL/TLS.
5. Select the encryption communication mode for "Permit SSL/TLS Communication".
6. If you want to disable a protocol, click [Inactive] next to "TLS1.2", "TLS1.1", "TLS1.0", or "SSL3.0".

At least one of these protocols must be enabled.

**7. Under "Encryption Strength Setting", specify the strength of encryption to be applied for "AES", "3DES", and/or "RC4". You must select at least one check box.**

Note that the availability of encryption strengths will vary depending on the settings you have specified for "TLS1.2", "TLS1.1", "TLS1.0", or "SSL3.0".

**8. Click [OK].**

**9. "Updating..." appears. Wait for about one or two minutes, and then click [OK].**

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

**10. Log out.**

**Note**

- If you set "Permit SSL/TLS Communication" to [Ciphertext Only], communication will not be possible if you select a protocol that does not support a Web browser, or specify an encryption strength setting only. If this is the case, enable communication by setting [Permit SSL / TLS Communication] to [Ciphertext / Cleartext] using the machine's control panel, and then specify the correct protocol and encryption strength.
- The SSL/TLS version and encryption strength settings can be changed, even under [Network Security].
- Depending on the states you specify for "TLS1.2", "TLS1.1", "TLS1.0", and "SSL3.0", the machine might not be able to connect to an external LDAP server.
- If only TLS1.2 and TLS1.1 are enabled, Integration Server authentication cannot be performed.
- The following types of communication and data are always encrypted by SSL3.0: communication via @Remote, Integration Server authentication, files sent via a delivery server, and logs transferred to Remote Communication Gate S.

## User Setting for SSL/TLS

We recommend that after installing the self-signed certificate or device certificate from a private certificate authority on the main unit and enabling SSL/TLS (communication encryption), you instruct users to install the certificate on their computers. Installation of the certificate is especially necessary for users who want to print via IPP-SSL from Windows Vista/7/8, Windows Server 2008/2008 R2/2012. The network administrator must instruct each user to install the certificate.

Select [Trusted Root Certification Authorities] for the certificate store location when accessing the machine by IPP.

**Note**

- Take the appropriate steps when you receive a user's inquiry concerning problems such as an expired certificate.

- If a certificate issued by a certificate authority is installed in the machine, confirm the certificate store location with the certificate authority.
- To change the host name or IP address in [Common Name] of the device certificate when using the operating system's standard IPP port under Windows Vista/7/8 or Windows Server 2008/2008 R2/2012, delete any previously configured PC printer beforehand and re-install it after changing [Common Name]. Also, to change the user authentication settings (login user name and password), delete any previously configured PC printer beforehand and re-install it after changing the user authentication settings.

## Setting the SSL/TLS Encryption Mode

By specifying the SSL/TLS encrypted communication mode, you can change the security level.

### Encrypted communication mode

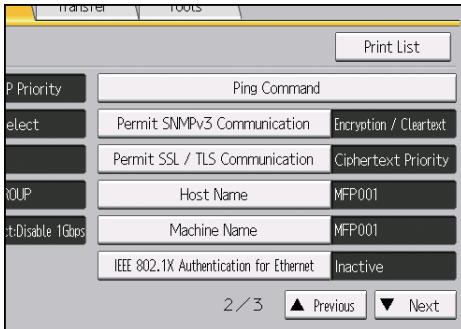
Using the encrypted communication mode, you can specify encrypted communication.

Encrypted communication mode	Description
Ciphertext Only	Allows encrypted communication only. If encryption is not possible, the machine does not communicate.
Ciphertext Priority	Performs encrypted communication if encryption is possible. If encryption is not possible, the machine communicates without it.
Ciphertext / Cleartext	Communicates with or without encryption, according to the setting.

After installing the device certificate, specify the SSL/TLS encrypted communication mode. By making this setting, you can change the security level.

1. Log in as the network administrator from the control panel.
2. Press [System Settings].
3. Press [Interface Settings].
4. Press [▼Next].

**5. Press [Permit SSL / TLS Communication].**



**6. Select the encrypted communication mode.**

Select [Ciphertext Only], [Ciphertext Priority], or [Ciphertext / Cleartext] as the encrypted communication mode.

**7. Press [OK].**

**8. Log out.**

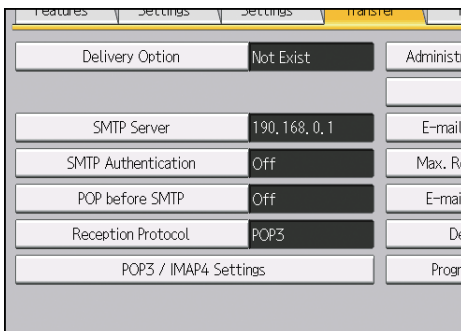
**Note**

- The SSL/TLS encrypted communication mode can also be specified using Web Image Monitor. For details, see Web Image Monitor Help.

## Enabling SSL for SMTP Connections

Use the following procedure to enable SSL encryption for SMTP connections.

- 1. Log in as the network administrator from the control panel.**
- 2. Press [System Settings].**
- 3. Press [File Transfer].**
- 4. Press [SMTP Server].**



**5. In "Use Secure Connection (SSL)", press [On].**

If you are not using SSL for SMTP connections, press [Off].

When "Use Secure Connection (SSL)" is set to [On], the port number is changed to 465.

**6. Press [OK].****7. Log out.**



# Configuring S/MIME

By registering a user certificate in the Address Book, you can send e-mail that is encrypted with a public key which prevents its content from being altered during transmission. You can also prevent sender impersonation (spoofing) by installing a device certificate on the machine, and attaching an electronic signature created with a private key. You can apply these functions separately or, for stronger security, together.

To send encrypted e-mail, both the sender (this machine) and the receiver must support S/MIME.

## Compatible mailer applications

The S/MIME function can be used with the following applications:

- Microsoft Outlook 98 and later
- Microsoft Outlook Express 5.5 and later
- Thunderbird 3.1.7 and later
- Lotus Notes R5 and later
- Windows Live Mail 2009 and later

### ★ Important

- To use S/MIME, you must first specify [Administrator's E-mail Address] in [System Settings].

### ↓ Note

- If an electronic signature is specified for an e-mail, the administrator's address appears in the "From" field and the address of the user specified as "sender" appears in the "Reply To" field.
- When you send an e-mail to both users whose mail clients support S/MIME and users whose clients lack such support, the e-mail for the S/MIME clients is encrypted, but that for the non-S/MIME clients is left as plaintext.
- When using S/MIME, the e-mail size is larger than normal.
- For details about using S/MIME with the scanner function, see "Security Settings to E-mails", Scan.

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## E-mail Encryption

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To send encrypted e-mail using S/MIME, the user certificate must first be prepared using Web Image Monitor and registered in the Address Book by the user administrator. Registering the certificate in the Address Book specifies each user's public key. After installing the certificate, specify the encryption algorithm using Web Image Monitor. The network administrator can specify the algorithm.

### E-mail encryption

1. Prepare the user certificate.
2. Install the user certificate in the Address Book using Web Image Monitor. (The public key on the certificate is specified in the Address Book.)

3. Specify the encryption algorithm using Web Image Monitor.
4. Using the shared key, encrypt the e-mail message.
5. The shared key is encrypted using the user's public key.
6. The encrypted e-mail is sent.
7. The receiver decrypts the shared key using a secret key that corresponds to the public key.
8. The e-mail is decrypted using the shared key.

#### ↓ Note

- There are three types of user certificates that can be installed on this machine, "DER Encoded Binary X.509", "Base 64 Encoded X.509", and "PKCS #7" certificate.
- When installing a user certificate to the Address Book using Web Image Monitor, you might see an error message if the certificate file contains more than one certificate. If this error message appears, install the certificates one at a time.

## Specifying the user certificate

Each user certificate must be prepared in advance.

1. **Log in as the user administrator from Web Image Monitor.**
2. **Point to [Device Management], and then click [Address Book].**
3. **Select the user for whom the certificate will be installed.**
4. **Click [Detail Input], and then click [Change].**

The Change User Information screen appears.

5. **Enter the user address in the "Email Address" field under "Email".**
6. **Click [Change] in "User Certificate".**
7. **Click [Browse], select the user certificate file, and then click [Open].**
8. **Click [OK].**

The user certificate is installed.

9. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

10. **Log out.**

#### ↓ Note

- Once the valid period of the selected user certificate elapses, encrypted messages can no longer be sent. Select a certificate that is within its valid period.

## Specifying the encryption algorithm

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1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [S/MIME] under "Security".
4. Select the encryption algorithm from the drop-down menu next to "Encryption Algorithm" under "Encryption".
5. Click [OK].

The algorithm for S/MIME is set.

6. Log out.

### Note

- Configure the settings taking into consideration the encryption algorithm and digest algorithm supported by the user's e-mail software.

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## Attaching an Electronic Signature

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To attach an electronic signature to sent e-mail, a device certificate must be installed in advance.

As the device certificate, you can use a self-signed certificate created by the machine or a certificate issued by a certificate authority. For details about creating and installing the device certificate, see page 123 "Protecting the Communication Path via a Device Certificate".

### Important

- **To install an S/MIME device certificate, you must first register "Administrator's E-mail Address" in [System Settings] as the e-mail address for the device certificate. Note that even if you will not be using S/MIME, you must still specify an e-mail address for the S/MIME device certificate.**

### Electronic signature

1. Install a device certificate on the machine. (The secret key on the certificate is configured on the machine.)
2. Attach the electronic signature to an e-mail using the secret key provided by the device certificate.
3. Send the e-mail with the electronic signature attached to the user.
4. The receiver requests the public key and device certificate from the machine.
5. Using the public key, you can determine the authenticity of the attached electronic signature to see if the message has been altered.

### Configuration flow (self-signed certificate)

1. Create and install the device certificate using Web Image Monitor.
2. Make settings for the certificate to be used for S/MIME using Web Image Monitor.

3. Make settings for the electronic signature using Web Image Monitor.

### Configuration flow (certificate issued by a certificate authority)

1. Create the device certificate using Web Image Monitor.  
The application procedure for a created certificate depends on the certificate authority. Follow the procedure specified by the certificate authority.
2. Install the device certificate using Web Image Monitor.
3. Make settings for the certificate to be used for S/MIME using Web Image Monitor.
4. Make settings for the electronic signature using Web Image Monitor.

### Selecting the device certificate

Select the device certificate to be used for S/MIME using Web Image Monitor.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Device Certificate] under "Security".
4. Select the certificate to be used for the electronic signature from the drop-down box in "S/MIME" under "Certification".
5. Click [OK].

The certificate to be used for the S/MIME electronic signature is set.

6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].  
If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.
7. Log out.

#### Note

- If the selected device certificate expires, signatures cannot be attached to e-mail. Select a certificate that is within its valid period.

### Specifying the electronic signature

After installing a device certificate to the machine, configure the conditions for S/MIME signatures. The configuration procedure is the same regardless of whether you are using a self-signed certificate or a certificate issued by a certificate authority.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [S/MIME] under "Security".

4. Select the digest algorithm to be used in the electronic signature next to "Digest Algorithm" under "Signature".
5. Select the method for attaching the electronic signature when sending e-mail from the scanner next to "When Sending Email by Scanner" under "Signature".
6. Select the method for attaching the electronic signature when forwarding stored documents next to "When Transferring Files Stored in Document Server (Utility)" under "Signature".
7. Click [OK].

The settings for the S/MIME electronic signature are enabled.

8. Log out.

#### ↓ Note

- Configure the settings taking into consideration the encryption algorithm and digest algorithm supported by the user's e-mail software.

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## Specifying Checking of the Certificate Valid Period

The validity period of the certificate used with S/MIME is verified when you send e-mail.

You can change the timing at which the valid period is checked.

Operation mode	Description
Security Priority	<p>The validity period is verified at the following timings.</p> <p><b>User Certificate</b></p> <p>(a). When the address is selected</p> <p>(b). When the [Start] key is pressed</p> <p><b>Device certificate</b></p> <p>(c). When the first address is selected</p> <p>(d). When the [Start] key is pressed</p>
Performance Priority	<p>Performing (b) and (c) are omitted.</p> <p>If it takes a long time to verify the validity period when the address is selected or when the [Start] key is pressed, the time taken can be shortened by selecting "Performance Priority".</p>

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [S/MIME] under "Security".

4. In "Operation Mode", select [Security Priority] or [Performance Priority].
5. Click [OK].
6. Log out.

**Note**

- If a certificate was valid when transmitted but has expired before retrieving the e-mail from the mail server to the client computer, the e-mail may not be retrieved.
- If an error occurs outside the validity period of the certificate when sending an S/MIME e-mail automatically, such as in the case of sending e-mail by Memory Transmission or at a specified time, the error will be reported by e-mail in plain text to the sender's or administrator's e-mail address. The error details can be viewed in the job log. When using S/MIME, be sure to enable the job log collection function. For details about viewing the logs, see page 197 "Managing Log Files".

# Configuring PDFs with Electronic Signatures

This machine can create PDFs with electronic signatures. PDFs with electronic signatures certify the creator of the PDF document and the date and time of creation. Tampering is also prevented as documents that have been tampered with can be detected.

In order to create PDFs with electronic signatures, first select the certificate to use for the signature from the device certificates that have been created and installed.

As the device certificate, you can use a self-signed certificate created by the machine or a certificate issued by a certificate authority. For details about creating and installing a device certificate, see page 123 "Protecting the Communication Path via a Device Certificate".

## ★ Important

- To create digitally signed PDFs, you must first specify [Administrator's E-mail Address] in [File Transfer] in [System Settings].
- To use the device certificate for digitally signed PDFs, you must first specify the administrator's e-mail address so that it is the same as that registered as "Administrator's E-mail Address" in [System Settings].

Select the certificate to use for signatures.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Device Certificate] under "Security".
4. Select the certificate to be used for the electronic signature from the drop-down box in "PDF Digital Signature" or "PDF/A Digital Signature" under "Certification".

PDF Digital Signature: This can be attached to PDFs in formats other than PDF/A.

PDF/A Digital Signature: This can be attached to PDFs in the PDF/A format.

5. Click [OK].
6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].  
If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.
7. Log out.

## ↓ Note

- If the selected device certificate expires, signatures cannot be attached to PDFs. Select a certificate that is within its valid period.
- The signature algorithm for the device certificate's digital signature that can be attached to PDF/A files is "sha1WithRSA-1024".

# Configuring IPsec

For communication security, this machine supports IPsec. IPsec transmits secure data packets at the IP protocol level using the shared key encryption method, where both the sender and receiver retain the same key. This machine uses automatic key exchange to configure the pre-shared key for both parties. Using the auto exchange setting, you can renew the shared key exchange settings within a specified validity period, and achieve higher transmission security.

## ★ Important

- When "Inactive" is specified for "Exclude HTTPS Communication", access to Web Image Monitor can be lost if the key settings are improperly configured. In order to prevent this, you can specify IPsec to exclude HTTPS transmission by selecting "Active". When you want to include HTTPS transmission, we recommend that you select "Inactive" for "Exclude HTTPS Communication" after confirming that IPsec is properly configured. When "Active" is selected for "Exclude HTTPS Communication", even though HTTPS transmission is not targeted by IPsec, Web Image Monitor might become unusable when TCP is targeted by IPsec from the computer side.
- If you cannot access Web Image Monitor due to IPsec configuration problems, disable IPsec in System Settings on the control panel, and then access Web Image Monitor.
- For details about enabling and disabling IPsec using the control panel, see "Interface Settings", Connecting the Machine/ System Settings.
- IPsec is not applied to data obtained through DHCP, DNS, or WINS.
- IPsec for IPv4 is supported by Windows XP SP2 and Windows Server 2003/2003 R2. IPsec for both IPv4 and IPv6 is supported by Windows Vista/7/8, Windows Server 2008/2008 R2/2012, Mac OS X 10.4.8 and later, Red Hat Enterprise Linux WS 4.0 and Solaris 10. However, some setting items are not supported depending on the operating system. Make sure the IPsec settings you specify are consistent with the operating system's IPsec settings.

## Encryption and Authentication by IPsec

IPsec consists of two main functions: the encryption function, which ensures the confidentiality of data, and the authentication function, which verifies the sender of the data and the data's integrity. This machine's IPsec function supports two security protocols: the ESP protocol, which enables both of the IPsec functions at the same time, and the AH protocol, which enables only the authentication function.

### ESP protocol

The ESP protocol provides secure transmission through both encryption and authentication. This protocol does not provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. If you use the encryption key auto exchange method, the encryption algorithm and encryption key are specified automatically.



- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

### AH protocol

The AH protocol provides secure transmission through authentication of packets only, including headers.

- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

### AH protocol + ESP protocol

When combined, the ESP and AH protocols provide secure transmission through both encryption and authentication. These protocols provide header authentication.

- For successful encryption, both the sender and receiver must specify the same encryption algorithm and encryption key. If you use the encryption key auto exchange method, the encryption algorithm and encryption key are specified automatically.
- For successful authentication, the sender and receiver must specify the same authentication algorithm and authentication key. If you use the encryption key auto exchange method, the authentication algorithm and authentication key are specified automatically.

#### Note

- Some operating systems use the term "Compliance" in place of "Authentication".

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## Encryption Key Auto Exchange Settings

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For key configuration, this machine supports automatic key exchange to specify agreements such as the IPsec algorithm and key for both sender and receiver. Such agreements form what is known as an SA (Security Association). IPsec communication is possible only if the receiver's and sender's SA settings are identical.

If you use the auto exchange method to specify the encryption key, the SA settings are auto configured on both parties' machines. However, before setting the IPsec SA, the ISAKMP SA (Phase 1) settings are auto configured. After this, the IPsec SA (Phase 2) settings, which allow actual IPsec transmission, are auto configured.

Also, for further security, the SA can be periodically auto updated by applying a validity period (time limit) for its settings. This machine only supports IKEv1 for encryption key auto exchange.

Note that it is possible to configure multiple SAs.

### Settings 1-4 and default setting

Using the auto exchange method, you can configure four separate sets of SA details (such as different shared keys and IPsec algorithms). In the default settings of these sets, you can include settings that the fields of sets 1 to 4 cannot contain.

When IPsec is enabled, set 1 has the highest priority and 4 has the lowest. You can use this priority system to target IP addresses more securely. For example, set the broadest IP range at the lowest priority (4), and then set specific IP addresses at a higher priority level (3 and higher). This way, when IPsec transmission is enabled for a specific IP address, the higher level settings will be applied.

## IPsec Settings

IPsec settings for this machine can be made on Web Image Monitor. The following table explains individual setting items.

### IPsec settings items

Setting	Description	Setting value
IPsec	Specify whether to enable or disable IPsec.	<ul style="list-style-type: none"> <li>Active</li> <li>Inactive</li> </ul>
Exclude HTTPS Communication	Specify whether to enable IPsec for HTTPS transmission.	<ul style="list-style-type: none"> <li>Active</li> <li>Inactive</li> </ul> Specify "Active" if you do not want to use IPsec for HTTPS transmission.

The IPsec setting can also be made from the control panel.

### Encryption key auto exchange security level

When you select a security level, certain security settings are automatically configured. The following table explains security level features.

Security level	Security level features
Authentication Only	Select this level if you want to authenticate the transmission partner and prevent unauthorized data tampering, but not perform data packet encryption.  Since the data is sent in cleartext, data packets are vulnerable to eavesdropping attacks. Do not select this if you are exchanging sensitive information.

Security level	Security level features
Authentication and Low Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides less security than "Authentication and High Level Encryption".
Authentication and High Level Encryption	Select this level if you want to encrypt the data packets as well as authenticate the transmission partner and prevent unauthorized packet tampering. Packet encryption helps prevent eavesdropping attacks. This level provides higher security than "Authentication and Low Level Encryption".

The following table lists the settings that are automatically configured according to the security level.

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Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Security Policy	Apply	Apply	Apply
Encapsulation Mode	Transport	Transport	Transport
IPsec Requirement Level	Use When Possible	Use When Possible	Always Require
Authentication Method	PSK	PSK	PSK
Phase 1 Hash Algorithm	MD5	SHA1	SHA256
Phase 1 Encryption Algorithm	DES	3DES	AES-128-CBC
Phase 1 Diffie-Hellman Group	2	2	2
Phase 2 Security Protocol	AH	ESP	ESP

Setting	Authentication Only	Authentication and Low Level Encryption	Authentication and High Level Encryption
Phase 2 Authentication Algorithm	HMAC-SHA1-96/ HMAC-SHA256-128/ HMAC-SHA384-192/ HMAC-SHA512-256	HMAC-SHA1-96/ HMAC-SHA256-128/ HMAC-SHA384-192/ HMAC-SHA512-256	HMAC-SHA256-128/ HMAC-SHA384-192/ HMAC-SHA512-256
Phase 2 Encryption Algorithm Permissions	Cleartext (NULL encryption)	3DES/AES-128/ AES-192/AES-256	AES-128/AES-192/ AES-256
Phase 2 PFS	Inactive	Inactive	2

### Encryption key auto exchange settings items

When you specify a security level, the corresponding security settings are automatically configured, but other settings, such as address type, local address, and remote address must still be configured manually.

After you specify a security level, you can still make changes to the auto configured settings. When you change an auto configured setting, the security level switches automatically to "User Setting".

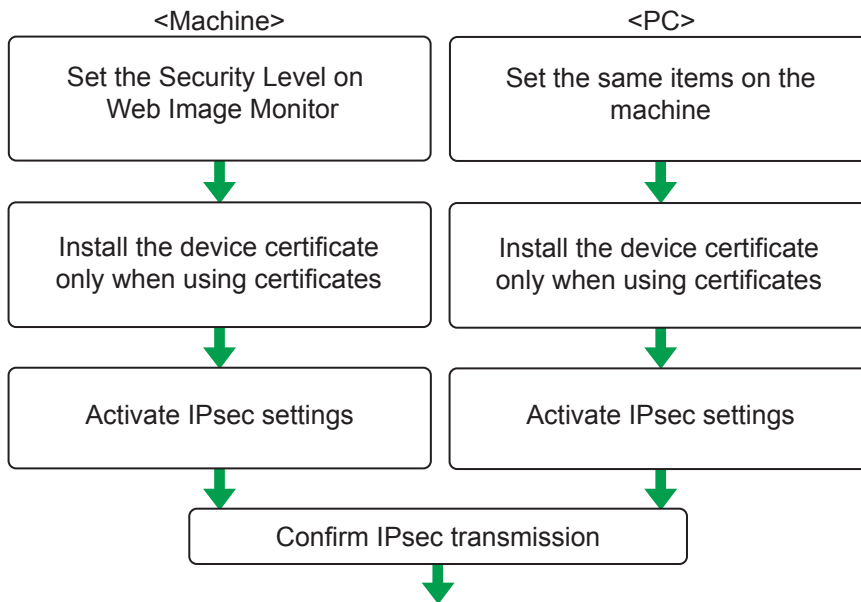
Setting	Description	Setting value
Address Type	Specify the address type for which IPsec transmission is used.	<ul style="list-style-type: none"> <li>• Inactive</li> <li>• IPv4</li> <li>• IPv6</li> <li>• IPv4/IPv6 (Default Settings only)</li> </ul>
Local Address	Specify the machine's address. If you are using multiple addresses in IPv6, you can also specify an address range.	<p>The machine's IPv4 or IPv6 address.</p> <p>If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.</p>

Setting	Description	Setting value
Remote Address	Specify the address of the IPsec transmission partner. You can also specify an address range.	The IPsec transmission partner's IPv4 or IPv6 address. If you are not setting an address range, enter 32 after an IPv4 address, or enter 128 after an IPv6 address.
Security Policy	Specify how IPsec is handled.	<ul style="list-style-type: none"> <li>• Apply</li> <li>• Bypass</li> <li>• Discard</li> </ul>
Encapsulation Mode	Specify the encapsulation mode. (auto setting)	<ul style="list-style-type: none"> <li>• Transport</li> <li>• Tunnel</li> </ul> (Tunnel beginning address - Tunnel ending address) Select the transport mode (this has no bearing on the security level). If you specify "Tunnel", you must then specify the "Tunnel End Point", which are the beginning and ending IP addresses. Set the same address for the beginning point as you set in "Local Address".
IPsec Requirement Level	Specify whether to only transmit using IPsec, or to allow cleartext transmission when IPsec cannot be established. (auto setting)	<ul style="list-style-type: none"> <li>• Use When Possible</li> <li>• Always Require</li> </ul>

Setting	Description	Setting value
Authentication Method	Specify the method for authenticating transmission partners. (auto setting)	<ul style="list-style-type: none"> <li>• PSK</li> <li>• Certificate</li> </ul> <p>If you specify "PSK", you must then set the PSK text (using ASCII characters).</p> <p>If you are using "PSK", specify a PSK password using up to 32 ASCII characters.</p> <p>If you specify "Certificate", the certificate for IPsec must be installed and specified before it can be used.</p>
PSK Text	Specify the pre-shared key for PSK authentication.	Enter the pre-shared key required for PSK authentication.
Phase 1 Hash Algorithm	Specify the Hash algorithm to be used in phase 1. (auto setting)	<ul style="list-style-type: none"> <li>• MD5</li> <li>• SHA1</li> <li>• SHA256</li> <li>• SHA384</li> <li>• SHA512</li> </ul>
Phase 1 Encryption Algorithm	Specify the encryption algorithm to be used in phase 1. (auto setting)	<ul style="list-style-type: none"> <li>• DES</li> <li>• 3DES</li> <li>• AES-128-CBC</li> <li>• AES-192-CBC</li> <li>• AES-256-CBC</li> </ul>
Phase 1 Diffie-Hellman Group	Select the Diffie-Hellman group number used for IKE encryption key generation. (auto setting)	<ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 14</li> </ul>
Phase 1 Validity Period	Specify the time period for which the SA settings in phase 1 are valid.	Set in seconds from 300 sec. (5 min.) to 172800 sec. (48 hrs.).

Setting	Description	Setting value
Phase 2 Security Protocol	Specify the security protocol to be used in Phase 2.  To apply both encryption and authentication to sent data, specify "ESP" or "ESP+AH".  To apply authentication data only, specify "AH".  (auto setting)	<ul style="list-style-type: none"> <li>• ESP</li> <li>• AH</li> <li>• ESP+AH</li> </ul>
Phase 2 Authentication Algorithm	Specify the authentication algorithm to be used in phase 2.  (auto setting)	<ul style="list-style-type: none"> <li>• HMAC-MD5-96</li> <li>• HMAC-SHA1-96</li> <li>• HMAC-SHA256-128</li> <li>• HMAC-SHA384-192</li> <li>• HMAC-SHA512-256</li> </ul>
Phase 2 Encryption Algorithm Permissions	Specify the encryption algorithm to be used in phase 2.  (auto setting)	<ul style="list-style-type: none"> <li>• Cleartext (NULL encryption)</li> <li>• DES</li> <li>• 3DES</li> <li>• AES-128</li> <li>• AES-192</li> <li>• AES-256</li> </ul>
Phase 2 PFS	Specify whether to activate PFS. Then, if PFS is activated, select the Diffie-Hellman group.  (auto setting)	<ul style="list-style-type: none"> <li>• Inactive</li> <li>• 1</li> <li>• 2</li> <li>• 14</li> </ul>
Phase 2 Validity Period	Specify the time period for which the SA settings in phase 2 are valid.	Specify a period (in seconds) from 300 (5min.) to 172800 (48 hrs.).

## Encryption Key Auto Exchange Settings Configuration Flow



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### ★ Important

- To use a certificate to authenticate the transmission partner in encryption key auto exchange settings, a device certificate must be installed.
- After configuring IPsec, you can use "Ping" command to check if the connection is established correctly. However, you cannot use "Ping" command when ICMP is excluded from IPsec transmission on the computer side. Also, because the response is slow during initial key exchange, it may take some time to confirm that transmission has been established.

## Specifying Encryption Key Auto Exchange Settings

To change the transmission partner authentication method for encryption key auto exchange settings to "Certificate", you must first install and assign a certificate. For details about creating and installing a device certificate, see page 123 "Protecting the Communication Path via a Device Certificate". For the method of assigning installed certificates to IPsec, see page 150 "Selecting the certificate for IPsec".

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [IPsec] under "Security".
4. Click [Edit] under "Encryption Key Auto Exchange Settings".



**5. Make encryption key auto exchange settings in [Settings 1].**

If you want to make multiple settings, select the settings number and add settings.

**6. Click [OK].**

**7. Select [Active] for "IPsec" in "IPsec".**

**8. Set "Exclude HTTPS Communication" to [Active] if you do not want to use IPsec for HTTPS transmission.**

**9. Click [OK].**

**10. "Updating..." appears. Wait for about one or two minutes, and then click [OK].**

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

**11. Log out.**

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### Selecting the certificate for IPsec

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Using Web Image Monitor, select the certificate to be used for IPsec. You must install the certificate before it can be used. For details about creating and installing a device certificate, see page 123 "Protecting the Communication Path via a Device Certificate".

**1. Log in as the network administrator from Web Image Monitor.**

**2. Point to [Device Management], and then click [Configuration].**

**3. Click [Device Certificate] under "Security".**

**4. Select the certificate to be used for IPsec from the drop-down box in "IPsec" under "Certification".**

**5. Click [OK].**

The certificate for IPsec is specified.

**6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].**

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

**7. Log out.**

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### Specifying the computer's IPsec settings

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Configure the computer's IPsec SA settings, so that they exactly match the machine's security level on the machine. Setting methods differ according to the computer's operating system. The example procedure shown here uses Windows 7 when the "Authentication and Low Level Encryption" security level is selected.

1. On the [Start] menu, click [Control Panel], click [System and Security], and then click [Administrative Tools].

Under Windows 8, hover the mouse pointer over the top- or bottom-right corner of the screen, and then click [Settings], [Control Panel], [System and Security], and then [Administrative Tools].

If you are using Windows XP, on the [Start] menu, click [Control Panel], click [Performance and Maintenance], and then click [Administrative Tools].

2. Double-click [Local Security Policy].

If the "User Account Control" dialog box appears, click [Yes].

3. Click [IP Security Policies on Local Computer].

4. In the "Action" menu, click [Create IP Security Policy].

The IP Security Policy Wizard appears.

5. Click [Next].

6. Enter a security policy name in "Name", and then click [Next].

7. Clear the "Activate the default response rule" check box, and then click [Next].

8. Select "Edit properties", and then click [Finish].

9. In the "General" tab, click [Settings].

If you are using Windows XP, in the "General" tab, click [Advanced].

10. In "Authenticate and generate a new key after every", enter the same validity period (in minutes) that is specified on the machine in "Encryption Key Auto Exchange Settings Phase 1", and then click [Methods].

11. Check that the hash algorithm ("Integrity"), encryption algorithm ("Encryption") and "Diffie-Hellman Group" settings in "Security method preference order" all match those specified on the machine in "Encryption Key Auto Exchange Settings Phase 1".

If the settings are not displayed, click [Add].

12. Click [OK] twice.

13. Click [Add] in the "Rules" tab.

The Security Rule Wizard appears.

14. Click [Next].

15. Select "This rule does not specify a tunnel", and then click [Next].

16. Select the type of network for IPsec, and then click [Next].

17. For Windows XP, select the authentication method, and then click [Next]. For Windows 7/8, go to Step 18.

If you select "Certificate" for authentication method in "Encryption Key Auto Exchange Settings" on the machine, specify the device certificate. If you select "PSK", enter the same PSK text specified on the machine with the pre-shared key.

18. Click [Add] in the IP Filter List.

19. In [Name], enter an IP Filter name, and then click [Add].

The IP Filter Wizard appears.

20. Click [Next].

21. If required, enter a description of the IP filter, and then click [Next].

For Windows XP, go to Step 22.

22. Select "My IP Address" in "Source address", and then click [Next].

23. Select "A specific IP Address or Subnet" in "Destination address", enter the machine's IP address, and then click [Next].

If you are using Windows XP, select "A specific IP Address", and then click [Next].

24. Select the protocol type for IPsec, and then click [Next].

If you are using IPsec with IPv6, select "58" as the protocol number for the "Other" target protocol type.

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25. Click [Finish].

26. Click [OK].

27. Select the IP filter that was just created, and then click [Next].

28. Click [Add].

Filter action wizard appears.

29. Click [Next].

30. In [Name], enter an IP Filter action name, and then click [Next].

31. Select "Negotiate security", and then click [Next].

32. Select "Allow unsecured communication if a secure connection connect be established.", and then [Next].

If you are using Windows XP, select "Fall back to unsecured communication", and then click [Next].

33. Select "Custom" and click [Settings].

34. In "Integrity algorithm", select the authentication algorithm that was specified on the machine in "Encryption Key Auto Exchange Settings Phase 2".

35. In "Encryption algorithm", select the encryption algorithm that specified on the machine in "Encryption Key Auto Exchange Settings Phase 2".

36. In Session key settings, select "Generate a new key every", and enter the validity period (in seconds) that was specified on the machine in "Encryption Key Auto Exchange Settings Phase 2".

37. Click [OK].

38. Click [Next].

39. Click [Finish].

**40. Select the filter action that was just created, and then click [Next].**

If you set "Encryption Key Auto Exchange Settings" to "Authentication and High Level Encryption", select the IP filter action that was just created, click [Edit], and then check "Use session key perfect forward secrecy (PFS)" on the filter action properties dialog box. If using PFS in Windows, the PFS group number used in phase 2 is automatically negotiated in phase 1 from the Diffie-Hellman group number (set in step 11). Consequently, if you change the security level specified automatic settings on the machine and "User Setting" appears, you must set the same the group number for "Phase 1 Diffie-Hellman Group" and "Phase 2 PFS" on the machine to establish IPsec transmission.

**41. Select the authentication method, and then click [Next]. For Windows XP, go to Step 42.**

If you select "Certificate" for authentication method in "Encryption Key Auto Exchange Settings" on the machine, specify the device certificate. If you select "PSK", enter the same PSK text specified on the machine with the pre-shared key.

**42. Click [Finish].****43. Click [OK].**

If you are using Windows XP, click [Close].

The new IP security policy (IPsec settings) is specified.

**44. Select the security policy that was just created, right-click, and then click [Assign].**

The computer's IPsec settings are enabled.

**Note**

- To disable the computer's IPsec settings, select the security policy, right-click, and then click [Unassign].

---

## telnet Setting Commands

---

You can use telnet to confirm IPsec settings and make setting changes. This section explains telnet commands for IPsec. The default user name for logging into telnet is "admin". The password is not configured by default. For details about logging in to telnet and telnet operations, see "Remote Maintenance Using telnet", Connecting the Machine/ System Settings.

**★ Important**

- If you are using a certificate as the authentication method in encryption key auto exchange settings (IKE), install the certificate using Web Image Monitor. A certificate cannot be installed using telnet.

**ipsec**

To display IPsec related settings information, use the "ipsec" command.

**Display current settings**

```
msh> ipsec
```

Displays the following IPsec settings information:

- IPsec settings values
- Encryption key auto exchange settings, IKE setting 1-4 values
- Encryption key auto exchange settings, IKE default setting values

#### Display current settings portions

```
msh> ipsec -p
```

- Displays IPsec settings information in portions.

### ipsec exclude

---

To display or specify protocols excluded by IPsec, use the "ipsec exclude" command.

#### Display current settings

```
msh> ipsec exclude
```

- Displays the protocols currently excluded from IPsec transmission.

#### Specify protocols to exclude

```
msh> ipsec exclude {https|dns|dhcp|wins|all} {on|off}
```

- Specify the protocol, and then enter [on] to exclude it, or [off] to include it for IPsec transmission. Entering [all] specifies all protocols collectively.

### ipsec ike

---

To display or specify the encryption key auto exchange settings, use the "ipsec ike" command.

#### Display current settings

```
msh> ipsec ike {1|2|3|4|default}
```

- To display the settings 1-4, specify the number [1-4].
- To display the default setting, specify [default].
- Not specifying any value displays all of the settings.

#### Disable settings

```
msh> ipsec ike {1|2|3|4|default} disable
```

- To disable the settings 1-4, specify the number [1-4].
- To disable the default settings, specify [default].

#### Specify the local/remote address for settings 1-4

```
msh> ipsec ike {1|2|3|4} {ipv4|ipv6} "local address" "remote address"
```

- Enter the separate setting number [1-4], and the address type to specify local and remote address.

- To set the local or remote address values, specify masklen by entering [/] and an integer 0-32 when settings an IPv4 address. When setting an IPv6 address, specify masklen by entering [/] and an integer 0-128.
- Not specifying an address value displays the current setting.

### Specify the address type in default setting

```
msh> ipsec ike default {ipv4|ipv6|any}
```

- Specify the address type for the default setting.
- To specify both IPv4 and IPv6, enter [any].

### Security policy setting

```
msh> ipsec ike {1|2|3|4|default} proc {apply|bypass|discard}
```

- Enter the separate setting number [1-4] or [default] and specify the security policy for the address specified in the selected setting.
- To apply IPsec to the relevant packets, specify [apply]. To not apply IPsec, specify [bypass].
- If you specify [discard], any packets to which IPsec can be applied are discarded.
- Not specifying a security policy displays the current setting.

### Security protocol setting

```
msh> ipsec ike {1|2|3|4|default} proto {ah|esp|dual}
```

- Enter the separate setting number [1-4] or [default] and specify the security protocol.
- To specify AH, enter [ah]. To specify ESP, enter [esp]. To specify AH and ESP, enter [dual].
- Not specifying a protocol displays the current setting.

### IPsec requirement level setting

```
msh> ipsec ike {1|2|3|4|default} level {require|use}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec requirement level.
- If you specify [require], data will not be transmitted when IPsec cannot be used. If you specify [use], data will be sent normally when IPsec cannot be used. When IPsec can be used, IPsec transmission is performed.
- Not specifying a requirement level displays the current setting.

### Encapsulation mode setting

```
msh> ipsec ike {1|2|3|4|default} mode {transport|tunnel}
```

- Enter the separate setting number [1-4] or [default] and specify the encapsulation mode.
- To specify transport mode, enter [transport]. To specify tunnel mode, enter [tunnel].
- If you have set the address type in the default setting to [any], you cannot use [tunnel] in encapsulation mode.
- Not specifying an encapsulation mode displays the current setting.

**Tunnel end point setting**

```
msh> ipsec ike {1|2|3|4|default} tunneladdr "beginning IP address" "ending IP address"
```

- Enter the separate setting number [1-4] or [default] and specify the tunnel end point beginning and ending IP address.
- Not specifying either the beginning or ending address displays the current setting.

**IKE partner authentication method setting**

```
msh> ipsec ike {1|2|3|4|default} auth {psk|rsasig}
```

- Enter the separate setting number [1-4] or [default] and specify the authentication method.
- Specify [psk] to use a shared key as the authentication method. Specify [rsasig] to use a certificate at the authentication method.
- You must also specify the PSK character string when you select [psk].
- Note that if you select "Certificate", the certificate for IPsec must be installed and specified before it can be used. To install and specify the certificate use Web Image Monitor.

**PSK character string setting**

```
msh> ipsec ike {1|2|3|4|default} psk "PSK character string"
```

- If you select PSK as the authentication method, enter the separate setting number [1-4] or [default] and specify the PSK character string.
- Specify the character string in ASCII characters. There can be no abbreviations.

**ISAKMP SA (phase 1) hash algorithm setting**

```
msh> ipsec ike {1|2|3|4|default} ph1 hash {md5|sha1|sha256|sha384|sha512}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) hash algorithm.
- Not specifying the hash algorithm displays the current setting.

**ISAKMP SA (phase 1) encryption algorithm setting**

```
msh> ipsec ike {1|2|3|4|default} ph1 encrypt {des|3des|aes128|aes192|aes256}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) encryption algorithm.
- Not specifying an encryption algorithm displays the current setting.

**ISAKMP SA (phase 1) Diffie-Hellman group setting**

```
msh> ipsec ike {1|2|3|4|default} ph1 dhgroup {1|2|14}
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

**ISAKMP SA (phase 1) validity period setting**

```
msh> ipsec ike {1|2|3|4|default} ph1 lifetime "validity period"
```

- Enter the separate setting number [1-4] or [default] and specify the ISAKMP SA (phase 1) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.

**IPsec SA (phase 2) authentication algorithm setting**

```
msh> ipsec ike {1|2|3|4|default} ph2 auth {hmac-md5|hmac-sha1|hmac-sha256|hmac-sha384|hmac-sha512}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) authentication algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- Not specifying an authentication algorithm displays the current setting.

**IPsec SA (phase 2) encryption algorithm setting**

```
msh> ipsec ike {1|2|3|4|default} ph2 encrypt {null|des|3des|aes128|aes192|aes256}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) encryption algorithm.
- Separate multiple encryption algorithm entries with a comma (,). The current setting values are displayed in order of highest priority.
- Not specifying an encryption algorithm displays the current setting.

**IPsec SA (phase 2) PFS setting**

```
msh> ipsec ike {1|2|3|4|default} ph2 pfs {none|1|2|14}
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) Diffie-Hellman group number.
- Specify the group number to be used.
- Not specifying a group number displays the current setting.

**IPsec SA (phase 2) validity period setting**

```
msh> ipsec ike {1|2|3|4|default} ph2 lifetime "validity period"
```

- Enter the separate setting number [1-4] or [default] and specify the IPsec SA (phase 2) validity period.
- Enter the validity period (in seconds) from 300 to 172800.
- Not specifying a validity period displays the current setting.



### Reset setting values

```
msh> ipsec ike {1|2|3|4|default|all} clear
```

- Enter the separate setting number [1-4] or [default] and reset the specified setting. Specifying [all] resets all of the settings, including default.

# Configuring IEEE 802.1X Authentication

IEEE 802.1X is an authentication function that can be used with both wired and wireless networks. Authentication is performed by the authentication server (RADIUS server).

You can select four types of EAP authentication method: EAP-TLS, LEAP, EAP-TTLS and PEAP. Note that each EAP authentication method has different configuration settings and authentication procedures.

Types and requirements of certificates are as follows:

EAP type	Required certificates
EAP-TLS	Site certificate, Device certificate (IEEE 802.1X Client Certificate)
LEAP	-
EAP-TTLS	Site certificate
PEAP	Site certificate
PEAP (Phase 2 is for TLS only)	Site certificate, Device certificate (IEEE 802.1X Client Certificate)

## Installing a Site Certificate

Install a site certificate (root CA certificate) for verifying the reliability of the authentication server. You need to have at least a certificate issued by the certificate authority who signed the server certificate or a certificate from a higher certificate authority.

Only PEM (Base64-encoded X.509) site certificates can be imported.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Site Certificate] under "Security".
4. Click [Browse] for "Site Certificate to Import", and then select the CA certificate you obtained.
5. Click [Open].
6. Click [Import].
7. Check that the imported certificate's [Status] shows "Trustworthy".

If [Site Certificate Check] shows [Active], and the [Status] of the certificate shows [Untrustworthy], communication might not be possible.

8. Click [OK].
9. Log out.

---

## Selecting the Device Certificate

---

Select the certificate to use under IEEE 802.1X from among the device certificates created and installed in advance on the machine. For details about creating and installing a device certificate, see page 123 "Protecting the Communication Path via a Device Certificate".

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Device Certificate] under "Security".
4. Select the certificate to be used for IEEE 802.1X from the drop-down box in "IEEE 802.1X" under "Certification".
5. Click [OK].
6. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

7. Log out.

---

## Setting Items of IEEE 802.1X for Ethernet

---

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [IEEE 802.1X] under "Security".
4. In "User Name", enter the user name set in the RADIUS server.
5. Enter the domain name in "Domain Name".
6. Select "EAP Type". Configurations differ according to the EAP Type.

### EAP-TLS

- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server on "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

### LEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

### EAP-TTLS

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

- Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".  
Certain methods might not be available, depending on the RADIUS server you want to use.
- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server in "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

#### PEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.  
If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
- Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [MSCHAPv2] or [TLS] in "Phase 2 Method".  
When you select [TLS], you must install "IEEE 802.1X Client Certificate".
- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server on "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

#### 7. Click [OK].

#### 8. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

#### 9. Click [Interface Settings] under "Interface".

#### 10. Select [Active] in "Ethernet Security".

#### 11. Click [OK].

#### 12. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

#### 13. Log out.

### ↓ Note

- If there is a problem with settings, you might not be able to communicate with the machine. In such a case, access [Print List] in [Interface Settings] on the control panel, and then print the network summary to check the status.
- If you cannot identify the problem, execute [Restore IEEE 802.1X Authentication to Defaults] in [Network] in [Interface Settings] on the control panel, and then repeat the procedure.

## Setting Items of IEEE 802.1X for Wireless LAN

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [IEEE 802.1X] under "Security".
4. In "User Name", enter the user name set in the RADIUS server.
5. Enter the domain name in "Domain Name".
6. Select "EAP Type". Configurations differ according to the EAP Type.

### EAP-TLS

- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server on "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

### LEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.

### EAP-TTLS

- Click [Change] in "Password", and then enter the password set in the RADIUS server.
- Click [Change] in "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [CHAP], [MSCHAP], [MSCHAPv2], [PAP], or [MD5] in "Phase 2 Method".

Certain methods might not be available, depending on the RADIUS server you want to use.

- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server in "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

## PEAP

- Click [Change] in "Password", and then enter the password set in the RADIUS server.  
If [TLS] is selected for "Phase 2 Method", you do not need to specify a password.
- Click [Change] on "Phase 2 User Name", and then enter the user name set in the RADIUS server.
- Select [MSCHAPv2] or [TLS] in "Phase 2 Method".  
When you select [TLS], you must install "IEEE 802.1X Client Certificate".
- Make the following settings according to the operating system you are using:
  - Select [On] or [Off] in "Authenticate Server Certificate".
  - Select [On] or [Off] in "Trust Intermediate Certificate Authority".
  - Enter the host name of the RADIUS server on "Server ID".
  - Select [On] or [Off] in "Permit Sub-domain".

7. Click [OK].

8. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

9. Click [Wireless LAN Settings] under "Interface".

10. Select [Wireless LAN] in "LAN Type".

11. Select [Infrastructure Mode] in "Communication Mode".

12. Enter the alphanumeric characters (a-z, A-Z, or 0-9) in [SSID] according to the access point you want to use.

13. Select [WPA2] in "Security Method".

14. Select [WPA2] in "WPA2 Authentication Method".

15. Click [OK].

16. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

17. Log out.

 **Note**

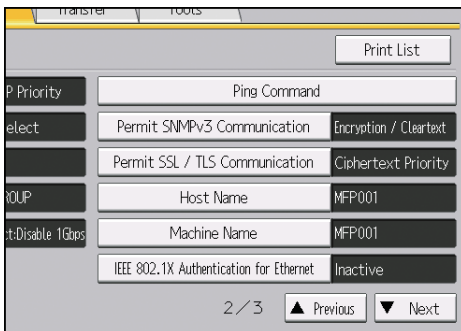
- If there is a problem with settings, you might not be able to communicate with the machine. In such a case, access [Print List] in [Interface Settings] on the control panel, and then print the network summary to check the status.
- If you cannot identify the problem, execute [Restore IEEE 802.1X Authentication to Defaults] in [Network] in [Interface Settings] on the control panel, and then repeat the procedure.

## SNMPv3 Encryption

When using SmartDeviceMonitor for Admin/Device Manager NX Lite or another application that communicates via SNMPv3, you can encrypt the data transmitted.

By making this setting, you can protect data from being tampered with.

1. Log in as the network administrator from the control panel.
2. Press [System Settings].
3. Press [Interface Settings].
4. Press [▼Next].
5. Press [Permit SNMPv3 Communication].



6. Press [Encryption Only].
7. Press [OK].
8. Log out.

### Note

- To use SmartDeviceMonitor for Admin/Device Manager NX Lite for encrypting the data for specifying settings, you need to specify the network administrator's [Encryption Password] setting and [Encryption Password] in [SNMP Authentication Information] in SmartDeviceMonitor for Admin/Device Manager NX Lite, in addition to specifying [Permit SNMPv3 Communication] on the machine. For details about specifying [Encryption Password] in SmartDeviceMonitor for Admin/Device Manager NX Lite, see SmartDeviceMonitor for Admin/Device Manager NX Lite Help.
- If network administrator's [Encryption Password] setting is not specified, the data for transmission may not be encrypted or sent. For details about specifying the network administrator's [Encryption Password] setting, see page 18 "Registering and Changing Administrators".

# Encrypting Transmitted Passwords

Configuring the driver encryption key and password encryption for IPP authentication enables communication with encrypted passwords as well as increasing the security against password cracking. In order to further enhance security, we recommend using IPsec, SNMPv3 and SSL/TLS all together.

Also, encrypt the login password for administrator authentication and user authentication.

## Driver Encryption Key

This key is a character string used for encrypting login passwords or document passwords sent from each driver when user authentication is ON.

To encrypt the login password, specify the driver encryption key on the machine and on the printer driver installed in the user's computer.

## Password for IPP Authentication

To encrypt the IPP Authentication password on Web Image Monitor, set "Authentication" to [DIGEST], and then specify the IPP Authentication password set on the machine.

You can use telnet or FTP to manage passwords for IPP authentication, although it is not recommended.

### Note

- For details on encrypting the login passwords used for administrator authentication, see page 18 "Registering and Changing Administrators".

---

## Specifying a Driver Encryption Key

---

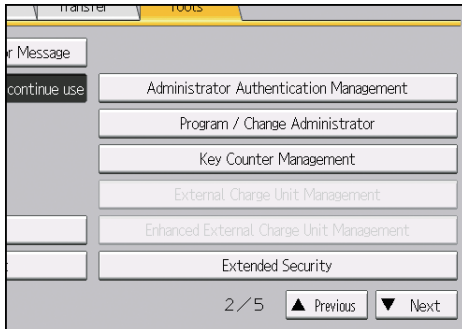
Specify the driver encryption key on the machine.

This setting enables encrypted transmission of login passwords and strengthens the security against password cracking.

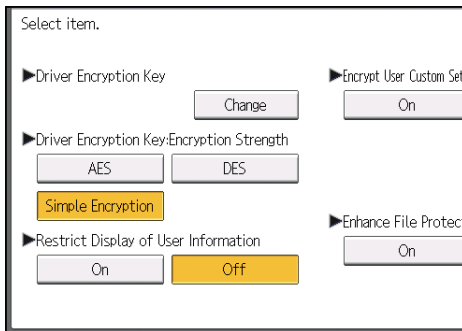
1. **Log in as the network administrator from the control panel.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next].**



**5. Press [Extended Security].**



**6. For "Driver Encryption Key", press [Change].**



**7. Enter the driver encryption key, and then press [OK].**

Enter the driver encryption key using up to 32 alphanumeric characters.

The network administrator must give users the driver encryption key specified on the machine so they can register it on their computers. Make sure to enter the same driver encryption key as that is specified on the machine.

**8. Press [OK].**

**9. Log out.**

**Note**

- For details about specifying the encryption key on the printer driver or TWAIN driver, see the driver help.

## Specifying an IPP Authentication Password

Specify an IPP authentication password for this machine. This setting enables encrypted transmission of IPP authentication passwords and strengthens the security against password cracking.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].

3. Click [IPP Authentication] under "Security".
4. Select [DIGEST] from the "Authentication" list.
5. Enter the user name in the "User Name" box.
6. Enter the password in the "Password" box.
7. Click [OK].

IPP authentication is specified.

8. "Updating..." appears. Wait for about one or two minutes, and then click [OK].

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

9. Log out.

## Kerberos Authentication Encryption Setting

You can specify encrypted transmission between the machine and the key distribution center (KDC) server when Kerberos authentication is enabled.

Using Kerberos authentication with Windows or LDAP authentication, LDAP search, etc., ensures safe communication.

The supported encryption algorithm differs depending on the type of KDC server. Select the algorithm that suits your environment.

KDC server	Supported encryption algorithms
Windows Server 2003 Active Directory	<ul style="list-style-type: none"> <li>• RC4-HMAC (ARCFour-HMAC-MD5)</li> <li>• DES-CBC-MD5</li> </ul>
Windows Server 2008	<ul style="list-style-type: none"> <li>• AES256-CTS-HMAC-SHA1-96</li> <li>• AES128-CTS-HMAC-SHA1-96</li> <li>• RC4-HMAC (ARCFour-HMAC-MD5)</li> <li>• DES-CBC-MD5</li> </ul>
Windows Server 2008 R2/Windows Server 2012	<ul style="list-style-type: none"> <li>• AES256-CTS-HMAC-SHA1-96</li> <li>• AES128-CTS-HMAC-SHA1-96</li> <li>• RC4-HMAC (ARCFour-HMAC-MD5)</li> <li>• DES-CBC-MD5*</li> </ul>
Heimdal	<ul style="list-style-type: none"> <li>• AES256-CTS-HMAC-SHA1-96</li> <li>• AES128-CTS-HMAC-SHA1-96</li> <li>• DES3-CBC-SHA1</li> <li>• RC4-HMAC (ARCFour-HMAC-MD5)</li> <li>• DES-CBC-MD5</li> </ul>

\* To use Kerberos authentication, it must be enabled in the operating system settings.

1. Log in as the network administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Kerberos Authentication] under "Device Settings".
4. Select the encryption algorithm you want to enable.  
One or more encryption algorithm must always be selected.
5. Click [OK].

**6. Log out.**



# 6. Preventing the Leaking of Documents


This chapter explains how to protect document data stored in the machine or printed using the machine.

## Managing Folders

This section explains how to manage the folders in Document Server: how to delete folders, change their passwords, and unlock them when locked.

### Deleting Folders

This can be done by the file administrator or a user.

To delete a folder with  icon next to it, the folder's password is required.

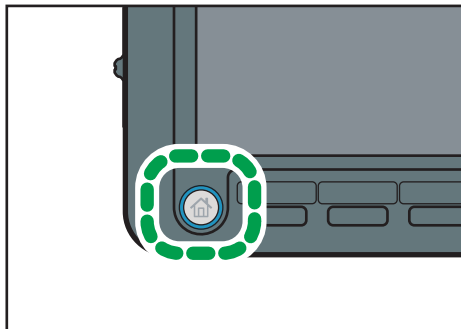
If a user has forgotten the password to access the folder, the file administrator can change it.

The file administrator can delete folders without using the password.

Folders containing files which the user does not have permission to delete cannot be deleted.

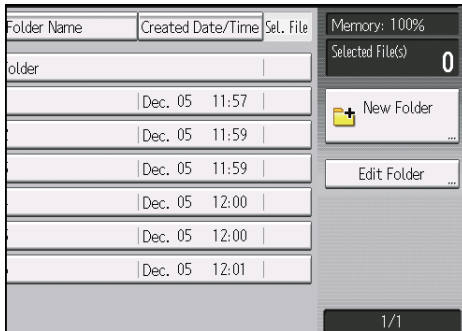
The shared folder cannot be deleted.

1. Log in as the file administrator or a user from the control panel.
2. Press the [User Tools] key to close the User Tools menu.  
If the message "You do not have the privileges to use this function." appears, press [Exit].
3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.



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#### 4. Press [Edit Folder].



#### 5. Select the folder.

#### 6. Press [Delete].

#### 7. If a password entry screen appears, enter the password of the folder, and then press [OK].

#### 8. Press [Delete].

#### 9. Log out.

#### Note

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

## Changing the Password of a Folder

This can be specified by the file administrator or a user.

If the password to access the folder has been forgotten, the file administrator can change it.

A password cannot be specified for the shared folder.

#### 1. Log in as the file administrator or a user from the control panel.

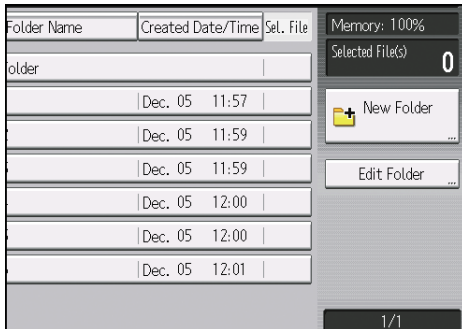
#### 2. Press the [User Tools] key to close the User Tools menu.

If the message "You do not have the privileges to use this function." appears, press [Exit].

#### 3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.

If the message "You do not have the privileges to use this function." appears, press [Exit].

#### 4. Press [Edit Folder].



#### 5. Select the folder.

#### 6. Press [Change Password].

#### 7. If a password entry screen appears, enter the password of the folder, and then press [OK].

The password entry screen does not appear if the file administrator is logged in.

#### 8. Enter the new password for the folder, and then press [OK].

You can use 4 to 8 numbers as the password for the folder.

#### 9. Re-enter the password for confirmation, and then press [OK].

The  icon appears next to a folder protected by password.

#### 10. Log out.

##### Note

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

## Unlocking Folders

Only the file administrator can unlock folders.

If you specify [On] for "Enhance File Protection", the folder will be locked and become inaccessible if an invalid password is entered ten times. This section explains how to unlock folders.

"Enhance File Protection" is one of the extended security functions. For details about this and other extended security functions, see page 249 "Specifying the Extended Security Functions".

#### 1. Log in as the file administrator from the control panel.

#### 2. Press the [User Tools] key to close the User Tools menu.

If the message "You do not have the privileges to use this function." appears, press [Exit].

#### 3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.

If the message "You do not have the privileges to use this function." appears, press [Exit].




4. Press [Edit Folder].

5. Select the folder.

The  icon appears next to a folder locked by the Enhance File Protection function.

6. Press [Unlock].

The  icon changes to the  icon.

7. Press [Unlock].

8. Log out.

 **Note**

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

# Managing Stored Files

This section describes how to specify access permissions for stored files.

You can specify who is allowed to access stored scan files and files stored in Document Server.

This can prevent activities such as printing or sending of stored files by unauthorized users.

You can also specify which users can change or delete stored files.

To limit the use of stored files, you can specify four types of access permissions.

## Types of access permission

Access permission	Description
Read-only	In addition to checking the content of and information about stored files, you can also print and send the files.
Edit	You can change the print settings for stored files. This includes permission to view files.
Edit / Delete	You can delete stored files. This includes permission to view and edit files.
Full Control	You can specify the user and access permission. This includes permission to view, edit, and edit / delete files.

## Password for stored files

- Passwords for stored files can be specified by the file administrator or owner. You can obtain greater protection against the unauthorized use of files. For details about assigning a password to a stored file, see page 181 "Specifying Passwords for Stored Files".
- Even if user authentication is not set, passwords for stored files can be set.

### Note

- Files can be stored by any user who is allowed to use Document Server, copy function, scanner function, or printer function.
- Using Web Image Monitor, you can check the content of stored files. For details, see Web Image Monitor Help.
- The default access permission for the owner is "Read-only". You can also specify the access permission.
- The file administrator not only configures access permissions, but can also delete stored files. For details on the methods of deleting documents, see "Deleting Stored Documents", Copy/ Document Server.

## Configuring Access Permission for Each Stored File

This can be specified by the file administrator or owner.

Specify the users and their access permissions for each stored file.

### ★ Important

- If files become inaccessible, reset their access permission as the owner. This can also be done by the file administrator. If you want to access a file but do not have access permission, ask the owner.
- The file administrator can change the owner of a document using the document's [Change Access Priv.] setting. This setting also allows the file administrator to change the access privileges of the owner and other users.
- The document owner and users with the [Full Control] privilege for the document can change the access privileges of the owner and other users under the [Change Access Priv.] setting.

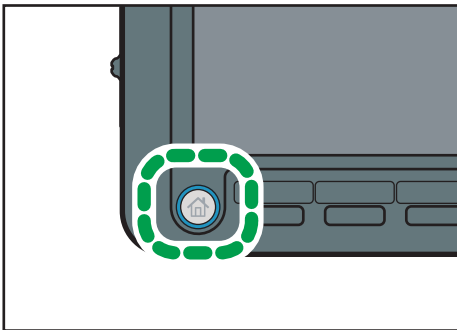
1. Log in as the file administrator or the owner from the control panel.

2. Press the [User Tools] key to close the User Tools menu.

If the message "You do not have the privileges to use this function." appears, press [Exit].

3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.

If the message "You do not have the privileges to use this function." appears, press [Exit].

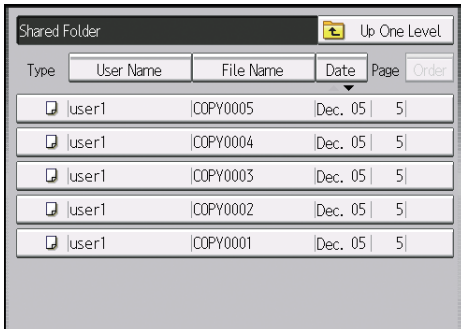


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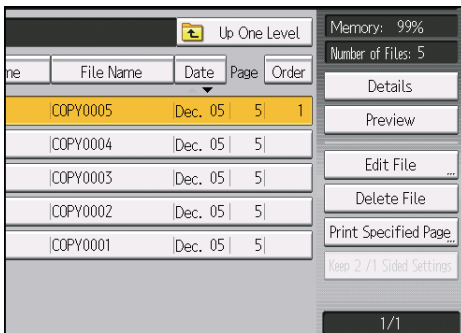
4. Select the folder.

No.	Folder Name	Created Date/Time	Sel.	File
	Shared Folder			
001	User001	Dec. 05 11:57		
002	User002	Dec. 05 11:59		
003	User003	Dec. 05 11:59		
004	User004	Dec. 05 12:00		
005	User005	Dec. 05 12:00		
006	User006	Dec. 05 12:01		

5. Select the file.

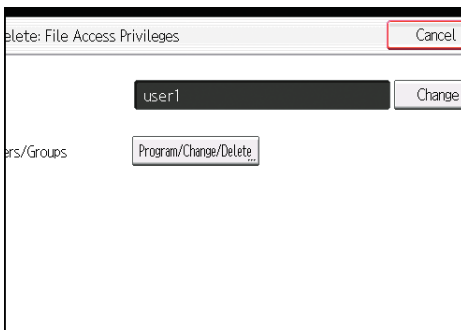


6. Press [Edit File].



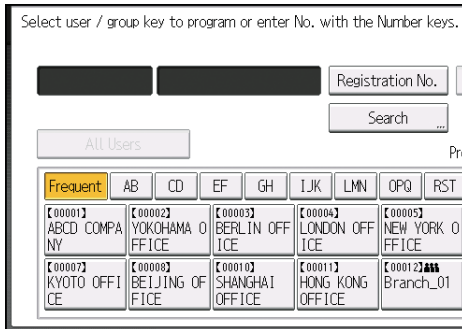
7. Press [Change Access Priv.].

8. Press [Program/Change/Delete].



9. Press [New Program].

**10. Select the users or groups to whom you want to assign access permission.**

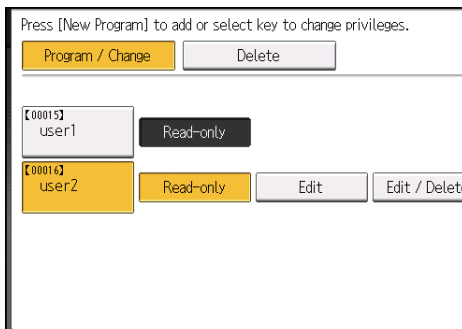


You can select more than one user.

By pressing [All Users], you can select all the users.

**11. Press [Exit].**

**12. Select the user to whom you want to assign access permission, and then select the permission.**



Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

**13. Press [Exit].**

**14. Press [OK].**

**15. Log out.**

**Note**

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.
- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

## Changing the Owner of a Document

Use this procedure to change the owner of a document.

Only the file administrator can change the owner of a document.

1. **Log in as the file administrator from the control panel.**
2. **Press the [User Tools] key to close the User Tools menu.**  
If the message "You do not have the privileges to use this function." appears, press [Exit].
3. **Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.**  
If the message "You do not have the privileges to use this function." appears, press [Exit].
4. **Select the folder.**
5. **Select the file.**
6. **Press [Edit File].**
7. **Press [Change Access Priv.].**
8. **Press [Change] for "Owner".**
9. **Select the user you want to register.**
10. **Press [Exit].**
11. **Press [OK].**
12. **Log out.**

## Configuring Access Permission for Each User for Stored Files

This can be specified by the user administrator or owner.

Specify the users and their access permission to files stored by a particular user.

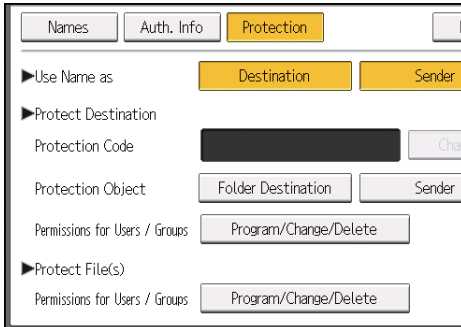
This makes managing access permission easier than specifying and managing access permissions for each stored file.

### ★ Important

- If files become inaccessible, be sure to enable the user administrator, so that the user administrator can reset the access permission for the files in question.

1. **The user administrator or the owner logs in from the control panel.**
2. **Press [Address Book Mangmnt].**
3. **Select the user.**
4. **Press [Protection].**

5. Under "Protect File(s)", press [Program/Change/Delete] for "Permissions for Users / Groups".

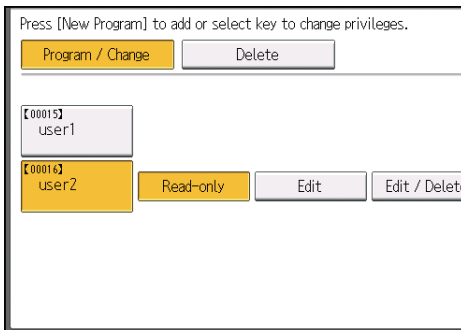


6. Press [New Program].
7. Select the users or groups to register.

You can select more than one user.

By pressing [All Users], you can select all the users.

8. Press [Exit].
9. Select the user to whom you want to assign access permission, and then select the permission.



Select the access permission from [Read-only], [Edit], [Edit / Delete], or [Full Control].

10. Press [Exit].
11. Press [OK].
12. Press [Exit].
13. Log out.

#### ↓ Note

- The "Edit", "Edit / Delete", and "Full Control" access permissions allow a user to perform high level operations that could result in loss of or changes to sensitive information. We recommend you grant only the "Read-only" permission to general users.

## Specifying Passwords for Stored Files

This can be specified by the file administrator or owner.

**1. The file administrator or the owner logs in from the control panel.**

**2. Press the [User Tools] key to close the User Tools menu.**

If the message "You do not have the privileges to use this function." appears, press [Exit].

**3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.**

If the message "You do not have the privileges to use this function." appears, press [Exit].

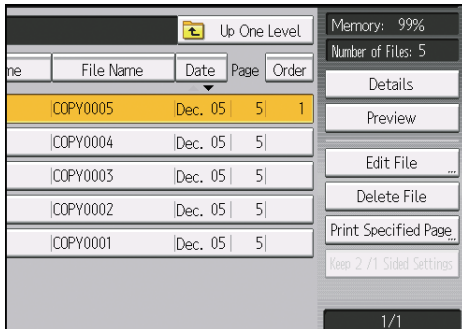
**4. Select the folder.**

No.	Folder Name	Created Date/Time	Sel. File
	Shared Folder		
001	User001	Dec. 05 11:57	
002	User002	Dec. 05 11:59	
003	User003	Dec. 05 11:59	
004	User004	Dec. 05 12:00	
005	User005	Dec. 05 12:00	
006	User006	Dec. 05 12:01	

**5. Select the file.**

Type	User Name	File Name	Date	Page	Order
<input type="checkbox"/>	user1	COPY0005	Dec. 05	5	
<input type="checkbox"/>	user1	COPY0004	Dec. 05	5	
<input type="checkbox"/>	user1	COPY0003	Dec. 05	5	
<input type="checkbox"/>	user1	COPY0002	Dec. 05	5	
<input type="checkbox"/>	user1	COPY0001	Dec. 05	5	



**6. Press [Edit File].****7. Press [Change Password].****8. Enter the new password for the stored file, and then press [OK].**

You can use 4 to 8 numbers as the password for the stored file.

**9. Re-enter the password for confirmation, and then press [OK].**

The  icon appears next to a stored file protected by password.

**10. Press [OK].****11. Log out.**

## Unlocking Stored Files

Only the file administrator can unlock files.

If you specify "Enhance File Protection", the file will be locked and become inaccessible if an invalid password is entered ten times. This section explains how to unlock files.

"Enhance File Protection" is one of the extended security functions. For details about this and other extended security functions, see page 249 "Specifying the Extended Security Functions".


**1. Log in as the file administrator from the control panel.****2. Press the [User Tools] key to close the User Tools menu.**

If the message "You do not have the privileges to use this function." appears, press [Exit].

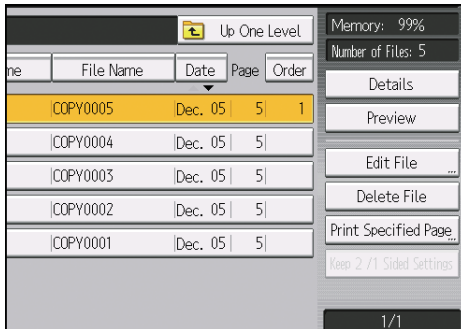
**3. Press the [Home] key on the control panel, and press the [Document Server] icon on the [Home] screen.**

If the message "You do not have the privileges to use this function." appears, press [Exit].

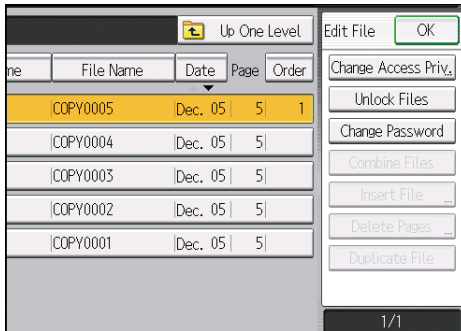
**4. Select the folder.****5. Select the file.**

The  icon appears next to a file locked by the Enhance File Protection function.

## 6. Press [Edit File].



## 7. Press [Unlock Files].



## 8. Press [Yes].

The  icon changes to the  icon.

## 9. Press [OK].

## 10. Log out.

## Managing Locked Print Files

Depending on the location of the machine, it is difficult to prevent unauthorized persons from viewing prints lying in the machine's output trays. When printing confidential documents, use the Locked Print function.

### Locked Print

- Using the printer's Locked Print function, store files in the machine as Locked Print files and then print them from the control panel and retrieve them immediately, preventing others from viewing them.

#### ↓ Note

- Confidential documents can be printed regardless of the user authentication settings.
- To store files temporarily, select [Stored Print] in the printer driver. If you select [Stored Print (Shared)], you can also share these files.
- For details on how to use the Locked Print function, see "Locked Print", Print.

## 6

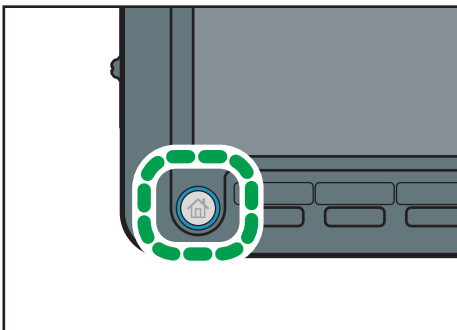
### Deleting Locked Print Files

This can be specified by the file administrator or owner.

For the owner to delete a Locked Print file, the password to access the file is required. If the owner has forgotten the password, the file administrator can change it.

The password is not required for the file administrator to delete Locked Print files.

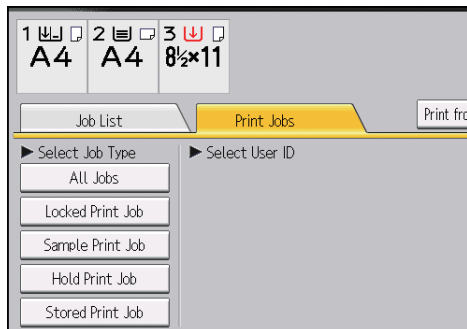
1. **Log in as the file administrator or the owner from the control panel.**
2. **Press the [User Tools] key to close the User Tools menu.**  
If the message "You do not have the privileges to use this function." appears, press [Exit].
3. **Press the [Home] key on the control panel, and press the [Printer] icon on the [Home] screen.**



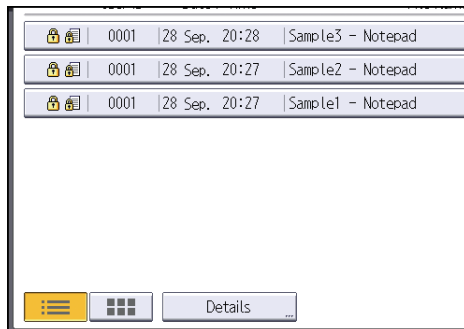
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4. **Press [Print Jobs].**

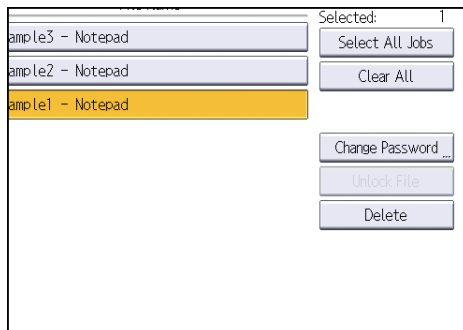
## 5. Press [Locked Print Job].



## 6. Select the file.



## 7. Press [Delete].



## 8. If a password entry screen appears, enter the password of the Locked Print file, and then press [OK].

The password entry screen does not appear if the file administrator is logged in.

## 9. Press [Yes].

## 10. Log out.

### Note

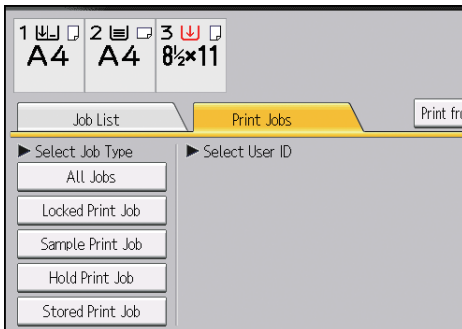
- You can configure this machine to delete stored files automatically by setting the "Auto Delete Temporary Print Jobs" option to [On]. For details about "Auto Delete Temporary Print Jobs", see "Data Management", Print.
- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

## Changing the Password of a Locked Print File

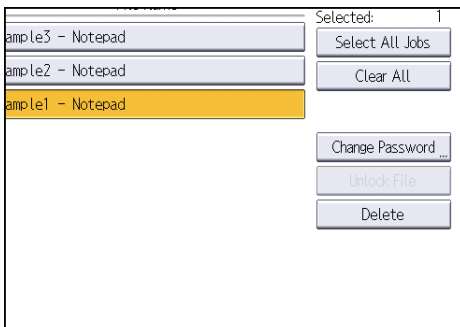
This can be specified by the file administrator or owner.

If the owner has forgotten the password, the file administrator can change it.

1. Log in as the file administrator or the owner from the control panel.
2. Press the [User Tools] key to close the User Tools menu.  
If the message "You do not have the privileges to use this function." appears, press [Exit].
3. Press the [Home] key on the control panel, and press the [Printer] icon on the [Home] screen.
4. Press [Print Jobs].
5. Press [Locked Print Job].



6. Select the file.
7. Press [Change Password].



8. If a password entry screen appears, enter the password for the stored file, and then press [OK].

The password entry screen will not appear if the file administrator is logged in.

9. Enter the new password for the stored file, and then press [OK].
10. Re-enter the password for confirmation, and then press [OK].
11. Log out.

#### ↓ Note

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

## Unlocking a Locked Print File

Only the file administrator can unlock files.

If you specify [On] for "Enhance File Protection", the file will be locked and become inaccessible if an invalid password is entered ten times. This section explains how to unlock files.

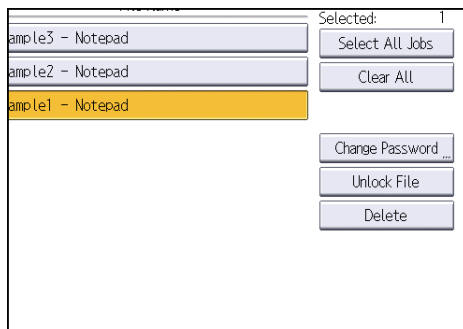
"Enhance File Protection" is one of the extended security functions. For details about this and other extended security functions, see page 249 "Specifying the Extended Security Functions".

1. Log in as the file administrator from the control panel.
2. Press the [User Tools] key to close the User Tools menu.
 

If the message "You do not have the privileges to use this function." appears, press [Exit].
3. Press the [Home] key on the control panel, and press the [Printer] icon on the [Home] screen.
4. Press [Print Jobs].
5. Press [Locked Print Job].
6. Select the file.

The  icon appears next to a file locked by the Enhance File Protection function.

7. Press [Unlock File].



**8. Press [Yes].**

The  icon disappears.

**9. Log out.**

**↓ Note**

- This can also be specified via Web Image Monitor. For details, see Web Image Monitor Help.

# Unauthorized Copy Prevention / Data Security for Copying

The copier, Document Server, and printer functions let you embed a pattern in a printed copy to discourage or prevent unauthorized copying.

If the Unauthorized Copy Prevention function is enabled, embedded text patterns (for instance, a warning message such as "No Copying") are displayed when documents are copied illegally. Accordingly, unauthorized copying can be prevented.

If the Data Security for Copying function is used and settings for special patterns embedded in documents are enabled, copies of documents with embedded patterns are printed with gray overprint. Accordingly, information leakage can be prevented. To protect documents by gray overprint, the copier or multi-function printer must be installed with the Copy Data Security Unit.

If a machine installed with the Copy Data Security Unit detects a file protected by the Data Security for Copying function, the machine beeps and logs the unauthorized copying.

For more information, see the information below:

## Using Unauthorized Copy Prevention

1. On the machine, enable printing of the embedded pattern. The settings must be configured by the machine administrator. For details about how to configure the setting, see page 190 "Enabling Pattern Printing".
2. Specify the settings for unauthorized copy prevention in the copier, Document Server, or printer function. The privilege to specify the setting depends on the setting specified in [Compulsory Unauthorized Copy Prevention]. For details, see page 190 "Enabling Pattern Printing".

## Using Data Security for Copying

1. On the machine, enable the embedded pattern print setting. The settings must be configured by the machine administrator. For details about how to configure the setting, see page 190 "Enabling Pattern Printing".
2. Specify the settings for data security for copying in the copier, Document Server, or printer function. The privilege to specify the setting depends on the setting specified in [Compulsory Unauthorized Copy Prevention]. For details, see page 190 "Enabling Pattern Printing".
3. Configure the "Detect Data Security for Copying" setting for printed copies, so that documents are printed with gray overprint when they are illegally copied, scanned, or stored in the machine. The setting must be configured by the machine administrator. For details about how to configure the setting, see page 191 "Enabling Detect Data Security for Copying".

### Note

- When copying, the thickness of an embedded pattern may be uneven due to the original type setting. If this happens, change the original type setting to [Text] or [Photo].



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## Enabling Pattern Printing

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You can enable embedded pattern printing to discourage or prevent unauthorized copying.

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### Enabling embedded pattern printing in the Copier/Document Server functions

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1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Select either [Unauthorized Copy Prevention Printing: Copier] or [Unauthorized Copy Prevention Printing: Document Server].
6. Press [Change] for "Compulsory Unauthorized Copy Prevention".
7. Specify whether or not to make printing of the embedded pattern mandatory.

- [Off]

Printing of the embedded pattern is not mandatory.

From the Copier/Document Server screen, users can specify whether or not to print with the embedded pattern and can specify its settings.

- [On:User Can Chng. Some Setg.]

Printing of the embedded pattern is mandatory.

From the Copier/Document Server screen, users can specify the embedded pattern settings except for type and thickness.

- [On:User Cannot Change Setg.]

Printing of the embedded pattern is mandatory.

Users cannot specify the embedded pattern settings from the Copier/Document Server screen.

8. Press [OK] twice.

9. Log out.

#### ↓ Note

- For details of the settings to specify the pattern using the machine, see "Administrator Tools", Connecting the Machine/ System Settings.

---

### Enabling embedded pattern printing in the Printer function

---

1. Log in as the machine administrator from the control panel.

2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Unauthorized Copy Prevention Printing: Printer].
6. Press [Change] for "Unauthorized Copy Prevention Setting".
7. Press [On], and then press [OK].
8. Press [Change] for "Compulsory Unauthorized Copy Prevention".
9. Specify whether or not to make printing of the embedded pattern mandatory.

- [Driver / Command]

Printing of the embedded pattern is not mandatory.

Using the printer driver, users can choose whether or not to print with the embedded pattern and can specify its settings.

- [Driver/Command (Most Settings)]

Printing of the embedded pattern is mandatory.

Using the printer driver, users can specify the embedded pattern settings except for type and thickness.

- [Machine Setting(s)]

Printing of the embedded pattern is mandatory.

Users cannot specify the embedded pattern settings using the printer driver.

10. Press [OK] twice.

11. Log out.

#### Note

- For details of the settings to specify the pattern using the machine, see "Administrator Tools", Connecting the Machine/ System Settings.

## Enabling Detect Data Security for Copying

To use this function, the Copy Data Security Unit must be installed.

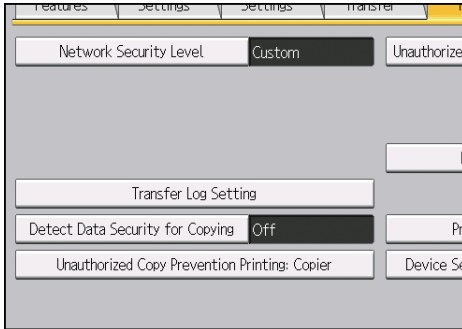
If a document printed is copied, scanned, or stored in the Document Server, the copy is grayed out.

#### Important

- If a document that is not copy-guarded is copied, scanned, or stored, the copy or stored file is not grayed out.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].

- 3. Press [Administrator Tools].
- 4. Press [▼Next] three times.
- 5. Press [Detect Data Security for Copying].



- 6. Press [On].  
If you do not want to specify "Detect Data Security for Copying", select [Off].
- 7. Press [OK].
- 8. Log out.

# Printing User Information on Paper

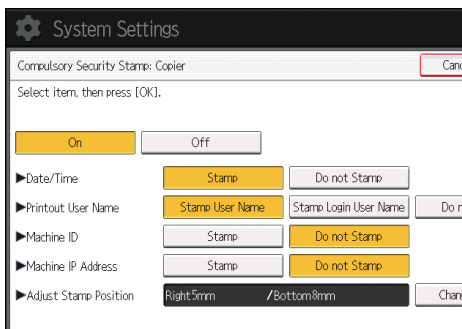
The start time of the print job, information on the person who prints it (name or login user name), machine number and machine's IP address can be compulsorily embedded on printed sheets. This function is called Compulsory Security Stamp.

Always printing out information on the person printing the job is effective for discouraging information leakage. It can also be used for identifying sources of information leakage.

Compulsory Security Stamp can be used with copying, Document Server, and printing.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] four times.
5. Select the function(s) for Compulsory Security Stamp.
  - To set the copy function to be stamped, press [Compulsory Security Stamp:Copier].
  - To set the Document Server to be stamped, press [Compulsory Security Stamp:Doc. Srvr.].
  - To set the printer function to be stamped, press [Compulsory Security Stamp:Printer].
6. Press [On], and then select the data to be stamped.

To turn Compulsory Security Stamp off, press [Off].

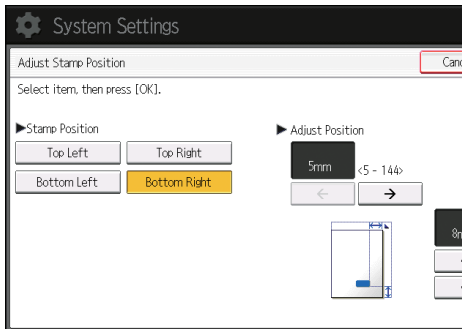


- Date/Time  
The job start time will be printed.
- Printout User Name  
These will be printed if user authentication is enabled.
  - Stamp User Name  
The "Name" in the "Names" in the Address Book will be printed.
  - Stamp Login User Name  
The user code or login user name in "Auth. Info" in the address book will be printed.

- Machine ID  
The numbers displayed as the "Serial No. of Machine" in [Inquiry] will be printed.
- Machine IP Address  
The machine's IP address will be printed. If there are both IPv4 and IPv6 addresses, the IPv4 address will be printed. If no IP address has been configured, this will be left blank.

**7. Press [Change] for "Adjust Stamp Position".**

**8. Set the stamp position.**



**9. Press [OK] twice.**

**10. Log out.**

# Enforced Storage of Documents to be Printed on a Printer

By making it compulsory to keep jobs in the machine before printing them, you can prevent information leakage due to users failing to collect prints or leaving prints unattended. The following print jobs are subject to compulsory storage.

- Normal Print
- Sample Print
- Store and Print

**1. Log in as the machine administrator from the control panel.**

**2. Press [Printer Features].**

**3. Press [System].**

**4. Press [▼Next] twice.**

**5. Press [Restrict Direct Print Jobs].**

**6. Press [Automatclly. Store Jobs].**

**7. Press [OK].**

**8. Log out.**

- If you select [Cncl All Direct Prt Jobs], the print jobs will be cancelled without being stored.
- For information on how to print stored documents, see "Printing Stored Documents", Print.



# 7. Managing the Machine

This chapter describes the functions for enhancing the security of the machine and operating the machine effectively.

## Managing Log Files

Collecting the logs stored in this machine allows you to track detailed data on access to the machine, user identities, usage of the machine's various functions, and error histories.

The logs can be deleted periodically to make hard disk space available, and they can be encrypted to prevent leaking of information.

The logs can be viewed using Web Image Monitor or using the log collection server. Collected logs can be converted to CSV files and downloaded all at once. They cannot be read directly from the hard disk.

### Log types

Three types of logs are stored on this machine: the job log, access log, and eco-friendly log.

- Job Log  
Stores details of user file-related operations such as copying, printing, and saving in Document Server, and control panel operations such as sending scan files and printing reports (the configuration list, for example).
- Access Log  
Stores details of login/logout activities, stored file operations such as creating, editing, and deleting, customer engineer operations such as hard disk formatting, system operations such as viewing log transfer results, and security operations such as specifying settings for encryption, unprivileged access detection, user lockout, and firmware authentication.
- Eco-friendly Log  
Main power ON, OFF, transitions in power status, job run times or time interval between jobs, paper consumption per hour, power consumption.

### Note

- For details about the log collection server, see the user's manual of the log collection server.
- When using the log collection server you must configure the log transfer settings on the log collection server.



# Using Web Image Monitor to Manage Log Files

You can specify the types of log to store in the machine and the log collection level. You can also encrypt, bulk delete, or download log files.

## Logs That Can Be Managed Using Web Image Monitor

The following tables explain the items in the job log and access log that the machine creates when you enable log collection using Web Image Monitor. If you require log collection, use Web Image Monitor to configure it. This setting can be specified in [Logs] under [Configuration] in Web Image Monitor.

### Job log information items

Job Log Item	Log Type Attribute	Content
Copier: Copying	Copier: Copying	Details of normal and Sample Copy jobs.
Copier: Copying and Storing	Copier: Copying and Storing	Details of files stored in Document Server that were also copied at the time of storage.
Document Server: Storing	Document Server: Storing	Details of files stored using the Document Server screen.
Document Server: Stored File Downloading	Document Server: Stored File Downloading	Details of files stored in Document Server and downloaded using Web Image Monitor or DeskTopBinder.
Stored File Printing	Stored File Printing	Details of files printed using the Document Server screen.
Scanner: Sending	Scanner: Sending	Details of sent scan files.
Scanner: URL Link Sending and Storing	Scanner: URL Link Sending and Storing	Details of scan files stored in Document Server and whose URLs were sent by e-mail at the time of storage.
Scanner: Sending and Storing	Scanner: Sending and Storing	Details of scan files stored in Document Server that were also sent at the time of storage.
Scanner: Storing	Scanner: Storing	Details of scan files stored in Document Server.

Job Log Item	Log Type Attribute	Content
Scanner: Stored File Downloading	Scanner: Stored File Downloading	Details of scan files stored in Document Server and downloaded using Web Image Monitor, DeskTopBinder or Desk Top Editor For Production.
Scanner: Stored File Sending	Scanner: Stored File Sending	Details of stored scan files that were also sent.
Scanner: Stored File URL Link Sending	Scanner: Stored File URL Link Sending	Details of stored scan files whose URLs were sent by e-mail.
Printer: Printing	Printer: Printing	Details of normal print jobs.
Printer: Locked Print (Incomplete)	Printer: Locked Print (Incomplete)	Log showing Locked Print documents temporarily stored on the machine.
Printer: Locked Print	Printer: Locked Print	Log showing Locked Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Sample Print (Incomplete)	Printer: Sample Print (Incomplete)	Log showing Sample Print documents temporarily stored on the machine.
Printer: Sample Print	Printer: Sample Print	Log showing Sample Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Hold Print (Incomplete)	Printer: Hold Print (Incomplete)	Log showing Hold Print documents temporarily stored on the machine.
Printer: Hold Print	Printer: Hold Print	Log showing Hold Print documents temporarily stored on the machine and then printed from the control panel or through Web Image Monitor.
Printer: Stored Print	Printer: Stored Print	Details of Stored Print files stored on the machine.
Printer: Store and Normal Print	Printer: Store and Normal Print	Details of Stored Print files that were printed at the time of storage (when "Job Type:" was set to "Store and Print" in printer properties).

Job Log Item	Log Type Attribute	Content
Printer: Stored File Printing	Printer: Stored File Printing	Details of Stored Print files printed from the control panel or Web Image Monitor.
Printer: Document Server Sending	Printer: Document Server Sending	Details of files stored in Document Server when "Job Type:" was set to "Document Server" in printer properties.
Report Printing	Report Printing	Details of reports printed from the control panel.
Scanner: TWAIN Driver Scanning	Scanner: TWAIN Driver Scanning	Details of stored scan files that were sent using Network TWAIN Scanner.
Printer: Hold Print File Printing	Printer: Hold Print File Printing	When a document is held for printing and stored temporarily on the machine, this logs the time a user specifies it be printed via the control panel or Web Image Monitor.

### Access log information items

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Access Log Item	Log Type Attribute	Content
Login	Login	Times of login and identity of logged in users.
Logout	Logout	Times of logout and identity of logged out users.
File Storing	File Storing	Details of files stored in Document Server.
Stored File Deletion	Stored File Deletion	Details of files deleted from Document Server.
All Stored Files Deletion	All Stored Files Deletion	Details of deletions of all Document Server files.
HDD Format	HDD Format	Details of hard disk formatting.
Unauthorized Copying	Unauthorized Copying	Details of documents scanned with "Data Security for Copying".
All Logs Deletion	All Logs Deletion	Details of deletions of all logs.
Log Setting Change	Log Setting Change	Details of changes made to log settings.
Transfer Log Result	Transfer Log Result	Log of the result of log transfer to Remote Communication Gate S.

Access Log Item	Log Type Attribute	Content
Log Collection Item Change	Log Collection Item Change	Details of changes to job log collection levels, access log collection levels, and types of log collected.
Collect Encrypted Communication Logs	Collect Encrypted Communication Logs	Log of encrypted transmissions between the utility, Web Image Monitor or outside devices.
Access Violation	Access Violation	Details of failed access attempts.
Lockout	Lockout	Details of lockout activation.
Firmware: Update	Firmware: Update	Details of firmware updates.
Firmware: Structure Change	Firmware: Structure Change	Details of structure changes that occurred when an SD card was inserted or removed, or when an unsupported SD card was inserted.
Firmware: Structure	Firmware: Structure	Details of checks for changes to firmware module structure made at times such as when the machine was switched on.
Machine Data Encryption Key Change	Machine Data Encryption Key Change	Details of changes made to encryption keys using "Machine Data Encryption Key Change" setting.
Firmware: Invalid	Firmware: Invalid	Details of checks for firmware validity made at times such as when the machine was switched on.
Date/Time Change	Date/Time Change	Details of changes made to date and time settings.
File Access Privilege Change	File Access Privilege Change	Log for changing the access privilege to the stored files.
Password Change	Password Change	Details of changes made to the login password.
Administrator Change	Administrator Change	Details of changes of administrator.
Address Book Change	Address Book Change	Details of changes made to address book entries.
Capture Error	Capture Error	Details of file capture errors.

Access Log Item	Log Type Attribute	Content
Machine Configuration	Machine Configuration	Log of changes to the machine's settings.
Back Up Address Book	Back Up Address Book	Log of when data in the Address Book is backed up.
Restore Address Book	Restore Address Book	Log of when data in the Address Book is restored.
Enhanced Print Volume Use Limitation: Tracking Permission Result	Enhanced Print Volume Use Limitation: Tracking Permission Result	Log of when a tracking error occurs.
Counter Clear Result: Selected User(s)	Counter Clear Result: Selected User(s)	Log of when the counter for an individual user is cleared.
Counter Clear Result: All Users	Counter Clear Result: All Users	Log of when the counters for all users are cleared.
Import Device Setting Information	Import Device Setting Information	Log of when a device setting information file is imported.
Export Device Setting Information	Export Device Setting Information	Log of when a device setting information file is exported.
Creating/Deleting Folders	Creating/Deleting Folders	Log reporting when folders are created and deleted.

There is no "Login" log made for SNMPv3.

If the hard disk is formatted, all the log entries up to the format are deleted and a log entry indicating the completion of the format is made.

"Access Violation" indicates the system has experienced frequent remote DoS attacks involving logon attempts through user authentication.

The first log made following power on is the "Firmware: Structure" log.

**Eco-friendly log information items**

Eco-friendly Log Item	Log Type Attribute	Content
Main Power On	Main Power On	Log of when the main power switch is turned on.

Eco-friendly Log Item	Log Type Attribute	Content
Main Power Off	Main Power Off	Log of when the main power switch is turned off.
Power Status Transition Result	Power Status Transition Result	Log of the results of transitions in power status.
Job Related Information	Job Related Information	Log of job-related information.
Paper Usage	Paper Usage	Log of the amount of paper used.
Power Consumption	Power Consumption	Log of power consumption.

## Attributes of Logs You Can Download

If you use Web Image Monitor to download logs, a CSV file containing the information items shown in the following table is produced.

Note that a blank field indicates an item is not featured in a log.

### File output format

- Character Code Set: UTF-8
- Output Format: CSV (Comma-Separated Values)
- File Names of Job Logs and Access Logs: "machine name +\_log.csv"
- File names for Eco-friendly Logs: "machine name+\_ecolog.csv"

### Order of log entries

Log entries are printed in ascending order according to Log ID.

### File structure

The data title is printed in the first line (header line) of the file.

### Differences in log data formatting

- Job log

Multiple lines appear in the order of common items (job log and access log), Source (job input data), and Target (job output data). The same log ID is assigned to all lines corresponding to a single job log entry.

	Start Date/Time	...	Result	...	Access Result	Source	...	Print File Name	Target	...	Stored File Name
1	20XX-12-03T15:43:03.0	...	Completed	...			...			...	
2		...	Completed	...		Report	...			...	
3		...	Completed	...			...		Print	...	

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**1. Common items**

Each item in the common items is displayed on a separate line.

**2. Source**

"Result" and "Status" in the common items and the job log input entry appear.

If there are multiple sources, multiple lines appear.

**3. Target**

"Result" and "Status" in the common items and the job log output entry appear.

If there are multiple targets, multiple lines appear.

- Access log

The common items and access log entries appear on separate lines.

- Eco-friendly log

Eco-friendly log entries appear on separate lines.

**Common items (Job log and Access log)**

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**Start Date/Time**

Indicates the start date and time of an operation or event.

**End Date/Time**

Indicates the end date and time of an operation or event.

**Log Type**

Details of the log type.

For details about the information items contained in each type of log, see page 198 "Logs That Can Be Managed Using Web Image Monitor".

**Result**

Indicates the result of an operation or event.

The following log items are recorded only when the logged operations are executed successfully:

"Document Server: Stored File Downloading", "Stored File Printing", "Scanner: Storing", "Scanner: Stored File Sending", "Printer: Stored File Printing" (Job logs) and "File Storing" and "Stored File Deletion" (Access logs).

Value	Content
Succeeded	The operation or event completed successfully.
Failed	The operation or event was unsuccessful.
<Blank>	The operation or event is still in progress.

## Operation Method

Indicates the operation procedure.

Value	Content
Control Panel	Control panel
Driver	Driver
Utility	Utility
Web	Web
Email	E-mail

## Status

Indicates the status of an operation or event.

Value	Content
Completed	The operation or event completed successfully on a job log entry.
Failed	The operation or event was unsuccessful on a job log entry.
Succeeded	The operation or event completed successfully on an access log entry.
Password Mismatch	An access error has occurred because of a password mismatch.
User Not Programmed	An access error has occurred because the user is not registered.
Other Failures	An access error has occurred because of an unspecified failure.
User Locked Out	An access error has occurred because the user is locked out.
File Limit Exceeded	An access error has occurred because the file limit has been exceeded.
Transfer Cancelled	An access error has occurred because of a transfer cancellation.
Power Failure	An access error has occurred because of a power failure.



Value	Content
Lost File	An access error has occurred because the file has been lost.
Functional Problem	An access error has occurred because of a functional problem.
Communication Failure	An access error has occurred because of a communication failure.
Communication Result Unknown	An access error has occurred because of an unknown communication result.
Failure in some or all parts	Clearing user-specific counter or all-user counter failed.
Importing/Exporting by Other User	Importing or exporting is executing by another user.
Connection Failed with Remote Machine	A connection to an output destination failed.
Write Error to Remote Machine	An error occurred in writing to an output destination.
Specified File: Incompatible	The specified file is incompatible.
Specified File: Format Error	A format error occurred with the specified file.
Specified File: Not Exist	The specified file cannot be found.
Specified File: No Privileges	There are no privileges for operating the specified file.
Specified File: Access Error	An error occurs in accessing the specified file.
Memory Storage Device Full	The external media is full.
Memory Storage Device Error	An abnormality is found in the external media.
Encryption Failed	Encryption failed.
Decoding Failed	Decoding failed.
Common Key Not Exist	There are no common keys.
Connection Error	A communication error occurred.
Processing	The job is being processed.
Error	An error has occurred.
Suspended	The job has been suspended.

**Cancelled: Details**

Indicates the status in which the operation or event was unsuccessful.

Value	Content
Cancelled by User	A user canceled an operation.
Input Failure	It terminated abnormally during input.
Output Failure	It terminated abnormally during output.
Other Error	An error is detected prior to execution of a job or others.
Power Failure	Power is lost.
External Charge Unit Disconnected	The accounting device is unplugged during operation.
Insufficient No. of Original for Overlay	Pages are missing from a manuscript during execution of the overlaid copying.
Exceed Max. Stored Page (File Storage)	The storage capacity of pages on Document Server is exceeded.
Exceed Max. Stored File (File Storage)	The storage capacity of documents on Document Server is exceeded.
Hard Disk Full (File Storage Memory)	The hard disk capacity on Document Server is exceeded.
Exceeded Max. Email Size	The limit to e-mail size is exceeded.
Exceeded Max. File Size	The size limit for one document is exceeded.
Scanner Error	A read error occurred with the automatic document feed.
Timeout	A time-out occurred.
Exceed Max. Stored Page (Image Area)	The number of pages that can be captured is exceeded.
Hard Disk Full (Image Area)	The hard disk capacity for capture is exceeded.
Specified Folder to Store does not Exist	The specified folder to store cannot be found.
Password for Folder Specified to Store is Incorrect	The password for specified folder to store is incorrect.

Value	Content
Folder is Locked	Folder is locked.
Memory Full	The memory range for processing data becomes full.
Print Data Error	An attempt to use a PDL or a port not configured on the machine has been made.
Data Transfer Interrupted	The following case is recorded; <ul style="list-style-type: none"> <li>• A different type of driver is used.</li> <li>• A network malfunction occurs.</li> </ul>
Over Job Limit	The number of jobs that can be received is exceeded.
Specifying Destination Error	An illegal address or an address with 41 or more digits is specified.
Authentication Failed (Access Restricted)	Device authentication failed.
Exceeded Print Volume Use Limitation	The logged in user exceeds their paper usage limit.
No Privilege	The user does not have permission to access a document or function.
Unavailable Size to Store	The size of paper specified (including irregular sizes) is of a size that cannot be stored.
Transmission Failed (Data Deleted)	A document is deleted or an undelivered document exceeds its wait time and is deleted.
Not Entered Document Password	The password for a document is not input.
Connection Failed with Destination	The specified server or folder is not found.
Authentication Failed with Destination	Authentication with the destination failed.
Transmission Failed with Memory Full	The destination memory is full.

Value	Content
Invalid Device Certificate	The following case is recorded; <ul style="list-style-type: none"> <li>• There is no device certificate.</li> <li>• Its valid period is elapsed.</li> <li>• If the e-mail address of the administrator and that of the certificate do not match.</li> </ul>
Invalid Expiration Date: Destination's Certificate	The valid period of the destination certificate is expired.
Invalid Device/Destination's Certificate	Both the destination certificate and the device certificate are invalid.
Book Function Error	A bookbinding function error has occurred.
Fold Function Error	A folding function error has occurred.
Print Cancelled (Error)	The print job has been cancelled because of a system error.

### User Entry ID

Indicates the user's entry ID.

This is a hexadecimal ID that identifies users who performed job or access log-related operations.

Value	Content
0x00000000	Indicates other operations
0x00000001 - 0xfffffeff	For general users and user code
0xfffff80	System operations
0xfffff81	System operations, Operations that were performed by non-authenticated users
0xfffff86	Supervisor
0xfffff87	Administrator
0xfffff88	Administrator 1
0xfffff89	Administrator 2
0xfffff8a	Administrator 3
0xfffff8b	Administrator 4

**User Code/User Name**

Identifies the user code or user name of the user who performed the operation.

If an administrator performed the operation, this ID will contain the login name of that administrator.

**Log ID**

Identifies the ID that is assigned to the log.

This is a hexadecimal ID that identifies the log.

**Access log information items**

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**Access Log Type**

Indicates the type of access.

Value	Content
Authentication	User authentication access
Stored File	Stored file access
System	System access
Network Attack Detection/ Encrypted Communication	Network attack or encrypted communication access
Firmware	Firmware verification access
Address Book	Address book access
Device Settings	Changes made to a setting in the User Tools menu.

**Authentication Server Name**

Indicates the name of the server where authentication was last attempted.

**No. of Authentication Server Switches**

Indicates the number of times server switching occurred when the authentication server was unavailable.

You can check whether or not the authentication server is available.

The number of server switches is indicated as 0 to 4.

"0" indicates the authentication server is available.

**Logout Mode**

Mode of logout.

Value	Content
by User's Operation	Manual logout by the user
by Auto Logout Timer	Automatic logout following a timeout

### Login Method

Indicates the route by which the authentication request is received.

Value	Content
Control Panel	The login was performed through the control panel.
via Network	The login was performed remotely through a network computer.
Others	The login was performed through another method.

### Login User Type

Indicates the type of login user.

Value	Content
User	General user
Guest	Guest user
User Administrator	User administrator
Machine Administrator	Machine administrator
Network Administrator	Network administrator
File Administrator	File administrator
Supervisor	Supervisor
Customer Engineer (Service Mode)	Customer engineer
Others	Login requests from users other than those specified above

### Target User Entry ID

Indicates the entry ID of the target user.

This is a hexadecimal ID that indicates users to whom the following settings are applied:

- Lockout
- Password Change

**Target User Code/User Name**

User code or user name of the user whose data was accessed.

If the administrator's data was accessed, the administrator's user name is logged.

**Address Book Registration No.**

Indicates the registration number of the user performing the operation.

**Address Book Operation Mode**

Indicates the method applied for changing the data registered in the Address Book.

**Address Book Change Item**

Indicates which item in the Address Book is changed.

**Address Book Change Request IP Address**

Indicates the IP address type (IPv4/IPv6) of the user using the Address Book.

**Lockout/Release**

Indicates the lockout status.

Value	Content
Lockout	Activation of password lockout
Release	Deactivation of password lockout

**Lockout/Release Method**

Indicates the method applied for releasing the lockout.

Value	Content
Manual	The machine is unlocked manually.
Auto	The machine is unlocked by the lockout release timer.

**Lockout Release Target Administrator**

Indicates which administrator(s) is (are) released when releasing the lockout.

**Counter to Clear**

Indicates which counter is reset for each user.

**Export Target**

Indicates the settings to be included in the device setting file to be exported.

Value	Content
System Settings	System Settings
Copier Features	Copier Features
Printer Features	Printer Features
Scanner Features	Scanner Features
Program (Copier)	Program (Copier)
Program (Scanner)	Program (Scanner)
Program (Document Server)	Program (Document Server)
Browser Features	Browser Features
Web Image Monitor Setting	Web Image Monitor Setting
Web Service Settings	Web Service Settings
System/Copier SP	System/Copier SP
Scanner SP	Scanner SP
Printer SP	Printer SP

**Target File Name**

Indicates the name of the device information file to be imported/exported.

**Stored File ID**

Identifies a created or deleted file.

This is a hexadecimal ID that indicates created or deleted stored files.

**Stored File Name**

Indicates the name of a created or deleted file.

**Folder Number**

Indicates the folder number.

**Folder Name**

Indicates the folder name.

**Creating/Deleting Folders**

Indicates the operations performed on folders.



Value	Content
Delete Folder	Folder deleted
New Folder	Folder created

**File Location**

Region of all file deletion. "Document Server" indicates a deletion of all files from the machine's hard disk.

**Collect Job Logs**

Indicates the status of the job log collection setting.

Value	Content
Active	Job log collection setting is enabled.
Inactive	Job log collection setting is disabled.
Not Changed	No changes have been made to the job log collection setting.



**Collect Access Logs**

Indicates the status of the access log collection setting.

Value	Content
Active	Access log collection setting is enabled.
Inactive	Access log collection setting is disabled.
Not Changed	No changes have been made to the access log collection setting.

**Collect Eco-friendly Logs**

Indicates the status of the eco-friendly log collection setting.

Value	Content
Active	Eco-friendly log collection setting is enabled.
Inactive	Eco-friendly log collection setting is disabled.
Not Changed	No changes have been made to the eco-friendly log collection setting.

## Transfer Logs

Indicates the status of the log transfer setting.

Value	Content
Active	Log transfer setting is enabled.
Inactive	Log transfer setting is disabled.
Not Changed	No changes have been made to the log transfer setting.

## Encrypt Logs

Indicates the status of the log encryption setting.

Value	Content
Active	Log encryption setting is enabled.
Inactive	Log encryption setting is disabled.
Not Changed	No changes have been made to the log transfer setting.

## Log Type

If a log's collection level setting has been changed, this function indicates details of the change.

Value	Content
Job Log	Job log
Access Log	Access log
Eco-friendly Log	Eco-friendly log

## Log Collect Level

Indicates the level of log collection.

Value	Content
Level 1	Level 1
Level 2	Level 2
User Settings	User settings

**Encryption/Cleartext**

Indicates whether communication encryption is enabled or disabled.

Value	Content
Encryption Communication	Encryption is enabled.
Cleartext Communication	Encryption is disabled.

**Machine Port No.**

Indicates the machine's port number.

**Protocol**

Destination protocol.

"Unknown" indicates the destination's protocol could not be identified.

**IP Address**

Destination IP address.

**Port No.**

Destination port number.

This is in decimal.

**MAC Address**

Destination MAC (physical) address.

**Primary Communication Protocol**

Indicates the primary communication protocol.

**Secondary Communication Protocol**

Indicates the secondary communication protocol.

**Encryption Protocol**

Indicates the protocol used to encrypt the communication.

**Communication Direction**

Indicates the direction of communication.

Value	Content
Communication Start Request Receiver (In)	The machine received a request to start communication.
Communication Start Request Sender (Out)	The machine sent a request to start communication.

**Communication Start Log ID**

Indicates the log ID for the communication start time.

This is a hexadecimal ID that indicates the time at which the communication started.

**Communication Start/End**

Indicates the times at which the communication started and ended.

**Network Attack Status**

Indicates the machine's status when network attacks occur.

Value	Content
Violation Detected	An attack on the network was detected.
Recovered from Violation	The network recovered from an attack.
Max. Host Capacity Reached	The machine became inoperable due to the volume of incoming data reaching the maximum host capacity.
Recovered from Max. Host Capacity	The machine became operable again following reduction of the volume of incoming data.

**Network Attack Type**

Identifies network attack types.

Value	Content
Password Entry Violation	Password entry violation
Device Access Violation	Device access violation

**Network Attack Type Details**

Indicates details of network attack types.

Value	Content
Authentication Error	Authentication error
Encryption Error	Encryption error

**Network Attack Route**

Identifies the route of the network attack.

Value	Content
Attack from Control Panel	Attack by an unauthorized operation using the machine's control panel
Attack from Other than Control Panel	Attack by means other than an unauthorized operation using the machine's control panel

**Login User Name used for Network Attack**

Identifies the login user name that the network attack was performed by.

**Add/Update/Delete Firmware**

Indicates the method used to add, update, or delete the machine's firmware.

Value	Content
Updated with SD Card	An SD card was used to perform the firmware update.
Added with SD Card	An SD card was used to install the firmware.
Deleted with SD Card	An SD card was used to delete the firmware.
Moved to Another SD Card	The firmware was moved to another SD card.
Updated via Remote	The firmware was updated from a remote computer.
Updated for Other Reasons	The firmware update was performed using a method other than any of the above.

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**Module Name**

Firmware module name.

**Parts Number**

Firmware module part number.

**Version**

Firmware version.

**Machine Data Encryption Key Operation**

Indicates the type of encryption key operation performed.

Value	Content
Back Up Machine Data Encryption Key	An encryption key backup was performed.

Value	Content
Restore Machine Data Encryption Key	An encryption key was restored.
Clear NVRAM	The NVRAM was cleared.
Start Updating Machine Data Encryption Key	An encryption key update was started.
Finish Updating Machine Data Encryption Key	An encryption key update was finished.

### Machine Data Encryption Key Type

Identifies the type of the encryption key.

Value	Content
Encryption Key for Hard Disk	Encryption key for hard disk
Encryption Key for NVRAM	Encryption key for NVRAM
Device Certificate	Device certificate

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### Validity Error File Name

Indicates the name of the file in which a validity error was detected.

### Configuration Category

Indicates the categories with changed settings.

Value	Content
User Lockout Policy	User lockout policy
Auto Logout Timer	Auto logout timer
Device Certificate	Device certificate
IPsec	IPsec
Compulsory Security Stamp	Compulsory security stamp
S/MIME	S/MIME
WIM Auto Logout Timer	Web Image Monitor auto logout timer

**Configuration Name / Configuration Value**

Indicates the attributes of the categories.

Indicates the values of the attributes.

Attribute	Description
Lockout	Whether the lockout is active (Active) or inactive (Inactive) is recorded.
Number of Attempts before Lockout	The number of times a user may enter a login password is recorded.
Lockout Release Timer	Whether the lockout release timer is active (Active) or inactive (Inactive) is recorded.
Lock Out User for	The time until lockout release is recorded.
Auto Logout Timer	Whether Auto Logout Timer is set to (On) or (Off) is recorded.
Auto Logout Timer (seconds)	The time until the auto logout operates is recorded.
Operation Mode	The type of operation is recorded.
Certificate No.	The number of the certificate to be used is recorded.
Certificate No.: IEEE 802.1X (WPA/WPA2)	The number of the certificate for applications is recorded. When a certificate is not used, "Do not Use" is recorded.
Certificate No.: S/MIME	The number of the certificate for applications is recorded. When a certificate is not used, "Do not Use" is recorded.
Certificate No.: IPsec	The number of the certificate for applications is recorded. When a certificate is not used, "Do not Use" is recorded.
Certificate No.: Digital Signature PDF	The number of the certificate for applications is recorded. When a certificate is not used, "Do not Use" is recorded.
Certificate No.: Digital Signature PDF/A	The number of the certificate for applications is recorded. When a certificate is not used, "Do not Use" is recorded.
IPsec	Whether IPsec is active (Active) or inactive (Inactive) is recorded.
Encryption Key Auto Exchange: Setting 1-4: Remote Address	The remote address is recorded.

Attribute	Description
Encryption Key Auto Exchange: Setting 1-4, Default: Security Level	The security level is recorded. When [Authentication Only] is selected, "Authentication Only" is recorded. When [Authentication and Low Level Encryption] is selected, "Authentication and Low Level Encryption" is recorded. When [Authentication and High Level Encryption] is selected, "Authentication and High Level Encryption" is recorded. When [User Settings] is selected, "User Settings" is recorded.
Encryption Key Auto Exchange: Setting 1-4, Default: Authentication Method	The authentication method used for the auto key exchange format is recorded. Either "PSK" or "Certificate" is recorded.
Compulsory Security Stamp	Whether [Compulsory Security Stamp] is set to (On) or (Off) is recorded.
Operation Mode	The mode of operation is recorded.
Scanner: Email Sending	The signature is recorded when the scanner is used for sending e-mail.
Document Server (Utility): Stored File Transferring	The signature is recorded when Document Server (utility) is used for transferring documents stored on it.
WIM Auto Logout Timer (minutes)	Web Image Monitor's auto logout timer log is recorded in increments of one minute.

### Destination Server Name

Indicates the name of the destination server to which the tracking information failed to be sent if the log type is "Enhanced Print Volume Use Limitation: Tracking Permission Result".

Indicates the name of the server from which the data export or import request is issued if the log type is import or export of preference information.

### HDD Format Partition

Indicates the initial status of each hard disk partition.

### Access Result

Indicates the results of logged operations.

Value	Content
Completed	An operation completed successfully.



Value	Content
Failed	An operation completed unsuccessfully.

### Job log (source)

---

#### Source

Indicates the source of the job file.

Value	Content
Scan File	The job file was scanned.
Stored File	The job file was stored on the hard disk.
Printer	The job file was sent from the printer driver.
Report	The job file was a printed report.

#### Start Date/Time

Dates and times "Scan File", "Received File" and "Printer" operations started.

#### End Date/Time

Dates and times "Scan File", "Received File" and "Printer" operations ended.

#### Stored File ID

Indicates the ID of data that is output as a stored file.

This is a decimal ID that identifies the stored file.

#### Stored File Name

Names of "Stored File" files.

#### Folder Number

Indicates the number of the folder in which the file has been stored.

#### Folder Name

Indicates the name of the folder in which the file has been stored.

#### Print File Name

Name of "Printer" files.

### Job log (target)

---

#### Target

Type of the job target.

Value	Content
Print	Print
Store	Store
Send	Send

**Start Date/Time**

Dates and times "Print", "Store", and "Send" operations started.

**End Date/Time**

Dates and times "Print", "Store", and "Send" operations ended.

**Destination Name**

Names of "Send" destinations.

**Destination Address**

IP address, path, or e-mail address of "Send" destinations.

**Stored File ID**

Indicates the ID of data that is output as a store file.

This is a decimal ID that identifies the stored file.

**Stored File Name**

Indicates the name of the stored file when Target Type is "Store".

**Folder Number**

Indicates the number of the folder in which you have stored the file.

**Folder Name**

Indicates the name of the folder in which you have stored the file.

**Eco-friendly log information items****Start Date/Time**

The event start date and time is recorded.

**End Date/Time**

The event end date and time is recorded.

**Log Type**

The type of eco-friendly log is recorded.

Value	Content
Main Power On	Main power on
Main Power Off	Main power off
Power Status Transition Result	Power status transition result
Job Related Information	Job related information
Paper Usage	Paper usage
Power Consumption	Power consumption

**Log Result**

Whether the event has ended or not is displayed.

Value	Content
Completed	Completed
Failed	Failed

7

**Result**

The result of the event is recorded.

Value	Content
Succeeded	Succeeded
Failed	Failed

**Log ID**

Identifies the ID that is assigned to the log. This is a hexadecimal ID that identifies the log.

**Power Mode**

The power status of the machine (after state transition) is logged.

Value	Content
Standby	Standby status
Low Power	Low power status
Silent	Silent status

Value	Content
HDD On	HDD on status
Engine Off	Engine off status
Controller Off	Controller off status
STR	STR status
Silent Print	Silent print status
Low Power Print	Low power print status
Fusing Unit Off	Fusing unit off status

**Log Type**

The type of job log is recorded.

**Job Interval (seconds)**

Indicates the elapsed time from the start of the previous job to the start of the present job.

**Job Duration (seconds)**

Indicates the elapsed time from the start of a job to its end.

**Paper Usage (Large Size)**

Indicates the number of one-sided prints per hour on large paper.

Large size means A3 (11 × 17 inches) or larger.

**Paper Usage (Small Size)**

Indicates the number of one-sided prints per hour on small paper.

Small size means smaller than A3 (11 × 17 inches).

**Paper Usage (2 Sided: Large Size)**

Indicates the number of two-sided prints per hour on large paper.

Large size means A3 (11 × 17 inches) or larger.

**Paper Usage (2 Sided: Small Size)**

Indicates the number of two-sided prints per hour on small paper.

Small size means smaller than A3 (11 × 17 inches).

**Detected Power**

The power consumption status of the machine is measured and registered in the log while the machine is being used.

Value	Content
Controller Standby	Controller standby mode
STR	Suspend to RAM (STR) mode
Main Power Off	The main power is turned off.
Scanning/Printing	Simultaneous scanning and printing
Printing	Machine's printing status
Scanning	Machine's printing status
Engine Standby	Engine's standby status
Engine Low	Engine's low-power status
Engine Night	Engine's silent status
Engine Total	Machine's total electricity consumption
Fusing Unit Off	Fusing unit off status

**Power Consumption(Wh)**

Indicates the power consumption in each power state.

**Specifying Log Collect Settings**

Enable the collection settings for each kind of log and configure the collection level.

**Job Log Collect Level**

If "Job Log Collect Level" is set to [Level 1], all job logs are collected.

**Access Log Collect Level**

If "Access Log Collect Level" is set to [Level 1], the following information items are recorded in the access log:

- HDD Format
- All Logs Deletion
- Log Setting Change
- Log Collection Item Change

If "Access Log Collect Level" is set to [Level 2], all access logs are collected.

**Eco-friendly Log Collect Level**

If "Eco-friendly Log Collect Level" is set to [Level 1], eco-friendly logs are not collected.

If "Eco-friendly Log Collect Level" is set to [Level 2], all eco-friendly logs are collected.

1. **Log in as the machine administrator from Web Image Monitor.**
2. **Point to [Device Management], and then click [Configuration].**
3. **Click [Logs] under "Device Settings".**
4. **Select [Active] for each function: "Collect Job Logs", "Collect Access Logs" and "Collect Eco-friendly Logs".**
5. **Specify the collection level for each function, "Job Log Collect Level", "Access Log Collect Level", and "Eco-friendly Log Collect Level".**

When a level is changed, the selection status of log details changes according to the level.

To change individual items of the log details, configure the setting for each item. Even if the collection level is set to [Level 1] or [Level 2], once individual items of the log details are changed, the level changes to [User Settings].

6. **Click [OK].**
7. **"Updating..." appears. Wait for about one or two minutes, and then click [OK].**

If the previous screen does not reappear after you click [OK], wait for a while, and then click the web browser's refresh button.

8. **Log out.**

#### Note

- The greater "Access Log Collect Level" setting value, the more logs are collected.

## Specifying Log Encryption

Use the following procedure to enable/disable log encryption.

To encrypt the logs, it is necessary to set the collection setting to active for job log, access log, or eco-friendly log.

If the data stored in the machine has been encrypted, the log files will still be encrypted, regardless of this setting.

1. **Log in as the machine administrator from Web Image Monitor.**
2. **Point to [Device Management], and then click [Configuration].**
3. **Click [Logs] under "Device Settings".**
4. **Select [Active] in the [Encrypt Logs] area under "Common Settings for All Logs".**

To disable log encryption, select [Inactive].

5. **Click [OK].**

A confirmation message appears.

6. **Click [OK].**

**7. Log out.**

---

## Downloading Logs

---

Use the following procedure to convert the logs stored in the machine into a CSV file for simultaneous batch download.

To collect logs, set the collection setting for the job log, access log and eco-friendly log to [Active].

This setting can be specified in [Logs] under [Configuration] in Web Image Monitor.

- 1. Log in as the machine administrator from Web Image Monitor.**
- 2. Point to [Device Management], and then click [Configuration].**
- 3. Click [Download Logs] under "Device Settings".**
- 4. Click [Logs to Download] and select the type of log to download.**

The security log includes two kinds of logs: job log and access log.

- 5. Click [Download].**
- 6. Specify the folder in which you want to save the file.**
- 7. Click [Back].**
- 8. Log out.**

**Note**

- Downloaded logs contain data recorded up till the time you click the [Download] button. Any logs recorded after the [Download] button is clicked will not be downloaded. The "Result" field of the log entry for uncompleted jobs will be blank.
- Download time may vary depending on the number of logs.
- If an error occurs while the CSV file is downloading or being created, the download is canceled and details of the error are included at the end of the file.
- If a log is downloaded successfully, "Download completed." will appear in the last line of the log file.
- For details about saving CSV log files, see your browser's Help.
- Downloaded log files use UTF-8 character encoding. To view a log file, open it using an application that supports UTF-8.
- For details about the items contained in the logs, see page 203 "Attributes of Logs You Can Download".

## Number of Logs That Can Be Kept on the Machine

When the maximum number of job log, access log or eco-friendly log that can be kept on the machine is exceeded and new logs are generated, old logs are overwritten by new ones. If the logs are not downloaded periodically, it may not be possible to record the old logs onto files.

When using Web Image Monitor to manage logs, download the logs at an interval appropriate to the conditions in the table.

After downloading the logs, perform a batch deletion of the logs.

If you change the [Collect] / [Do not Collect] setting for log collection, you must perform a batch deletion of the logs.

### Maximum number of logs that can be stored in the machine

Log types	Maximum number of logs
Job logs	4000
Access logs	12000
Eco-friendly logs	4000

### Estimated number of logs created per day

Log types	Number of logs created per day
Job logs	100
Access logs	300 This number is based on 100 operations such as initialization and access operations over the Web, and 200 job entries (two entries per job: one login and one logout).
Eco-friendly logs	100

According to these conditions, the machine can maintain logs for 40 days without overwriting, but to be cautious, we recommend downloading after half that time, 20 days, to leave room for error.

Manage downloaded log files appropriately under the responsibility of the machine administrator.

#### Note

- During log downloads, do not perform operations that will create log entries, as logs that are in the process of downloading cannot be updated with new entries.
- Batch deletion of logs can be performed from the control panel or through Web Image Monitor.



## Notes on Operation When the Number of Log Entries Reaches Maximum

If the number of logs that can be stored on the machine exceeds the specified maximum limit, old logs are overwritten by new logs. The maximum number of logs that can be stored is defined for each of the job log, access log and eco-friendly log.

The job log and access log are downloaded as one file.

"If logs are downloaded without overwriting" below indicates that the job log and access log are mixed after download.

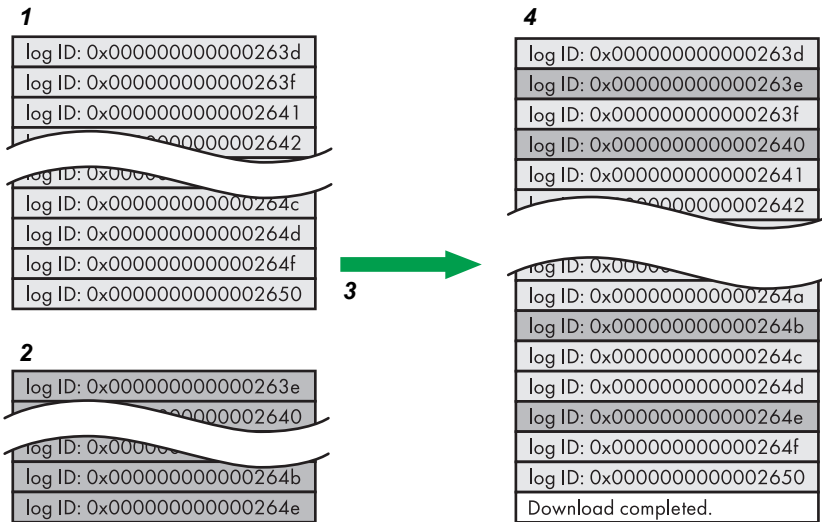
"If logs are downloaded during overwriting" below indicates that part of the access log is overwritten.

In this example, part of the access log is overwritten by a downloaded log and deleted.

The eco-friendly log is downloaded as an independent file.

Log entries are overwritten in the order of priority. Log entries with higher priority will not be overwritten or deleted.

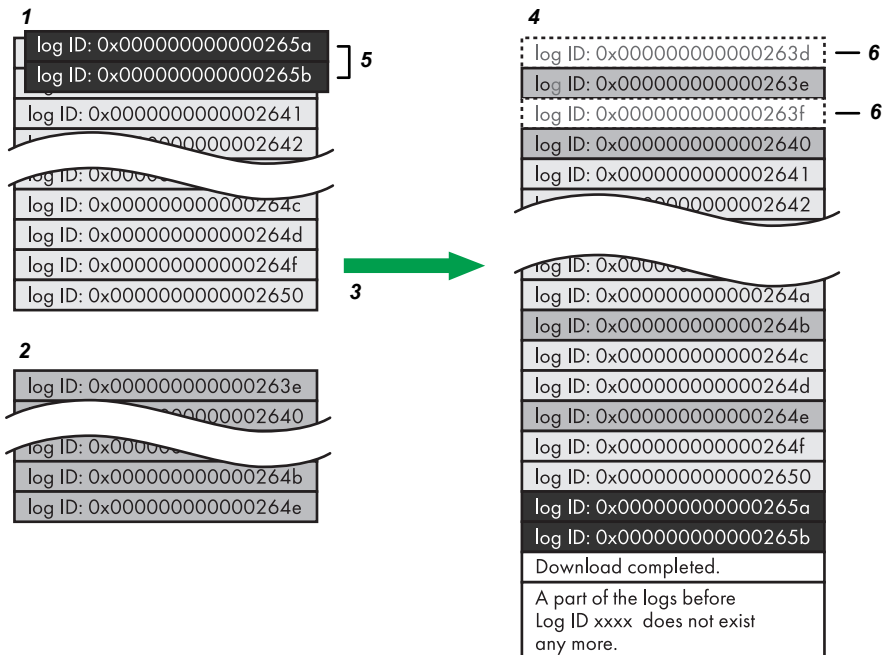
### If logs are downloaded without overwriting



1. Access log
2. Job log
3. Download
4. Downloaded logs

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## If logs are downloaded during overwriting



CJD007

7

1. Access log
2. Job log
3. Download
4. Downloaded logs
5. Overwriting
6. Deleted by overwriting

To determine whether or not overwriting occurred while the logs were downloading, check the message in the last line of the downloaded logs.

- If overwriting did not occur, the last line will contain the following message: Download completed.
- If overwriting did occur, the last line will contain the following message: Download completed. A part of the logs before Log ID xxxx does not exist any more.

### ↓ Note

- If overwriting has occurred, a part of the logs will have been erased by the overwriting, so check the log "Log ID xxxx" and more recent logs.

## Printer Job Logs

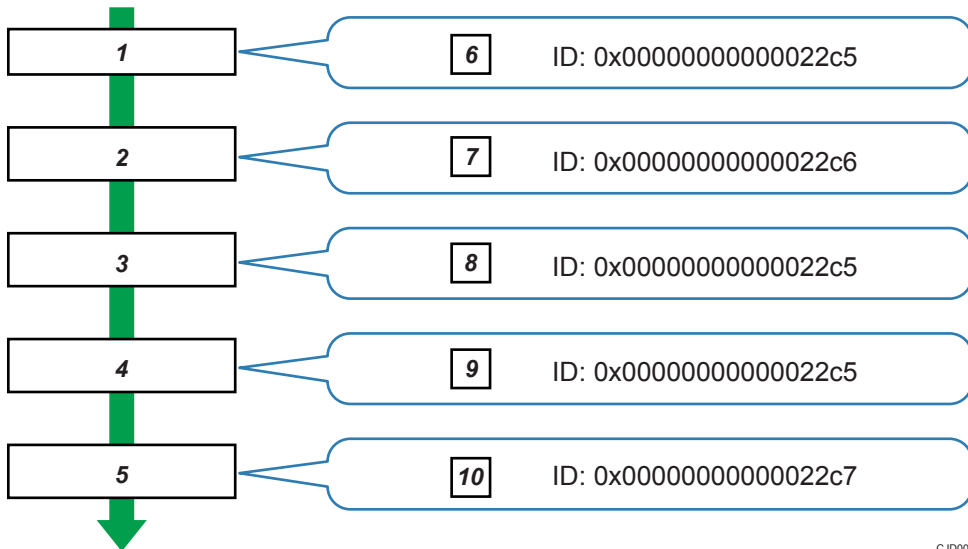
Print Log entries are made before the login entry is made in the Access Log.

Details of series of jobs (including reception, processing, and output of the jobs' data) are combined into single entries.

When the machine receives a print job, it creates an ID for the job and records this in the job log. The machine then creates a login ID for the print job and records this in the access log. It then creates a job log entry detailing the job's processing and outputting (under the same login ID). When the machine has finished processing the job, it creates a logout entry and places this in the access log.

Entries detailing the reception, processing, and output of a series of print jobs are created in the job log first, and then the login and logout details of those jobs are recorded in the access log.

### Print job flowchart



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1. Print job data is received.
2. Authentication (login) data is received.
3. Print job is processed.
4. Print job is output.
5. Authentication (login) data is received.
6. An ID is assigned to the print job and recorded as an entry in the Job Log.
7. Authentication (login) data is recorded as an entry in the Access Log.
8. Information about the processing of the print job is recorded as an entry in the Job Log (using the same ID).

9. Information about the outputting of the print job is recorded as an entry in the Job Log (using the same ID).
10. Authentication (logout) data is recorded as an entry in the Access Log.

---

## Deleting All Logs

---

Use the following procedure to delete all logs stored in the machine.

"Delete All Logs" appears if one of the job log, access log, or eco-friendly log is set to [Active].

1. Log in as the machine administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Logs] under "Device Settings".
4. Click [Delete] under "Delete All Logs".
5. Click [OK].
6. Log out.

---

## Disabling Log Transfer to the Log Collection Server

---

Use the following procedure to disable log transfer to the log collection server. Note that you can switch the log transfer setting to [Inactive] only if it is already set to [Active].

1. Log in as the machine administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Logs] under "Device Settings".
4. Select [Inactive] in the [Transfer Logs] area under "Common Settings for All Logs".
5. Click [OK].
6. Log out.

# Managing Logs from the Machine

You can specify settings such as whether or not to transfer logs to the log collection server and whether or not to delete all logs.

---

## Disabling Log Transfer to the Log Collection Server

---

Use the following procedure to disable log transfer from the machine to the log collection server. Note that you can switch the log transfer setting to [Off] only if it is already set to [On].

For details about the log collection server, contact your sales representative.

For details about the transfer log setting, see the log collection server manual.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Transfer Log Setting].
6. Press [Off].
7. Press [OK].
8. Log out.

---

## Specifying Delete All Logs

---

Use the following procedure to delete all logs stored in the machine.

Deleting all logs from the machine as a batch can be achieved only if the log collection server is in use or if the Web Image Monitor setting has been specified to collect job log, access log or eco-friendly log.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] three times.
5. Press [Delete All Logs].
6. Press [Yes].
7. Press [Exit].
8. Log out.

---

## Managing Logs from the Log Collection Server

---

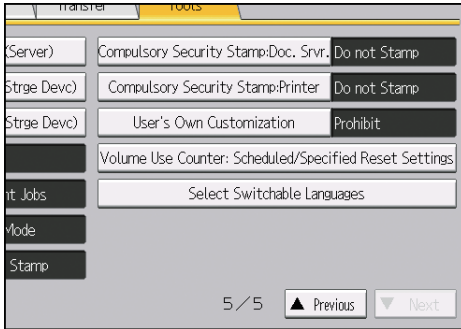
For details about using the log collection server to manage Log Files, see the manual supplied with the log collection server.

# Configuring the Home Screen for Individual Users

This allows each user to use their own home screen.

When a user logs in, their personalized home screen is displayed.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] four times.
5. Press [User's Own Customization].



6. Press [Allow], and then press [OK].
7. Log out.

## ⬇ Note

- This can also be configured from Web Image Monitor. For details, see Web Image Monitor Help.
- The home information for each user is maintained even when "User's Own Customization" is set to [Prohibit]. When the setting is changed back to [Allow], the information can be used again.

## Warnings About Using User's Own Home Screens

Consider these warnings before using this function.

- When a user is registered in the Address Book, a home screen is created for that user. At that time, their user's own home screen is configured with the default settings (arrangement of icons).
- If Menu Protect is set to either [Level 1] or [Level 2], the user cannot use that function's program registration, editing or delete. However, there is no restriction on adding icons to the user's own home screen.

- When Menu Protect has been set to [Level 1] or [Level 2], have the administrator create any necessary programs.
- Only the icons of functions an administrator has permitted to be used are displayed.
- When a user is deleted from the Address Book, that user's home screen information is also deleted.
- When a user has edited a program, the changes are reflected to all the users who have the program's icon distributed to their own home screen.
- When a user deletes a program, the icon of the program is deleted from all the user's home screens to which it is distributed.
- Because each user manages and uses their own home screen, the administrator cannot check each user's own home information (customized state of users' own home screens).



# Configuring the Browser Functions

---

## Precautions for Using the Browser Function

---

The communication between the MFP and the server via a Web browser is exposed to the risk of unauthorized viewing and modification. Because of this, it is recommended to install the site certificates issued for the Web sites the MFP is allowed to browse and enable the machine's Site Certificate Check function in advance. By allowing the machine to access only the Web sites whose certificates are installed in the machine, you can prevent access to unauthorized Web sites.

It is recommended to enable [Site Certificate Check] especially when sending data using Extended JavaScript.

To enable [Site Certificate Check], it is necessary to enable the machine's SSL function and install site certificates.

For details about configuring SSL, see page 128 "Configuring SSL/TLS".

For details about installing site certificates, see page 159 "Configuring IEEE 802.1X Authentication".

The machine's Site Certificate Check settings can be specified only via Web Image Monitor.

See the related articles in the Web Image Monitor Help.

If [Site Certificate Check] is disabled and the user accesses an untrusted Web site, a warning message may appear.

If this is the case, the connected Web site may have a security problem. In such a case, the machine administrator must refer to page 238 "Troubleshooting", and then instruct the users to take appropriate measures accordingly.

Further, even if such a message does not appear, to minimize the risk of information leakages and unauthorized modification, the administrator should instruct the users to check the certificates and URLs of the connected Web sites so that access to unauthorized Web sites can be prevented.

### Untrusted Web site

An "untrusted Web site" meets any of the following criteria:

- Its certificate has not been issued.
- Its certificate has been issued by an unknown source.
- Its certificate has expired.

---

## Troubleshooting

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If the connected Web site has a security problem, a message may appear.

If this is the case, the machine administrator must check the message and instruct the users to take appropriate measures accordingly.

**Messages**

- "This site has a security problem. The certificate has expired."
- "This site has a security problem. The root certificate for verification does not exist."
- "This site has a security problem. Verification of the server to connect to cannot be performed."
- "This site has a security problem. The http subcontents are included in the https site."\*<sup>1</sup>

\* 1 The connected Web site contains non-encrypted data.

# Managing Device Information

## CAUTION

- Keep SD cards or USB flash memory devices out of reach of children. If a child accidentally swallows an SD card or USB flash memory device, consult a doctor immediately.

The machine's device information can be set by an administrator with privileges to manage everything — devices, users, networks and files.

The machine's device information can be exported to an external device as a device setting information file. By importing an exported device setting information file to the machine, you can use it as a backup file to restore device settings.

### Data that can be imported and exported

- Copier / Document Server Features
- Printer Features
- Scanner Features
- Browser Features
- Program (Document Server)
- Program (Copier)
- Program (Scanner)
- Web Image Monitor Setting
- Web Service Settings
- System Settings

### Data that cannot be imported or exported

- Some System Settings <sup>\*1</sup> <sup>\*2</sup>

\*1 The setting for the date, settings that require the device certificate, and settings that need to be adjusted for each machine (for example, image adjustment settings) cannot be imported or exported.

\*2 Settings only for executing functions and settings only for viewing cannot be imported or exported.

- Extended Feature Settings
- Address book
- Programs (printer function)
- User stamp in Copier / Document Server Features
- Settings that can be specified via telnet
- @Remote-related data
- Counters
- EFI printer unit settings

- Settings that can only be specified via Web Image Monitor or Web Service (for example, Bonjour, SSDP setting)

**Note**

- The file format for exports is CSV.
- The device configuration of the machine importing the device setting information file must be the same as that of the machine, which exported the device setting information file. Otherwise, the device setting information file cannot be imported.
- Import/export is possible between machines only if their models, region of use, and the following device configuration match.
  - Input Tray
  - Output Tray
  - Whether or not equipped with the duplex function
  - Whether or not equipped with a finisher and the type of finisher
  - Whether or not equipped with a hard disk
- If the device configuration is changed, export the updated device setting information file.
- If there are machines with the same device configuration, you can specify their settings identically by importing the same device setting file.
- If the home screen contains JPG image files, they will also be exported.
- While a user is operating the machine, nothing can be imported or exported until the user completes the operation.
- During export and import, the machine cannot be otherwise operated.
- For details about SD card handling, see "Inserting/Removing a Memory Storage Device", Getting Started.

---

## Exporting Device Information

---

When exporting device information from the control panel, the data is saved on an SD card.

**1. Insert an SD card into the media slot on the side of the control panel.**

For details about inserting the SD card, see "Inserting/Removing a Memory Storage Device", Getting Started.

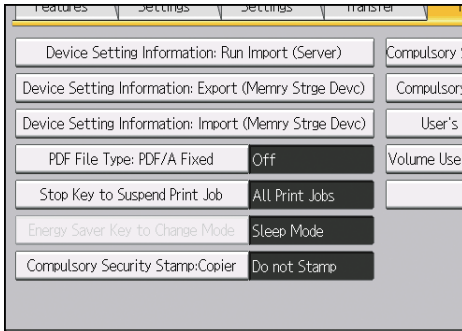
**2. Log in from the control panel as an administrator with all privileges.**

**3. Press [System Settings].**

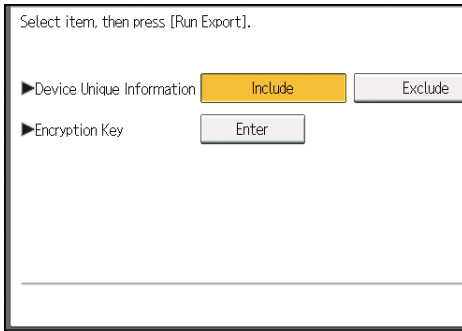
**4. Press [Administrator Tools].**

**5. Press [▼Next] four times.**

6. Press [Device Setting Information: Export (Memry Strge Devc)].



7. Set the export conditions.



- Specify whether to [Include] or [Exclude] the "Device Unique Information". "Device Unique Information" includes the IP address, host name, etc.
- Specify an encryption key.

8. Press [Run Export].

9. Press [OK].

10. Press [Exit].

11. Log out.

**Note**

- If import or export fails, you can check the log for the error. The log is stored in the same location as the exported device setting information file.

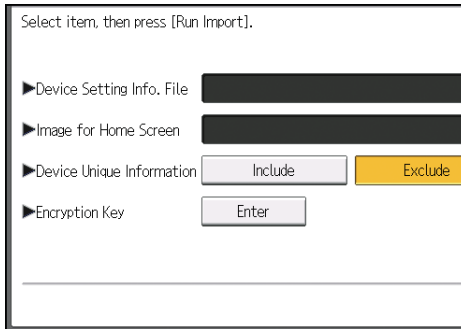
## Importing Device Information

Import device information saved on an SD card.

1. Insert an SD card into the media slot on the side of the control panel.

For details about inserting the SD card, see "Inserting/Removing a Memory Storage Device", Getting Started.

2. Log in from the control panel as an administrator with all privileges.
3. Press [System Settings].
4. Press [Administrator Tools].
5. Press [▼Next] four times.
6. Press [Device Setting Information: Import (Memory Storage Device)].
7. Configure the import conditions.



- Press [Select] of the "Device Setting Info. File" to select the file(s) to import.
- When adding an image to a home screen, press [Select] for "Image for Home Screen", and then select the file.
- Specify whether to [Include] or [Exclude] the "Device Unique Information". "Device Unique Information" includes the IP address, host name, etc.
- Enter the encryption key that was specified when the file was exported.

8. Press [Run Import].
9. Press [OK].
10. Press [Exit].

The machine restarts.

#### ↓ Note

- If import or export fails, you can check the log for the error. The log is stored in the same location as the exported device setting information file.

## Troubleshooting

If an error occurs, check the log's result code first. Values other than 0 indicate that an error occurred. The result code will appear in the circled area illustrated below.

**Example of a log file**

```

"1.0.0"
"ExecType", "Date", "SerialNo", "PnP", "Model", "Destination", "IP", "Host", "Storage", "FileName", "FileID", "TotalItem", "NumOfOkItem", "ResultCode", "ResultName", "Identifier"
"IMPORT"
"20XX-07-05T15:29:16+09:00"
"3C35-7M0014"
"Brand Name"
"Product Name"
"0"
"10"
"10.250.155.125"
"RNP00267332582D"
"SD"
"20XX07051519563C35-710220.csv"
"20XX07051519563C35-710220"
" 0"
" 2"
"..... REQUEST"
"TargetID", "ModuleID", "PrefID", "Item", "NgCode", "NgName"
    
```

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If you cannot solve the problem or do not know how to solve it after checking the code, write down the error log entry, and then contact your service representative.

7

ResultCode	Cause	Solutions
2 (INVALID REQUEST)	A file import was attempted between different models or machines with different device configurations.	Import files exported from the same model with the same device configurations.
4 (INVALID OUTPUT DIR)	Failed to write the device information to the destination device.	Check whether the destination device is operating normally.
7 (MODULE ERROR)	An unexpected error has occurred during an import or export.	Turn the power off and then back on, and then try the operation again. If the error persists, contact your service representative.
8 (DISK FULL)	The available storage space on the external medium is insufficient.	Execute the operation again after making sure there is enough storage space.
9 (DEVICE ERROR)	Failed to write or read the log file.	Check whether the path to the folder for storing the file or the folder in which the file is stored is missing.

ResultCode	Cause	Solutions
10 (LOG ERROR)	Failed to write the log file. The hard disk is faulty.	Contact your service representative.
20 (PART FAILED)	Failed to import some settings.	<p>The reason for the failure is logged in "NgName". Check the code.</p> <p><b>Reason for the Error (NgName)</b></p> <p>2 INVALID VALUE The specified value exceeds the allowable range.</p> <p>3 PERMISSION ERROR The permission to edit the setting is missing.</p> <p>4 NOT EXIST The setting does not exist in the system.</p> <p>5 INTERLOCK ERROR The setting cannot be changed because of the system status or interlocking with other specified settings.</p> <p>6 OTHER ERROR The setting cannot be changed for some other reason.</p>
21 (INVALID FILE)	Failed to import the file because it is in the wrong format in the external medium.	Check whether the file format is correct. The log is in the form of a CSV file.
22 (INVALID KEY)	The encryption key is not valid.	Use the correct encryption key.



# Managing Eco-friendly Counter

When user authentication is being used, information on the eco-friendly counter is displayed at login.

The eco-friendly counter displays the ratio of use of duplex and combine printing to the total number of printed sheets.

How much toner and paper are being saved is indicated by the eco-friendly index. Higher eco-friendly index leads to greater resource saving.

## Note

- When Basic, Windows, LDAP or Integration Server authentication is used for user authentication, the machine compiles the data and displays the eco-friendly counter for each user.
- When user code authentication is used for user authentication, or when user authentication is not in use, the machine compiles the data and displays it's overall eco-friendly counter.

---

## Configuring the Display of Eco-friendly Counters

---

Set up the period for collecting data for the eco-friendly counter and an administrator's message.

1. **Log in as the machine administrator from the control panel.**
2. **Press [System Settings].**
3. **Press [Administrator Tools].**
4. **Press [▼Next].**
5. **Press [Eco-friendly Counter Period / Administrator Message].**
6. **Change the settings.**
7. **Press [OK].**
8. **Press [Exit].**
9. **Log out.**

### Count Period

Set up the period for collecting data for the eco-friendly counter.

When [Specify Days] is selected, data for the eco-friendly counter is compiled for each number of days specified.

Default: [Do not Count]

### Administrator Message

Select the message to be displayed when a user logs in.

If you select "Fixed Message", a preset message is displayed.

If you select "User Message", the machine administrator can enter a message to be displayed.

Default: [Fixed Message]

### Display Information Screen

Specify whether or not to display the information screen at user login.

Default: [Off]

### Display Time

Specify the timing for displaying the information screen.

Default: [Every Time Login]

---

## Clearing a Machine's Eco-friendly Counter

---

A machine's eco-friendly counter can be cleared.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Display / Clear Eco-friendly Counter].
5. Press [Clear Current Value] or [Clear Crnt. & Prev. Val.].
6. Press [OK].
7. Log out.

7

---

## Clearing Users' Eco-friendly Counters

---

By clearing the users' eco-friendly counter, all users' eco-friendly counters are cleared.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Display / Clear Eco-friendly Counter per User].
5. Press [Clear Current Value] or [Clear Crnt. & Prev. Val.].
6. Press [OK].
7. Log out.

# Managing the Address Book

---

## Specifying Auto Deletion of Address Book Data

---

Specify how the machine handles a request for auto registration after the registered data in the address book has reached the limit.

If you set this to [On], new user accounts are added by automatically deleting old user accounts. Accounts that have not been used for the longest time are deleted first.

If you set this to [Off], old user accounts are not deleted, so new user accounts cannot be added once the limit has been reached.

1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Auto Delete User in Address Book].
5. Select [On], and then press [OK].
6. Log out.

### Note

- The data is automatically deleted only when the machine receives a request for data registration. Auto deletion is not executed if user accounts are manually added.
- Only user accounts with user codes or login user names and passwords will be automatically deleted.

---

## Deleting All Data in the Address Book

---

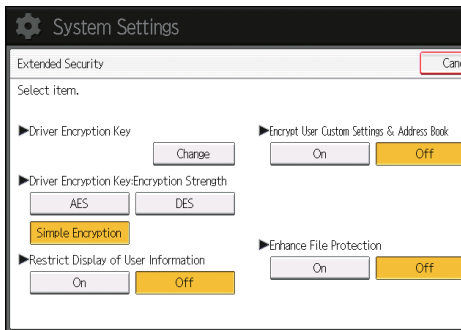
You can delete all the data registered in the Address Book.

1. Log in as the user administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [Delete All Data in Address Book].
5. Press [Yes], and then press [Exit].
6. Log out.

# Specifying the Extended Security Functions

In addition to providing basic security through user authentication and each administrator's specified limits to access the machine, security can also be increased by encrypting transmitted data and data in the Address Book.

1. Log in from the control panel as an administrator with privileges.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next].
5. Press [Extended Security].
6. Press the setting you want to change, and change the settings.



7. Press [OK].
8. Log out.

## Note

- The operation privileges of an administrator differs depending on the setting.

### Driver Encryption Key

This can be specified by the network administrator.

Specify the string of text for decrypting the login passwords or file passwords sent from the driver when user authentication is ON.

To specify the driver encryption key, register the encryption key specified using the machine in the driver.

For details, see page 165 "Specifying a Driver Encryption Key".

### Driver Encryption Key:Encryption Strength

This can be specified by the network administrator.

Specify the encryption strength for sending jobs from the driver to the machine.

The machine confirms the encryption strength of the password appended to a job and processes it.

If [Simple Encryption] is specified, all jobs that pass user authentication are accepted.

If [DES] is specified, jobs encrypted with DES or AES are accepted.

If [AES] is specified, jobs encrypted with AES are accepted.

If you select [AES] or [DES], specify the encryption settings using the printer driver. For details about specifying the printer driver, see the printer driver Help.

Default: [Simple Encryption]

### Restrict Display of User Information

This can be specified by the machine administrator.

This can be specified if user authentication is specified. When the job history is checked using a network connection for which authentication is not available, all personal information can be displayed as "\*\*\*\*\*". For example, when someone not authenticated as an administrator checks the job history using SNMP in SmartDeviceMonitor for Admin/Device Manager NX Lite, personal information can be displayed as "\*\*\*\*\*" so that users cannot be identified. Because information identifying registered users cannot be viewed, unauthorized users are prevented from obtaining information about the registered files.

Default: [Off]

### Encrypt User Custom Settings & Address Book

This can be specified by the user administrator.

Encrypt the individual settings of the machine's users and the data in the Address Book.

Even if information on an internal part has been leaked, encryption prevents the individual user settings or the Address Book data from being read.

For details, see page 91 "Protecting the Address Book".

Default: [Off]

### Enhance File Protection

This can be specified by the file administrator.

By specifying a password, you can limit operations such as printing, deleting, and sending files, and can prevent unauthorized people from accessing the files. However, it is still possible for the password to be cracked.

By specifying "Enhance File Protection", files are locked and so become inaccessible if an invalid password is entered ten times. This can protect the files from unauthorized access attempts in which a password is repeatedly guessed.

When "Enhance File Protection" is specified,  appears in the lower right corner of the screen.

The locked files can only be unlocked by the file administrator.

When files are locked, you cannot select them even if the correct password is entered.

Default: [Off]

### Restrict Use of Destinations

This can be specified by the user administrator.

The available scanner destinations are limited to the destinations registered in the Address Book.

A user cannot directly enter the destinations for transmission.

If you specify the setting to receive e-mails via SMTP, you cannot use "Restrict Use of Destinations".

The destinations searched by "LDAP Search" can be used.

For details, see page 73 "Restricting Usage of the Destination List".

Default: [Off]

### Restrict Adding of User Destinations

This can be specified by the user administrator.

If you set "Restrict Adding of User Destinations" to [Off], users will be able to register a scanner destination in the Address Book simply by entering the destination and then pressing [Prg. Dest.]. If you set these functions to [On], the [Prg. Dest.] key will not appear. Users will still be able to enter a destination directly using the scanner screen, but cannot then register that destination in the Address Book by pressing [Prg. Dest.].

Also, note that even if you set these functions to [On], users registered in the address book can change their passwords. Only the user administrator can change items other than the password.

Default: [Off]

### Settings by SNMPv1, v2

This can be specified by the network administrator.

When the machine is accessed using the SNMPv1, v2 protocol, authentication cannot be performed, allowing machine administrator settings such as the paper setting to be changed. If you select [Prohibit], the setting can be viewed but not specified with SNMPv1, v2.

Default: [Do not Prohibit]

### Authenticate Current Job

This can be specified by the machine administrator.

This setting lets you specify whether or not authentication is required for operations such as canceling jobs under the copier and printer functions.

If you select [Login Privilege], authorized users and the machine administrator can operate the machine. When this is selected, authentication is not required for users who logged in to the machine before [Login Privilege] was selected.

If [Access Privilege] is specified, any user who performed a copy or print job can cancel the job. Also, the machine administrator can cancel the user's copy or print job.

Even if you select [Login Privilege] and log on to the machine, you cannot cancel a copy or print job that is being processed if you are not privileged to use the copy and printer functions.

You can specify "Authenticate Current Job" only if "User Authentication Management" was specified.

Default: **[Off]**

### **Password Policy**

This can be specified by the user administrator.

This setting lets you specify [Complexity Setting] and [Minimum Character No.] for the password. By making this setting, you can limit the available passwords to only those that meet the conditions specified in "Complexity Setting" and "Minimum Character No."

If you select [Level 1], specify the password using a combination of two types of characters selected from upper-case letters, lower-case letters, decimal numbers, and symbols such as #.

If you select [Level 2], specify the password using a combination of three types of characters selected from upper-case letters, lower-case letters, decimal numbers, and symbols such as #.

Default: **[Off]**, Minimum required number of characters not specified

### **@Remote Service**

This can be specified by the machine administrator.

Communication via HTTPS for @Remote Service is disabled if you select [Prohibit].

When setting it to [Prohibit], consult with your service representative.

If it is set to [Proh. Some Services], it becomes impossible to change settings via a remote connection, providing optimally secure operation.

Default: **[Do not Prohibit]**

### **Update Firmware**

This can be specified by the machine administrator.

Specify whether to allow firmware updates on the machine. Firmware update means having a service representative update the firmware or updating the firmware via the network.

If you select [Prohibit], firmware on the machine cannot be updated.

If you select [Do not Prohibit], there are no restrictions on firmware updates.

Default: **[Do not Prohibit]**

### **Change Firmware Structure**

This can be specified by the machine administrator.

Specify whether to prevent changes in the machine's firmware structure. The Change Firmware Structure function detects when the SD card is inserted, removed or replaced.

If you select [Prohibit], the machine stops during startup when a firmware structure change is detected and a message requesting administrator login is displayed. After the machine administrator logs in, the machine finishes startup with the updated firmware.

The administrator can confirm if the updated structure change is permissible or not by checking the firmware version displayed on the control panel screen. If the firmware structure change is not permissible, contact your service representative before logging in.

When "Change Firmware Structure" is set to [Prohibit], administrator authentication must be enabled.

After [Prohibit] is specified, disable administrator authentication. When administrator authentication is enabled again, you can return the setting to [Do not Prohibit].

If you select [Do not Prohibit], firmware structure change detection is disabled.

Default: [Do not Prohibit]

### Password Entry Violation

This can be specified by the machine administrator.

If the number of authentication requests exceeds the setting, the system classifies the access session as a password attack. The access session is recorded in the Access Log and the log data is sent to the machine administrator by e-mail.

If the "Max. Allowed No. of Access" is set to [0], password attacks are not detected.

- Max. Allowed No. of Access

Specify the maximum number of allowable authentication attempts.

Use the number keys to enter the number between "0" and "100", and then press [#].

Default: [30]

- Measurement Time

Specify the interval to count the number of repeated failed authentication attempts. When the measurement time is over, the logged counts of failed authentication attempts are cleared.

Use the number keys to enter the time between "1" and "10", and then press [#].

Default: [5]

#### Note

- Depending on the values of the settings for [Max. Allowed No. of Access] and [Measurement Time], you may frequently receive violation detection e-mail.
- If violation detection e-mail is received frequently, check the content and review the setting values.

### Security Setting for Access Violation

This can be specified by the machine administrator.

When logging in to the machine via a network application, a user may be locked out erroneously because the number of authentication attempts of the user does not match the number of attempts logged internally.

For example, access may be denied when a print job for multiple sets of pages is sent from an application.



If you select [On] under "Security Setting for Access Violation", you can prevent such authentication errors.

- On
  - Denial Durtn. for Accs. Viol.
 

Specify the time to limit repeated access by a user.

Use the number keys to enter the time between "0" and "60", and then press [#].

Default: [15]
  - Managed User Host Limit
 

Specify the number of user accounts to manage under "Security Setting for Access Violation".

Use the number keys to enter the number between "50" and "200", and then press [#].

Default: [200]
  - Password Entry Host Limit
 

Specify the number of passwords to manage under "Security Setting for Access Violation".

Use the number keys to enter the number between "50" and "200", and then press [#].

Default: [200]
  - Status Monitor Interval
 

Specify the monitoring interval of "Managed User Host Limit" and "Password Entry Host Limit".

Use the number keys to enter the time between "1" and "10", and then press [#].

Default: [3]
- Off
 

Default: [Off]

### Device Access Violation

This can be specified by the machine administrator.

If the number of log in requests exceeds the setting, the system classifies the access session as an access violation. The access session is recorded in the Access Log and the log data is sent to the machine administrator by e-mail. Also, a message is displayed on the control panel and on Web Image Monitor.

If the "Max. Allowed No. of Access" is set to [0], over access is not detected.

In "Authentication Delay Time", you can specify response delay time for log-in requests to prevent the system from becoming unavailable when an access violation is detected.

In "Simultns. Access Host Limit", you can specify the limit number of hosts accessing the machine at one time. If the number of access exceeds the setting, monitoring becomes unavailable and the detected unavailability is recorded in the Log.

- Max. Allowed No. of Access

Specify the maximum number of allowable access attempts.

Use the number keys to enter the number between "0" and "500", and then press [#].

Default: [100]

- Measurement Time

Specify the interval to count the number of excessive access. When the measurement time is over, the logged counts of access are cleared.

Use the number keys to enter the number between "10" and "30", and then press [#].

Default: [10]

- Authentication Delay Time

Specify the authentication delay time when an access violation is detected.

Use the number keys to enter the number between "0" and "9", and then press [#].

Default: [3]

- Simultns. Access Host Limit

Specify the number of acceptable authentication attempts when authentications are delayed due to an access violation.

Use the number keys to enter the number between "50" and "200", and then press [#].

Default: [200]

 **Note**

- Depending on the values of the settings for [Max. Allowed No. of Access] and [Measurement Time], you may frequently receive violation detection e-mail.
- If violation detection e-mail is received frequently, check the content and review the setting values.

# Other Security Functions

This is an explanation of the settings for preventing leakage of information.

It also explains the functions that are restricted when user authentication is used.

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## Scanner Function

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### Print & Delete Scanner Journal

When user authentication is enabled, "Print & Delete Scanner Journal" is automatically set to [Do not Print: Disable Send] in order to prevent personal information in transmission/delivery history from being automatically printed. In this case, the scanner is automatically disabled when the journal history exceeds 250 transmissions/deliveries. When this happens, select [Print Scanner Journal] or [Delete Scanner Journal]. To print the scanner journal automatically, set [Print and Delete All] for "Print & Delete Scanner Journal".

For details, see "Scanner Features", Scan.

### WSD scanner function

WSD scanner function is automatically disabled when user authentication is specified. Even if automatically disabled, it can be enabled from "Initial Settings" available in Web Image Monitor.

For details, see "Preparing to Use WSD Scanner (Push Type)" and "Preparing to Use WSD Scanner (Pull Type)", Scan.

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## System Status

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Pressing the [Check Status] key on the control panel allows you to check the machine's current status and settings. If administrator authentication has been specified, [Machine Address Info] is displayed in [Maintnc./Inquiry/Mach. Info] only if you have logged in to the machine as an administrator.

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## Confirming Firmware Validity

---

When the machine starts up, this function verifies the validity of its firmware.

If an error occurs during the verification, a verification error is displayed on the control panel.

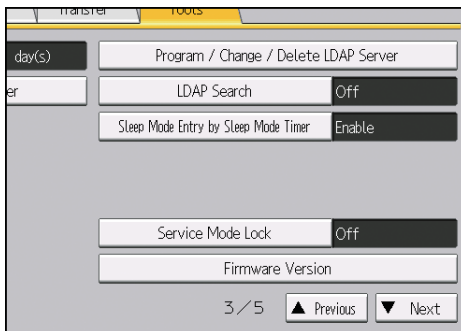
Note that this can also be checked on Web Image Monitor after startup of the machine. If an error occurs in the verification of Web Image Monitor itself, Web Image Monitor cannot be used, so check the display on the control panel.

# Restricting a Customer Engineer Operation

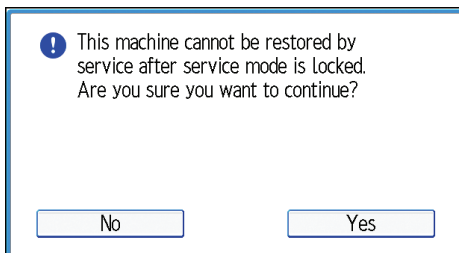
You can restrict the customer engineer's access to the service mode.

Service mode is used by a customer engineer for inspection or repair. If you set "Service Mode Lock" to [On], service mode cannot be used unless the machine administrator logs on to the machine and cancels the service mode lock to allow a customer engineer to operate the machine for inspection and repair. This ensures that the inspection and repair are done under the supervision of the machine administrator.

1. Log in as the machine administrator from the control panel.
2. Press [System Settings].
3. Press [Administrator Tools].
4. Press [▼Next] twice.
5. Press [Service Mode Lock].



6. Press [On], and then press [OK].
7. Press [Yes].



8. Log out.

# Additional Information for Enhanced Security

This section explains the settings that you can configure to enhance the machine's security.

## Settings You Can Configure Using the Control Panel

Use the control panel to configure the security settings shown in the following table.

### System Settings

Tab	Item	Setting
Timer Settings	Auto Logout Timer	On: 180 seconds or less. See page 69 "Auto Logout".
Administrator Tools	User Authentication Management	Select [Basic Auth.], and then set "Printer Job Authentication" to [Entire]. See page 37 "Basic Authentication".
Administrator Tools	Administrator Authentication Management → User Management	Select [On], and then select [Administrator Tools] for "Available Settings". See page 15 "Configuring Administrator Authentication".
Administrator Tools	Administrator Authentication Management → Machine Management	Select [On], and then select each of "Available Settings". See page 15 "Configuring Administrator Authentication".
Administrator Tools	Administrator Authentication Management → Network Management	Select [On], and then select [Interface Settings], [File Transfer], and [Administrator Tools] for "Available Settings". See page 15 "Configuring Administrator Authentication".
Administrator Tools	Administrator Authentication Management → File Management	Select [On], and then select [Administrator Tools] for "Available Settings". See page 15 "Configuring Administrator Authentication".

Tab	Item	Setting
Administrator Tools	Extended Security → Settings by SNMPv1, v2	Prohibit See page 249 "Specifying the Extended Security Functions".
Administrator Tools	Extended Security → Driver Encryption Key:Encryption Strength	AES See page 249 "Specifying the Extended Security Functions"
Administrator Tools	Extended Security → Authenticate Current Job	Access Privilege See page 249 "Specifying the Extended Security Functions"
Administrator Tools	Extended Security → Password Policy	"Complexity Setting": Level 1 or higher, "Minimum Character No.": 8 or higher See page 249 "Specifying the Extended Security Functions"
Administrator Tools	Network Security Level	Level 2 To acquire the machine status through printer driver or Web Image Monitor, set "SNMP" to Active on Web Image Monitor. See page 118 "Specifying Network Security Level".
Administrator Tools	Service Mode Lock	On See page 257 "Restricting a Customer Engineer Operation".
Administrator Tools	Machine Data Encryption Settings	Select [Encrypt], and then select [All Data] for "Carry over all data or file system data only (without formatting), or format all data." If [Encrypt] is already selected, further encryption settings are not necessary. See page 95 "Encrypting Data on the Hard Disk".

**Scanner Features**

Tab	Item	Setting
Initial Settings	Menu Protect	Level 2 See page 76 "Specifying Menu Protect".

**Note**

- The SNMP setting can be specified in [SNMP] under [Configuration] in Web Image Monitor.

**Settings You Can Configure Using Web Image Monitor**

Use Web Image Monitor to configure the security settings shown in the following table.

Category	Item	Setting
Device Settings → Logs	Collect Job Logs	Active
Device Settings → Logs	Collect Access Logs	Active
Security → User Lockout Policy	Lockout	Active For details, see page 67 "User Lockout Function".
Security → User Lockout Policy	Number of Attempts before Lockout	5 times or less. For details, see page 67 "User Lockout Function".
Security → User Lockout Policy	Lockout Release Timer	Set to [Active] or [Inactive]. When setting to [Active], set the Lockout release timer to 60 minutes or more. For details, see page 67 "User Lockout Function".
Security → User Lockout Policy	Lock Out User for	When setting "Lockout Release Timer" to [Active], set the Lockout release timer to 60 minutes or more. For details, see page 67 "User Lockout Function".

Category	Item	Setting
Network → SNMPv3	SNMPv3 Function	Inactive  To use SNMPv3 functions, set "SNMPv3 Function" to [Active], and set "Permit SNMPv3 Communication" to [Encryption Only]. Because SNMPv3 enforces authentication for each packet, Login log will be disabled as long as SNMPv3 is active.
Security → Network Security	FTP	Inactive  Before specifying this setting, set "Network Security Level" to [Level 2] on the control panel.
Security	S/MIME	"Encryption Algorithm": AES-128 bit, AES-256 bit, or 3DES-168 bit  You must register the user certificate in order to use S/MIME.
Address Book → Detail Input → Add User/Change → Email	User Certificate	You must register the user certificate in order to use S/MIME.

#### ↓ Note

- The administrator must indicate which strength level is to be specified for the encryption algorithm.
- For details about specifying an encryption algorithm and registering a user certificate, see page 134 "Configuring S/MIME".

## Settings You Can Configure When IPsec Is Available/Unavailable

All communication to and from machines on which IPsec is enabled is encrypted.

If your network supports IPsec, we recommend you enable it.

### Settings you can configure when IPsec is available

If IPsec is available, configure the settings shown in the following table to enhance the security of the data traveling on your network.



**Control panel settings**

**System Settings**

Tab	Item	Setting
Interface Settings	IPsec	Active
Interface Settings	Permit SSL / TLS Communication	Ciphertext Only

**Web Image Monitor settings**

Category	Item	Setting
Security → IPsec → Encryption Key Auto Exchange Settings	Edit → Security Level	Authentication and High Level Encryption

**Settings you can configure when IPsec is unavailable**

7

If IPsec is not available, configure the settings shown in the following table to enhance the security of the data traveling on your network.

**Control panel settings**

**System Settings**

Tab	Item	Setting
Interface Settings	IPsec	Inactive
Interface Settings	Permit SSL / TLS Communication	Ciphertext Only

**Note**

- You can set "IPsec" and "Permit SSL/TLS Communication" using Web Image Monitor.

**Securing data when IPsec is unavailable**

The following procedures make user data more secure when IPsec is unavailable.

Administrators must inform users to carry out these procedures.

**Printer**

- Printing with protocols that support encryption

To use the printer functions, specify sftp as the protocol, or specify IPP and enable SSL/TLS.

For details about sftp, see "Printing Files Directly from Windows", Connecting the Machine/ System Settings.

For details about IPP settings, see "Installing the Printer Driver for the Selected Port", Driver Installation Guide.

For details about SSL/TLS settings, see page 128 "Configuring SSL/TLS".

## Scanner

- Sending the URL address of stored files

Send the URL of scanned files to destinations by configuring [Send Settings] in [Scanner Features], instead of sending the actual scanned files. For details, see "Sending the URL by E-mail", Scan.

- Managing scanned files using Web Image Monitor

Use Web Image Monitor through your network to view, delete, send, and download scanned files.

- S/MIME authentication function

When sending scanned files attached to e-mail, protect them by applying an S/MIME certificate. To do this, configure the "Security" settings prior to sending. For details about sending e-mail from the scanner, see "Security Settings to E-mails", Scan.

### Note

- For details about enabling and disabling IPsec using the control panel, see "Interface Settings", Connecting the Machine/ System Settings.
- For details about specifying the IPsec setting via Web Image Monitor, see page 141 "Configuring IPsec".



# 8. Troubleshooting

This chapter describes what to do if the machine does not function properly.

## If a Message is Displayed

This section explains how to deal with problems if a message appears on the screen during user authentication.

If a message not shown below is displayed, follow the message to resolve the problem.

### **"You do not have the privileges to use this function."**

The privileges to use the function is not specified.

If this appears when trying to use a function:

- The function is not specified in the Address Book management setting as being available.
- The user administrator must decide whether to additionally assign the privileges to use the function.

If this appears when trying to specify a machine setting:

- The administrator differs depending on the machine settings you wish to specify.
- Using the list of settings, the administrator responsible must decide whether to additionally assign the privileges to use the function.

### **"Authentication has failed."**

The cause depends on the error code.

For details, see page 267 "If an Error Code is Displayed".

### **"Administrator Authentication for User Management must be set to on before this selection can be made."**

User administrator privileges have not been enabled in [Administrator Authentication Management].

- To specify Basic authentication, Windows authentication, LDAP authentication, or Integration Server authentication, you must first enable user administrator privileges in [Administrator Authentication Management].

For details, see page 15 "Configuring Administrator Authentication".

### **"Failed to obtain URL."**

The machine cannot connect to the server or cannot establish communication.

- Make sure the server's settings, such as the IP address and host name, are specified correctly on the machine.
- Make sure the host name of the UA Server is specified correctly.

**"Failed to obtain URL."**

The machine is connected to the server, but the UA service is not responding properly.

- Make sure the UA service is specified correctly.

**"Failed to obtain URL."**

SSL is not specified correctly on the server.

- Specify SSL using Authentication Manager.

**"Failed to obtain URL."**

Server authentication failed.

- Make sure server authentication is specified correctly on the machine.

**"The selected file(s) contained file(s) without access privileges. Only file(s) with access privileges will be deleted."**

You have tried to delete files without the privileges to do so.

- Files can be deleted by the owner or file administrator. To delete a file which you are not privileged to delete, contact the owner.

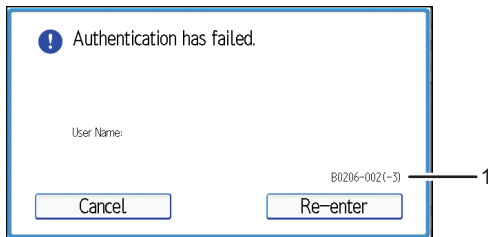
**Note**

- If a service call message appears, contact your service representative.

# If an Error Code is Displayed

When authentication fails, the message "Authentication has failed." appears with an error code. The following lists provide solutions for each error code. If the error code that appears is not on the lists, write down the error code and contact your service representative.

## Error code display position



CJD014

### 1. Error code

An error code appears.

## Basic Authentication

### B0103-000

A TWAIN operation occurred during authentication.

- Make sure no other user is logged on to the machine, and then try again.

### B0104-000

Failed to decrypt password.

- A password error occurred.  
Make sure the password is entered correctly.
- Either [DES] or [AES] is selected for "Driver Encryption Key: Encryption Strength".  
You can make access by specifying the driver encryption key.
- A driver encryption key error occurred.  
Make sure that the encryption key is correctly specified on the driver.

### B0105-000

A login user name was not specified but a DeskTopBinder operation was performed.

- Specify the DeskTopBinder login user name correctly.

### **B0206-002 : Case 1**

A login user name or password error occurred.

- Make sure the login user name and password are entered correctly and then log in.

### **B0206-002 : Case 2**

The user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.

- Only the administrator has login privileges on this screen.
- Log in as a general user from the application's login screen.

### **B0206-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log in again.

### **B0207-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

### **B0208-000 / B0208-002**

The account is locked because you have reached the maximum number of failed authentication attempts allowed.

- Ask the user administrator to unlock the account.

---

## **Windows Authentication**

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### **W0103-000**

A TWAIN operation occurred during authentication.

- Make sure no other user is logged in to the machine, and then try again.

### **W0104-000**

Failed to encrypt password.

- A password error occurred.  
Make sure the password is entered correctly.
- Either [DES] or [AES] is selected for "Driver Encryption Key: Encryption Strength".  
You can make access by specifying the driver encryption key.
- A driver encryption key error occurred.

Make sure that the encryption key is correctly specified on the driver.

#### **W0105-000**

A login user name was not specified but a DeskTopBinder operation was performed.

- Set the DeskTopBinder login user name correctly.

#### **W0206-002**

The user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.

- Only the administrator has login privileges on this screen.
- Log in as a general user from the application's login screen.

#### **W0206-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log in again.

#### **W0207-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

#### **W0208-000 / W0208-002**

The account is locked because you have reached the maximum number of failed authentication attempts allowed.

- Ask the user administrator to unlock the account.

#### **W0400-102**

Kerberos authentication failed because the server is not functioning correctly.

- Make sure that the server is functioning properly.

#### **W0400-200**

Due to the high number of authentication attempts, all resources are busy.

- Wait a few minutes and then try again.

#### **W0400-202 : Case 1**

The SSL settings on the authentication server and the machine do not match.

- Make sure the SSL settings on the authentication server and the machine match.

#### **W0400-202 : Case 2**

The user entered sAMAccountName in the user name to log in.



- If a user enters sAMAccountName as the login user name, ldap\_bind fails in a parent/subdomain environment. Use UserPrincipalName for the login name instead.

#### **W0406-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log on again.

#### **W0406-101**

Authentication cannot be completed because of the high number of authentication attempts.

- Wait a few minutes and then try again.
- If the situation does not return to normal, make sure that an authentication attack is not occurring.
- Notify the administrator of the screen message by e-mail, and check the system log for signs of an authentication attack.

#### **W0406-107 : Case 1**

The UserPrincipalName (user@domainname.xxx.com) form is being used for the login user name.

- The user group cannot be obtained if the UserPrincipalName (user@domainname.xxx.com) form is used.
- Use "sAMAccountName(user)" to log in, because this account allows you to obtain the user group.

#### **W0406-107 : Case 2**

Current settings do not allow group retrieval.

- Make sure the user group's group scope is set to "Global Group" and the group type is set to "Security" in group properties.
- Make sure the account has been added to user group.
- Make sure the user group name registered on the machine and the group name on the DC (domain controller) are exactly the same. The DC is case sensitive.
- Make sure that "Use Auth. Info at Login" has been specified in "Auth. Info" in the user account registered on the machine.
- If there is more than one DC, make sure that a confidential relationship has been configured between each DC.

#### **W0406-107 : Case 3**

The domain name cannot be resolved.

- Make sure that DNS/WINS is specified in the domain name in "Interface Settings".

#### **W0406-107 : Case 4**

Cannot connect to the authentication server.

- Make sure that connection to the authentication server is possible.
- Use the "Ping Command" in "Interface Settings" to check the connection.

#### **W0406-107 : Case 5**

A login name or password error occurred.

- Make sure that the user is registered on the server.
- Use a registered login user name and password.

#### **W0406-107 : Case 6**

A domain name error occurred.

- Make sure that the Windows authentication domain name is specified correctly.

#### **W0406-107 : Case 7**

Cannot resolve the domain name.

- Specify the IP address in the domain name and confirm that authentication is successful.

If authentication was successful:

- If the top-level domain name is specified in the domain name (such as domainname.xxx.com), make sure that DNS is specified in "Interface Settings".
- If a NetBIOS domain name is specified in domain name (such as DOMAINNAME), make sure that WINS is specified in "Interface Settings".

If authentication was unsuccessful:

- Make sure that Restrict LM/NTLM is not set in either "Domain Controller Security Policy" or "Domain Security Policy".
- Make sure that the ports for the domain control firewall and the firewall on the machine to the domain control connection path are open.
- Under Windows 7/8, if the Windows firewall is activated, create a firewall rule in the Windows firewall's "Advanced settings" to authorize ports 137 and 139.
- Under Windows XP, if the Windows firewall is activated, open the properties for "Network Connections", and then click "Settings" on the "Advanced" tab. On the "Exceptions" tab, specify ports 137 and 139 as exceptions.
- In the Properties window for "Network Connections", open TCP/IP properties. Then click detail settings, WINS, and then check the "Enable NetBIOS over TCP/IP" box and set number 137 to "Open".

#### **W0406-107 : Case 8**

Kerberos authentication failed.

- Kerberos authentication settings are not correctly configured.

Make sure the realm name, KDC (Key Distribution Center) name and corresponding domain name are specified correctly.

- The KDC and machine timing do not match.

Authentication will fail if the difference between the KDC and machine timing is more than 5 minutes. Make sure the timing matches.

- Kerberos authentication will fail if the realm name is specified in lower-case letters. Make sure the realm name is specified in capital letters.
- Kerberos authentication will fail if automatic retrieval for KDC fails.

Ask your service representative to make sure the KDC retrieval settings are set to "automatic retrieval".

If automatic retrieval is not functioning properly, switch to manual retrieval.

#### **W0409-000**

Authentication timed out because the server did not respond.

- Check the network configuration, or settings on the authenticating server.

#### **W0511-000**

The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in LDAP authentication settings.)

- Delete the old, duplicated name or change the login name.
- If the authentication server has just been changed, delete the old name on the server.

#### **W0606-004**

Authentication failed because the user name contains language that cannot be used by general users.

- Do not use "other", "admin", "supervisor" or "HIDE\*" in general user accounts.

#### **W0607-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

#### **W0612-005**

Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)

- Ask the user administrator to delete unused user accounts in the Address Book.

#### **W0707-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

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## LDAP Authentication

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### L0103-000

A TWAIN operation occurred during authentication.

- Make sure no other user is logged in to the machine, and then try again.

### L0104-000

Failed to encrypt password.

- A password error occurred.  
Make sure the password is entered correctly.
- Either [DES] or [AES] is selected for "Driver Encryption Key: Encryption Strength".  
You can make access by specifying the driver encryption key.
- A driver encryption key error occurred.  
Make sure that the encryption key is correctly specified on the driver.

### L0105-000

A login user name was not specified but a DeskTopBinder operation was performed.

- Set the DeskTopBinder login user name correctly.

### L0206-002

A user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.

- Only the administrator has login privileges on this screen.
- Log in as a general user from the application's login screen.

### L0206-003

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log in again.

### L0207-001

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

### L0208-000 / L0208-002

The account is locked because you have reached the maximum number of failed authentication attempts allowed.

- Ask the user administrator to unlock the account.

### **L0307-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

### **L0400-210**

Failed to obtain user information in LDAP search.

- The login attribute's search criteria might not be specified or the specified search information is unobtainable.
- Make sure the login name attribute is specified correctly.

### **L0406-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log in again.

### **L0406-200**

Authentication cannot be completed because of the high number of authentication attempts.

- Wait a few minutes and then try again.
- If the situation does not return to normal, make sure that an authentication attack is not occurring.
- Notify the administrator of the screen message by e-mail, and check the system log for signs of an authentication attack.

### **L0406-201**

Authentication is disabled in the LDAP server settings.

- Change the LDAP server settings in administrator tools, in "System Settings".

### **L0406-202 / L0406-203 : Case 1**

There is an error in the LDAP authentication settings, LDAP server, or network configuration.

- Make sure that a connection test is successful with the current LDAP server configuration.  
If connection is not successful, there might be an error in the network settings.  
Check the domain name or DNS settings in "Interface Settings".
- Make sure the LDAP server is specified correctly in the LDAP authentication settings.
- Make sure the login name attribute is entered correctly in the LDAP authentication settings.
- Make sure the SSL settings are supported by the LDAP server.

### **L0406-202 / L0406-203 : Case 2**

A login user name or password error occurred.

- Make sure the login user name and password are entered correctly.

- Make sure a usable login name is registered on the machine.

Authentication will fail in the following cases:

If the login user name contains a space, colon (:), or quotation mark (").

If the login user name exceeds 128 bytes.

### **L0406-202 / L0406-203 : Case 3**

There is an error in the simple encryption method.

- Authentication will fail if the password is left blank in simple authentication mode.  
To allow blank passwords, contact your service representative.
- In simple authentication mode, the DN of the login user name is obtained in the user account.  
Authentication fails if the DN cannot be obtained.

Make sure there are no errors in the server name, login user name/password, or information entered for the search filter.

### **L0406-204**

Kerberos authentication failed.

- Kerberos authentication settings are not correctly configured.  
Make sure the realm name, KDC (Key Distribution Center) name, and supporting domain name are specified correctly.
- The KDC and machine timing do not match.  
Authentication will fail if the difference between the KDC and machine timing is more than 5 minutes. Make sure the timing matches.
- Kerberos authentication will fail if the realm name is specified in lower-case letters. Make sure the realm name is specified in capital letters.

### **L0409-000**

Authentication timed out because the server did not respond.

- Contact the server or network administrator.
- If the situation does not return to normal, contact your service representative.

### **L0511-000**

The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in the LDAP authentication settings.)

- Delete the old, duplicated name or change the login name.
- If the authentication server has just been changed, delete the old name on the server.

### **L0606-004**

Authentication failed because the user name contains language that cannot be used by general users.

- Do not use "other", "admin", "supervisor" or "HIDE\*" in general user accounts.

#### **L0607-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

#### **L0612-005**

Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)

- Ask the user administrator to delete unused user accounts in the Address Book.

#### **L0707-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

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## **Integration Server Authentication**

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#### **I0103-000**

A TWAIN operation occurred during authentication.

- Make sure no other user is logged in to the machine, and then try again.

#### **I0104-000**

Failed to decrypt password.

- A password error occurred.  
Make sure the password is entered correctly.
- Either [DES] or [AES] is selected for "Driver Encryption Key: Encryption Strength".  
You can make access by specifying the driver encryption key.
- A driver encryption key error occurred.  
Make sure that the encryption key is correctly specified on the driver.

#### **I0105-000**

A login user name was not specified but a DeskTopBinder operation was performed.

- Set the DeskTopBinder login user name correctly.

#### **I0206-002**

A user attempted authentication from an application on the "System Settings" screen, where only the administrator has authentication ability.

- Only the administrator has login privileges on this screen.
- Log in as a general user from the application's login screen.

**I0206-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If the account name was entered incorrectly, enter it correctly and log in again.

**I0207-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

**I0208-000 / I0208-002**

The account is locked because you have reached the maximum number of failed authentication attempts allowed.

- Ask the user administrator to unlock the account.

**I0406-003**

An authentication error occurred because the user name contains a space, colon (:), or quotation mark (").

- Recreate the account if the account name contains any of these prohibited characters.
- If account name was entered incorrectly, enter it correctly and log in again.

**I0406-301 : Case 1**

The URL could not be obtained.

- Obtain the URL using Obtain URL in Integration Server authentication.

**I0406-301 : Case 2**

A login user name or password error occurred.

- Make sure the login user name and password are entered correctly.
- Make sure that a usable login name is registered on the machine.

Authentication will fail in the following cases:

If the login user name contains a space, colon (:), or quotation mark (").

If the login user name exceeds 128 bytes.

**I0409-000**

Authentication timed out because the server did not respond.

- Contact the server or network administrator.
- If the situation does not return to normal, contact your service representative.



### **I0511-000**

The authentication server login name is the same as a user name already registered on the machine. (Names are distinguished by the unique attribute specified in the LDAP authentication settings.)

- Delete the old, duplicated name or change the login name.
- If the authentication server has just been changed, delete the old name on the server.

### **I0606-004**

Authentication failed because the user name contains language that cannot be used by general users.

- Do not use "other", "admin", "supervisor" or "HIDE\*" in general user accounts.

### **I0607-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

### **I0612-005**

Authentication failed because no more users can be registered. (The number of users registered in the Address Book has reached capacity.)

- Ask the user administrator to delete unused user accounts in the Address Book.

### **I0707-001**

An authentication error occurred because the Address Book is being used at another location.

- Wait a few minutes and then try again.

# If the Machine Cannot Be Operated

If the following conditions arise while users are operating the machine, provide the instructions on how to deal with them.

Condition	Cause	Solution
Cannot perform the following: <ul style="list-style-type: none"> <li>• Print with the printer driver</li> <li>• Connect with the TWAIN driver</li> </ul>	User authentication has been rejected.	Confirm the user name and login name with the administrator of the network in use if using Windows authentication, LDAP authentication, or Integration Server authentication.  Confirm with the user administrator if using Basic authentication.
Cannot perform the following: <ul style="list-style-type: none"> <li>• Print with the printer driver</li> <li>• Connect with the TWAIN driver</li> </ul>	The encryption key specified in the driver does not match the machine's driver encryption key.	Specify the driver encryption key registered in the machine. For details, see page 165 "Specifying a Driver Encryption Key".
Cannot connect with the TWAIN driver.	The SNMPv3 account, password, and encryption algorithm do not match settings specified on this machine.	Specify the account, password and the encryption algorithm of SNMPv3 registered in the machine using network connection tools.
Cannot authenticate using the TWAIN driver.	Another user is logging in to the machine.	Wait for the user to log out.
Cannot authenticate using the TWAIN driver.	Authentication is taking time because of operating conditions.	Make sure the LDAP server setting is correct.  Make sure the network settings are correct.
Cannot authenticate using the TWAIN driver.	Authentication is not possible while the machine is editing the Address Book data.	Wait until editing of the Address Book data is complete.

Condition	Cause	Solution
<p>After starting "User Management Tool" or "Address Management Tool" in SmartDeviceMonitor for Admin/Device Manager NX Lite and entering the correct login user name and password, a message that an incorrect password has been entered appears.</p>	<p>"Driver Encryption Key:Encryption Strength" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.</p>	<p>Set "Driver Encryption Key:Encryption Strength" to [Simple Encryption]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer.</p> <p>For details, see page 249 "Specifying the Extended Security Functions" and page 128 "Configuring SSL/TLS".</p>
<p>Cannot log in to the machine using [Document Server (MFP): Authentication/Encryption] in DeskTopBinder.</p>	<p>"Driver Encryption Key:Encryption Strength" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.</p>	<p>Set "Driver Encryption Key:Encryption Strength" to [Simple Encryption]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer.</p> <p>For details, see page 249 "Specifying the Extended Security Functions" and page 128 "Configuring SSL/TLS".</p>
<p>Cannot access the machine using ScanRouter EX Professional V3 / ScanRouter EX Enterprise V2.</p>	<p>"Driver Encryption Key:Encryption Strength" is not set correctly. Alternatively, "SSL/TLS" has been enabled although the required certificate is not installed in the computer.</p>	<p>Set "Driver Encryption Key:Encryption Strength" to [Simple Encryption]. Alternatively, enable "SSL/TLS", install the server certificate in the machine, and then install the certificate in the computer.</p> <p>For details, see page 249 "Specifying the Extended Security Functions" and page 128 "Configuring SSL/TLS".</p>

Condition	Cause	Solution
Cannot connect to the ScanRouter delivery software.	The ScanRouter delivery software may not be supported by the machine.	Update to the latest version of the ScanRouter delivery software.
Cannot access the machine using ScanRouter EX Professional V2.	ScanRouter EX Professional V2 does not support user authentication.	ScanRouter EX Professional V2 does not support user authentication.
Cannot log out when using the copying or scanner functions.	The original has not been scanned completely.	When the original has been scanned completely, press [#], remove the original, and then log out.
"Prg. Dest." does not appear on the scanner screen for specifying destinations.	"Restrict Adding of User Destinations" is set to [On] in "Restrict Use of Destinations" under "Extended Security", so only the user administrator can register destinations in the Address Book on the scanner screen.	Registration must be done by the user administrator.

Condition	Cause	Solution
<p>Cannot send e-mail from the scanner.</p> <p>Similarly:</p> <ul style="list-style-type: none"> <li>• Cannot select an address.</li> <li>• Cannot specify a signature.</li> <li>• Cannot store data in a media.</li> </ul>	<p>The following are possible causes:</p> <ul style="list-style-type: none"> <li>• The validity period of the user certificate (destination certificate) has expired.</li> <li>• The validity period of the device certificate (S/MIME) has expired.</li> <li>• The device certificate (S/MIME) does not exist or is invalid.</li> <li>• The validity period of the device certificate (PDF with digital signature or PDF/A with digital signature) has expired.</li> <li>• The device certificate (PDF with digital signature or PDF/A with digital signature) does not exist or is invalid.</li> <li>• The administrator's e-mail address is incorrect.</li> </ul>	<ul style="list-style-type: none"> <li>• Install a user certificate (destination certificate). You can install a user certificate (destination certificate) from the Web Image Monitor address book. The user certificate (destination certificate) itself must be prepared in advance.</li> <li>• Install a device certificate for S/MIME.</li> <li>• Install a device certificate for PDF with digital signature or PDF/A with digital signature. For details, see page 123 "Protecting the Communication Path via a Device Certificate".</li> <li>• Specify the administrator's e-mail address. For details, see "File Transfer", Connecting the Machine/ System Settings.</li> </ul>
<p>User authentication is disabled, yet stored files do not appear.</p>	<p>User authentication might have been disabled without "All Users" being selected for user access to stored files.</p>	<p>Re-enable user authentication, and select [All Users] as the access permission setting of the files you want to display. For details, see page 175 "Managing Stored Files".</p>

Condition	Cause	Solution
User authentication is disabled, yet destinations specified using the machine do not appear.	User authentication might have been disabled without "All Users" being selected for "Protect Destination".	Re-enable user authentication, and select [All Users] as the access permission setting of the destinations you want to display.  For details, see page 91 "Protecting the Address Book".
Cannot print when user authentication has been enabled.	User authentication may not be specified in the printer driver.	Specify user authentication in the printer driver. For details, see the printer driver Help.
[Finish Job and Limit] is selected in "Machine action when limit is reached", but the current job is canceled before it is finished.	Depending on the application you are using, the machine might recognize a job as multiple jobs, causing cancelation of the job before it is finished.	Reset the print volume use setting for the user by, for example, clearing the print volume use counter, and then perform printing again.  For details, see page 88 "Clearing Print Volume Use Counters".
If you try to interrupt a job while copying or scanning, an authentication screen appears.	With this machine, you can log out while copying or scanning. If you try to interrupt copying or scanning after logging out, an authentication screen appears.	Only the user who executed a copying or scanning job can interrupt it.  Wait until the job has completed or check with the user who executed the job.  The machine administrator can delete jobs.
After executing "Encrypt User Custom Settings & Address Book", the "Exit" message does not appear despite waiting a long time.	Authentication may be taking time because a large number of items are registered in the address book. Alternatively, a file may be corrupt or the hard disk may be faulty.	If the screen has still not updated even though the "File System Data Only" time specified in accordance with page 95 "Encrypting Data on the Hard Disk" has elapsed, contact your service representative.



# 9. List of Operation Privileges for Settings

This chapter specifies a list of the administrator and user operation privileges for the machine settings when administrator authentication or user authentication is enabled.

## How to Read

### Understanding headers

- User  
The user administrator has privileges for this operation.
- Mach  
The machine administrator has privileges for this operation.
- N/W  
The network administrator has privileges for this operation.
- File  
The file administrator has privileges for this operation.
- Unset  
The logged in user has privileges for this operation.  
In cases where no settings are selected in "Available Settings" of [Administrator Authentication Management].
- Set  
The logged in user has privileges for this operation.  
Status when settings are selected in "Available Settings" of [Administrator Authentication Management].
- Lv.1  
In cases where the [Menu Protect] setting is set to [Level 1].
- Lv.2  
In cases where the [Menu Protect] setting is set to [Level 2].

### Understanding the symbols

R/W: Execute, change and reading possible.

R: Reading is possible.

-: Execute, change and reading are not possible.



# System Settings

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [General Features]

Settings	User	Mach	N/W	File	Unset	Set
[Program / Change / Delete User Text]	R	R/W	R	R	R/W	R
[Panel Key Sound]	R	R/W	R	R	R/W	R
[Warm-up Beeper]	R	R/W	R	R	R/W	R
[Copy Count Display]	R	R/W	R	R	R/W	R
[Function Priority]	R	R/W	R	R	R/W	R
[Function Key Allocation]	R	R/W	R	R	R/W	R
[Screen Color Setting]	R	R/W	R	R	R/W	R
[Print Priority]	R	R/W	R	R	R/W	R
[Function Reset Timer]	R	R/W	R	R	R/W	R
[Interleave Print]	R	R/W	R	R	R/W	R
[Output: Copier]	R	R/W	R	R	R/W	R
[Output: Document Server]	R	R/W	R	R	R/W	R
[Output: Printer]	R	R/W	R	R	R/W	R
[Key Repeat]	R	R/W	R	R	R/W	R
[System Status/Job List Display Time]	R	R/W	R	R	R/W	R
[Time Interval between Printing Jobs]	R	R/W	R	R	R/W	R
[ADF Original Table Elevation]	R	R/W	R	R	R/W	R
[External Keyboard]	R	R/W	R	R	R/W	R
[Compatible ID]	R	R/W	R	R	R/W	R
[Z-fold Position]	R	R/W	R	R	R/W	R
[Half Fold Position]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[Letter Fold-out Position]	R	R/W	R	R	R/W	R
[Letter Fold-in Position]	R	R/W	R	R	R/W	R
[Double Parallel Fold Position]	R	R/W	R	R	R/W	R
[Gate Fold Position]	R	R/W	R	R	R/W	R
[Paper Tray Priority: Copier]	R	R/W	R	R	R/W	R
[Paper Tray Priority: Printer]	R	R/W	R	R	R/W	R
[Status Indicator]	R	R/W	R	R	R/W	R
[Perfect Binding Cut Fine Adjustment]	R	R/W	R	R	R/W	R

**[Timer Settings]**

Settings	User	Mach	N/W	File	Unset	Set
[Sleep Mode Timer]	R	R/W	R	R	R/W	R
[Low Power Mode Timer]	R	R/W	R	R	R/W	R
[System Auto Reset Timer]	R	R/W	R	R	R/W	R
[Copier / Document Server Auto Reset Timer]	R	R/W	R	R	R/W	R
[Printer Auto Reset Timer]	R	R/W	R	R	R/W	R
[Scanner Auto Reset Timer]	R	R/W	R	R	R/W	R
[Set Date]	R	R/W	R	R	R/W	R
[Set Time]	R	R/W	R	R	R/W	R
[Auto Logout Timer]	R	R/W	R	R	R/W	R
[Weekly Timer]	R	R/W	R	R	R/W	R
[Binding Glue Heater Auto Off Timer]	R	R/W	R	R	R/W	R

**[Interface Settings]**

**[Network]**

Settings	User	Mach	N/W	File	Unset	Set
[Machine IPv4 Address] <sup>*1</sup>	R	R	R/W	R	R/W	R
[IPv4 Gateway Address]	R	R	R/W	R	R/W	R
[Machine IPv6 Address]	R	R	R	R	R	R
[IPv6 Gateway Address]	R	R	R	R	R	R
[IPv6 Stateless Address Autoconfiguration]	R	R	R/W	R	R/W	R
[DHCPv6 Configuration]	R	R	R/W	R	R/W	R
[DNS Configuration] <sup>*2</sup>	R	R	R/W	R	R/W	R
[DDNS Configuration]	R	R	R/W	R	R/W	R
[IPsec]	R	R	R/W	R	R/W	R
[Domain Name] <sup>*1</sup>	R	R	R/W	R	R/W	R
[WINS Configuration]	R	R	R/W	R	R/W	R
[Effective Protocol]	R	R	R/W	R	R/W	R
[NCP Delivery Protocol]	R	R	R/W	R	R/W	R
[NW Frame Type]	R	R	R/W	R	R/W	R
[SMB Computer Name]	R	R	R/W	R	R/W	R
[SMB Work Group]	R	R	R/W	R	R/W	R
[Ethernet Speed]	R	R	R/W	R	R/W	R
[LAN Type]	R	R	R/W	R	R/W	R
[Ping Command]	-	-	R/W	-	R/W	R
[Permit SNMPv3 Communication]	R	R	R/W	R	R/W	R
[Permit SSL / TLS Communication]	R	R	R/W	R	R/W	R
[Host Name]	R	R	R/W	R	R/W	R
[Machine Name]	R	R	R/W	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[IEEE 802.1X Authentication for Ethernet]	R	R	R/W	R	R/W	R
[Restore IEEE 802.1X Authentication to Defaults]	-	-	R/W	-	R/W	-

\*1 When auto-obtain is set, the data is read-only.

\*2 All administrators and users can run a test of connections.

### [Parallel Interface]

Settings	User	Mach	N/W	File	Unset	Set
[Parallel Timing]	R	R/W	R	R	R/W	R
[Parallel Communication Speed]	R	R/W	R	R	R/W	R
[Selection Signal Status]	R	R/W	R	R	R/W	R
[Input Prime]	R	R/W	R	R	R/W	R
[Bidirectional Communication]	R	R/W	R	R	R/W	R
[Signal Control]	R	R/W	R	R	R/W	R

### [Wireless LAN]

Settings	User	Mach	N/W	File	Unset	Set
[Communication Mode]	R	R	R/W	R	R/W	R
[SSID Setting]	R	R	R/W	R	R/W	R
[Ad-hoc Channel]	R	R	R/W	R	R/W	R
[Security Method]	R	R	R/W	R	R/W	R
[Wireless LAN Easy Setup]	-	-	R/W	-	R/W	-
[Wireless LAN Signal]	R	R	R	R	R	R
[Restore Factory Defaults]	-	-	R/W	-	R/W	-

### [Print List]

Settings	User	Mach	N/W	File	Unset	Set
[Print List]	-	-	R/W	-	R/W	-

**[File Transfer]**

Settings	User	Mach	N/W	File	Unset	Set
[Delivery Option]* <sup>3</sup>	R	R/W	R	R	R/W	R
[Capture Server IPv4 Address]	R	R/W	R	R	R/W	R
[SMTP Server]	R	R	R/W	R	R/W	R
[SMTP Authentication]* <sup>4</sup>	R	R/W	R	R	R/W	R
[POP before SMTP]	R	R/W	R	R	R/W	R
[Reception Protocol]	R	R/W	R	R	R/W	R
[POP3 / IMAP4 Settings]	R	R/W	R	R	R/W	R
[Administrator's E-mail Address]	R	R/W	R	R	R/W	R
[E-mail Communication Port]	R	R	R/W	R	R/W	R
[E-mail Reception Interval]	R	R	R/W	R	R/W	R
[Max. Reception E-mail Size]	R	R	R/W	R	R/W	R
[E-mail Storage in Server]	R	R	R/W	R	R/W	R
[Default User Name / Password (Send)]* <sup>4</sup>	R	R/W	R	R	R/W	R
[Program / Change / Delete E-mail Message]	R	R/W	R	R	R/W	R/W
[Auto Specify Sender Name]	R	R	R/W	R	R/W	R
[Scanner Resend Interval Time]	R	R	R/W	R	R/W	R
[Number of Scanner Resends]	R	R	R/W	R	R/W	R

\*3 The primary and secondary delivery server addresses are read-only.

\*4 Passwords cannot be read.

**[Administrator Tools]**

Settings	User	Mach	N/W	File	Unset	Set
[Address Book Management]	R/W	R/W * <sup>5</sup>	R/W * <sup>5</sup>	R/W * <sup>5</sup>	R/W * <sup>6</sup>	R* <sup>6</sup>

Settings	User	Mach	N/W	File	Unset	Set
[Address Book: Program / Change / Delete Group]	R/W	R/W *5	R/W *5	R/W *5	R/W *6	R*6
[Address Book: Change Order]	R/W	–	–	–	R/W	–
[Print Address Book: Destination List]	R/W	–	–	–	R/W	R/W
[Address Book: Edit Title]	R/W	–	–	–	R/W	–
[Address Book: Switch Title]	R/W	–	–	–	R/W	R
[Backup/Restore: User Custom Settings & Address Book]	R/W	–	–	–	R/W	–
[Data Carry-over Setting for Address Book Auto-program]	R/W	R	R	R	R/W	R
[Auto Delete User in Address Book]	R/W	–	–	–	R/W	–
[Delete All Data in Address Book]	R/W	–	–	–	R/W	–
[Display / Print Counter]	R	R/W	R	R	R/W	R/W
[Display / Clear / Print Counter per User]	R/W *7	R/W *8	R	R	R/W	–
[Display / Clear Eco-friendly Counter]	–	R/W	–	–	–	–
[Display / Clear Eco-friendly Counter per User]	–	R/W	–	–	–	–
[Eco-friendly Counter Period / Administrator Message]	R	R/W	R	R	R	R
[Machine action when limit is reached]	R	R/W	R	R	R	R
[Print Volume Use Limitation: Unit Count Setting]	R	R/W	R	R	R	R
[Enhanced Print Volume Use Limitation]	R	R/W	R	R	R	R
[Print Volum. Use Limit.: Default Limit Value]	R/W	R	R	R	R	R
[Media Slot Use]	R	R/W	R	R	R	R
[User Authentication Management]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[Enhanced Authentication Management]	R	R/W	R	R	R/W	R
[Administrator Authentication Management]	R/W *9*10	R/W *10	R/W *10	R/W *10	R/W	-
[Program / Change Administrator]	R/W *11	R/W *11	R/W *11	R/W *11	-	-
[Key Counter Management]	R	R/W	R	R	R/W	R
[External Charge Unit Management]	R	R/W	R	R	R/W	R
[Enhanced External Charge Unit Management]	R	R/W	R	R	R/W	R
[Extended Security]						
• [Driver Encryption Key]	-	-	R/W	-	R/W	-
• [Driver Encryption Key:Encryption Strength]	R	R	R/W	R	R/W	R
• [Restrict Display of User Information]	R	R/W	R	R	R/W	R
• [Encrypt User Custom Settings & Address Book]	R/W	R	R	R	R	R
• [Enhance File Protection]	R	R	R	R/W	R	R
• [Restrict Use of Destinations]	R/W	R	R	R	R	R
• [Restrict Adding of User Destinations]	R/W	R	R	R	R	R
• [Settings by SNMPv1, v2]	R	R	R/W	R	R/W	R
• [Authenticate Current Job]	R	R/W	R	R	R/W	R
• [Password Policy]	R/W	-	-	-	-	-
• [@Remote Service]	R	R/W	R	R	R/W	R
• [Update Firmware]	R	R/W	R	R	-	-
• [Change Firmware Structure]	R	R/W	R	R	-	-
• [Password Entry Violation]	-	R/W	-	-	-	-
• [Security Setting for Access Violation]	-	R/W	-	-	-	-

Settings	User	Mach	N/W	File	Unset	Set
• [Device Access Violation]	-	R/W	-	-	-	-
[Auto Delete File in Document Server]	R	R	R	R/W	R/W	R
[Delete All Files in Document Server]	-	-	-	R/W	R/W	-
[Capture Priority]	-	R/W	-	-	R/W	R
[Capture: Delete All Unsent Files]	-	R/W	-	-	R/W	-
[Capture: Ownership]	-	R/W	-	-	R/W	R
[Capture: Public Priority]	-	R/W	-	-	R/W	R
[Capture: Owner Defaults]	-	R/W	-	-	R/W	R
[Program / Change / Delete LDAP Server] <sup>*4</sup>	-	R/W	-	-	R/W	R
[LDAP Search]	R	R/W	R	R	R/W	R
[Sleep Mode Entry by Sleep Mode Timer]	R	R/W	R	R	R/W	R
[Service Test Call]	-	R/W	-	-	R/W	-
[Notify Machine Status]	-	R/W	-	-	R/W	-
[Service Mode Lock]	R	R/W	R	R	R/W	R
[Firmware Version]	R	R	R	R	R	R
[Network Security Level]	R	R	R/W	R	R	R
[Auto Erase Memory Setting]	R	R/W	R	R	R	R
[Erase All Memory]	-	R/W	-	-	-	-
[Delete All Logs]	-	R/W	-	-	R/W	-
[Transfer Log Setting] <sup>*12</sup>	R	R/W	R	R	R/W	R
[Detect Data Security for Copying]	R	R/W	R	R	R/W	R
[Unauthorized Copy Prevention Printing: Copier]	R	R/W	R	R	R/W	R
[Unauthorized Copy Prevention Printing: Document Server]	R	R/W	R	R	R/W	R



Settings	User	Mach	N/W	File	Unset	Set
[Unauthorized Copy Prevention Printing: Printer]	R	R/W	R	R	R/W	R
[Fixed USB Port]	R	R/W	R	R	R/W	R
[Program / Change / Delete Realm]	-	R/W	-	-	R/W	R
[Machine Data Encryption Settings]	-	R/W	-	-	-	-
[Program / Delete Device Certificate]	-	-	R/W	-	-	-
[Device Setting Information: Export (Memry Strge Devc)]* <sup>13</sup>	-	-	-	-	-	-
[Device Setting Information: Import (Memry Strge Devc)]* <sup>13</sup>	-	-	-	-	-	-
[PDF File Type: PDF/A Fixed]	R	R/W	R	R	R/W	R
[Stop Key to Suspend Print Job]	R	R/W	R	R	R/W	R
[Energy Saver Key to Change Mode]	R	R/W	R	R	R/W	R
[Compulsory Security Stamp:Copier]	R	R/W	R	R	R/W	R
[Compulsory Security Stamp:Doc. Srvr.]	R	R/W	R	R	R/W	R
[Compulsory Security Stamp:Printer]	R	R/W	R	R	R/W	R
[User's Own Customization]	R	R/W	R	R	R/W	R
[Volume Use Counter: Scheduled/Specified Reset Settings]	R	R/W	R	R	R	R
[Select Switchable Languages]	-	R/W	-	-	R/W	-

\*4 Passwords cannot be read.

\*5 Only changing headings and user searches are possible.

\*6 The items that can be executed, changed and read differ according is set to access privilege.

\*7 Can only be cleared.

\*8 Can only be printed.

\*9 Cannot be changed when using the individual authentication function.

\*10 Only the administrator privilege settings can be changed.

\*11 Administrators can only change their own accounts.

- \* 12 Can only be changed to [Off].
- \* 13 R/W is the administrator with all privileges that include user administrator, machine administrator, network administrator, and file administrator privileges.

## Tray Paper Settings

This section lists the settings displayed by pressing the [Paper Setting] key on the control panel.

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

### [Tray Paper Settings]

Settings	User	Mach	N/W	File	Unset	Set
[Paper Tray]	R	R/W	R	R	R/W	R
[Cover/Designation/Slip/Separation Sheet]	R	R/W	R	R	R/W	R
[Edit Custom Paper]	–	R/W	–	–	R/W	–

# Edit Home

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [Edit Home]

Settings	User	Mach	N/W	File	Unset	Set
[Move Icon]	R	R/W	R	R	R/W	R
[Delete Icon]	R	R/W	R	R	R/W	R
[Add Icon]	-	R/W	-	-	R/W	-
[Restore Default Icon Display]	-	R/W	-	-	R/W	-
[Insert Image on Home Screen]	-	R/W	-	-	R/W	-

# Adjustment Settings for Operators

Settings	User	Mach	N/W	File	Unset	Set
[Adjustment Settings for Operators]	R/W	R/W	R/W	R/W	R/W	R/W

# Adjustment Settings for Skilled Operators

Settings	User	Mach	N/W	File	Unset	Set
[Adjustment Settings for Skilled Operators]	-	R/W	-	-	-	-

## Copier / Document Server Features

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

### [General Features]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Auto Image Density Priority]	R	R/W	R	R	R	R
[Original Photo Type Priority]	R	R/W	R	R	R	R
[Original Orientation in Duplex Mode]	R	R/W	R	R	R	R
[Copy Orientation in Duplex Mode]	R	R/W	R	R	R	R
[Reserve Job Mode]	R	R/W	R	R	R	R
[Reservation Screen Auto-off Timer]	R	R/W	R	R	R	R
[Max. Copy Quantity]	R	R/W	R	R	R	R
[Manual Original Counter Reset]	R	R/W	R	R	R	R
[Auto Tray Switching]	R	R/W	R	R	R	R
[Dark Background]	R	R/W	R	R	R	R
[Panel Features Default]	R	R/W	R	R	R	R
[Image Adjustment Priority]	R	R/W	R	R	R	R
[Paper Display]	R	R/W	R	R	R	R
[Original Type Display]	R	R/W	R	R	R	R
[Alert Sound: Original left on Exposure Glass]	R	R/W	R	R	R	R
[Job End Call]	R	R/W	R	R	R	R
[Connect Copy Key Display]	R	R/W	R	R	R	R
[Switch Original Counter Display]	R	R/W	R	R	R	R
[Paper Settings Screen for Tray 7]	R	R/W	R	R	R	R
[Customize Function: Copier]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Customize Function: Document Server Storage]	R	R/W	R	R	R/W	R

**[Reproduction Ratio]**

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Shortcut Reduce/Enlarge]	R	R/W	R	R	R	R
[Reproduction Ratio]	R	R/W	R	R	R	R
[Reduce/Enlarge Ratio Priority]	R	R/W	R	R	R	R
[Ratio for Create Margin]	R	R/W	R	R	R	R

**[Edit]**

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Front Margin: Left / Right]	R	R/W	R	R	R	R
[Back Margin: Left / Right]	R	R/W	R	R	R	R
[Front Margin: Top / Bottom]	R	R/W	R	R	R	R
[Back Margin: Top / Bottom]	R	R/W	R	R	R	R
[1 Sided→2 Sided Auto Margin: TtoT]	R	R/W	R	R	R	R
[1 Sided→2 Sided Auto Margin: TtoB]	R	R/W	R	R	R	R
[Creep Setting for Magazine]	R	R/W	R	R	R	R
[Erase Border Width]	R	R/W	R	R	R	R
[Erase Original Shadow in Combine]	R	R/W	R	R	R/W	R
[Erase Center Width]	R	R/W	R	R	R	R
[Front Cover Copy in Combine]	R	R/W	R	R	R/W	R
[Copy Order in Combine]	R	R/W	R	R	R/W	R
[Orientation: Booklet, Magazine]	R	R/W	R	R	R/W	R
[Copy on Designating Page in Combine]	R	R/W	R	R	R/W	R



Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Image Repeat Separation Line]	R	R/W	R	R	R/W	R
[Double Copies Separation Line]	R	R/W	R	R	R/W	R
[Separation Line in Combine]	R	R/W	R	R	R/W	R
[Copy Back Cover]	R	R/W	R	R	R/W	R
[Double Copies Position]	R	R/W	R	R	R/W	R

**[Stamp]**

**[Background Numbering]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Size]	R	R/W	R	R	R/W	R
[Density]	R	R/W	R	R	R/W	R

**[Preset Stamp]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Stamp Language]	R	R/W	R	R	R/W	R
[Stamp Priority]	R	R/W	R	R	R	R
[Stamp Format]: COPY	R	R/W	R	R	R/W *1	R
[Stamp Format]: URGENT	R	R/W	R	R	R/W *1	R
[Stamp Format]: PRIORITY	R	R/W	R	R	R/W *1	R
[Stamp Format]: For Your Info.	R	R/W	R	R	R/W *1	R
[Stamp Format]: PRELIMINARY	R	R/W	R	R	R/W *1	R
[Stamp Format]: For Internal Use Only	R	R/W	R	R	R/W *1	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Stamp Format]: CONFIDENTIAL	R	R/W	R	R	R/W *1	R
[Stamp Format]: DRAFT	R	R/W	R	R	R/W *1	R

\*1 Only adjustments to print position can be set. The print position itself cannot be configured.

### [User Stamp]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Program / Delete Stamp]	R	R/W	R	R	R/W	R
[Stamp Format]: 1-5	R	R/W	R	R	R/W	R

### [Date Stamp]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Format]	R	R/W	R	R	R	R
[Font]	R	R/W	R	R	R/W	R
[Size]	R	R/W	R	R	R/W	R
[Superimpose]	R	R/W	R	R	R/W	R
[Stamp Setting]	R	R/W	R	R	R/W *2	R

\*2 Only adjustments to print position can be set. The print position itself cannot be configured.

### [Page Numbering]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Stamp Format]	R	R/W	R	R	R	R
[Font]	R	R/W	R	R	R/W	R
[Size]	R	R/W	R	R	R/W	R
[Duplex Back Page Stamping Position]	R	R/W	R	R	R/W	R
[Page Numbering in Combine]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Stamp on Designating Slip Sheet]	R	R/W	R	R	R/W	R
[Stamp Position:P1,P2...]	R	R/W	R	R	R/W *3	R
[Stamp Position:1/5,2/5...]	R	R/W	R	R	R/W *3	R
[Stamp Position:-1,-2...]	R	R/W	R	R	R/W *3	R
[Stamp Position:P.1,P.2...]	R	R/W	R	R	R/W *3	R
[Stamp Position:1,2...]	R	R/W	R	R	R/W *3	R
[Stamp Position:1-1,1-2...]	R	R/W	R	R	R/W *3	R
[Superimpose]	R	R/W	R	R	R/W	R
[Page Numbering Initial Letter]	R	R/W	R	R	R	R

\*3 Only adjustments to print position can be set. The print position itself cannot be configured.

**[Stamp Text]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Font]	R	R/W	R	R	R/W	R
[Size]	R	R/W	R	R	R/W	R
[Superimpose]	R	R/W	R	R	R/W	R
[Stamp Setting]	R	R/W	R	R	R/W	R
[Change Job Serial No. for First Job]	R	R/W	R	R	R	R

**[Input / Output]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[SADF Auto Reset]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Copy Eject Face Method in Glass Mode]	R	R/W	R	R	R	R
[Memory Full Auto Scan Restart]	R	R/W	R	R	R	R
[Sort/ Stack Shift Tray Setting]	R	R/W	R	R	R	R
[Insert Separation Sheet]	R	R/W	R	R	R	R
[Letterhead Setting]	R	R/W	R	R	R	R
[Fore Edge Cut Setting]	R	R/W	R	R	R	R
[Staple Position]	R	R/W	R	R	R/W	R
[Punch Type]	R	R/W	R	R	R/W	R
[Ring Binding / Fold Type]	R	R/W	R	R	R/W	R
[Fold Type]	R	R/W	R	R	R/W	R
[Finisher: Staple Position]	R	R/W	R	R	R/W	R
[Finisher: Punch Type]	R	R/W	R	R	R/W	R
[Finisher: Ring Binding Type]	R	R/W	R	R	R/W	R
[Simplified Screen: Finishing Types]	R	R/W	R	R	R/W	R
[Half Fold Settings (Finisher: Booklet Tray)]	R	R/W	R	R	R	R
[Z-fold Output Tray]	R	R/W	R	R	R	R
[Half Fold Settings]	R	R/W	R	R	R	R
[Letter Fold-out Settings]	R	R/W	R	R	R	R
[Letter Fold-in Settings]	R	R/W	R	R	R	R
[Double Parallel Fold Settings]	R	R/W	R	R	R	R
[Gate Fold Settings]	R	R/W	R	R	R	R

### [Administrator Tools]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Menu Protect]	R	R/W	R	R	R	R

# Printer Functions

This section lists the printer function items that appear if [Printer] on the Home screen is pressed.

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

## Printer Functions

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Job List]	R	R	R	R	R	R
[Print Jobs]	R	R	R	R/W	R/W	R/W
[Print from Memory Storage Device]	-	-	-	-	R/W	R/W
[Job Reset]	R/W	R/W	R/W	R/W	R/W	R/W
[Job Operation]	R/W	R/W	R/W	R/W	R/W	R/W
[Form Feed]	R/W	R/W	R/W	R/W	R/W	R/W
[Spooling Job List]	R	R/W	R	R	R	R
[Error Log]	-	R	-	-	R	R

# Printer Features

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

## [List / Test Print]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Multiple Lists]	-	R/W	-	-	R/W	R/W
[Configuration Page]	-	R/W	-	-	R/W	R/W
[Error Log]	-	R/W	-	-	R/W	R/W
[PCL Configuration / Font Page]	-	R/W	-	-	R/W	R/W
[PS Configuration / Font Page]	-	R/W	-	-	R/W	R/W
[PDF Configuration / Font Page]	-	R/W	-	-	R/W	R/W
[Hex Dump]	-	R/W	-	-	R/W	R/W

## [Data Management]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Menu Protect]	R	R/W	R	R	R	R
[List / Test Print Lock]	R	R/W	R	R	R	R
[Delete All Temporary Print Jobs]	-	-	-	R/W	-	-
[Delete All Stored Print Jobs]	-	-	-	R/W	-	-
[Auto Delete Temporary Print Jobs]	R	R	R	R/W	R	R
[Auto Delete Stored Print Jobs]	R	R	R	R/W	R	R

## [System]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Print Error Report]	R	R/W	R	R	R	R
[Auto Continue]	R	R/W	R	R	R	R
[Store and Skip Errored Job]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Memory Overflow]	R	R/W	R	R	R	R
[Auto Cancel Conf. for PDL Error Job]	R	R/W	R	R	R	R
[Auto Cancel for Print Job(s) on Error]	R	R/W	R	R	R	R
[Job Separation]	R	R/W	R	R	R	R
[Rotate Sort: Auto Paper Continue]	R	R/W	R	R	R	R
[Rotate by 180 Degrees]	R	R/W	R	R	R	R
[Print Compressed Data]	R	R/W	R/W	R	R	R
[Memory Usage]	R	R/W	R/W	R	R	R
[Duplex]	R	R/W	R	R	R	R
[Copies]	R	R/W	R	R	R	R
[Blank Page Print]	R	R/W	R	R	R	R
[Edge Smoothing]	R	R/W	R	R	R	R
[Toner Saving]	R	R/W	R	R	R	R
[Spool Image]	R	R/W	R	R	R	R
[Reserved Job Waiting Time]	R	R/W	R	R	R	R
[Printer Language]	R	R/W	R	R	R	R
[Sub Paper Size]	R	R/W	R	R	R	R
[Page Size]	R	R/W	R	R	R	R
[Letterhead Setting]	R	R/W	R	R	R	R
[Tray Setting Priority]	R	R/W	R	R	R	R
[Edge to Edge Print]	R	R/W	R	R	R	R
[Default Printer Language]	R	R/W	R	R	R	R
[Tray Switching]	R	R/W	R	R	R	R
[Extended Auto Tray Switching]	R	R/W	R	R	R	R
[Jobs Not Printed As Machn. Was Off]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Restrict Direct Print Jobs]	R	R/W	R	R	R	R
[Switch Initial Screen]	R	R/W	R	R	R	R

**[Host Interface]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[I/O Buffer]	R	R/W	R	R	R	R
[I/O Timeout]	R	R/W	R	R	R	R

**[PCL Menu]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Orientation]	R	R/W	R	R	R	R
[Form Lines]	R	R/W	R	R	R	R
[Font Source]	R	R/W	R	R	R	R
[Font Number]	R	R/W	R	R	R	R
[Point Size]	R	R/W	R	R	R	R
[Font Pitch]	R	R/W	R	R	R	R
[Symbol Set]	R	R/W	R	R	R	R
[Courier Font]	R	R/W	R	R	R	R
[Extend A4 Width]	R	R/W	R	R	R	R
[Append CR to LF]	R	R/W	R	R	R	R
[Resolution]	R	R/W	R	R	R	R

**[PS Menu]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Job Timeout]	R	R/W	R	R	R	R
[Wait Timeout]	R	R/W	R	R	R	R



Settings	User	Mach	N/W	File	Lv.1	Lv.2
[Paper Selection Method]	R	R/W	R	R	R	R
[Swchng. btwn. 1&2 Sided Prt. Func.]	R	R/W	R	R	R	R
[Data Format]	R	R/W	R	R	R	R
[Resolution]	R	R/W	R	R	R	R
[Orientation Auto Detect]	R	R/W	R	R	R	R

**[PDF Menu]**

Settings	User	Mach	N/W	File	Lv.1	Lv.2
[Change PDF Password]	R	R/W	R	R	R	R
[PDF Group Password]	R	R/W	R	R	R	R
[Reverse Order Printing]	R	R/W	R	R	R	R
[Resolution]	R	R/W	R	R	R	R
[Orientation Auto Detect]	R	R/W	R	R	R	R

# Scanner Features

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

## [General Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Switch Title]	R	R/W	R	R	R	R
[Update Delivery Server Destination List]	–	R/W	–	–	–	–
[Search Destination]	R	R/W	R	R	R	R
[Ext. Auth.: Folder Path Overwrite Setting]	R	R/W	R	R	R	R
[PC Scan Command Standby Time]	R	R/W	R	R	R	R
[Destination List Display Priority 1]	R	R/W	R	R	R	R
[Destination List Display Priority 2]	R	R/W	R	R	R	R
[Print & Delete Scanner Journal]	R	R/W	R	R	R	R
[Print Scanner Journal]	R	R/W	R	R	R	R
[Delete Scanner Journal]	R	R/W	R	R	R	R
[Delete Recent Destinations]	R	R/W	R	R	R	R
[Use WSD or DSM]	R	R/W	R	R	R/W	R
[Use a Destination List that is not DSM]	R	R/W	R	R	R/W	R
[Program Setting for Destinations]	R	R/W	R	R	R	R

## [Scan Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[A.C.S. Sensitivity Level]	R	R/W	R	R	R	R
[Wait Time for Next Orig.: Exposure Glass]	R	R/W	R	R	R	R
[Wait Time for Next Original(s): SADP]	R	R/W	R	R	R	R
[Background Density of ADS (Full Color)]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Lv.1	Lv.2
[Blank Page Detect]	R	R/W	R	R	R	R
[Reproduction Ratio]	R	R/W	R	R	R	R
[Program / Change / Delete Scan Size]	R	R/W	R	R	R	R

**[Send Settings]**

Settings	User	Mach	N/W	File	Lv.1	Lv.2
[Compression (Black & White)]	R	R/W	R	R	R/W	R
[Compression Method (Black & White)]	R	R/W	R	R	R/W	R
[Compression (Gray Scale / Full Color)]	R	R/W	R	R	R/W	R
[Compression Method for High Compression PDF]	R	R/W	R	R	R/W	R
[High Compression PDF Level]	R	R/W	R	R	R/W	R
[OCR Scanned PDF: Blank Page Sensitivity]	R	R/W	R	R	R/W	R
[Max. Email Size]	R	R	R/W	R	R	R
[Divide & Send Email]	R	R	R/W	R	R	R
[Insert Additional Email Info]	R	R/W	R	R	R/W	R
[No. of Digits for Single Page Files]	R	R/W	R	R	R/W	R
[Stored File Email Method]	R	R/W	R	R	R/W	R
[Default Email Subject]	R	R/W	R	R	R	R

**[Initial Settings]**

Settings	User	Mach	N/W	File	Lv.1	Lv.2
[Menu Protect]	R	R/W	R	R	R	R

# Browser Features

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

Settings	User	Mach	N/W	File	Unset	Set
[Browser Default Settings]	R	R/W	R	R	R/W	R
[Settings per Users]	R	R/W	R	R	R/W	R
[View Logs]	R	R	R	R	R	R

# Extended Feature Settings

## [Extended Feature Settings]

Settings	User	Mach	N/W	File	Unset	Set
[Startup Setting]	R	R/W	R	R	R	R
[Install]	R	R/W	R	R	R	R
[Uninstall]	R	R/W	R	R	R	R
[Extended Feature Info]	R	R/W	R	R	R	R
[Administrator Tools]	-	R/W	-	-	-	-
[Add.Program Startup Setting]	R	R/W	R	R	R	R
[Install Add.Program]	R	R/W	R	R	R	R
[Uninstall Add.Program]	R	R/W	R	R	R	R
[Add.Program Info]	R	R/W	R	R	R	R

# Web Image Monitor: Display Eco-friendly Counter

These settings are in [Status/Information].

Each user can only view his or her own counter.

Settings	User	Mach	N/W	File	Unset	Set
[Download]	-	R/W	-	-	-	-
[Device Total Counter]	-	R	-	-	-	-
[Counter per User]	-	R	-	-	R	R

# Web Image Monitor: Job

These settings are in [Status/Information].

Users can only change jobs they themselves executed.

## [Job List]

Settings	User	Mach	N/W	File	Unset	Set
[Current/Waiting Jobs]: [Change Order]	-	R/W	-	-	-	-
[Current/Waiting Jobs]: [Suspend Printing]/ [Resume Printing]	-	R/W	-	-	-	-
[Current/Waiting Jobs]: [Delete Reservation]	-	R/W	-	-	-	R/W
[Job History]	-	R	-	-	R	R <sup>*1</sup>

\*1 Can be viewed if user code authentication is used for the user authentication method.

## [Printer]

Settings	User	Mach	N/W	File	Unset	Set
[Spool Printing]: [Delete]	-	R/W	-	-	R	R/W
[Job History]	R	R/W	R	R	R	R
[Error Log]	-	R	-	-	R	R

## [Document Server]

Settings	User	Mach	N/W	File	Unset	Set
[Print Job History]	-	R	-	-	R	R <sup>*1</sup>
[Scanner Remote Send History]	-	R	-	-	R	R <sup>*1</sup>

\*1 Can be viewed when using user code authentication for the user authentication method.

# Web Image Monitor: Device Settings

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [System]

Settings	User	Mach	N/W	File	Unset	Set
[Device Name]	R	R	R/W	R	R/W	R
[Comment]	R	R	R/W	R	R/W	R
[Location]	R	R	R/W	R	R/W	R
[Display Panel Language]	R	R/W	R	R	R/W	R
[Spool Printing]	R	R/W	R	R	R/W	R
[Protect Printer Display Panel]	R	R/W	R	R	–	–
[Print Priority]	R	R/W	R	R	R/W	R
[Function Reset Timer]	R	R/W	R	R	R/W	R
[Energy Saver Key to Change Mode]	R	R/W	R	R	R/W	R
[Stop Key to Suspend Print Job]	R	R/W	R	R	R/W	R
[Permit Firmware Update]	R	R/W	R	R	–	–
[Permit Firmware Structure Change]	R	R/W	R	R	–	–
[Display IP Address on Device Display Panel]	R	R/W	R	R	–	–
[Media Slot Use]	R	R/W	R	R	R	R
[Compatible ID]	R	R/W	R	R	R/W	R
[PDF File Type: PDF/A Fixed]	R	R/W	R	R	R/W	R
[Output Tray]	R	R/W	R	R	R/W	R
[Paper Tray Priority]	R	R/W	R	R	R/W	R
[Front Cover Sheet Tray]	R	R/W	R	R	R/W	R
[Back Cover Sheet Tray]	R	R/W	R	R	R/W	R



Settings	User	Mach	N/W	File	Unset	Set
[Slip Sheet Tray]	R	R/W	R	R	R/W	R
[Designation Sheet 1-9 Tray]	R	R/W	R	R	R/W	R
[Separation Sheet Tray]	R	R/W	R	R	R/W	R

**[Function Key Allocation/Function Priority]**

Settings	User	Mach	N/W	File	Unset	Set
[Function Key Allocation]	R	R/W	R	R	R/W	R
[Function Priority]	R	R/W	R	R	R/W	R

**[Paper]**

Settings	User	Mach	N/W	File	Unset	Set
[Tray 1-7]	R	R/W	R	R	R/W	R
[Interposer Upper Tray]	R	R/W	R	R	R/W	R
[Interposer Lower Tray]	R	R/W	R	R	R/W	R
[Perfect Binder Interposer Upper Tray]	R	R/W	R	R	R/W	R
[Perfect Binder Interposer Lower Tray]	R	R/W	R	R	R/W	R

**[Custom Paper]**

Settings	User	Mach	N/W	File	Unset	Set
[Program/Change]	-	R/W	-	-	R/W	-
[Delete]	-	R/W	-	-	R/W	-
[Recall Paper Library]	-	R/W	-	-	R/W	-

**[Date/Time]**

Settings	User	Mach	N/W	File	Unset	Set
[Set Date]	R	R/W	R	R	R/W	R
[Set Time]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[SNTP Server Name]	R	R/W	R	R	R/W	R
[SNTP Polling Interval]	R	R/W	R	R	R/W	R
[Time Zone]	R	R/W	R	R	R/W	R

**[Timer]**

Settings	User	Mach	N/W	File	Unset	Set
[Sleep Mode Timer]	R	R/W	R	R	R/W	R
[Low Power Mode Timer]	R	R/W	R	R	R/W	R
[System Auto Reset Timer]	R	R/W	R	R	R/W	R
[Copier/Document Server Auto Reset Timer]	R	R/W	R	R	R/W	R
[Scanner Auto Reset Timer]	R	R/W	R	R	R/W	R
[Printer Auto Reset Timer]	R	R/W	R	R	R/W	R
[Auto Logout Timer]	R	R/W	R	R	R/W	R
[Weekly Timer]	R	R/W	R	R	R/W	R

**[Logs]**

Settings	User	Mach	N/W	File	Unset	Set
[Job Log]	R	R/W	R	R	R/W	R
[Access Log]	R	R/W	R	R	R/W	R
[Eco-friendly Logs]	R	R/W	R	R	R/W	R
[Transfer Logs] <sup>*1</sup>	R	R/W	R	R	R/W	R
[Encrypt Logs]	R	R/W	R	R	R/W	R
[Classification Code]	R	R/W	R	R	R/W	R
[Delete All Logs]	–	R/W	–	–	R/W	–

\*1 Can only be changed to [Inactive].

**[Download Logs]**

Settings	User	Mach	N/W	File	Unset	Set
[Logs to Download]	-	R/W	-	-	-	-
[Download]	-	R/W	-	-	-	-

**[Email]**

Settings	User	Mach	N/W	File	Unset	Set
[Administrator Email Address]	-	R/W	-	-	R/W	R
[Signature]	-	R/W	-	-	R/W	R
[Reception Protocol]	-	R/W	-	-	R/W	R
[Email Reception Interval]	-	-	R/W	-	R/W	R
[Max. Reception Email Size]	-	-	R/W	-	R/W	R
[Email Storage in Server]	-	-	R/W	-	R/W	R
[SMTP Server Name]	-	-	R/W	-	R/W	R
[SMTP Port No.]	-	-	R/W	-	R/W	R
[Use Secure Connection (SSL)]	-	-	R/W	-	R/W	R
[SMTP Authentication]	-	R/W	-	-	R/W	R
[SMTP Auth. Email Address]	-	R/W	-	-	R/W	R
[SMTP Auth. User Name]	-	R/W	-	-	R/W	-
[SMTP Auth. Password]* <sup>2</sup>	-	R/W	-	-	R/W	-
[SMTP Auth. Encryption]	-	R/W	-	-	R/W	R
[POP before SMTP]	-	R/W	-	-	R/W	R
[POP Email Address]	-	R/W	-	-	R/W	R
[POP User Name]	-	R/W	-	-	R/W	-
[POP Password]* <sup>2</sup>	-	R/W	-	-	R/W	-
[Timeout setting after POP Auth.]	-	R/W	-	-	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[POP3/IMAP4 Server Name]	-	R/W	-	-	R/W	R
[POP3/IMAP4 Encryption]	-	R/W	-	-	R/W	R
[POP3 Reception Port No.]	-	-	R/W	-	R/W	R
[IMAP4 Reception Port No.]	-	-	R/W	-	R/W	R
[Email Notification E-mail Address]	-	R/W	-	-	R/W	R
[Receive Email Notification]	-	R/W	-	-	R/W	-
[Email Notification User Name]	-	R/W	-	-	R/W	-
[Email Notification Password] <sup>*2</sup>	-	R/W	-	-	R/W	-

\*2 Passwords cannot be read.

### [Auto Email Notification]

Settings	User	Mach	N/W	File	Unset	Set
[Notification Message]	R	R/W	R	R	R/W	R
[Groups to Notify]	R	R/W	R	R	R/W	R
[Select Groups/Items to Notify]	R	R/W	R	R	R/W	R
[Detailed Settings of Each Item]	R	R/W	R	R	R/W	R

### [On-demand Email Notification]

Settings	User	Mach	N/W	File	Unset	Set
[Notification Subject]	R	R/W	R	R	R/W	R
[Notification Message]	R	R/W	R	R	R/W	R
[Access Restriction to Information]	R	R/W	R	R	R/W	R
[Receivable Email Address/Domain Name Settings]	R	R/W	R	R	R/W	R

**[File Transfer]**

Settings	User	Mach	N/W	File	Unset	Set
[SMB User Name]	-	R/W	-	-	R/W	-
[SMB Password]* <sup>2</sup>	-	R/W	-	-	R/W	-
[FTP User Name]	-	R/W	-	-	R/W	-
[FTP Password]* <sup>2</sup>	-	R/W	-	-	R/W	-
[NCP User Name]	-	R/W	-	-	R/W	-
[NCP Password]* <sup>2</sup>	-	R/W	-	-	R/W	-

\*2 Passwords cannot be read.

**[User Authentication Management]**

Settings	User	Mach	N/W	File	Unset	Set
[User Authentication Management]	R	R/W	R	R	R/W	R
[Printer Job Authentication Settings]	R	R/W	R	R	R/W	R
[User Code Authentication Settings]	R	R/W	R	R	R/W	R
[Basic Authentication Settings]	R	R/W	R	R	R/W	R
[Windows Authentication Settings]	R	R/W	R	R	R/W	R
[Group Settings for Windows Authentication]	R	R/W	R	R	R/W	R
[LDAP Authentication Settings]	R	R/W	R	R	R/W	R
[Integration Server Authentication Settings]	R	R/W	R	R	R/W	R
[Group Settings for Integration Server Authentication]	R	R/W	R	R	R/W	R

**[Administrator Authentication Management]**

Settings	User	Mach	N/W	File	Unset	Set
[User Administrator Authentication]	R/W	R	R	R	R	R
[Available Settings for User Administrator]	R/W	R	R	R	R	R

Settings	User	Mach	N/W	File	Unset	Set
[Machine Administrator Authentication]	R	R/W	R	R	R	R
[Available Settings for Machine Administrator]	R	R/W	R	R	R	R
[Network Administrator Authentication]	R	R	R/W	R	R	R
[Available Settings for Network Administrator]	R	R	R/W	R	R	R
[File Administrator Authentication]	R	R	R	R/W	R	R
[Available Settings for File Administrator]	R	R	R	R/W	R	R

### [Program/Change Administrator]

Settings	User	Mach	N/W	File	Unset	Set
[User Administrator]	R/W	R	R	R	–	–
[Machine Administrator]	R	R/W	R	R	–	–
[Network Administrator]	R	R	R/W	R	–	–
[File Administrator]	R	R	R	R/W	–	–
[Login User Name]* <sup>1</sup>	R/W	R/W	R/W	R/W	–	–
[Login Password]* <sup>1</sup>	R/W	R/W	R/W	R/W	–	–
[Encryption Password]* <sup>1</sup>	R/W	R/W	R/W	R/W	–	–

\*1 Administrators can only change their own accounts.

### [Print Volume Use Limitation]

Settings	User	Mach	N/W	File	Unset	Set
[Machine Action When Limit is Reached]	R	R/W	R	R	R	R
[Print Volume Use Limitation: Unit Count Setting]	R	R/W	R	R	R	R
[Volume Use Counter: Scheduled/Specified Reset Settings]	R	R/W	R	R	R	R

**[LDAP Server]**

Settings	User	Mach	N/W	File	Unset	Set
[LDAP Search]	-	R/W	-	-	R/W	-
[Change]	-	R/W	-	-	R/W	-
[Delete]	-	R/W	-	-	R/W	-

**[Firmware Update]**

Settings	User	Mach	N/W	File	Unset	Set
[Update]	-	R/W	-	-	-	-
[Firmware Version]	-	R	-	-	-	-

**[Kerberos Authentication]**

Settings	User	Mach	N/W	File	Unset	Set
[Encryption Algorithm]	-	R/W	-	-	-	-
[Realm 1-5]	-	R/W	-	-	-	-

**[Eco-friendly Counter Period/Administrator Message]**

Settings	User	Mach	N/W	File	Unset	Set
[Display Information Screen]	R	R/W	R	R	R/W	R
[Display Time]	R	R/W	R	R	R/W	R
[Count Period]	R	R/W	R	R	R/W	R
[Count Period (Days)]	R	R/W	R	R	R/W	R
[Administrator Message]	R	R/W	R	R	R/W	R

**[Compulsory Security Stamp]**

Settings	User	Mach	N/W	File	Unset	Set
[Copier]	R	R/W	R	R	R	R
[Document Server]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Unset	Set
[Printer]	R	R/W	R	R	R	R

**[Unauthorized Copy Prevention: Copier]**

Settings	User	Mach	N/W	File	Unset	Set
[Compulsory Unauthorized Copy Prevention]	R	R/W	R	R	R	R
[Unauthorized Copy Prevention Type]	R	R/W	R	R	R	R
[Mask Type for Pattern/Density/Effect]	R	R/W	R	R	R	R
[Prevention Text Settings]	R	R/W	R	R	R	R

**[Unauthorized Copy Prevention: Document Server]**

Settings	User	Mach	N/W	File	Unset	Set
[Compulsory Unauthorized Copy Prevention]	R	R/W	R	R	R	R
[Unauthorized Copy Prevention Type]	R	R/W	R	R	R	R
[Mask Type for Pattern/Density/Effect]	R	R/W	R	R	R	R
[Prevention Text Settings]	R	R/W	R	R	R	R

**[Unauthorized Copy Prevention: Printer]**

Settings	User	Mach	N/W	File	Unset	Set
[Unauthorized Copy Prevention Setting]	R	R/W	R	R	R	R
[Compulsory Unauthorized Copy Prevention]	R	R/W	R	R	R	R
[Unauthorized Copy Prevention Type]	R	R/W	R	R	R	R
[Mask Type for Pattern/Density/Effect]	R	R/W	R	R	R	R
[Prevention Text Settings]	R	R/W	R	R	R	R



# Web Image Monitor: Printer

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

## [Basic Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Print Error Report]	R	R/W	R	R	R	R
[Auto Continue]	R	R/W	R	R	R	R
[Memory Overflow]	R	R/W	R	R	R	R
[Auto Cancel Confirmation for PDL Error Job]	R	R/W	R	R	R	R
[Auto Cancel for Print Job(s) on Error]	R	R/W	R	R	R	R
[Job Separation]	R	R/W	R	R	R	R
[Rotate Sort: Auto Paper Continue]	R	R/W	R	R	R	R
[Auto Delete Temporary Print Jobs]	R	R	R	R/W	R	R
[Auto Delete Stored Print Jobs]	R	R	R	R/W	R	R
[Jobs Not Printed As Machine Was Off]	R	R/W	R	R	R	R
[Rotate by 180 Degrees]	R	R/W	R	R	R	R
[Print Compressed Data]	R	R/W	R/W	R	R	R
[Memory Usage]	R	R/W	R	R	R	R
[Duplex]	R	R/W	R	R	R	R
[Copies]	R	R/W	R	R	R	R
[Blank Page Print]	R	R/W	R	R	R	R
[Edge Smoothing]	R	R/W	R	R	R	R
[Toner Saving]	R	R/W	R	R	R	R
[Spool Image]	R	R/W	R	R	R	R
[Reserved Job Waiting Time]	R	R/W	R	R	R	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Printer Language]	R	R/W	R	R	R	R
[Sub Paper Size]	R	R/W	R	R	R	R
[Page Size]	R	R/W	R	R	R/W	R
[Letterhead Setting]	R	R/W	R	R	R	R
[Tray Setting Priority]	R	R/W	R	R	R	R
[Store and Skip Errored Job]	R	R/W	R	R	R	R
[Edge to Edge Print]	R	R/W	R	R	R	R
[Default Printer Language]	R	R/W	R	R	R	R
[Tray Switching]	R	R/W	R	R	R	R
[List/Test Print Lock]	R	R/W	R	R	R	R
[Extended Auto Tray Switching]	R	R/W	R	R	R	R
[Virtual Printer]	R	R/W	R	R	R	R
[Restrict Direct Print Jobs]	R	R/W	R	R	R	R
[Initial screen switch setting]	R	R/W	R	R	R	R
[Host Interface]	R	R/W	R	R	R	R
[PCL Menu]	R	R/W	R	R	R	R
[PS Menu]	R	R/W	R	R	R	R
[PDF Menu]	R	R/W	R	R	R	R

**[Tray Parameters (PCL)]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Tray Parameters (PCL)]	-	R/W	-	-	-	-

**[Tray Parameters (PS)]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Tray Parameters (PS)]	-	R/W	-	-	-	-

**[PDF Temporary Password]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[PDF Temporary Password]	-	-	-	-	R/W	R/W

**[PDF Group Password]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[PDF Group Password]	-	R/W	-	-	-	-

**[PDF Fixed Password]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[PDF Fixed Password]	-	R/W	-	-	-	-

**[Virtual Printer Settings]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Virtual Printer Name]	R	R/W	R	R	R	R
[Protocol]	R	R/W	R	R	R	R
[Print Error Report]	R	R/W	R	R	R	R
[Job Separation]	R	R/W	R	R	R	R
[Rotate by 180 Degrees]	R	R/W	R	R	R	R
[Memory Usage]	R	R/W	R	R	R	R
[Duplex]	R	R/W	R	R	R	R
[Copies]	R	R/W	R	R	R	R
[Blank Page Print]	R	R/W	R	R	R	R
[Edge Smoothing]	R	R/W	R	R	R	R
[Toner Saving]	R	R/W	R	R	R	R
[Sub Paper Size]	R	R/W	R	R	R	R
[Input Tray]	R	R/W	R	R	R/W	R/W

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Page Size]	R	R/W	R	R	R/W	R
[Paper Type]	R	R/W	R	R	R/W	R/W
[Output Tray]	R	R/W	R	R	R/W	R/W
[Letterhead Setting]	R	R/W	R	R	R	R
[Edge to Edge Print]	R	R/W	R	R	R	R
[PCL Menu]	R	R/W	R	R	R	R
[PS Menu]	R	R/W	R	R	R	R
[PDF Menu]	R	R/W	R	R	R	R
[RHPP Settings]	R	R/W	R	R	R/W	R/W

#### [Permissions for Printer Language to Operate File System]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[PJI]	R	R/W	R	R	R	R
[PDF, PostScript]	R	R/W	R	R	R	R

# Web Image Monitor: Scanner

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the "Menu Protect" setting.

## [General Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Switch Title]	R	R/W	R	R	R	R
[Search Destination]	R	R/W	R	R	R	R
[PC Scan Command Standby Time]	R	R/W	R	R	R	R
[Destination List Display Priority 1]	R	R/W	R	R	R	R
[Destination List Display Priority 2]	R	R/W	R	R	R	R
[Print & Delete Scanner Journal]	R	R/W	R	R	R	R
[External Authentication: Folder Path Overwrite Setting]	R	R/W	R	R	R	R

## [Scan Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[A.C.S. Sensitivity Level]	R	R/W	R	R	R	R
[Wait Time for Next Original(s)]	R	R/W	R	R	R	R
[Background Density of ADS (Full Color)]	R	R/W	R	R	R	R
[Blank Page Detect]	R	R/W	R	R	R	R

## [Send Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv. 2
[Compression (Black & White)]	R	R/W	R	R	R/W	R
[Compression (Gray Scale/Full Color)]	R	R/W	R	R	R/W	R
[OCR Scanned PDF: Blank Page Sensitivity]	R	R/W	R	R	R/W	R

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[High Compression PDF Level]	R	R/W	R	R	R/W	R
[Compression Method for High Compression PDF]	R	R/W	R	R	R/W	R
[Max. Email Size]	R	R	R/W	R	R*1	R*1
[Divide & Send Email]	R	R	R/W	R	R*1	R*1
[Insert Additional Email Info]	R	R/W	R	R	R/W	R
[No. of Digits for Single Page Files]	R	R/W	R	R	R/W	R
[Stored File Email Method]	R	R/W	R	R	R/W	R
[Default Email Subject]	R	R/W	R	R	R	R

\*1 When [Network Management] in [Administrator Authentication Management] is set to [Off], user privilege becomes R/W.

### [Initial Settings]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Menu Protect]	R	R/W	R	R	R	R
[Use WSD or DSM]	R	R/W	R	R	R	R
[Display WSD Destination List]	R	R/W	R	R	R	R
[Prohibit WSD Scan Command]	R	R/W	R	R	R	R
[Use a Destination List that is not DSM]	R	R/W	R	R	R	R

### [Default Settings for Normal Screens on Device]

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Store File]	-	R/W	-	-	R	R
[Preview]	-	R/W	-	-	R	R
[Scan Settings]	-	R/W	-	-	R	R
[Send File Type]	-	R/W	-	-	R	R

**[Default Settings for Simplified Screens on Device]**

Settings	User	Mach	N/W	File	Lv. 1	Lv.2
[Scan Settings]	-	R/W	-	-	R	R
[Send File Type]	-	R/W	-	-	R	R

# Web Image Monitor: Interface

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [Interface Settings]

Settings	User	Mach	N/W	File	Unset	Set
[LAN Type]	–	–	R/W	–	R	–
[Network]	R	R	R	R	R	R
[MAC Address]	R	R	R	R	R	R
[Ethernet Security]	R	R	R/W	R	R/W	R
[Ethernet Speed]	R	R	R/W	R	R/W	R
[Bluetooth]	R	R	R/W	R	R/W	R
[Operation Mode]	R	R	R/W	R	R/W	R
[USB]	R	R/W	R	R	R/W	R
[USB Host]	R	R	R	R	R	R

## [Wireless LAN Settings]

Settings	User	Mach	N/W	File	Unset	Set
[LAN Type]	–	–	R/W	–	R	–
[Network]	R	R	R	R	R	R
[MAC Address]	R	R	R	R	R	R
[Available Wireless LAN]	R	R	R	R	R	R
[Communication Mode]	R	R	R/W	R	R/W	R
[SSID]	R	R	R/W	R	R/W	R
[Channel]	R	R	R/W	R	R/W	–
[Security Method]	R	R	R/W	R	R/W	R



Settings	User	Mach	N/W	File	Unset	Set
[WEP Settings]	R	R	R/W	R	R/W	R
[WPA2 Settings]	R	R	R/W	R	R/W	R

# Web Image Monitor: Network

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [IPv4]

Settings	User	Mach	N/W	File	Unset	Set
[IPv4]	R	R	R/W *1	R	R/W *1	R
[Host Name]	R	R	R/W	R	R/W	R
[DHCP]	R	R	R/W	R	R/W	R
[Domain Name]	R	R	R/W	R	R/W	R
[IPv4 Address]	R	R	R/W	R	R/W	R
[Subnet Mask]	R	R	R/W	R	R/W	R
[DDNS]	R	R	R/W	R	R/W	R
[WINS]	R	R	R/W	R	R/W	R
[Primary WINS Server]	R	R	R/W	R	R/W	R
[Secondary WINS Server]	R	R	R/W	R	R/W	R
[LLMNR]	R	R	R/W	R	R/W	R
[Scope ID]	R	R	R/W	R	R/W	R
[Details]	R	R	R/W	R	R/W	R

\*1 IPv4 cannot be disabled from Web Image Monitor when using IPv4 transmission.

## [IPv6]

Settings	User	Mach	N/W	File	Unset	Set
[IPv6]	R	R	R/W	R	R/W	R
[Host Name]	R	R	R/W	R	R/W	R
[Domain Name]	R	R	R/W	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[Link-local Address]	R	R	R	R	R	R
[Stateless Address]	R	R	R/W	R	R/W	R
[Manual Configuration Address]	R	R	R/W	R	R/W	R
[DHCPv6]	R	R	R/W	R	R/W	R
[DHCPv6 Address]	R	R	R	R	R	R
[DDNS]	R	R	R/W	R	R/W	R
[LLMNR]	R	R	R/W	R	R/W	R
[Details]	R	R	R/W	R	R/W	R

**[NetWare]**

Settings	User	Mach	N/W	File	Unset	Set
[NetWare]	R	R	R/W	R	R/W	R
[NetWare Print Settings]	R	R	R/W	R	R/W	R
[NCP Delivery]	R	R	R/W	R	R/W	R

**[SMB]**

Settings	User	Mach	N/W	File	Unset	Set
[SMB]	R	R	R/W	R	R/W	R
[Protocol]	R	R	R	R	R	R
[Workgroup Name]	R	R	R/W	R	R/W	R
[Computer Name]	R	R	R/W	R	R/W	R
[Comment]	R	R	R/W	R	R/W	R
[Share Name]	R	R	R	R	R	R
[Notify Print Completion]	R	R	R/W	R	R/W	R

**[SNMP]**

Settings	User	Mach	N/W	File	Unset	Set
[SNMP]	-	-	R/W	-	-	-
[Protocol]	-	-	R/W	-	-	-
[SNMPv1 ,v2 Setting]	-	-	R/W	-	-	-
[Community]	-	-	R/W	-	-	-

**[SNMPv3]**

Settings	User	Mach	N/W	File	Unset	Set
[SNMP]	-	-	R/W	-	-	-
[Protocol]	-	-	R/W	-	-	-
[SNMPv3 Setting]	-	-	R/W	-	-	-
[SNMPv3 Trap Communication Setting]	-	-	R/W	-	-	-
[Account] [(User)]	-	-	R/W	-	-	-
[Account] [(Network Administrator)]	-	-	R/W	-	-	-
[Account] [(Machine Administrator)]	-	R/W	-	-	-	-

**[SSDP]**

Settings	User	Mach	N/W	File	Unset	Set
[SSDP]	-	-	R/W	-	-	-
[UUID]	-	-	R	-	-	-
[Profile Expires]	-	-	R/W	-	-	-
[TTL]	-	-	R/W	-	-	-

**[Bonjour]**

Settings	User	Mach	N/W	File	Unset	Set
[Bonjour]	R	R	R/W	R	R/W	R

Settings	User	Mach	N/W	File	Unset	Set
[Local Hostname]	R	R	R	R	R	R
[Details]	R	R	R/W	R	R/W	R
[Print Order Priority]	R	R	R/W	R	R/W	R

**[System Log]**

Settings	User	Mach	N/W	File	Unset	Set
[System Log]	R	R	R	R	R	-

# Web Image Monitor: Security

These settings are in [Configuration] in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Network Security]	-	-	R/W	-	-	-
[Access Control]	-	-	R/W	-	-	-
[IPP Authentication]	-	-	R/W	-	-	-
[SSL/TLS]	-	-	R/W	-	-	-
[ssh]	-	-	R/W	-	R	R
[Site Certificate]	-	-	R/W	-	-	-
[Device Certificate]	-	-	R/W	-	-	-
[S/MIME]	-	-	R/W	-	-	-
[IPsec]	-	-	R/W	-	-	-
[User Lockout Policy]	-	R/W	-	-	-	-
[IEEE 802.1X]	-	-	R/W	-	-	-

# Web Image Monitor: @Remote

These settings are in [Configuration] in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Setup RC Gate]	-	R/W	-	-	-	-
[Update RC Gate Firmware]	-	R/W	-	-	-	-
[RC Gate Proxy Server]	-	R/W	-	-	-	-
[Notify Functional Problems of Device]	-	R/W	-	-	-	-

# Web Image Monitor: Webpage

These settings are in [Configuration] in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

## [Webpage]

Settings	User	Mach	N/W	File	Unset	Set
[Webpage Language]	R	R	R/W	R	R/W	R
[Web Image Monitor Auto Logout]	R	R	R/W	R	R/W	R
[Set URL Target of Link Page]	R	R	R/W	R	R/W	R
[Set Help URL Target]	R	R	R/W	R	R/W	R
[WSD/UPnP Setting]	R	R	R/W	R	R/W	R
[Download Help File]	R/W	R/W	R/W	R/W	R/W	R/W



# Web Image Monitor: Extended Feature Settings

These settings are in [Configuration] in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Startup Setting]	-	R/W	-	-	-	-
[Extended Feature Info]	R	R	R	R	R	R
[Install]	-	R/W	-	-	-	-
[Uninstall]	-	R/W	-	-	-	-
[Administrator Tools]	-	R/W	-	-	-	-
[Additional Program Startup Setting]	-	R/W	-	-	-	-
[Install Additional Program]	-	R/W	-	-	-	-
[Uninstall Additional Program]	-	R/W	-	-	-	-
[Copy Extended Features]	-	R/W	-	-	-	-
[Copy Card Save Data]	-	R/W	-	-	-	-

# Web Image Monitor: Address Book

These settings are in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Add User]	R/W	-	-	-	R/W *1	R/W *1
[Change]	R/W	-	-	-	R/W *1	R/W *1
[Delete]	R/W	-	-	-	R/W *1	R/W *1
[Add Group]	R/W	-	-	-	R/W *1	R/W *1
[Data Carry-over Setting for Address Book Auto-program]	R/W	-	-	-	R/W *1	R/W *1
[Maintenance]	R/W	-	-	-	R/W *1	R/W *1

\* 1 If [Restrict Adding of User Destinations] of [Extended Security] is set to [On], when the machine is configured for basic authentication, users can only change the password of their own account.

# Web Image Monitor: Reset Printer Job

These settings are in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Reset Current Job]	-	R/W	-	-	-	-
[Reset All Jobs]	-	R/W	-	-	-	-

# Web Image Monitor: Reset the Machine

These settings are in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

Settings	User	Mach	N/W	File	Unset	Set
[Reset the Machine]	-	R/W	-	-	R/W	-

# Web Image Monitor: Device Home Management

These settings are in [Device Management].

When administrator authentication is set, the restrictions to user operations differ depending on the configurations in "Available Settings".

Settings	User	Mach	N/W	File	Unset	Set
[Edit Icons]	R	R/W	R	R	R/W	R
[Restore Default Icon Display]	-	R/W	-	-	R/W	-
[Home Screen Settings]	R	R/W	R	R	R/W	R

# Web Image Monitor: Screen Monitoring

These settings are in [Device Management].

Settings	User	Mach	N/W	File	Unset	Set
[Display Device's Screen]	-	R/W	-	-	-	-

# Web Image Monitor: Customize Screen per User

This appears if [User's Own Customization] is set to [Allow].


Users can change only their own settings.

Settings	User	Mach	N/W	File	Unset	Set
[Edit Icons]	-	-	-	-	-	R/W
[Restore Default Icon Display]	-	-	-	-	-	R/W
[Function Priority per User]	-	-	-	-	-	R/W

# Web Image Monitor: Document Server

These settings are in [Print Job/Stored File].

What users can do with stored files depends on their access privileges. For details, see page 351 "List of Operation Privileges for Stored Files".

Settings	User	Mach	N/W	File	Unset	Set
[New Folder]	-	-	-	R/W	R/W	R/W
[Edit Folder]	-	-	-	R/W	R/W	R/W
[Delete Folder]	-	-	-	R/W	R/W	R/W
[Unlock Folder]	-	-	-	R/W	-	-
[Print]	-	-	-	-	R/W	R/W
[Send]	-	-	-	-	R/W	R/W
[Delete]	-	-	-	R/W	R/W	R/W
 [Edit detailed information]	-	-	-	R/W	R/W	R/W
[Download]	-	-	-	-	R/W	R/W
[Unlock File]	-	-	-	R/W	-	-




# Web Image Monitor: Printer: Print Jobs

These settings are in [Print Job/Stored File].

Users can use the printer documents stored themselves or stored when user authentication is off.

The printer documents stored by other users are not displayed.

Settings	User	Mach	N/W	File	Unset	Set
[Print]	-	-	-	-	R/W *1	R/W *1
[Delete]	-	-	-	R/W	R/W *1	R/W *1
[  Edit detailed information]	-	-	-	R/W	R/W *1	R/W *1
[Unlock Job]	-	-	-	R/W	-	-

\* 1 Access to saved documents may be restricted, depending on the user's access privileges.

# List of Operation Privileges for Stored Files

## Understanding headers

- Read  
Users configured for read privileges.
- Edit  
Users configured for editing privileges.
- E/D  
Users configured for edit/delete privileges.
- Full  
Users configured for full control privileges.
- Owner  
Either the user who registered a document or a user set up as the owner.
- File  
The file administrator.

## Understanding the symbols

R/W: Can execute.

–: Cannot execute.

Settings	Read	Edit	E/D	Full	Owner	File
[Printing]	R/W	R/W	R/W	R/W	R/W	–
[Details]	R/W	R/W	R/W	R/W	R/W	R/W
[Preview]	R/W	R/W	R/W	R/W	R/W	–
[Change Access Priv.]: [Owner]	–	–	–	–	–	R/W
[Change Access Priv.]: [Permissions for Users/Groups]	–	–	–	R/W	R/W* <sup>1</sup>	R/W
[Change File Name]	–	R/W	R/W	R/W	R/W* <sup>1</sup>	–
[Change Password]	–	–	–	–	R/W	R/W
[Unlock Files]	–	–	–	–	–	R/W
[Combine Files]	–	–	R/W	R/W	R/W* <sup>1</sup>	–
[Insert File]	–	–	R/W	R/W	R/W* <sup>1</sup>	–

Settings	Read	Edit	E/D	Full	Owner	File
[Delete Pages]	-	-	R/W	R/W	R/W* <sup>1</sup>	-
[Duplicate File]	R/W	R/W	R/W	R/W	R/W	-
[Delete File]	-	-	R/W	R/W	R/W* <sup>1</sup>	R/W
[Print Specified Page]	R/W	R/W	R/W	R/W	R/W	-
[Keep 2 /1 Sided Settings]	R/W	R/W	R/W	R/W	R/W	-

\*1 The owner can change operation privileges.

# List of Operation Privileges for Address Books

## Understanding headers

- Read  
Users configured for read privileges.
- Edit  
Users configured for editing privileges.
- E/D  
Users configured for edit/delete privileges.
- Full  
Users configured for full control privileges.
- Entry  
User whose personal information is registered in the Address Book. The person who knows the user login name and password.
- User  
The user administrator.

## Understanding the symbols

R/W: Execute, change and reading possible.

R: Reading is possible.

--: Execute, change and reading are not possible.

## [Names]

Settings	Read	Edit	E/D	Full	Entry	User
[Name]	R	R/W	R/W	R/W	R/W	R/W
[Key Display]	R	R/W	R/W	R/W	R/W	R/W
[Display Priority]	R	R/W	R/W	R/W	R/W	R/W
[Registration No.]	R	R/W	R/W	R/W	R/W	R/W
[Select Title]	R	R/W	R/W	R/W	R/W	R/W

## [Auth. Info]

Settings	Read	Edit	E/D	Full	Entry	User
[User Code]	-	-	-	-	-	R/W

Settings	Read	Edit	E/D	Full	Entry	User
[Login User Name]	-	-	-	-	R	R/W
[Login Password]	-	-	-	-	R/W *1	R/W *1
[SMTP Authentication]	-	-	-	-	R/W *1	R/W *1
[Folder Authentication]	R	R/W *1	R/W *1	R/W *1	R/W *1	R/W *1
[LDAP Authentication]	-	-	-	-	R/W *1	R/W *1
[Available Functions]	-	-	-	-	R	R/W
[Print Volum. Use Limit.]	-	-	-	-	R	R/W

\*1 Passwords cannot be read.

**[Protection]**

Settings	Read	Edit	E/D	Full	Entry	User
[Use Name as]	R	R/W	R/W	R/W	R/W	R/W
[Protect Destination]: [Protection Code]	-	-	-	R/W *2	R/W *2	R/W *2
[Protect Destination]: [Protection Object]	-	R/W	R/W	R/W	R/W	R/W
[Protect Destination]: [Permissions for Users / Groups]	-	-	-	R/W	R/W	R/W
[Protect File(s)]: [Permissions for Users / Groups]	-	-	-	R/W	R/W	R/W

\*2 The code for [Protection Code] cannot be read.

**[E-mail]**

Settings	Read	Edit	E/D	Full	Entry	User
[E-mail Address]	R	R/W	R/W	R/W	R/W	R/W

**[Folder]**

Settings	Read	Edit	E/D	Full	Entry	User
[SMB/FTP/NCP]	R	R/W	R/W	R/W	R/W	R/W
[SMB]: [Path]	R	R/W	R/W	R/W	R/W	R/W
[FTP]: [Server Name]	R	R/W	R/W	R/W	R/W	R/W
[FTP]: [Path]	R	R/W	R/W	R/W	R/W	R/W
[FTP]: [Port Number]	R	R/W	R/W	R/W	R/W	R/W
[NCP]: [Path]	R	R/W	R/W	R/W	R/W	R/W
[NCP]: [Connection Type]	R	R/W	R/W	R/W	R/W	R/W
[Connection Test]	R	R/W	R/W	R/W	R/W	R/W

**[Add to Group]**

Settings	Read	Edit	E/D	Full	Entry	User
[Registration No.]	R	R/W	R/W	R/W	R/W	R/W
[Search]	R	R/W	R/W	R/W	R/W	R/W
[Switch Title]	R/W	R/W	R/W	R/W	R/W	R/W

**↓ Note**

- When [Restrict Adding of User Destinations] of [Extended Security] is set to [On], regardless of the user's operation privileges, access to the Address Book is rescinded from any user other than the user administrator.

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# **Pro 8100s/8110s/8120s**

**Operating Instructions**

**Replacement Guide: TCRU/ORU**



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# Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

This manual is only for operators who have received proper training.

- Never perform any procedure in this manual if you have not received proper training.
- If you have received training and are not sure how to perform a procedure, call your service representative.
- Even if you have received training, never attempt any procedure that is not shown in this manual.
- The contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating this machine.

---

# How to Read This Manual

---

## Symbols

---

This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

 **Reference**

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

---

## Disclaimer

---

Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

---

## Power Switch Symbols

---

Where symbols are used on or near switches on machines for Europe and other areas, the meaning of each symbol conforms with IEC60417.

I ON

⏻ STANDBY

---

# Safety During Operation

In this manual, the following important symbols are used:

 **WARNING**

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

 **CAUTION**

Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

---

# Safety Precautions to Be Followed

---

## Environments Where the Machine Can be Used

---

### **WARNING**

- Do not use flammable sprays or solvents in the vicinity of this machine. Doing so could result in fire or electric shock.

### **WARNING**

- Do not place vases, plant pots, cups, toiletries, medicines, small metal objects, or containers holding water or any other liquids, on or close to this machine. Fire or electric shock could result from spillage or if such objects or substances fall inside this machine.

### **CAUTION**

- Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.

### **CAUTION**

- Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.

### **CAUTION**

- Do not obstruct the machine's vents. Doing so risks fire caused by overheated internal components.

### **CAUTION**

- Do not place heavy objects on the machine. Doing so can cause the machine to topple over, possibly resulting in injury.

### **CAUTION**

- Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.

---

---

## Handling power cords and power plugs

---

### **WARNING**

- Do not use any power sources other than those that match the specifications shown in this manual. Doing so could result in fire or electric shock.

### **WARNING**

- Do not use any frequencies other than those that match the specifications shown. Doing so could result in fire or electric shock.

### **WARNING**

- Do not use multi-socket adaptors. Doing so could result in fire or electric shock.

### **WARNING**

- Do not use extension cords. Doing so could result in fire or electric shock.

### **WARNING**

- Do not use power cords that are damaged, broken, or modified. Also, do not use power cords that have been trapped under heavy objects, pulled hard, or bent severely. Doing so could result in fire or electric shock.

### **WARNING**

- It is dangerous to handle the power cord plug with wet hands. Doing so could result in electric shock.

### **WARNING**

- Touching the prongs of the power cable's plug with anything metallic constitutes a fire and electric shock hazard.

### **WARNING**

- The supplied power cord is for use with this machine only. Do not use it with other appliances. Doing so could result in fire or electric shock.

### **WARNING**

- If the power cord is damaged and its inner wires are exposed or broken, contact your service representative for a replacement. Use of damaged power cords could result in fire or electric shock.

---

## **WARNING**

- Be sure to disconnect the plug from the wall outlet at least once a year and check for the following:
  - There are burn marks on the plug.
  - The prongs on the plug are deformed.
- If any of the above conditions exist, do not use the plug and consult your dealer or service representative. Use of the plug could result in fire or electric shock.

## **WARNING**

- Be sure to disconnect the power cord from the wall outlet at least once a year and check for the following:
  - The power cord's inner wires are exposed, broken, etc.
  - The power cord's coating has a crack or dent.
  - When bending the power cord, the power turns off and on.
  - Part of the power cord becomes hot.
  - The power cord is damaged.
- If any of the above conditions exist, do not use the power cord and consult your dealer or service representative. Use of the power cord could result in fire or electric shock.

## **CAUTION**

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

## **CAUTION**

- Be sure to push the plug of the power cord fully into the wall outlet. Partially inserted plugs create an unstable connection that can result in unsafe buildup of heat.

## **CAUTION**

- Be sure to disconnect the plug from the wall outlet and clean the prongs and the area around the prongs at least once a year. Allowing dust to build up on the plug constitutes a fire hazard.

## **CAUTION**

- If this machine is not going to be used for several days or longer at a time, disconnect its power cord from the wall outlet.

---

## CAUTION

- When performing maintenance on the machine, always disconnect the power cord from the wall outlet.

---

## Handling the main machine

---

### WARNING

- The following explains the warning messages on the plastic bag used in this product's packaging.
  - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

### WARNING

- Be sure to locate the machine as close as possible to a wall outlet. This will allow easy disconnection of the power cord in the event of an emergency.

### WARNING

- If the machine emits smoke or odours, or if it behaves unusually, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

### WARNING

- If metal objects, or water or other fluids fall inside this machine, you must turn off its power immediately. After turning off the power, be sure to disconnect the power cord plug from the wall outlet. Then contact your service representative and report the problem. Do not use the machine. Doing so could result in fire or electric shock.

### WARNING

- Do not touch this machine if a lightning strike occurs in the immediate vicinity. Doing so could result in electric shock.

### CAUTION

- Unplug the power cord from the wall outlet before you move the machine. While moving the machine, take care that the power cord is not damaged under the machine. Failing to take these precautions could result in fire or electric shock.



---

## CAUTION

- After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.

## CAUTION

- Contact your service representative if you need to lift the machine (such as when relocating it to another floor). Do not attempt to lift the machine without the assistance of your service representative. The machine will be damaged if it topples or is dropped, resulting in malfunction and risk of injury to users. The machine's various handling areas are for service engineer use only. Do not touch these areas.

## CAUTION

- Do not look into the lamp. It can damage your eyes.

## CAUTION

- Do not hold the control panel while moving the machine. Doing so may damage the control panel, cause a malfunction, or result in injury.

## CAUTION

- Keep your hands away from the hinges and exposure glass when lowering the ADF. Not doing so result in an injury if your hands or fingers are pinched.

---

## Handling the machine's interior

---

## WARNING

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.

## CAUTION

- Some of this machine's internal components get very hot. For this reason, take care when removing misfed paper. Not doing so could result in burns.

---

## **⚠ CAUTION**

- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise, an injury might occur.

## **⚠ CAUTION**

- When removing jammed paper, make sure not to trap or injure your fingers.

## **⚠ CAUTION**

- When loading paper, take care not to trap or injure your fingers.

## **⚠ CAUTION**

- Keep your hands clear of the booklet finisher tray when removing misfed paper, pulling out or pushing in the finisher's staple unit. You can trap and injure your fingers if you do not.

## **⚠ CAUTION**

- During operation, rollers for transporting the paper and originals revolve. A safety device has been installed so that the machine can be operated safely. But take care not to touch the machine during operation. Otherwise, an injury might occur.

## **⚠ CAUTION**

- If the machine's interior is not cleaned regularly, dust will accumulate. Fire and breakdown can result from heavy accumulation of dust inside this machine. Contact your sales or service representative for details about and charges for cleaning the machine's interior.

---

## **Handling the machine's supplies**

---

### **⚠ WARNING**

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

### **⚠ WARNING**

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

---

## **WARNING**

- Do not use a vacuum cleaner to remove spilled toner (including used toner). Absorbed toner may cause a fire or explosion due to electrical contact flickering inside the vacuum cleaner. However, it is possible to use a vacuum cleaner that is explosion-proof and dust ignition-proof. If toner is spilled on the floor, remove the spilled toner slowly using a wet cloth, so that the toner is not scattered.

## **WARNING**

- The following explains the warning messages on the plastic bag used in this product's packaging.
  - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

## **CAUTION**

- The fusing unit becomes extremely hot during operation. To prevent minor burns, allow the machine to cool for at least 30 minutes before you remove the fusing unit.

## **CAUTION**

- The fusing unit weighs approximately around 17.0 kg (37.5 lb).
- When moving the fusing unit, lift it slowly and be careful not to strain yourself. Careless handling or over-exertion when lifting can result in breakage of the unit or injury to yourself.

## **CAUTION**

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

## **CAUTION**

- Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

## **CAUTION**

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

---

## CAUTION

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

## CAUTION

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

## CAUTION

- When removing jammed paper or replacing toner, avoid getting toner (new or used) on your clothing. If toner comes into contact with your clothing, wash the stained area with cold water. Hot water will set the toner into the fabric and make removing the stain impossible.

## CAUTION

- Avoid getting toner on your clothes or skin when replacing toner filter. If your skin comes into contact with toner, wash the affected area thoroughly with soap and water.
- If toner gets on your clothing, wash with cold water. Hot water will set the toner into the fabric and may make removing the stain impossible.

---

## SAFETY AND ECOLOGICAL NOTES FOR DISPOSAL

---

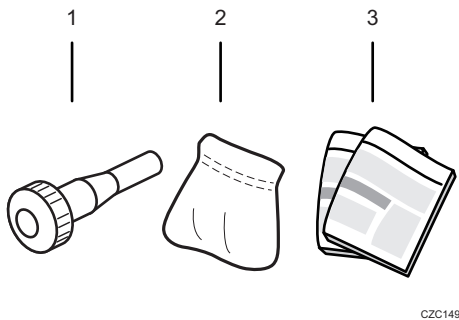
1. Do not incinerate toner bottles or used toner. Toner dust may ignite suddenly when exposed to an open flame.
2. Dispose of used toner and organic photoconductors in accordance with local regulations. (These are non-toxic supplies.)
3. Dispose of replaced parts in accordance with local regulations.



# 1. Before You Begin

## What You Need

Use only the tools and materials described in this manual. Using other tools or materials could damage the machine or cause injury.



### 1. Hex screwdriver

Use this to remove black hexagonal-head screws from the machine.

### 2. Drum setting powder pad applicator

Needed to apply a thin coated of powder on the drum.

### 3. Newspaper or other paper

To prevent toner and other stains getting on the floor, spread sheets of paper out where you intend to place the removed parts.

#### ↓ Note

- The hex screwdriver and drum setting powder pad applicator are included in the maintenance kit. Keep them somewhere safe. If the maintenance kit has any items missing, contact your service representative.

# General Cautions

**★ Important**

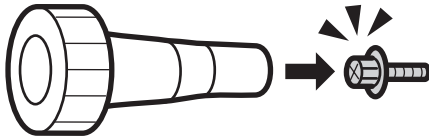
- **Never remove any screw unless you are instructed to do so.**

## Handles and levers

- Purple handles and levers are for pulling or lifting parts when you move or remove them. Purple labels on parts indicate exactly where to hold the parts when pulling or lifting them.

## Screws

- Replaceable components are secured with black screws. Never remove screws that are not black.
- The hex screwdriver is used to clench the heads of screws, so that they do not drop into the machine during removal.

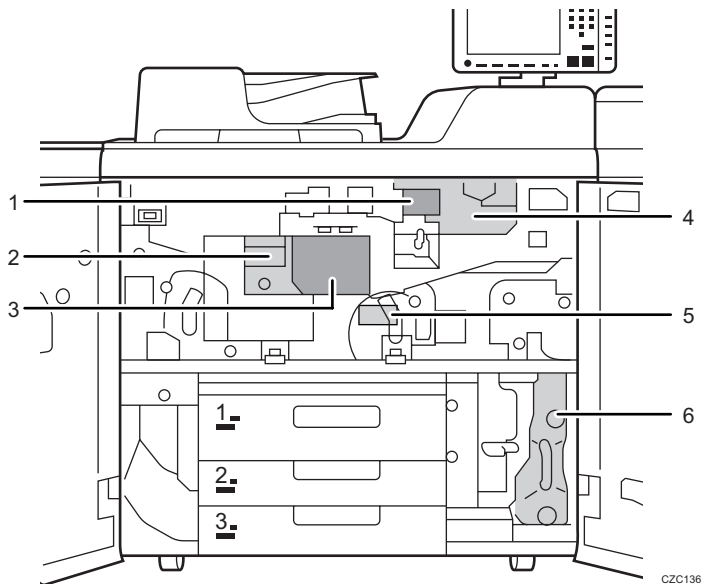


CWH161

# Names of Components

## **⚠ WARNING**

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock.



1. Developer outlet/inlet
2. Fusing unit
3. Cleaning unit for intermediate transfer belt
4. Development unit
5. Transfer unit
6. Waste toner bottle



# Control Panel

1



CZC140

1. Main power indicator
2. Number keys
3. [User Tools] key
4. [Counter] key
5. [Start] key

# Turning Off/On the Power

## ★ Important

- Turn off the main power before carrying out any of the operations described in this manual.

The main power switch is on the left side of the machine. When this switch is turned on, the main power turns on and the main power indicator lights up. When this switch is turned off, the main power turns off and the main power indicator goes out.

## Turning Off the Main Power

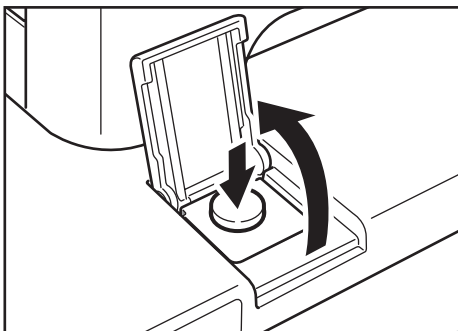
### ⚠ CAUTION

- When disconnecting the power cord from the wall outlet, always pull the plug, not the cord. Pulling the cord can damage the power cord. Use of damaged power cords could result in fire or electric shock.

## ★ Important

- Do not turn off the power while the machine is in operation.
- Do not hold down the main power switch while turning off the main power. Doing so forcibly turns off the machine's power and may damage the hard disk or memory and cause malfunctions.

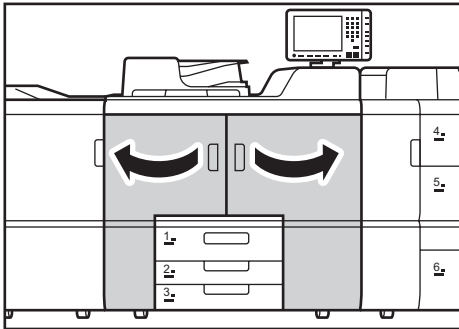
1. Open the main power switch cover, and then push the main power switch.



CZC150

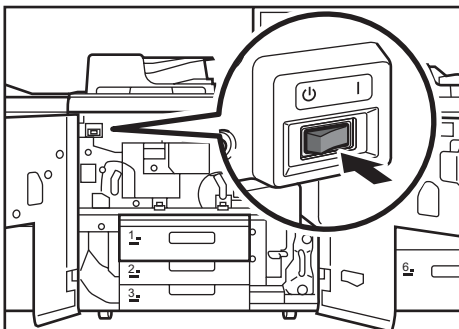
The main power indicator goes out.

**2. Open the front covers.**



CZC001

**3. Push the AC power switch.**



CZC173

**4. Unplug the machine and its optional devices from the wall outlet.**

---

## Turning On the Main Power

---

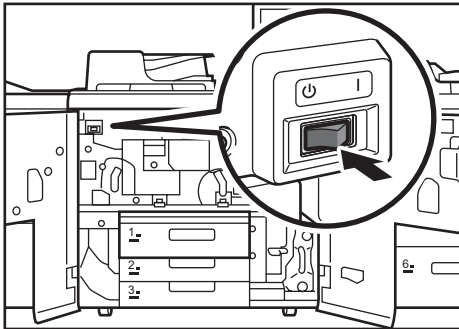
**1. Plug the machine and its optional devices into the wall outlet.**

**2. Open the front covers.**



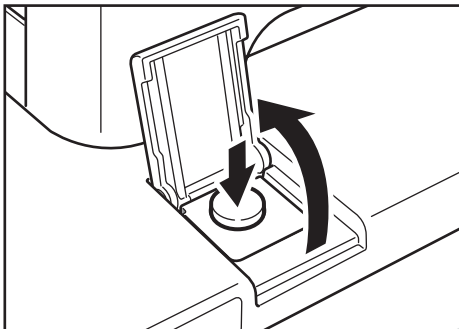
CZC001

### 3. Push the AC power switch.



CZC172

### 4. Open the main power switch cover, and push the main power switch.



CZC150

The main power indicator goes on.

#### **Note**

- After you switch the main power on, a screen may appear to indicate that the machine is initializing. Do not switch the power off during this process. Initialization takes about 16 minutes.
- If the machine does not turn on even if you press the main power switch, open the front covers and make sure that the AC power switch is turned on. For details about the AC power switch, see "Dos and Don'ts", About this Machine.

## Specifying System Auto-Reset Timer

1

To prevent the machine from switching screens while you are replacing parts, set [System Auto Reset Timer] to "Off". After replacing the parts return the setting to "On", if necessary.

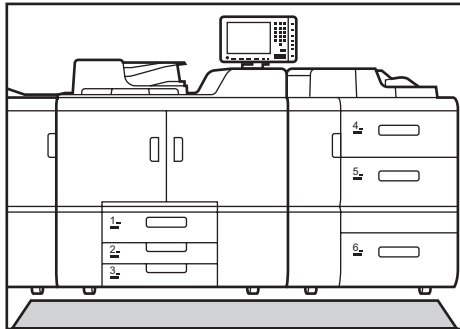
### Note

- For details about changing this setting, see *General Settings Guide*, which is supplied with this machine.

# Preparation

Spread newspaper or other paper in front of the machine before removing any parts.

- The newspaper or other paper will catch small amounts of toner or shreds of dry lubricant that may fall out of the PCUs when they are removed.

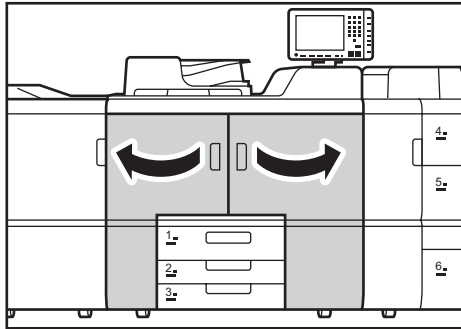


CZC141

# Resetting the Replaceable Parts Counter

1

1. Open the front covers.



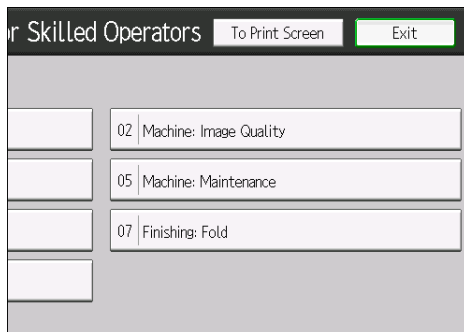
2. Turn the machine on.

See page 19 "Turning Off/On the Power".

3. Access the Adjustment Settings for Skilled Operators menu.

See "Adjustment Settings for Skilled Operators", Adjustment Item Menu Guide: TCRU/ORU.

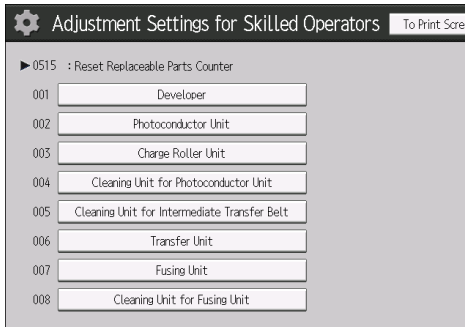
4. Press [Machine: Maintenance].



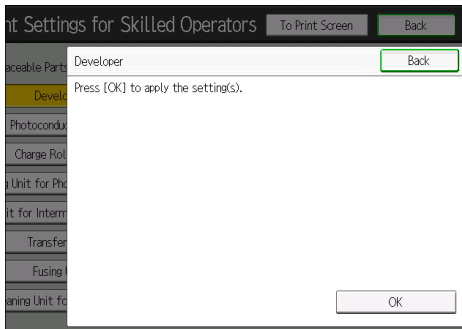
5. Press [Reset Replaceable Parts Counter].



## 6. Press the button of the part that has been replaced.



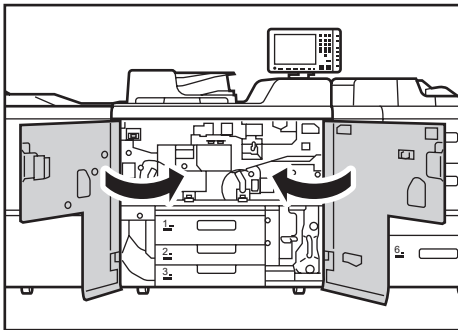
## 7. Press [OK].



## 8. Turn the machine off.

See page 19 "Turning Off/On the Power".

## 9. Close the front covers.



CZC006

## 10. Turn the machine on.

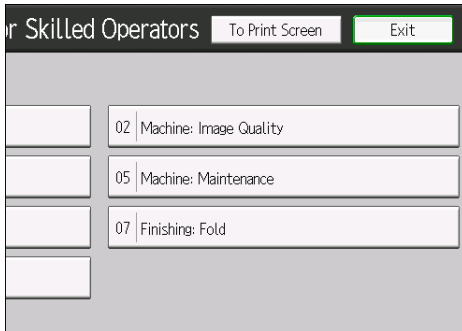
The counter for the replaced component is reset. The setting for adjusting the machine for the replaced component is executed automatically.

## 11. Access the Adjustment Settings for Skilled Operators menu.

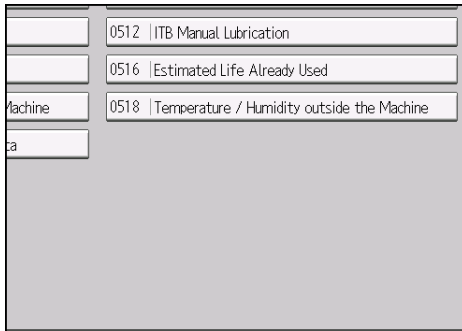
See "Adjustment Settings for Skilled Operators", Adjustment Item Menu Guide: TCRU/ORU.



**12. Press [Machine: Maintenance].**



**13. Press [Estimated Life Already Used].**



**14. Make sure the counter has been reset.**

## 2. Replacing the Paper Feed Rollers

### Before You Begin

#### ★ Important

- The three rollers must be replaced together.
- Handle new rollers carefully and avoid touching their surfaces with bare hands.
- If you lose a snap ring, contact your service representative.

#### What You Need

- Hex screwdriver

#### Time for Replacement

A message will appear when it nears the time to replace a component.

#### Print the counter list.

1. Press the [Counter] key and print out the counter list.

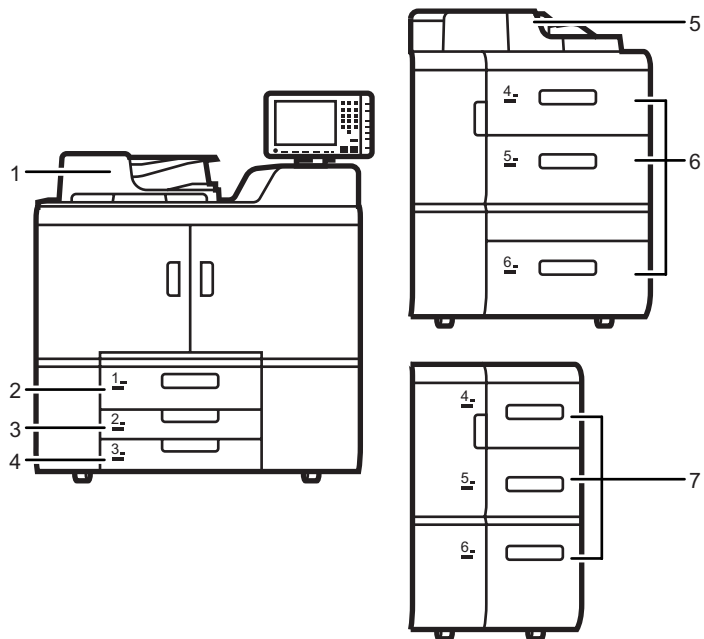
See page 18 "Control Panel".

2. Turn the machine off.

See page 19 "Turning Off/On the Power".

## Tray Names

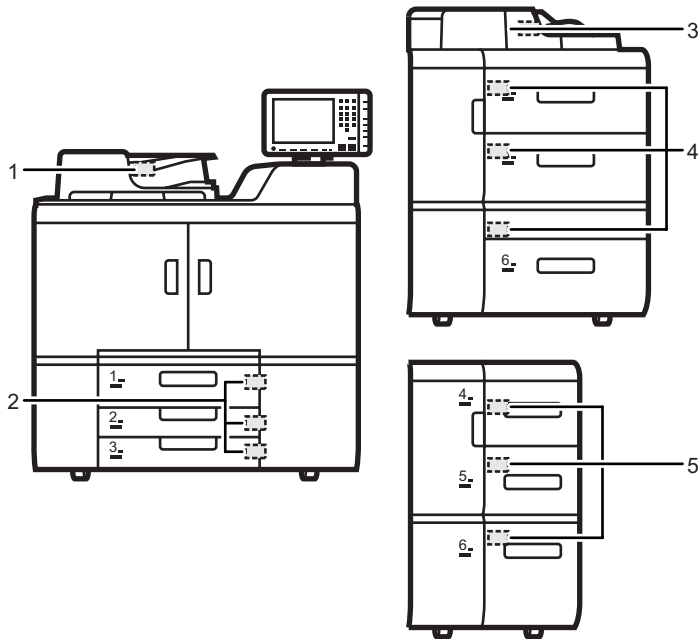
2



CZC138

1. ADF
2. Tray 1
3. Tray 2
4. Tray 3
5. Multi bypass tray
6. Tray 4-6 (wide LCT)
7. Tray 4-6 (LCT)

## Position of the paper feed rollers

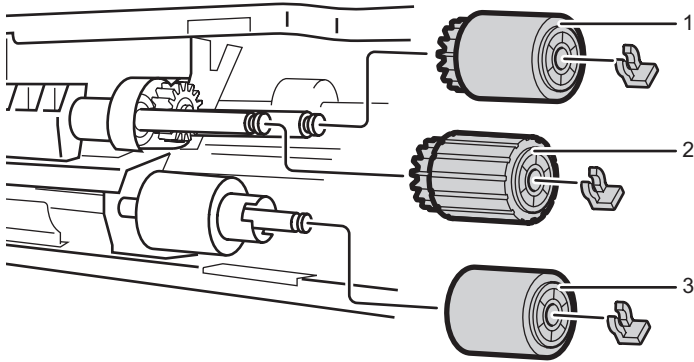


1. ADF
2. Trays 1-3
3. Multi bypass tray
4. Tray 4-6 (wide LCT)
5. Tray 4-6 (LCT)

CZC139

## Replaceable Parts

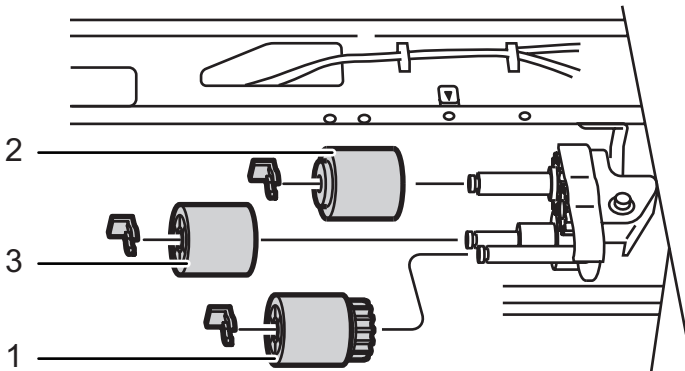
### Trays 1-3



CZC142

1. Feed roller
2. Pick-up roller
3. Separation roller

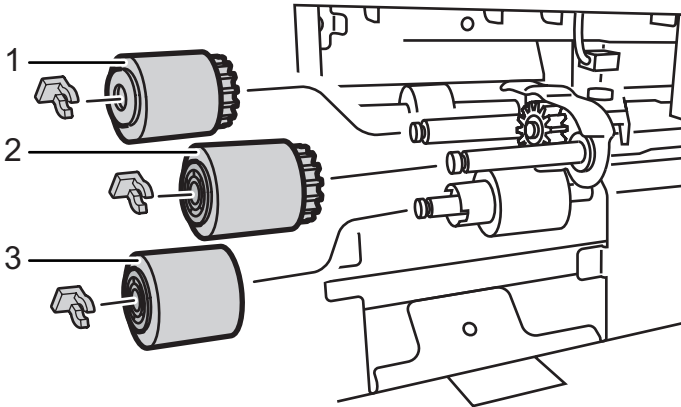
### Trays 4-6 (Wide LCD/LCD)



CZC143

1. Pick-up roller
2. Feed roller
3. Separation roller

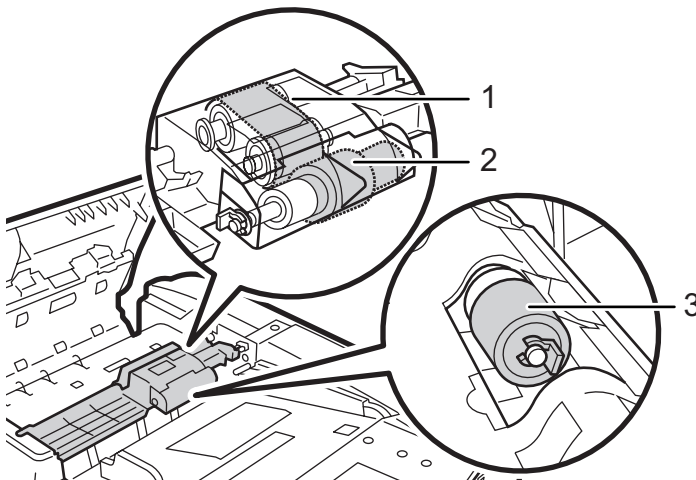
### Multi bypass tray



CZC144

1. Feed roller
2. Pick-up roller
3. Separation roller

### ADF

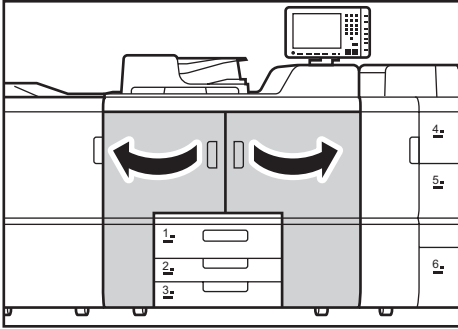


CZC155

1. Paper feed belt
2. Pick-up roller
3. Separation roller

# Replacing the Rollers in Tray 1

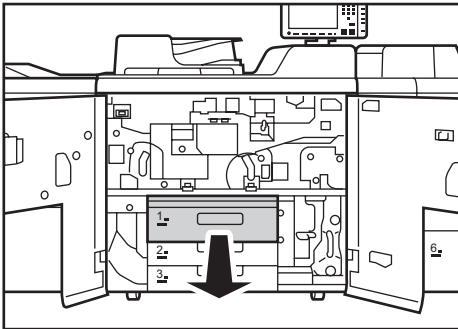
1. Open the front covers.



CZC001

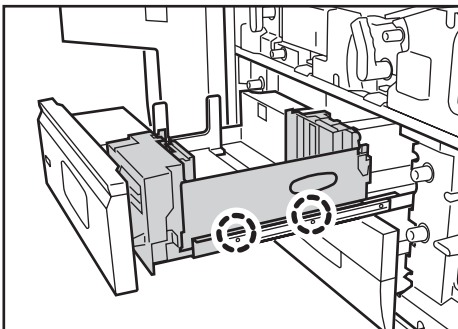
2. Pull open the tray until it stops.

Remove any paper in the tray.



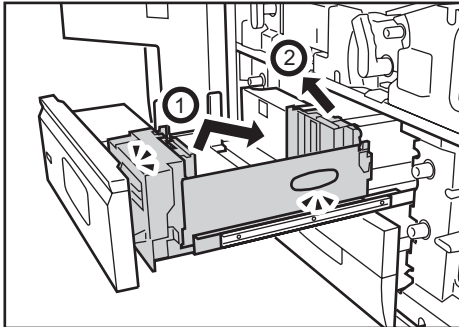
CZC002

3. Remove the 2 screws.

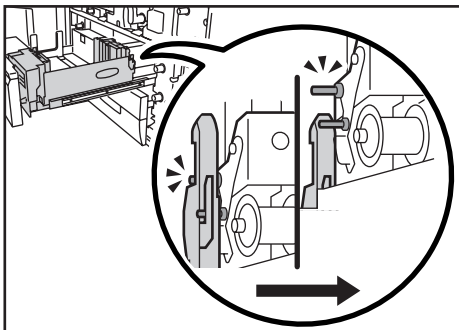


CZC003

4. Push the tray in while lifting its front part slightly, disengage the lock, and then detach the tray.

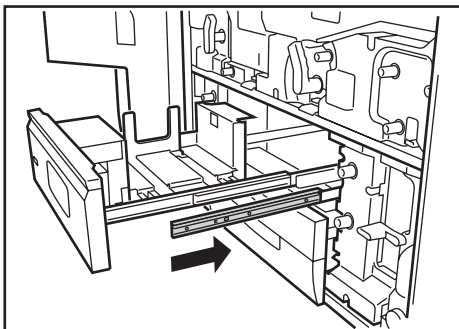


CZC192



CZC193

5. Push the guide rail back into the machine.

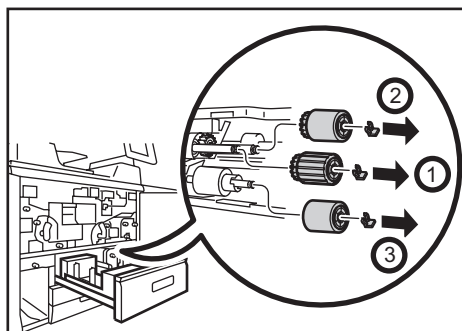


CZC004

6. Remove the paper feed roller in the following order:

- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller

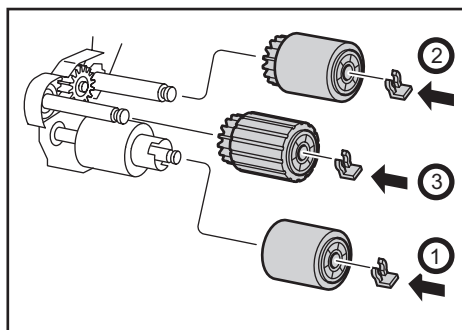




CZC005

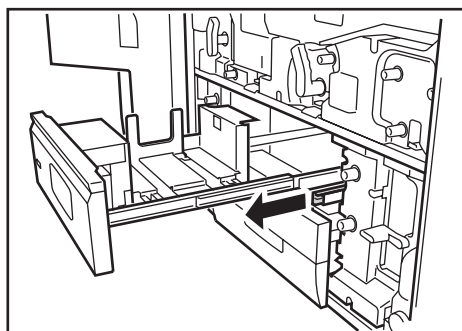
**7. Attach the new paper feed roller in the following order:**

- (1) Separation roller and snap ring
- (2) Feed roller and snap ring
- (3) Pick-up roller and snap ring



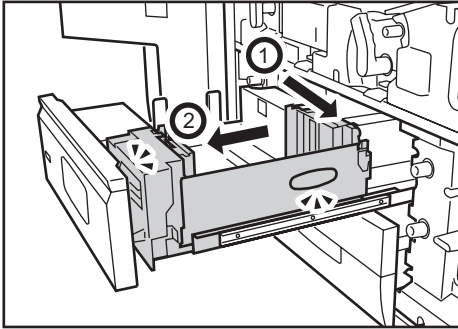
CZC010

**8. Pull out the guide rails.**



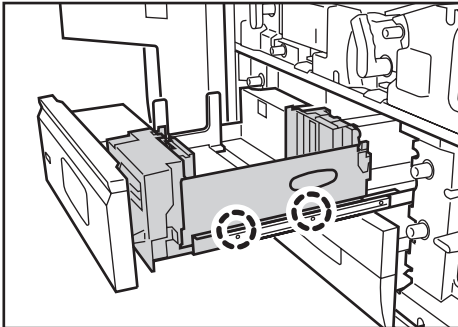
CZC009

9. Engage the tray with the guide rails' thread holes.



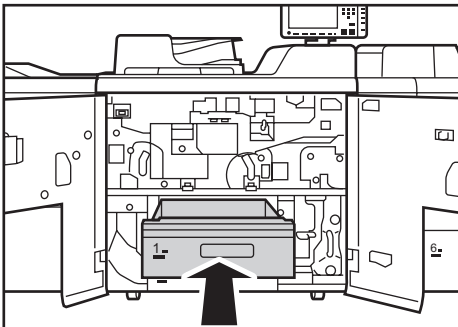
CZC008

10. Secure the tray with the 2 screws.



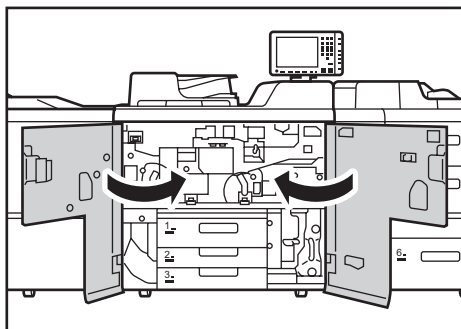
CZC003

11. Push the tray back into the machine.



CZC007

**12. Close the front covers.**



CZC006

**13. Reset the counter for replaceable parts.**

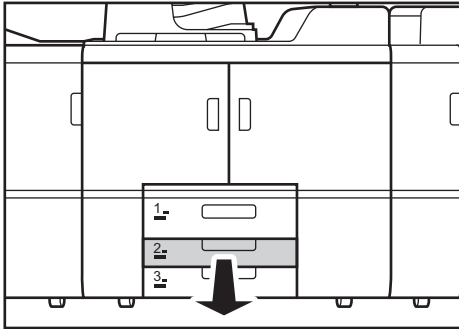
Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

# Replacing the Rollers in Tray 2/3

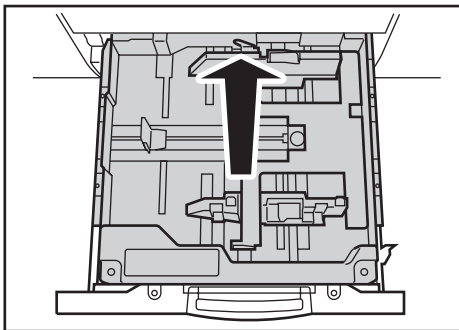
**1. Pull open the tray until it stops.**

Remove any paper in the tray.



CZC011

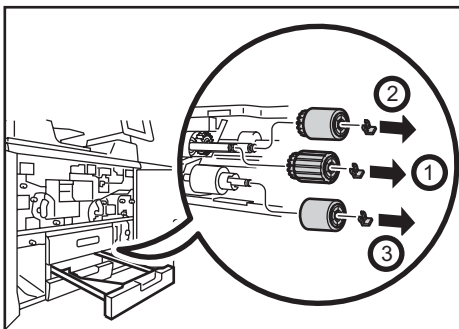
**2. Lift the inner tray out of the drawer.**



CZC012

**3. Remove the paper feed roller in the following order:**

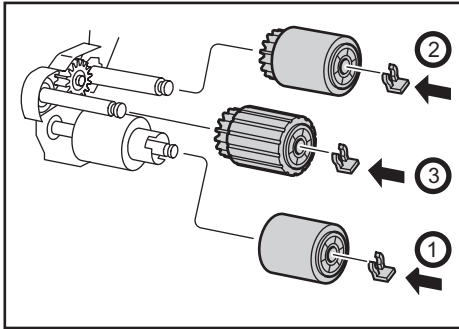
- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller



CZC186

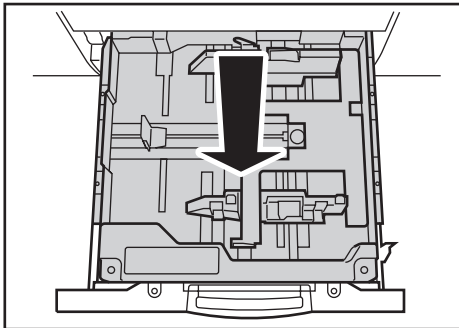
**4. Attach the new paper feed roller in the following order:**

- (1) Separation roller and snap ring
- (2) Feed roller and snap ring
- (3) Pick-up roller and snap ring



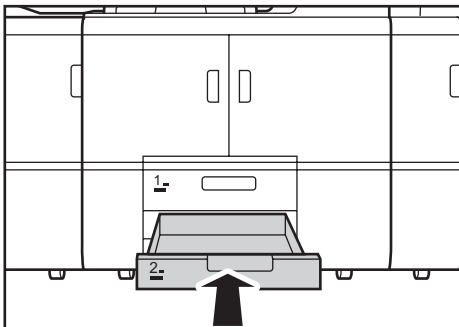
CZC010

**5. Mount the inner tray.**



CZC014

**6. Push the tray back into the machine.**



CZC013

**7. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

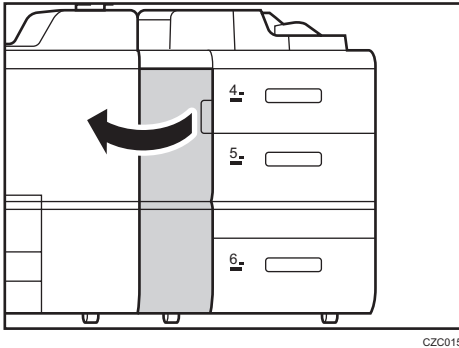
See page 24 "Resetting the Replaceable Parts Counter".

# Replacing the Rollers in the Wide LCT

## Replacing the Rollers in the Wide LCT 4

2

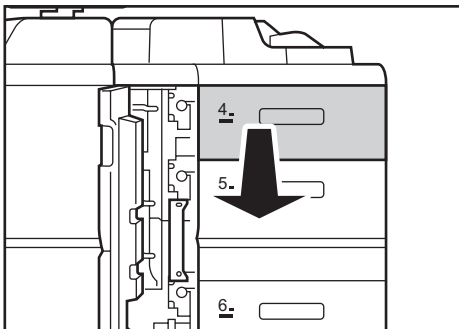
1. Open the front cover.



CZC015

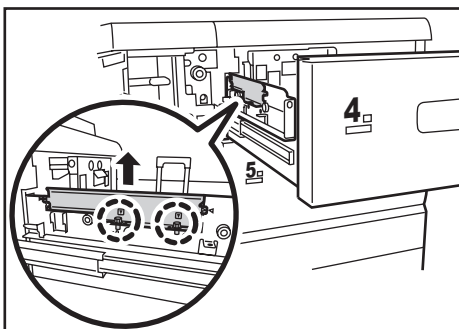
2. Pull open the tray until it stops.

Remove any paper in the tray.



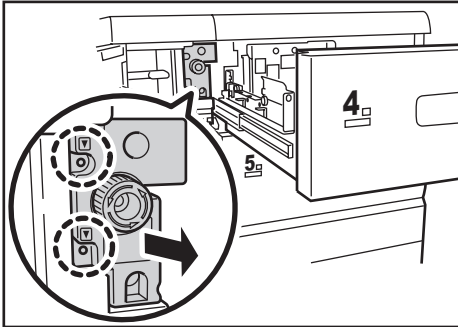
CZC016

3. Remove the 2 screws, and then remove the side plate.



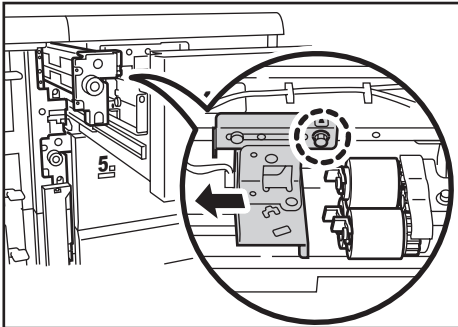
CZC017

4. Remove the 2 screws, and then pull out the paper feed unit until it stops.



CZC018

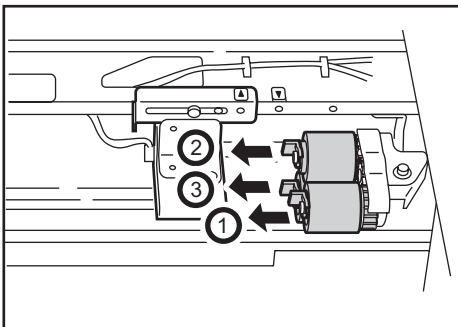
5. Remove the screw, and then slide the bracket.



CZC019

6. Remove the paper feed roller in the following order:

- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller

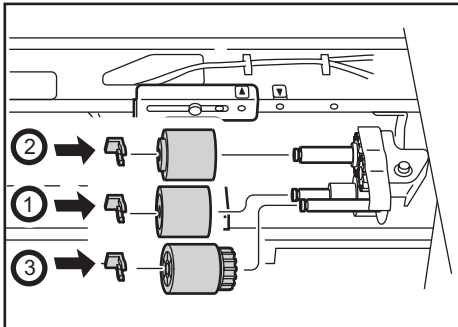


CZC189

7. Attach the new paper feed roller in the following order:

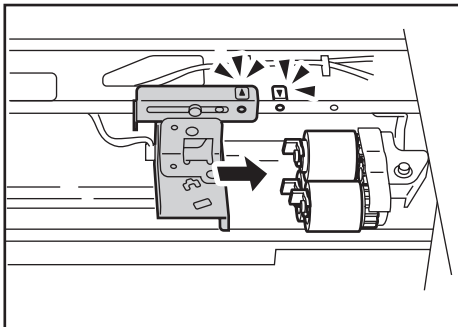
- (1) Separation roller and snap ring
- (2) Feed roller and snap ring

(3) Pick-up roller and snap ring



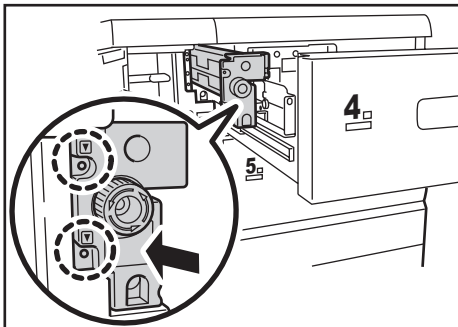
CZC157

8. Slide the bracket back to its original position, and then secure it with the screw.



CZC024

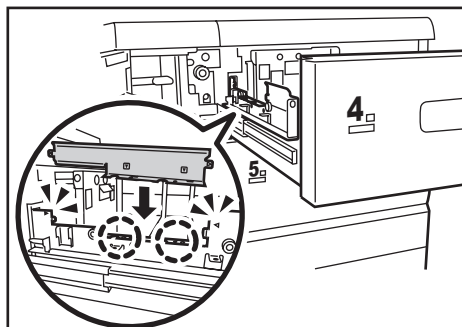
9. Push the paper feed unit into the machine, and then secure it with the 2 screws.



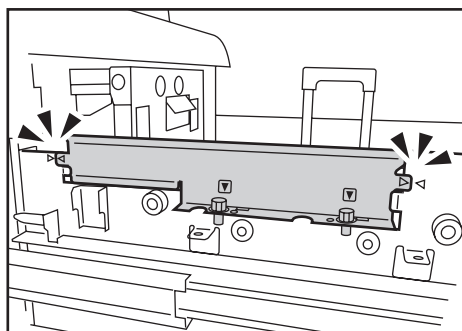
CZC023



10. Align the markers, and then secure the side plate with the 2 screws.

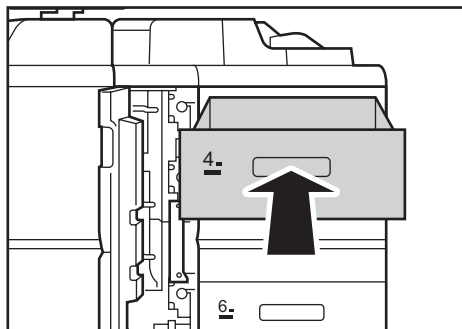


CZC022



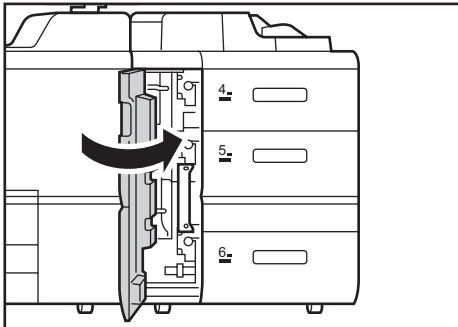
CZC156

11. Push the tray back into the machine.



CZC021

**12. Close the front cover.**



CZC020

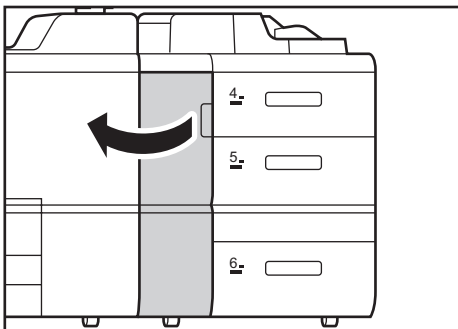
**13. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

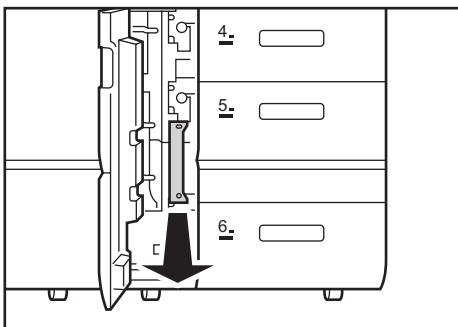
## Replacing the Rollers in the Wide LCT 5/6

**1. Open the front cover.**



CZC015

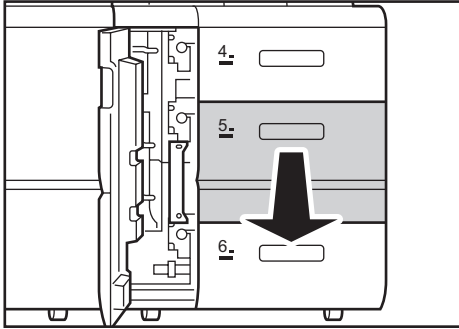
**2. Remove the tab paper end fence.**



CZC025

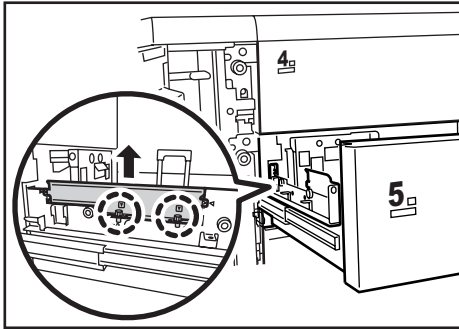
**3. Pull open the tray until it stops.**

Remove any paper in the tray.



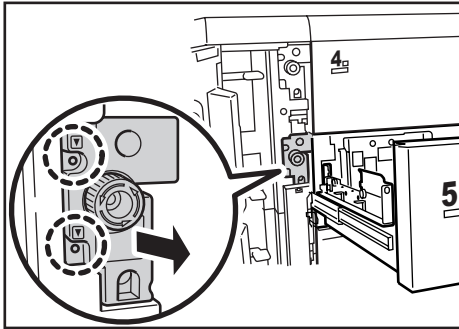
CZC026

**4. Remove the 2 screws, and then remove the side plate.**



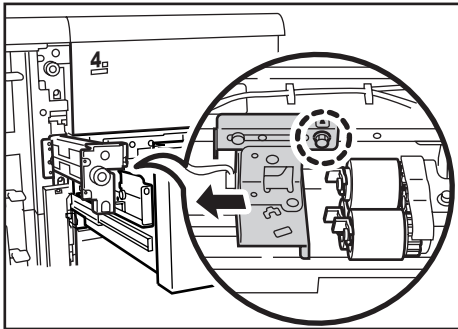
CZC151

**5. Remove the 2 screws, and then pull out the paper feed unit until it stops.**



CZC152

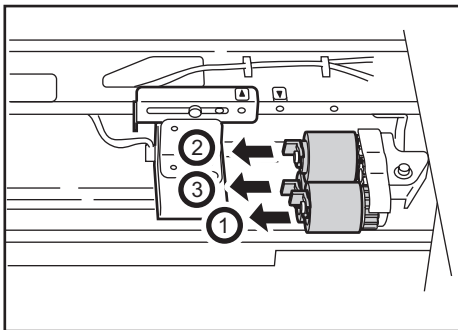
**6. Remove the screw, and then slide the bracket.**



CZC183

**7. Remove the paper feed roller in the following order:**

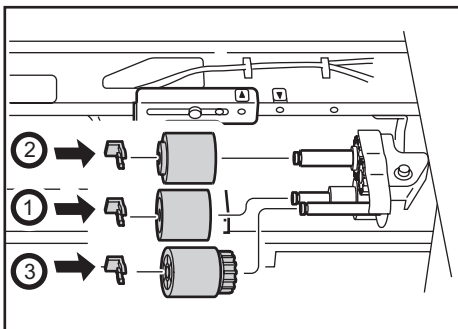
- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller



CZC189

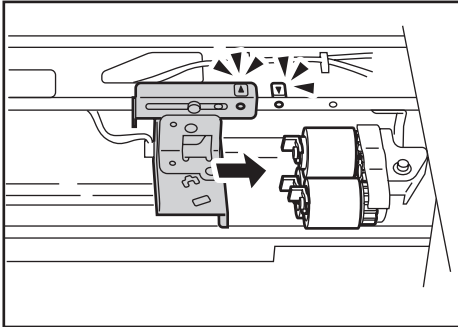
**8. Attach the new paper feed roller in the following order:**

- (1) Separation roller and snap ring
- (2) Feed roller and snap ring
- (3) Pick-up roller and snap ring



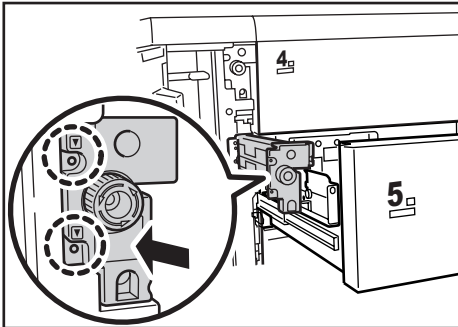
CZC157

9. Slide the bracket back to its original position, and then secure it with the screw.



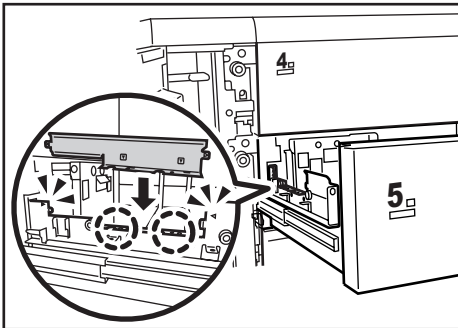
CZC024

10. Push the paper feed unit into the machine, and then secure it with the 2 screws.

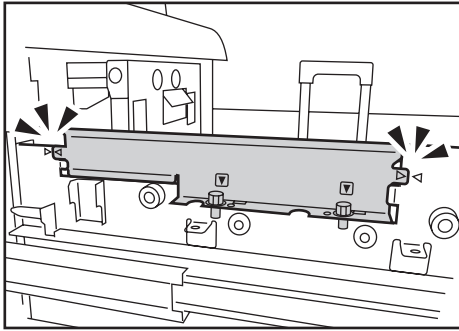


CZC154

11. Align the markers, and then secure the side plate with the 2 screws.

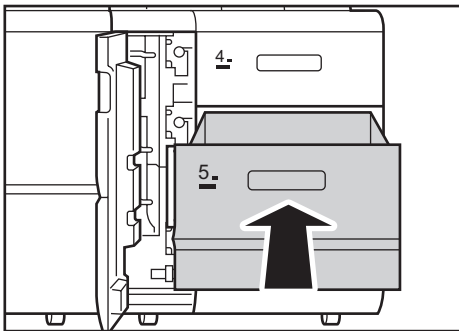


CZC153



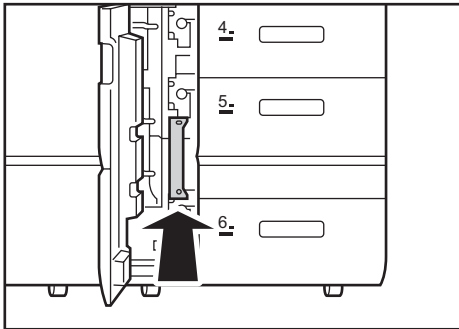
CZC156

**12. Push the tray back into the machine.**



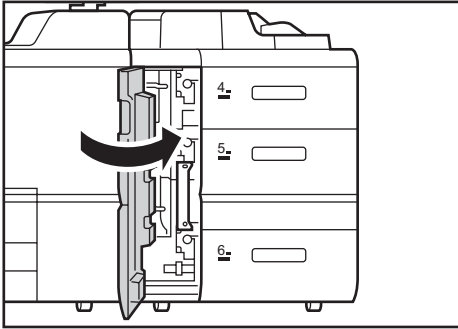
CZC028

**13. Attach the tab paper end fence.**



CZC027

**14. Close the front cover.**



CZC020

**15. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

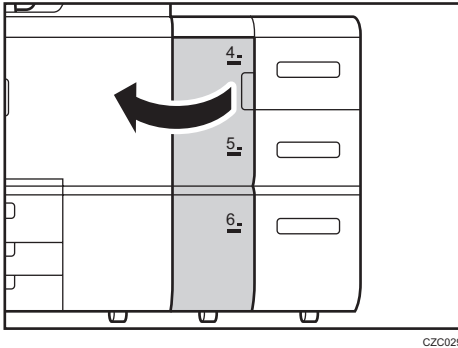
See page 24 "Resetting the Replaceable Parts Counter".

# Replacing the Rollers in the LCT

## Replacing the Rollers in the LCT 4

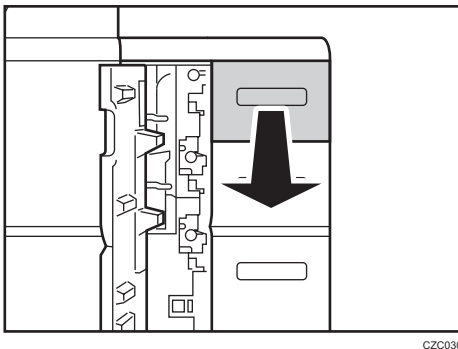
2

1. Open the front cover.

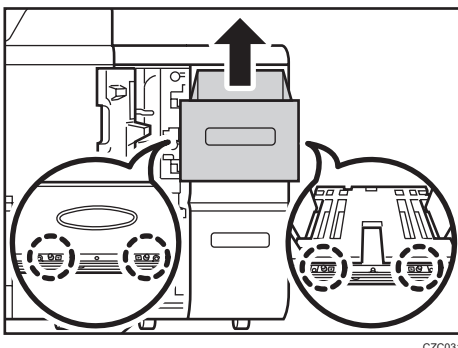


2. Pull open the tray until it stops.

Remove any paper in the tray.

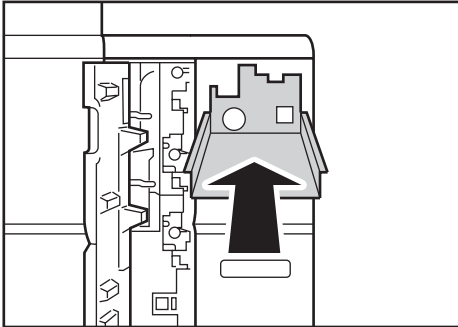


3. Remove the 4 screws, and then lift the inner tray out of the drawer.





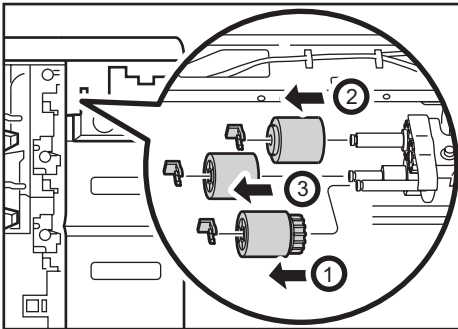
**4. Push the guide back into the machine.**



CZC032

**5. Remove the paper feed roller in the following order:**

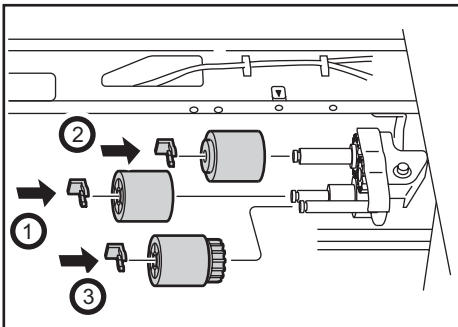
- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller



CZC033

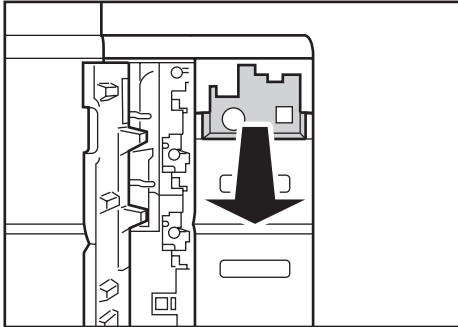
**6. Attach the new paper feed roller in the following order:**

- (1) Separation roller and snap ring
- (2) Feed roller and snap ring
- (3) Pick-up roller and snap ring



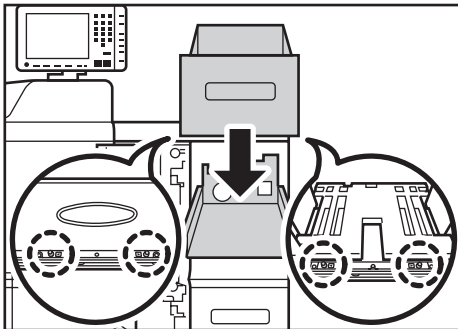
CZC038

**7. Pull out the guide.**



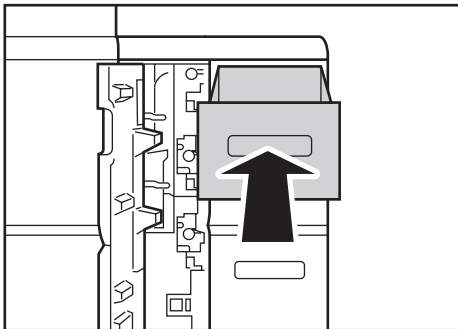
CZC037

**8. Mount the inner tray on the guide, and then secure it with 4 screws.**



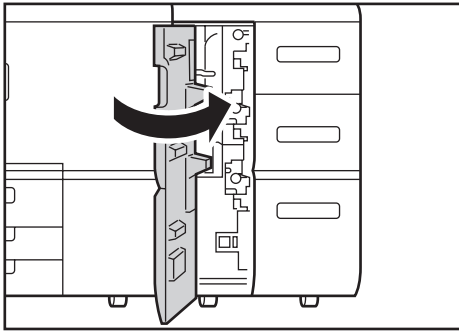
CZC036

**9. Push the tray back into the machine.**



CZC035

**10. Close the front cover.**



CZC034

**11. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

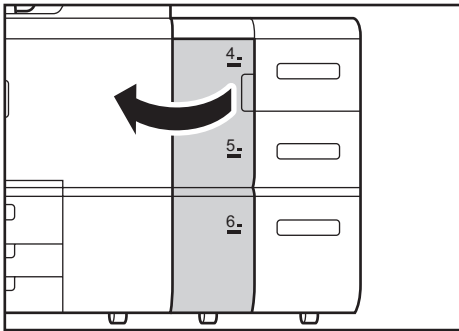
See page 24 "Resetting the Replaceable Parts Counter".

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## Replacing the Rollers in the LCT 5

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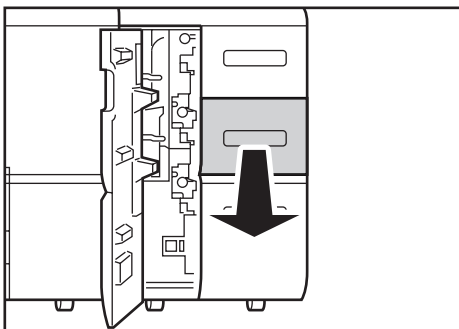
**1. Open the front cover.**



CZC029

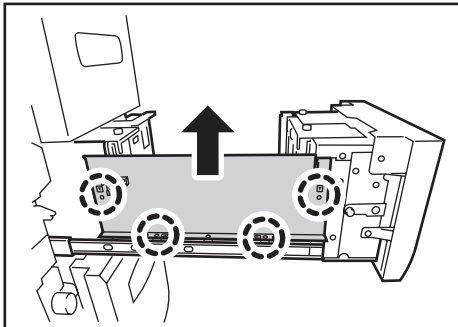
**2. Pull open the tray until it stops.**

Remove any paper in the tray.



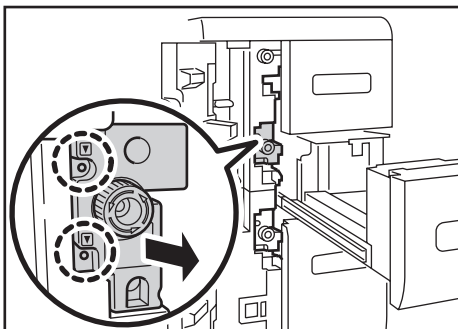
CZC039

**3. Remove the 4 screws, and then remove the side plate.**



CZC040

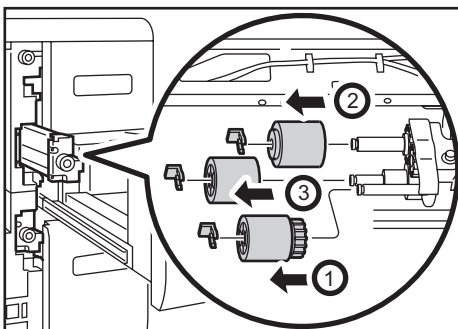
**4. Remove the 2 screws, and then pull out the paper feed unit until it stops.**



CZC041

**5. Remove the paper feed roller in the following order:**

- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller

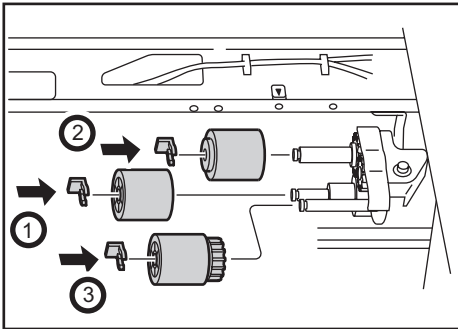


CZC184

**6. Attach the new paper feed roller in the following order:**

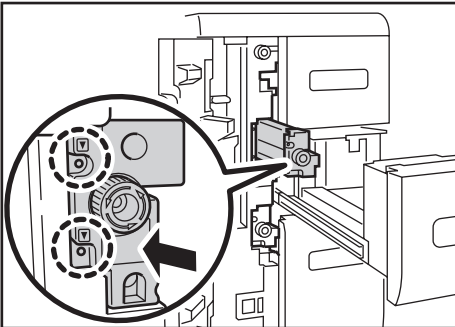
- (1) Separation roller and snap ring
- (2) Feed roller and snap ring

(3) Pick-up roller and snap ring



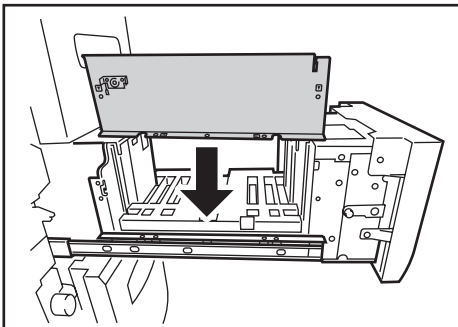
CZC038

7. Push the paper feed unit into the machine, and then secure it with the 2 screws.

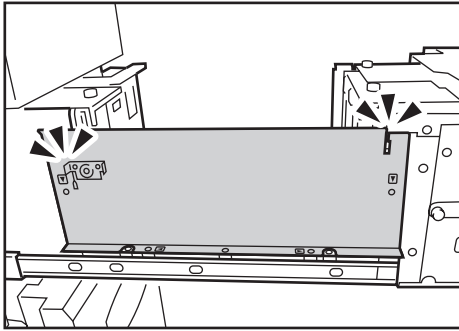


CZC044

8. Align the markers, and then secure the side plate with the 4 screws.

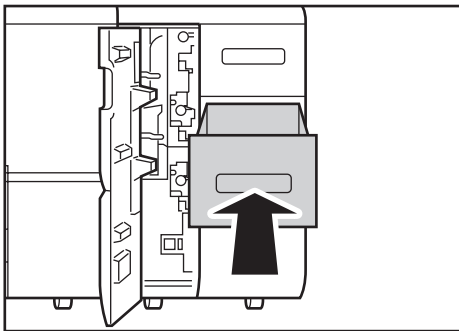


CZC043



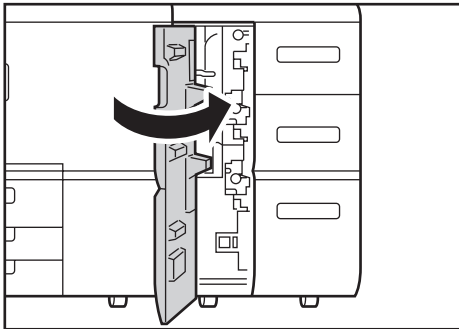
CZC158

**9. Push the tray back into the machine.**



CZC042

**10. Close the front cover.**



CZC034

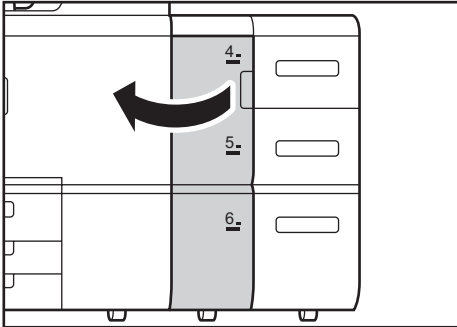
**11. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

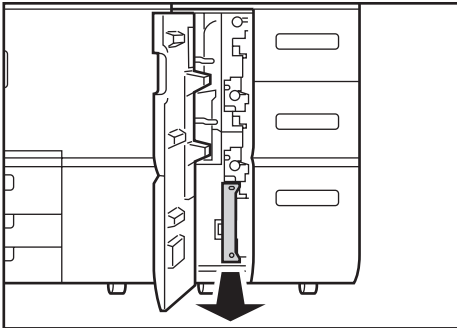
## Replacing the Rollers in the LCT 6

1. Open the front cover.



CZC029

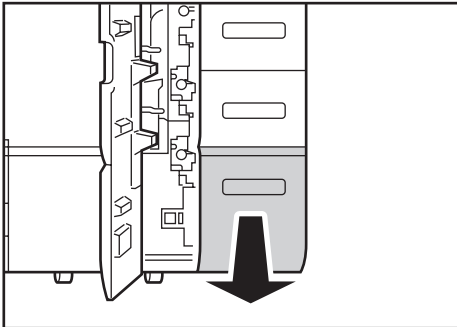
2. Remove the tab paper end fence.



CZC135

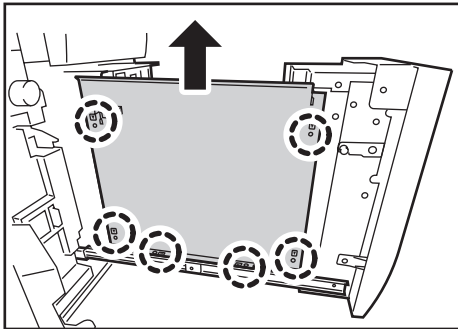
3. Pull open the tray until it stops.

Remove any paper in the tray.



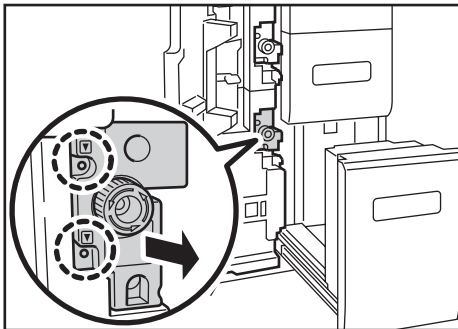
CZC045

4. Remove the 6 screws, and then remove the side plate.



CZC046

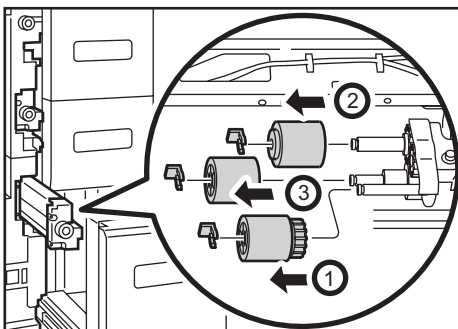
5. Remove the 2 screws, and then pull out the paper feed unit until it stops.



CZC047

6. Remove the paper feed roller in the following order:

- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller



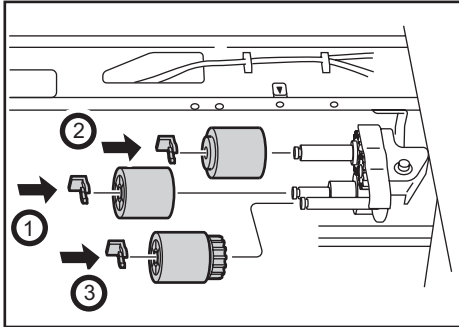
CZC185

7. Attach the new paper feed roller in the following order:

- (1) Separation roller and Snap ring
- (2) Feed roller and Snap ring

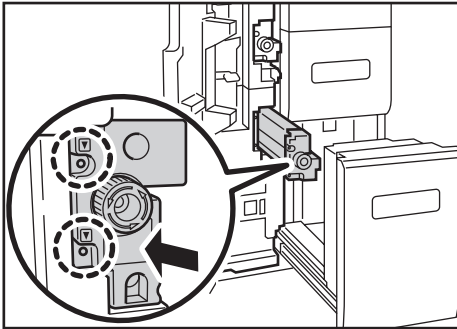


(3) Pick-up roller and Snap ring



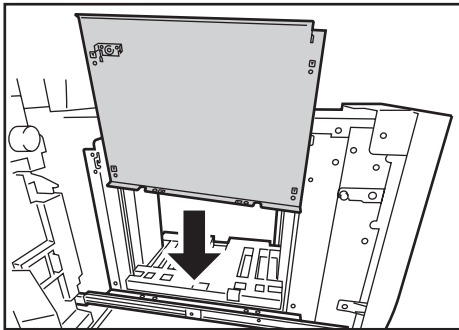
CZC038

8. Push the paper feed unit into the machine, and then secure it with the 2 screws.

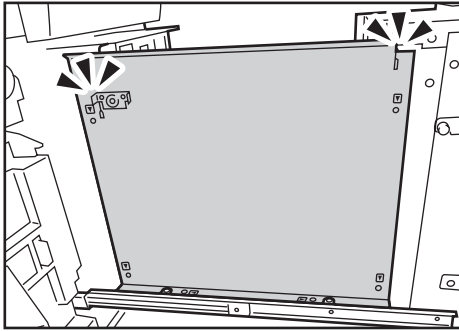


CZC050

9. Align the markers, and then secure the side plate with the 6 screws.

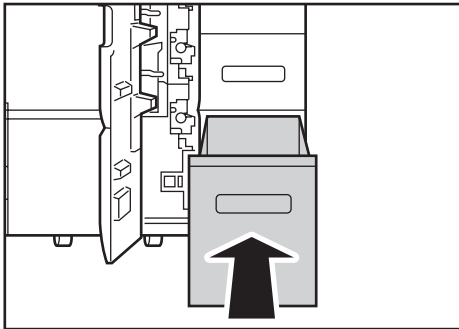


CZC049



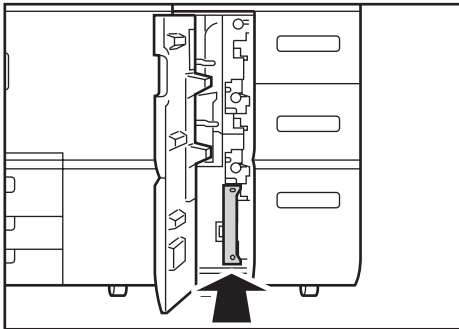
CZC159

**10. Push the tray back into the machine.**



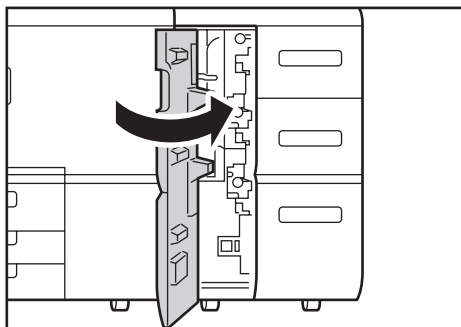
CZC048

**11. Attach the tab paper end fence.**



CZC134

**12. Close the front cover.**



C2C034

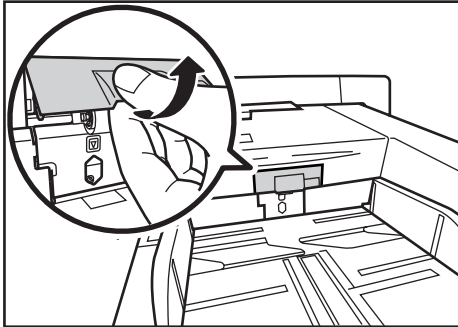
**13. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

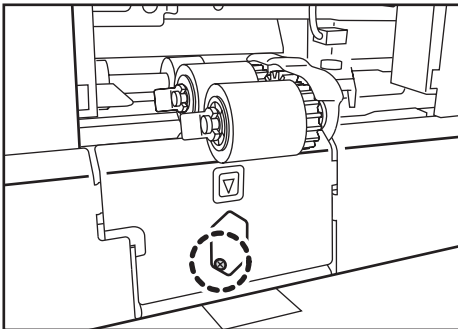
# Replacing the Rollers in the Bypass Tray

1. Remove the cover.



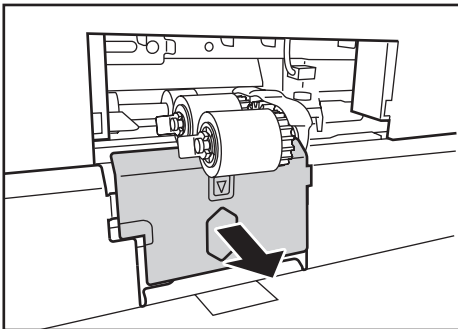
CZC128

2. Remove the screw.



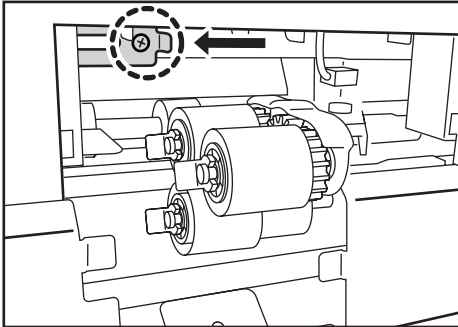
CZC124

3. Remove the plate.



CZC129

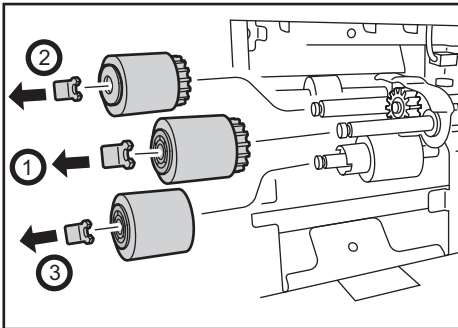
**4. Remove the screw, and then slide the bracket.**



CZC125

**5. Remove the paper feed roller in the following order:**

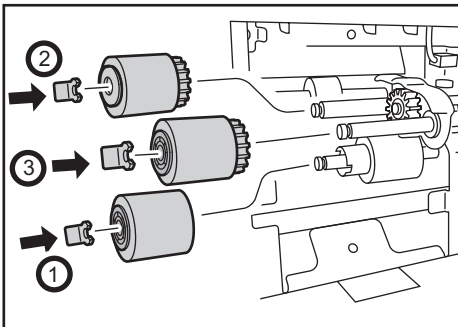
- (1) Snap ring and pick-up roller
- (2) Snap ring and feed roller
- (3) Snap ring and separation roller



CZC132

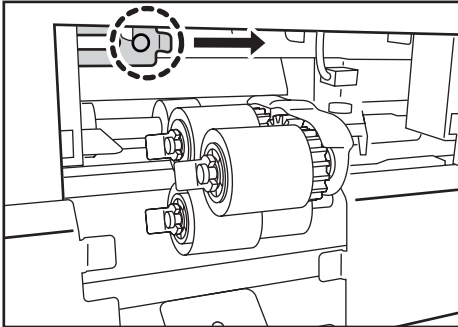
**6. Attach the new paper feed roller in the following order:**

- (1) Separation roller and Snap ring
- (2) Feed roller and Snap ring
- (3) Pick-up roller and Snap ring



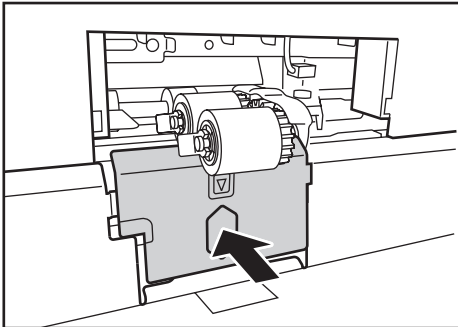
CZC133

7. Slide the bracket back to its original position, and then secure it with the screw.



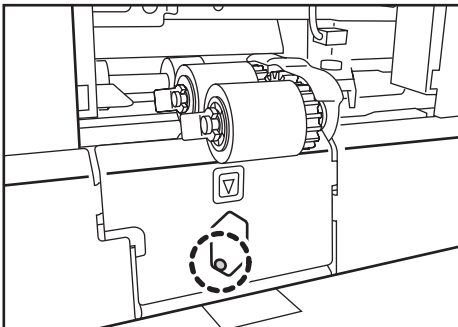
CZC126

8. Attach the plate.



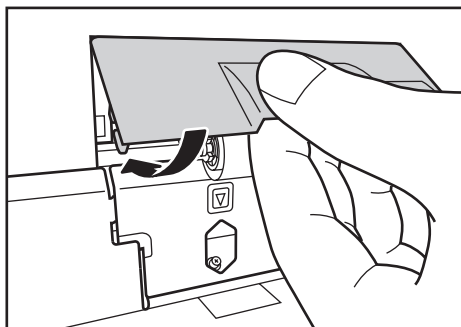
CZC130

9. Secure the plate with the screw.



CZC127

**10. Attach the cover.**



C2C131

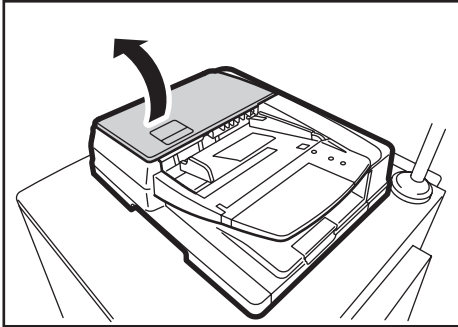
**11. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

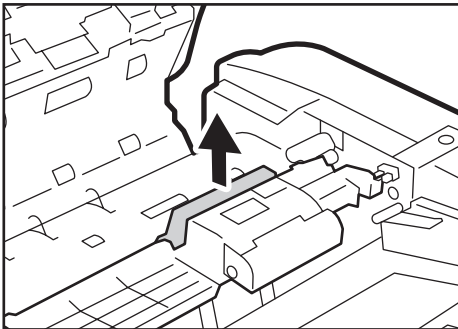
# Replacing the Rollers in the ADF

1. Open the ADF cover.



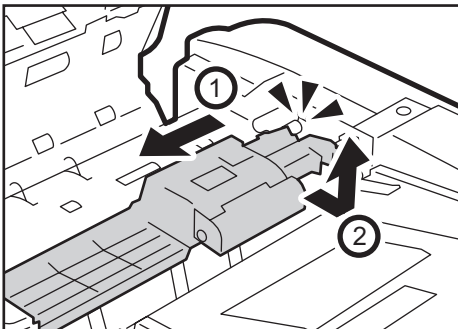
CWH133

2. Remove the retaining plate.



CZC160

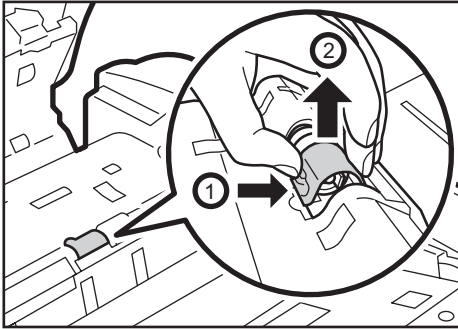
3. Pull the shaft toward the front of the machine to detach it, and then remove the paper feed unit.



CZC161

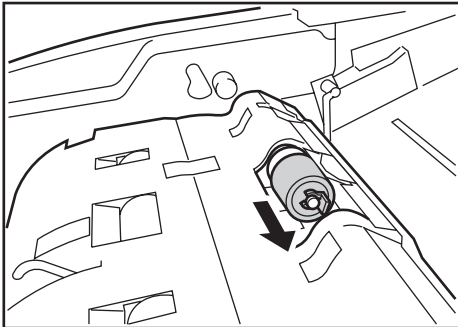


**4. Remove the separation roller cover.**



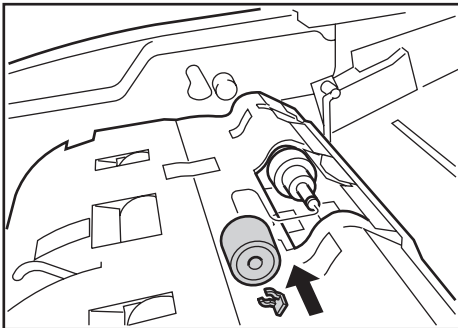
CZC162

**5. Remove the separation snap ring and roller.**



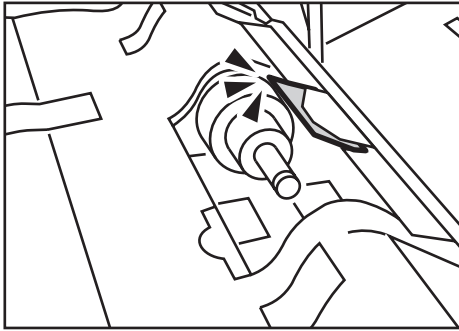
CWH136

**6. Mount the new separation roller and the snap ring.**



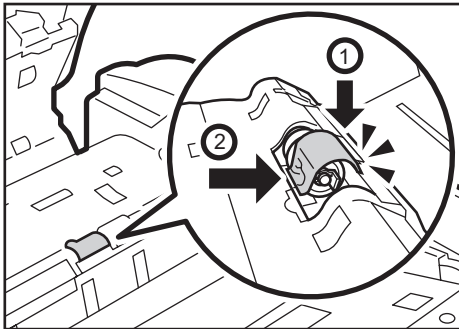
CWH137

When you replace the parts, be careful not to bend the film.



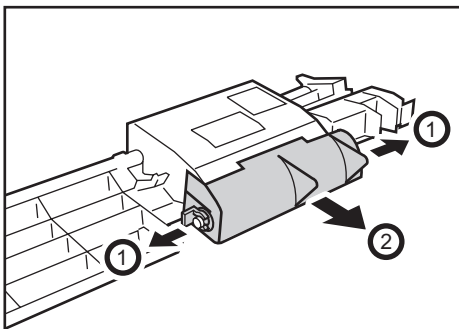
CZC194

7. Attach the separation roller cover by aligning the tabs.



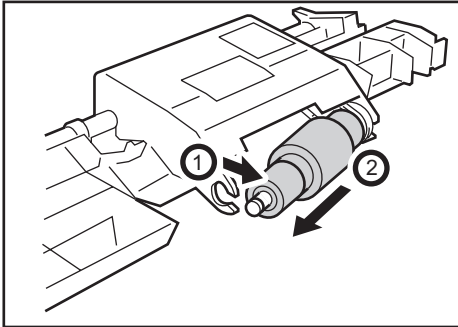
CZC163

8. Remove the two pick-up roller's snap rings and bearings, and then remove the pick-up roller cover.



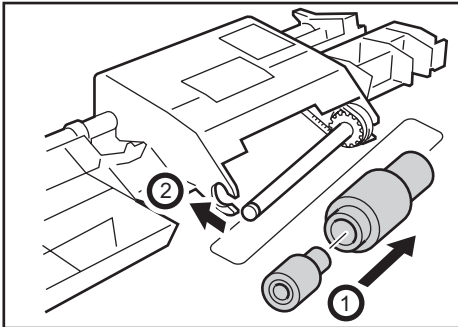
CWH139

9. Disengage the shaft, remove the white component, and then remove the pick-up roller.



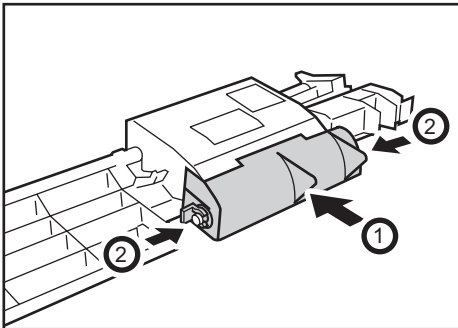
CWH140

10. Mount the new pick-up roller and reattach the white component and the shaft.



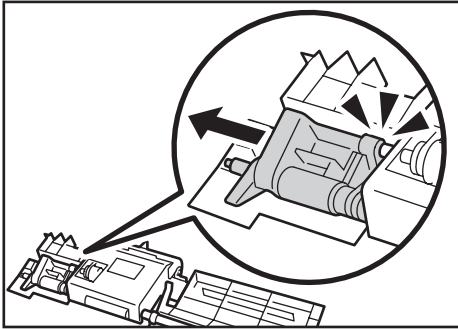
CWH141

11. Attach the cover, and then fit the two bearings and snap rings.



CWH142

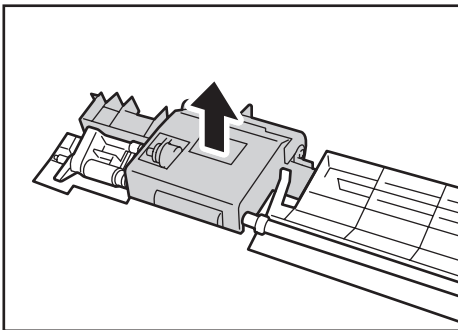
12. Pulling the white component away, disengage the projecting part from the pick-up roller.



CZC175

13. Remove the component containing the pick-up roller.

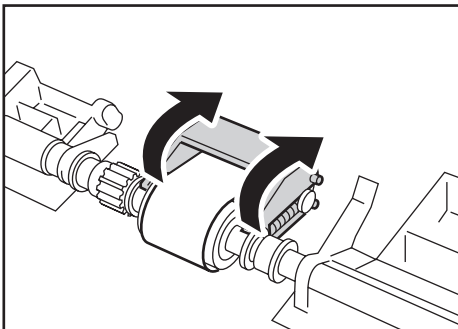
Be sure to disengage the projecting part before removing the component. If you try to remove it forcefully, you may damage it.



CZC176

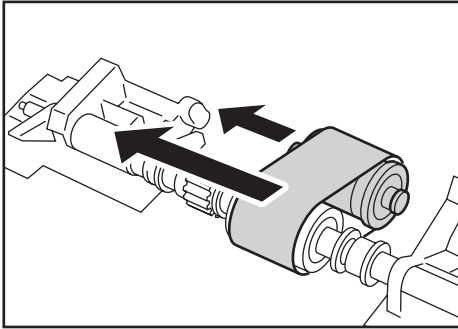
14. Remove the paper feed belt cover.

The paper feed belt cover's spring comes off easily. Be careful not to lose it.



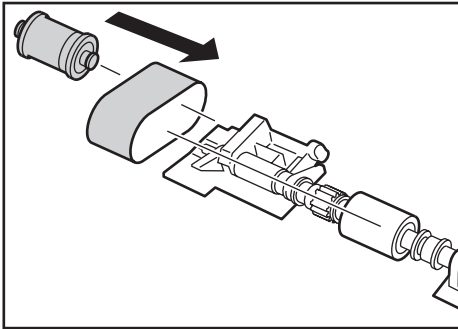
CZC177

15. Remove the idler roller and the paper feed belt.



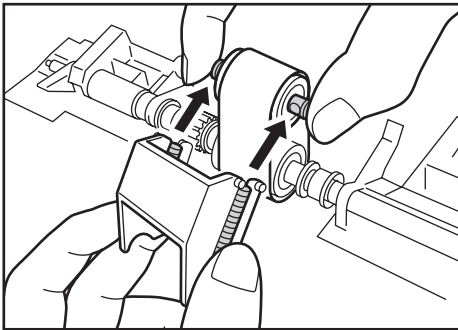
CWH145

16. Install the new paper feed belt and reattach the idler roller.



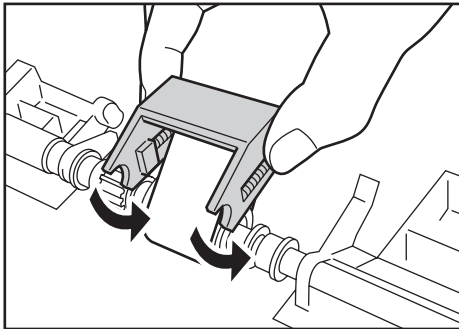
CWH146

17. Insert the cover's bars into the holes in the idler roller's shaft.



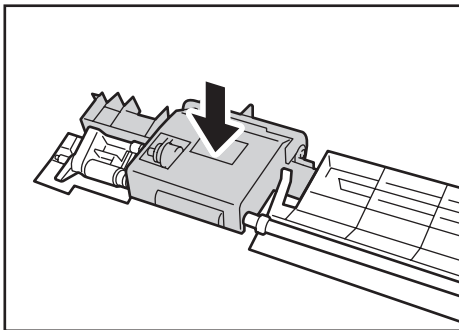
CZC178

18. Attach the paper feed belt cover.



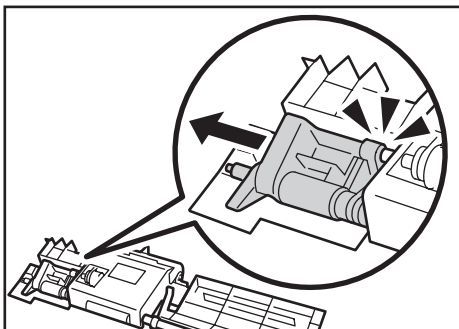
CZC180

19. Attach the component containing the pick-up roller, and then pull the white component and insert the stud into it.
20. Attach the component containing the pick-up roller.



CZC179

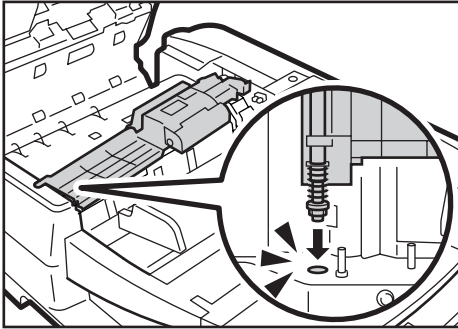
21. Pull the white component and insert the stud into the component containing the pick-up roller.



CZC175

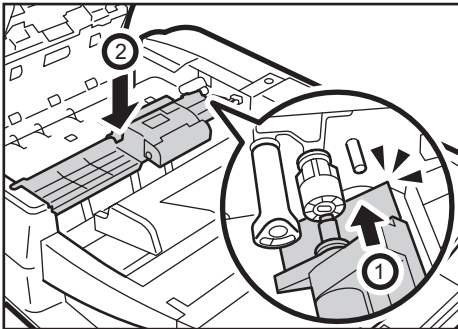
22. Install the paper feed unit by inserting the end of the shaft into the hole and the end of the right shaft into the white component.

23. Insert the end of the shaft into the hole.



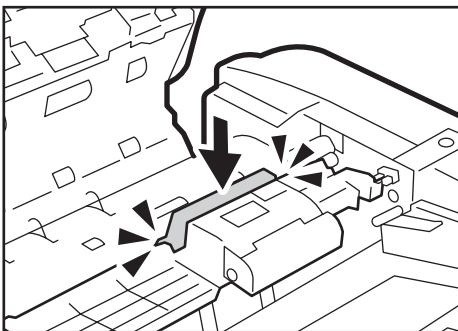
CZC181

24. Install the paper feed unit by inserting the end of the shaft into the socket in the white component, making sure that the end of the shaft and the socket have the same cross-sectional shape.



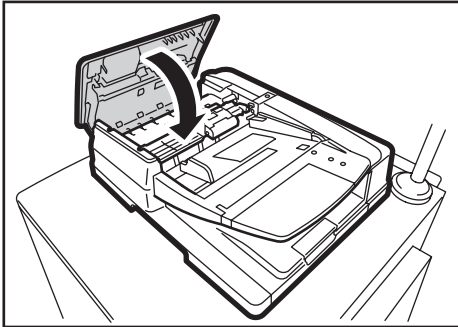
CZC182

25. Reattach the stopper.



CZC165

**26. Close the ADF cover.**



CWH151

**27. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".





# 3. Development Unit

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## Before You Begin

### ★ Important

- The surface of a drum is sensitive to light. Exposing the surface of a drum to strong light (especially direct sunlight) can permanently damage it.
- Replace the photoconductor unit or its cleaning unit with the detached charge unit.

### What You Need

- Hex screwdriver
- Drum setting powder pad applicator
- Newspaper or other paper

### Time for Replacement

A message will appear when it nears the time to replace a component.

### Print the counter list.

1. Press the [Counter] key and print out the counter list.

See page 18 "Control Panel".

2. Turn the machine off.

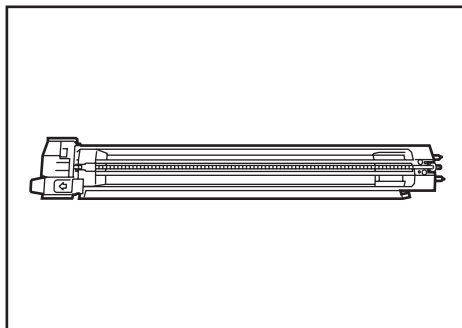
See page 19 "Turning Off/On the Power".

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## Replaceable Parts

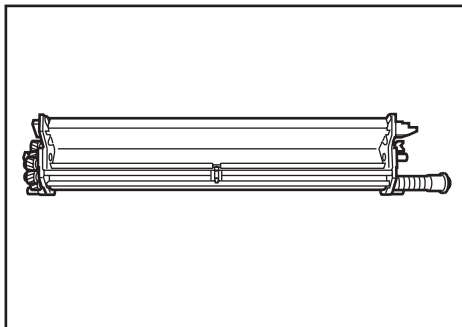
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### Charge unit



CZC051

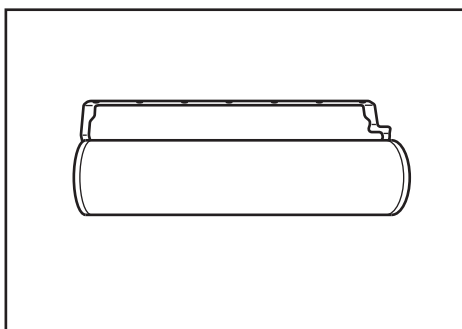
### Cleaning unit for photoconductor unit



CZC052

3

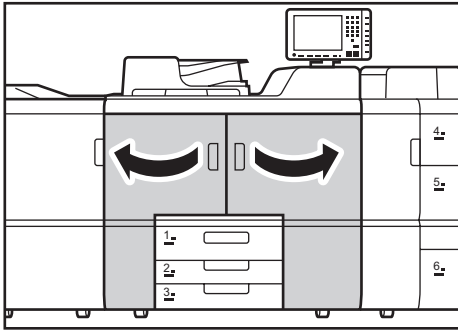
### Photoconductor unit



CZC053

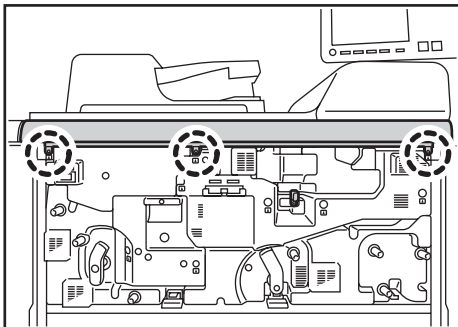
# Replacing the Charge Unit/Cleaning Unit for Photoconductor Unit/Photoconductor Unit

1. Open the front covers.



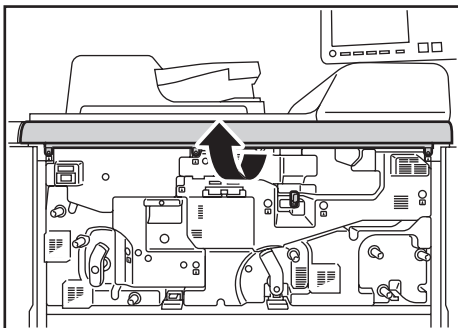
CZC001

2. Remove the 3 screws.



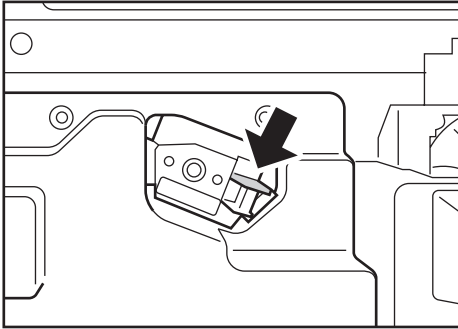
CZC054

3. Remove the cover.



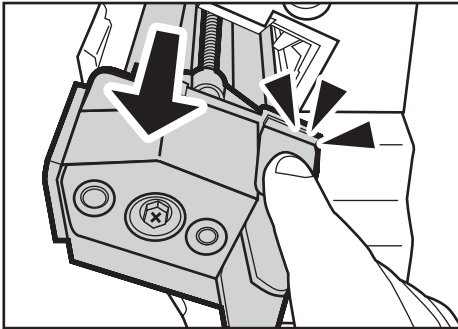
CZC055

**4. Push the lock lever.**



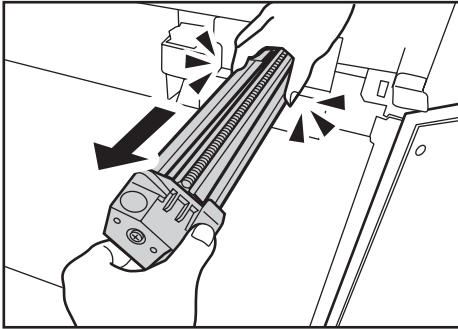
CZC056

**5. Pulling the lock lever down, pull out the charge unit.**



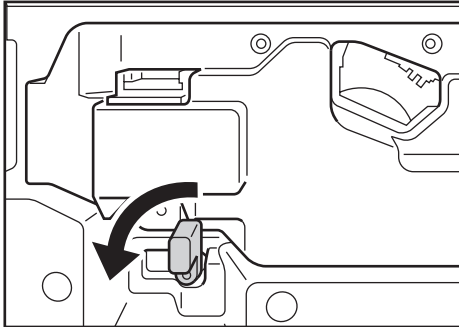
CZC166

**6. Hold the charge unit with both hands so it does not come into contact with any metal parts, and then detach it.**

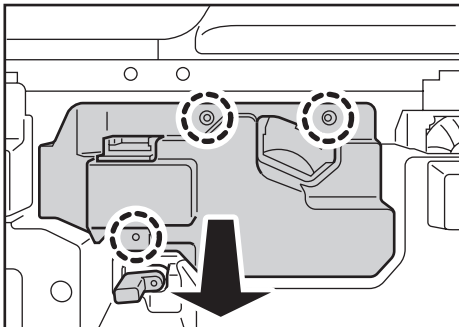


CZC167

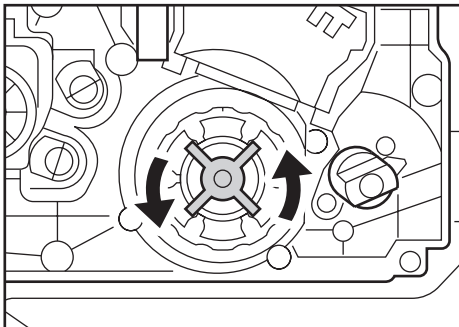
**7. Pull down the lever.**



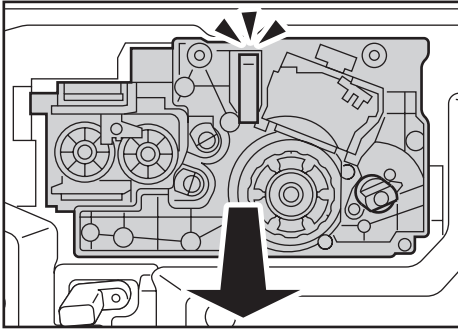
**8. Remove the 3 screws, and then remove the cover.**



**9. Loosen the drawer stop knob by turning it, and then remove it.**

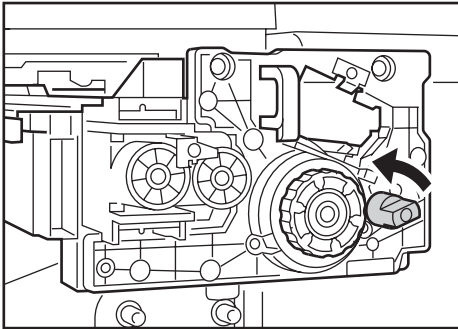


**10. Holding the handle, pull out the development unit drawer.**



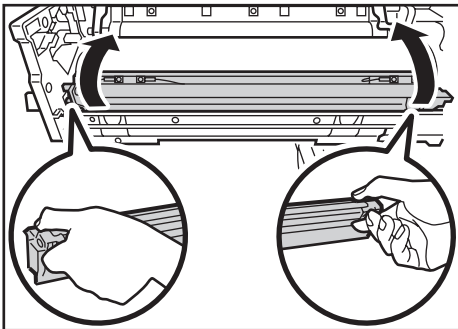
CZC060

**11. Turn the lock lever.**



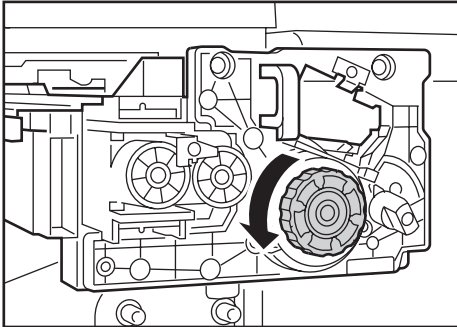
CZC061

**12. Remove the cleaning unit for photoconductor unit.**



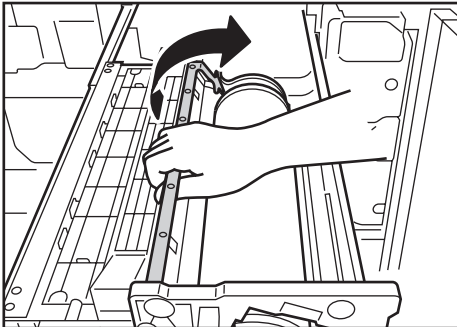
CZC062

**13. Turn the dram knob.**



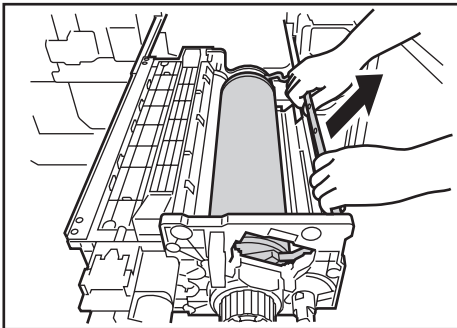
CZC063

**14. Rotate the handle.**



CZC064

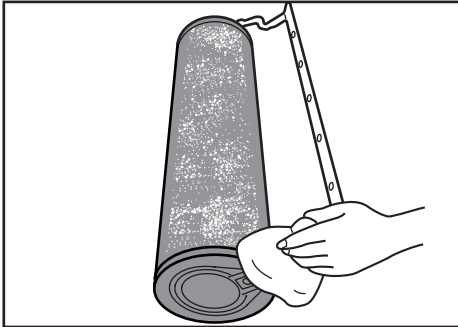
**15. Pull out the photoconductor unit.**



CZC065

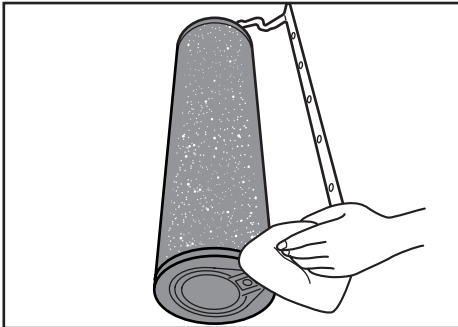


16. Using the powder pad applicator, pat the surface of the photoconductor unit lightly.



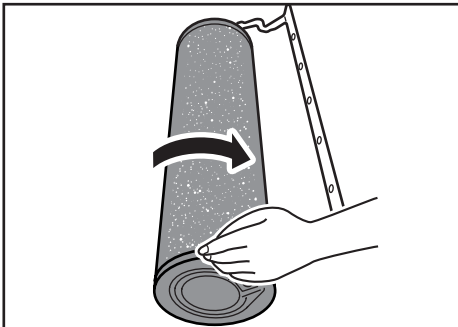
CZC145

17. Spread the developer on the photoconductor unit evenly using a dry cloth.



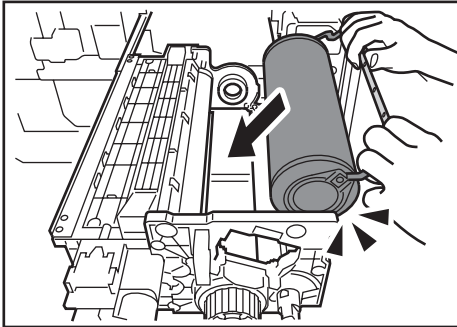
CZC174

18. Rotate the photoconductor unit a half-turn until the surface to which the powder has been applied faces down.

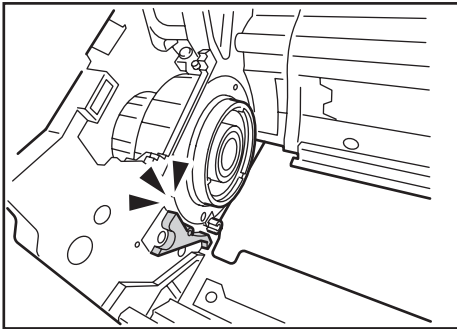


CZC196

**19. Attach the new photoconductor unit.**

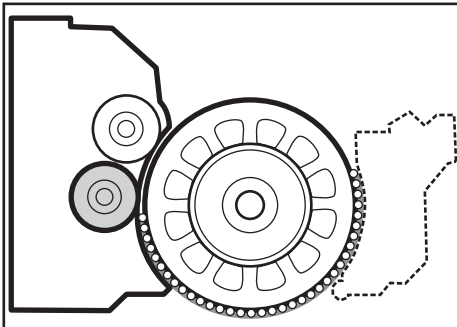


CZC077



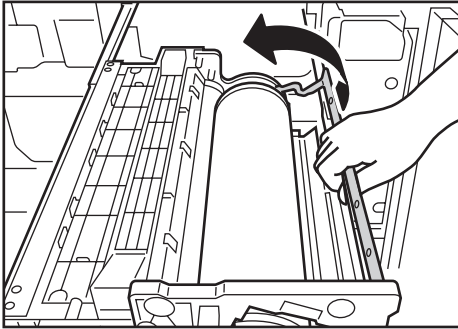
CZC147

Make sure that the surface to which the powder has been applied does not come into contact with the development roller.



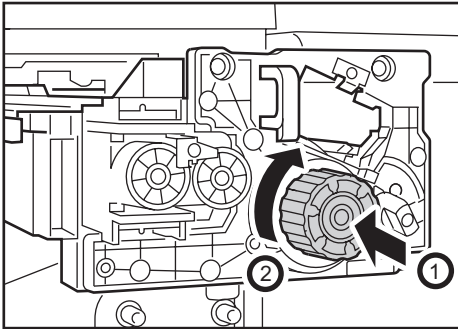
CZC197

**20. Rotate the handle.**



CZC076

**21. Turn the drum knob while pushing it in to fasten the photoconductor unit.**

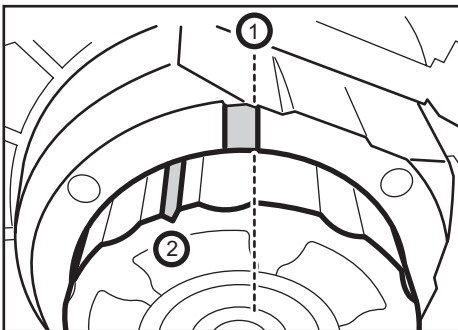


CZC075

**22. Check that the drum knob is locked securely.**

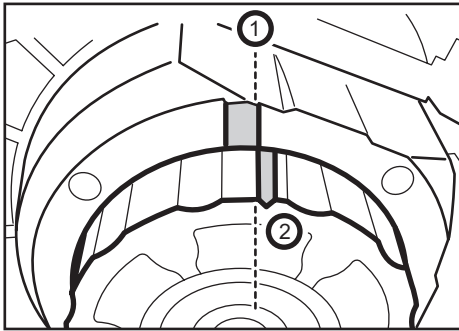
Turn the drum knob until the groove (2) reaches the position to the right of reference position (1).

**Unlocked**



CZC187

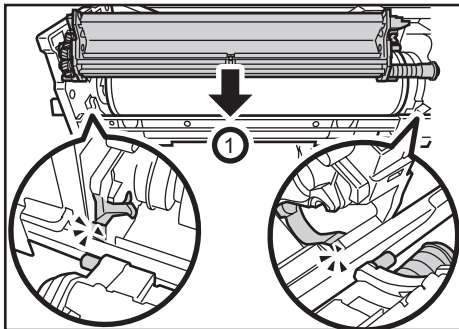
Locked



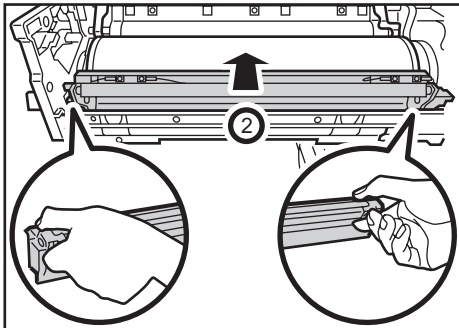
CZC190

3

23. Attach the new cleaning unit for photoconductor unit.

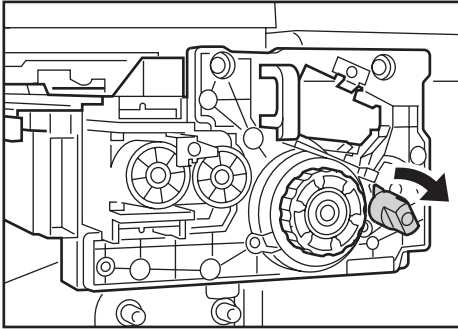


CZC074



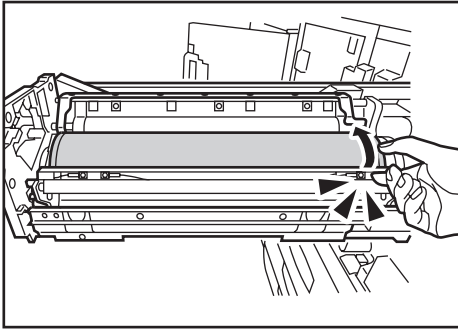
CZC169

24. Turn the lock lever, and then secure cleaning unit for photoconductor unit.



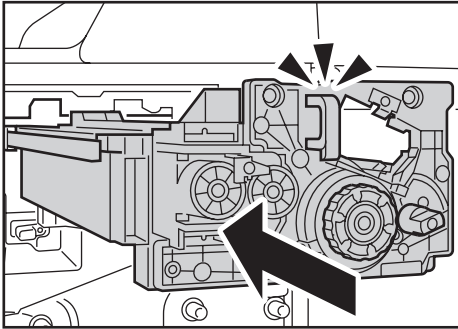
CZC073

25. While carefully holding the cleaning unit for photoconductor unit, rotate the photoconductor unit half a turn.



CZC148

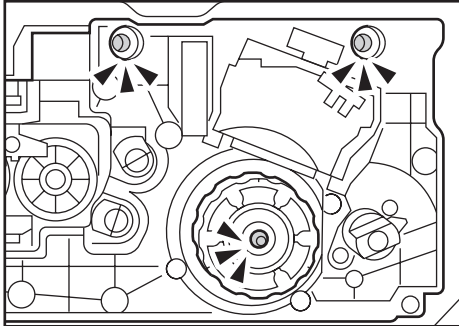
26. Holding the handle, push the development unit drawer back into the machine.



CZC072

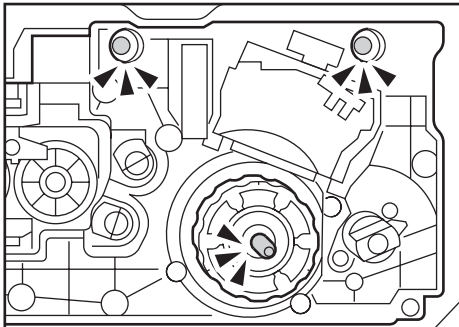
**27. Check that the development unit is attached securely.**

**Detached**



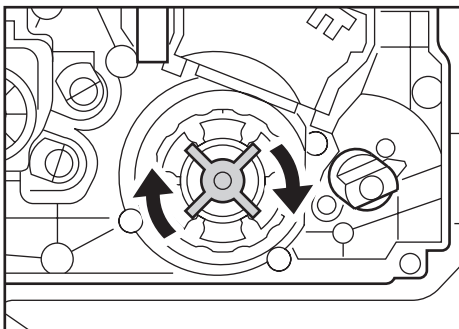
CZC188

**Attached**



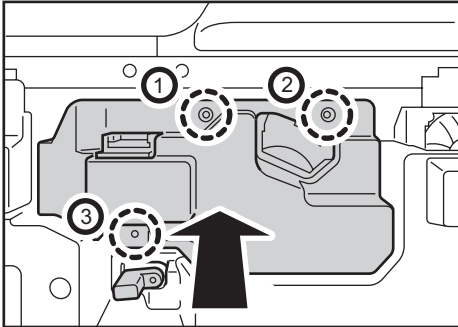
CZC191

**28. Install the drawer stop knob, and then fasten it by turning it.**



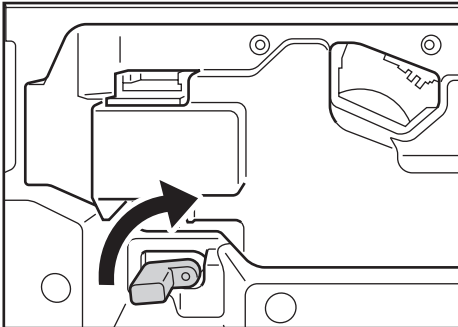
CZC071

**29. Attach the cover, and then secure it with the 3 screws in order.**



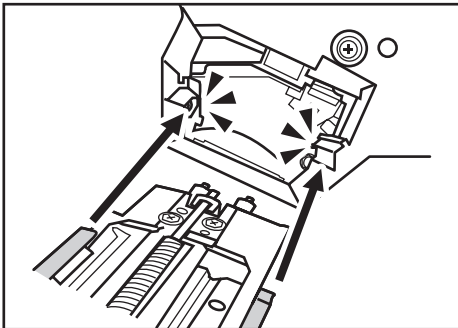
CZC070

**30. Pull up the lever.**



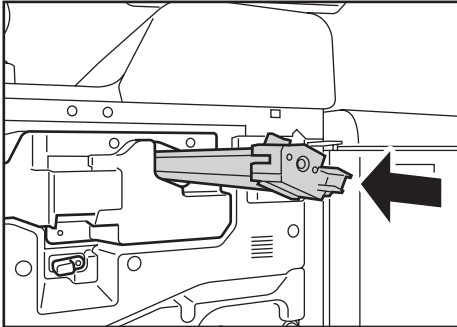
CZC069

**31. Engage the new charge unit with the guide rail.**



CZC168

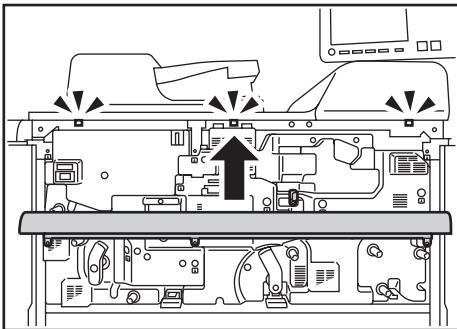
32. Push the charge unit in horizontally.



CZC068

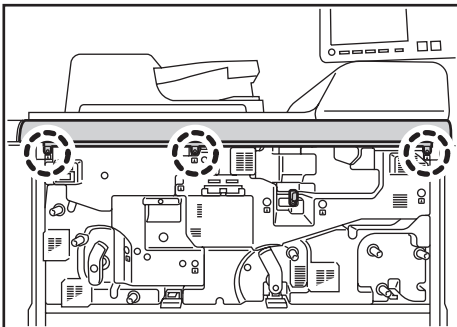
3

33. Attach the cover by aligning it with the 3 catches.



CZC067

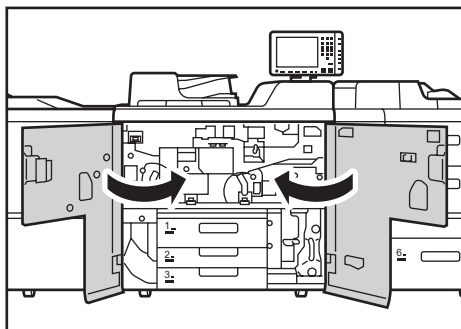
34. Secure the cover with the 3 screws.



CZC066



**35. Close the front covers.**



CZC006

**36. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

# 4. Cleaning Unit for Intermediate Transfer Belt

---

## Before You Begin

### ★ Important

- The cleaning unit for intermediate transfer belt requires lubrication as part of its replacement. Lubricate the cleaning unit for the photoconductor unit and intermediate transfer belt that are detached.

### What You Need

- Hex screwdriver
- Newspaper or other paper

### Time for Replacement

A message will appear when it nears the time to replace a component.

### Print the counter list.

1. Press the [Counter] key and print out the counter list.

See page 18 "Control Panel".

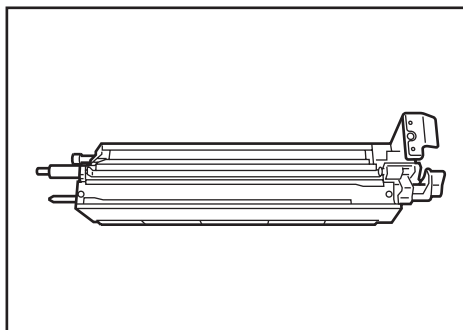
2. Turn the machine off.

See page 19 "Turning Off/On the Power".

---

## Replaceable Parts

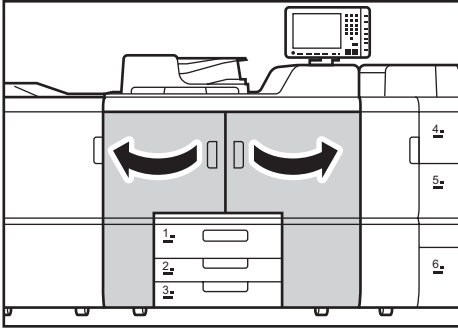
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CZC078

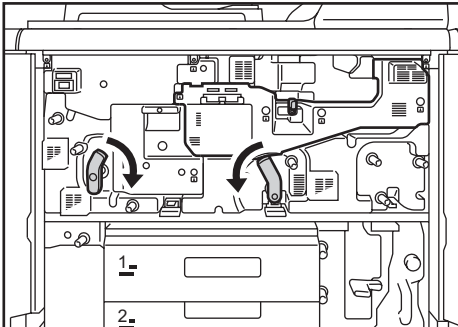
# Replacing the Cleaning Unit for Intermediate Transfer Belt

1. Open the front covers.



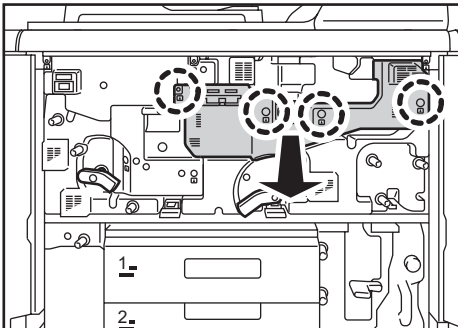
CZC001

2. Pull down the 2 levers.



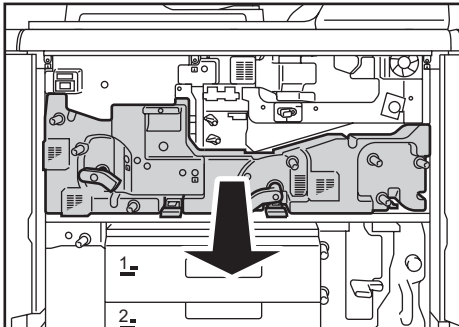
CZC079

3. Remove the 4 screws, and then remove the cover.



CZC080

**4. Pull out the drawer until it stops.**

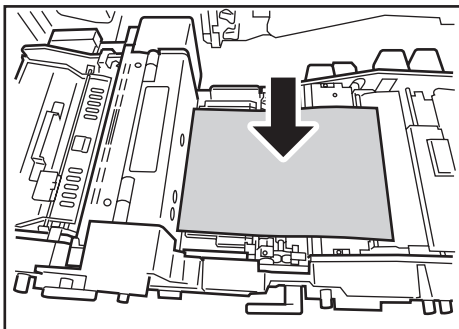


CZC081

**5. Remove the transfer unit.**

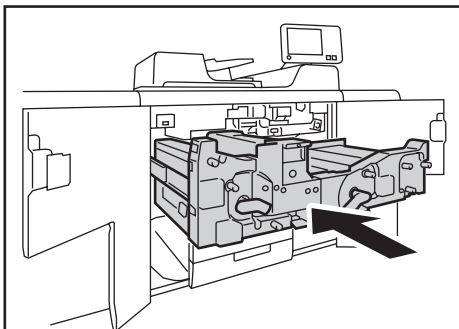
See page 102 "Replacing the Transfer Unit".

**6. Spread a sheet of paper.**



CZC082

**7. Push the drawer back into the machine.**

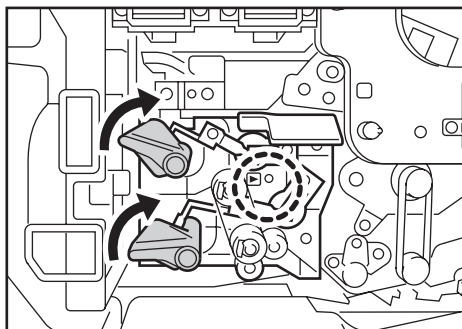


CZC088

**8. Remove the cleaning unit for photoconductor unit.**

See page 77 "Replacing the Charge Unit/Cleaning Unit for Photoconductor Unit/Photoconductor Unit".

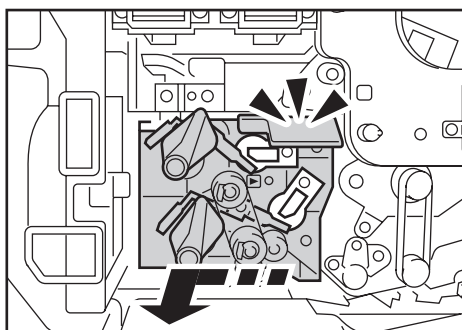
**9. Pull up the 2 levers, and then remove the screw.**



CZC083

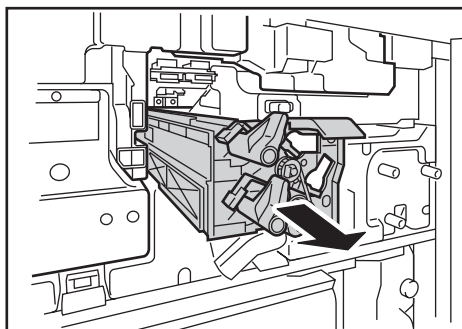
4

**10. Holding the grip, pull out the cleaning unit for intermediate transfer belt while pressing it to the left.**



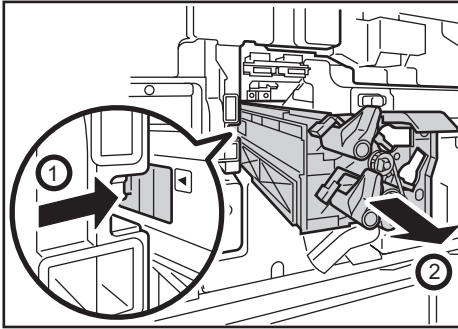
CZC084

**11. Pull out the cleaning unit for intermediate transfer belt until it stops.**



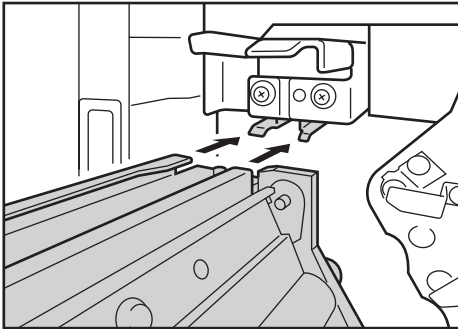
CZC170

12. While holding the latch, remove the cleaning unit for intermediate transfer belt.



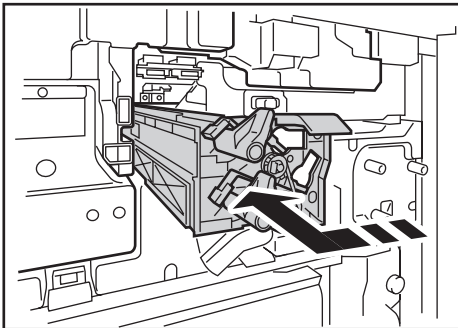
CZC085

13. Engage the new cleaning unit for intermediate transfer belt with the guide rail.



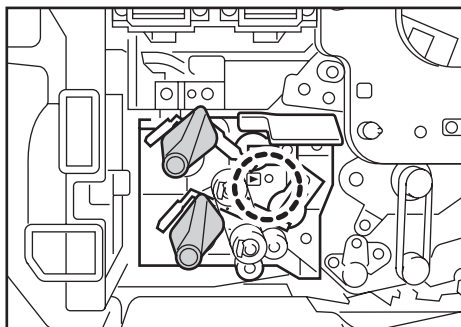
CZC091

14. Push in the cleaning unit for intermediate transfer belt while pressing it to the left.



CZC092

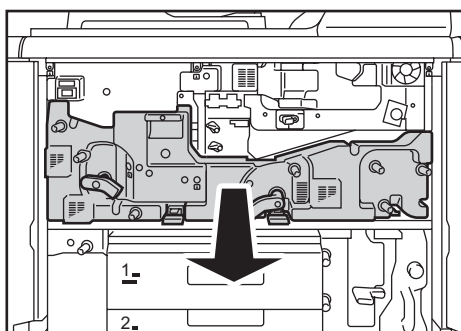
**15. Secure the cleaning unit for intermediate transfer belt with the screw.**



CZC195

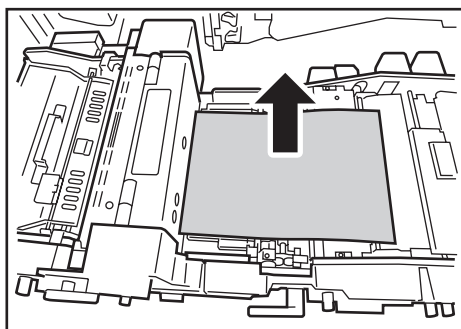
4

**16. Pull out the drawer until it stops.**



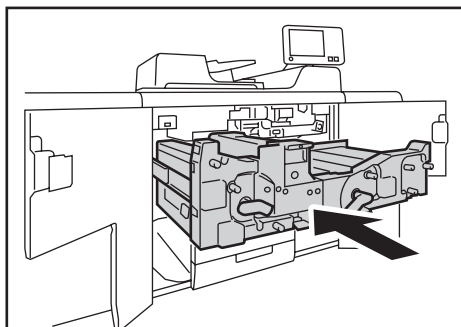
CZC081

**17. Remove the paper.**



CZC089

**18. Push the drawer back into the machine.**



CZC088

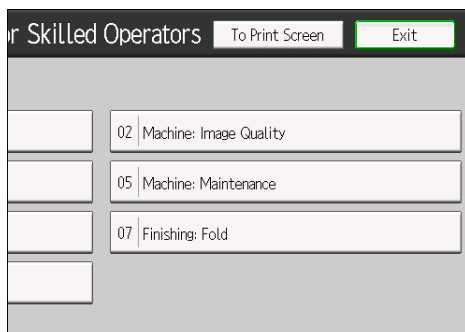
**19. Turn the machine on.**

See page 19 "Turning Off/On the Power".

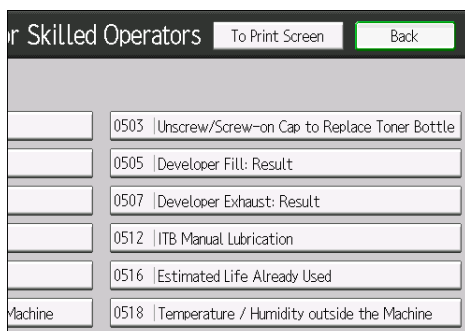
**20. Access the Adjustment Settings for Skilled Operators menu.**

See "Adjustment Settings for Skilled Operators", Adjustment Item Menu Guide: TCRU/ORU.

**21. Press [Machine: Maintenance].**

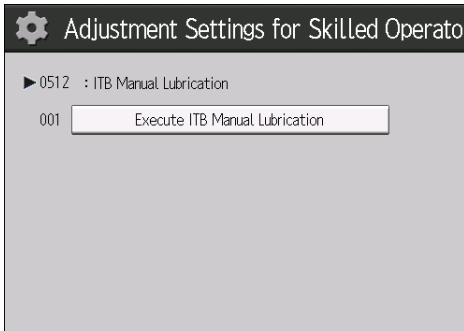


**22. Press [ITB Manual Lubrication].**

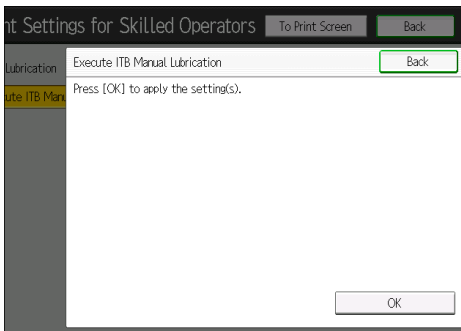




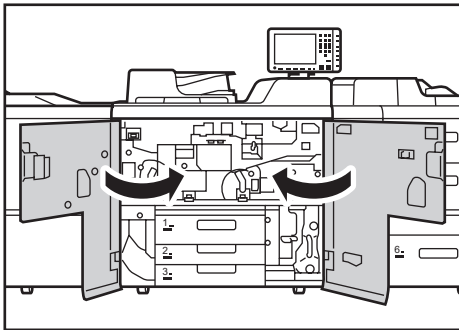
**23. Press [Execute ITB Manual Lubrication].**



**24. Press [OK].**



**25. Close the front covers.**



CZC006

Lubrication starts. It takes about 5 minutes.

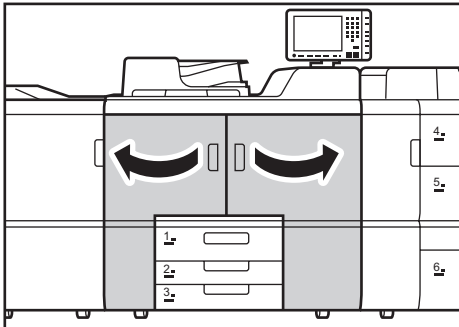
If lubrication fails soon after starting, check the following:

- Is the cleaning unit for intermediate transfer belt attached?
- Is the cleaning unit for photoconductor unit detached?
- Has the toner run out or almost run out?

If this operation fails halfway, contact your sales or service representative.

**26. Check that lubrication has completed, and then press [Exit].**

**27. Open the front covers.**



CZC001

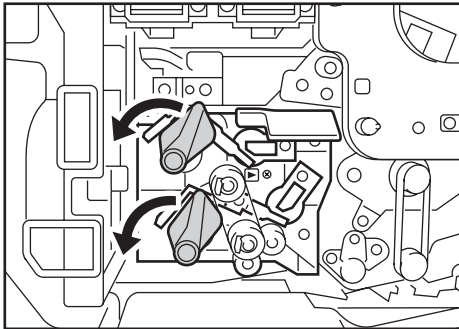
**28. Attach the transfer unit.**

See page 102 "Replacing the Transfer Unit".

**29. Attach the cleaning unit for photoconductor unit.**

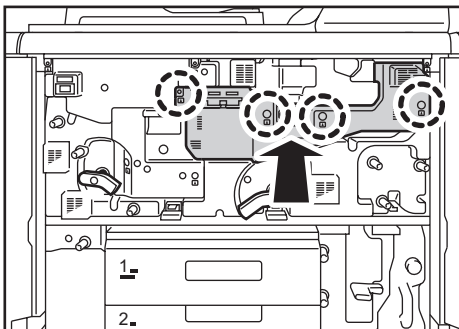
See page 77 "Replacing the Charge Unit/Cleaning Unit for Photoconductor Unit/Photoconductor Unit".

**30. Pull down the 2 levers.**



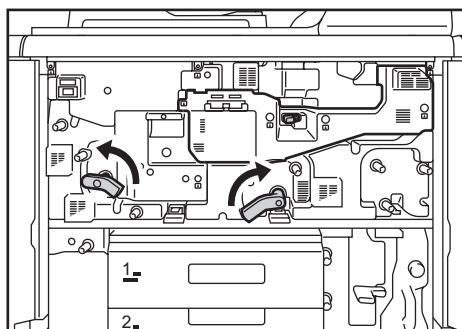
CZC090

**31. Attach the cover, and then secure it with the 4 screws.**



CZC087

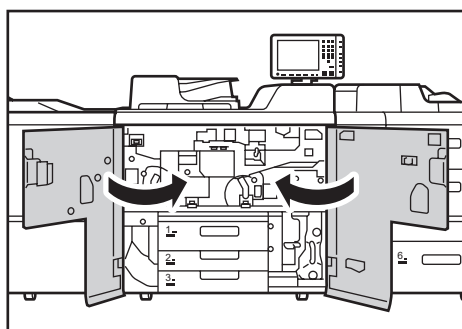
**32. Pull up the 2 levers.**



CZC086

4

**33. Close the front covers.**



CZC006

**34. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".

# 5. Transfer Unit

---

## Before You Begin

### What You Need

- Hex screwdriver
- Newspaper or other paper

### Time for Replacement

A message will appear when it nears the time to replace a component.

### Print the counter list.

1. Press the [Counter] key and print out the counter list.

See page 18 "Control Panel".

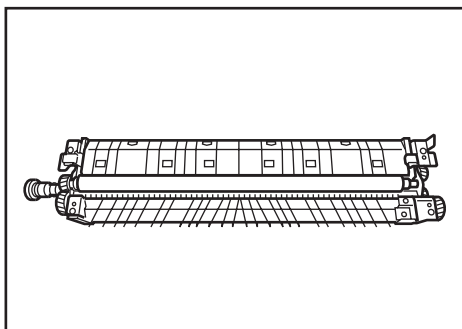
2. Turn the machine off.

See page 19 "Turning Off/On the Power".

---

## Replaceable Parts

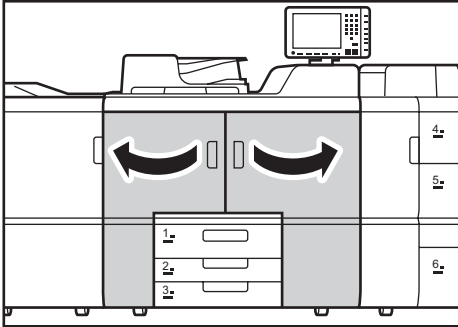
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CZC093

# Replacing the Transfer Unit

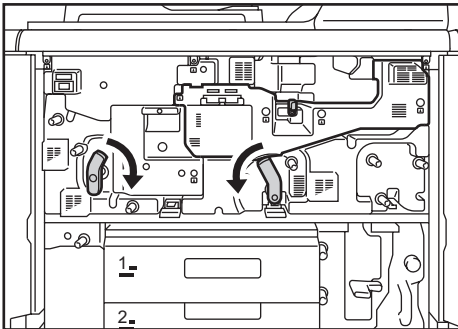
1. Open the front covers.



CZC001

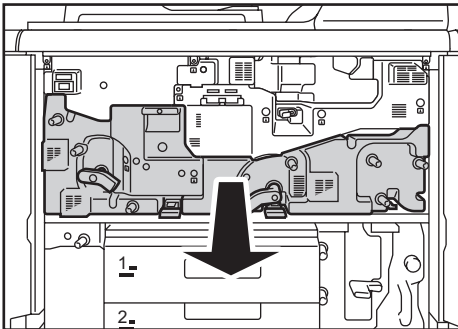
5

2. Pull down the 2 levers.



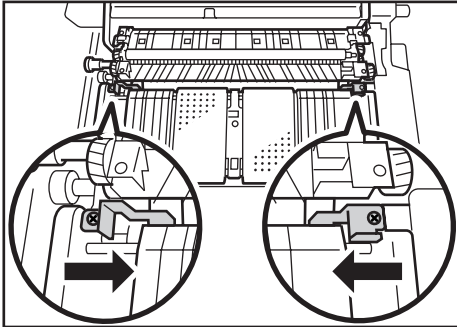
CZC079

3. Pull out the drawer until it stops.



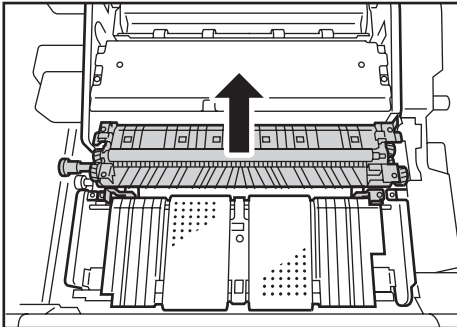
CZC094

4. Remove the 2 screws, and then slide the bracket.



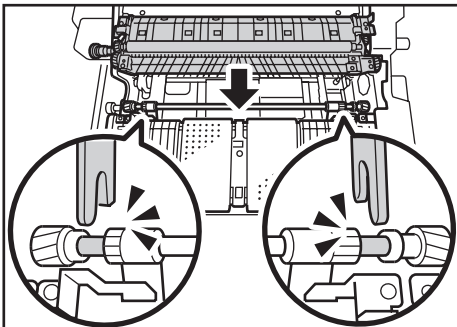
CZC095

5. Remove the transfer unit.



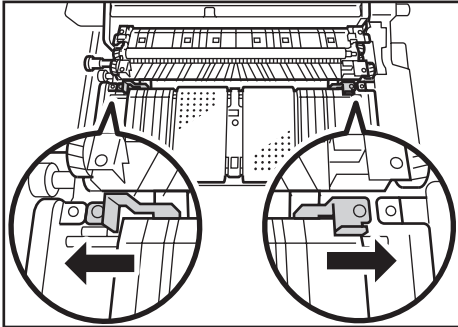
CZC096

6. Attach the transfer unit by engaging the notches on its sides with the shaft.



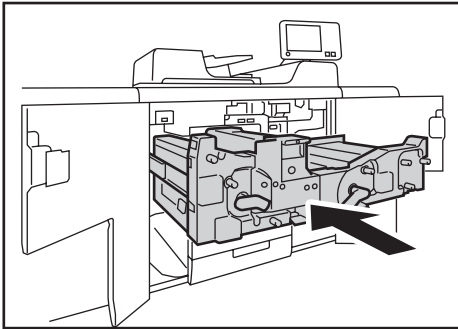
CZC099

7. Slide the bracket, and then secure the transfer unit with the 2 screws.



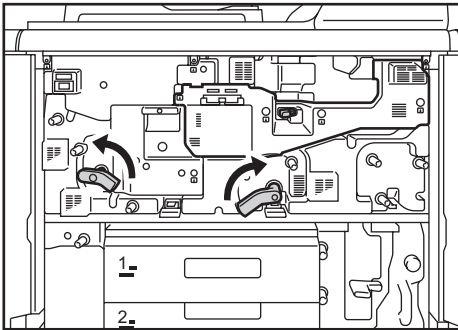
CZC098

8. Push the drawer back into the machine.



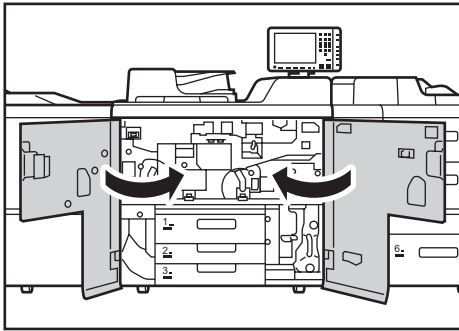
CZC097

9. Pull up the 2 levers.



CZC086

**10. Close the front covers.**



CZC006

**11. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".





# 6. Fusing Unit

## Before You Begin

### ⚠ CAUTION

- The fusing unit becomes extremely hot during operation. To prevent minor burns, allow the machine to cool for at least 30 minutes before you remove the fusing unit.

### ⚠ CAUTION

- The fusing unit weighs approximately around 17.0 kg (37.5 lb).
- When moving the fusing unit, lift it slowly and be careful not to strain yourself. Careless handling or over-exertion when lifting can result in breakage of the unit or injury to yourself.

### What You Need

- Hex screwdriver
- Newspaper or other paper

### Time for Replacement

A message will appear when it nears the time to replace a component.

### Print the counter list.

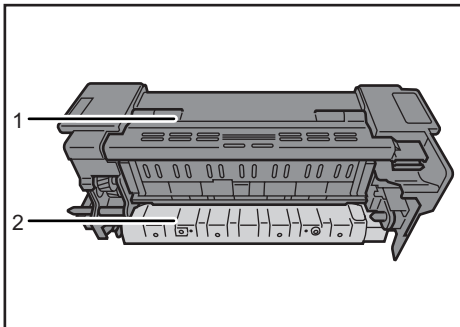
1. Press the [Counter] key and print out the counter list.

See page 18 "Control Panel".

2. Turn the machine off.

See page 19 "Turning Off/On the Power".

## Replaceable Parts



CZC100

- 1. Fusing assembly**
- 2. Cleaning unit for the fusing unit**

# Replacing the Cleaning Unit for the Fusing Unit/Fusing Assembly

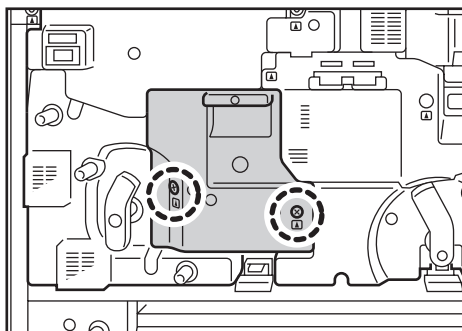
This section explains how to replace the cleaning unit for the fusing unit. When you replace the fusing unit, it is necessary to attach the cleaning unit for the fusing unit to the new fusing unit.

## 1. Open the front covers.



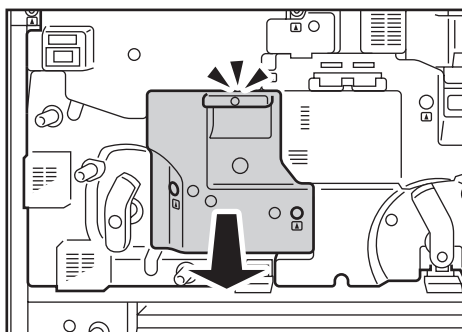
CZC001

## 2. Remove the 2 screws.



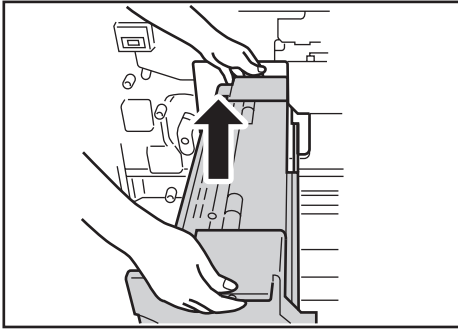
CZC101

## 3. Pull out the fusing unit.



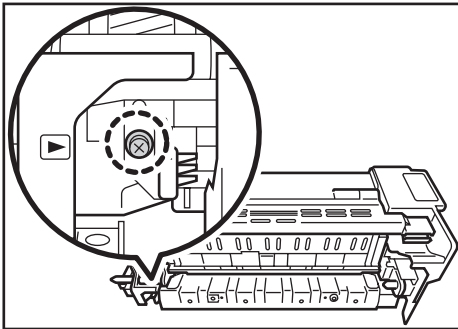
CZC102

**4. Remove the fusing unit.**



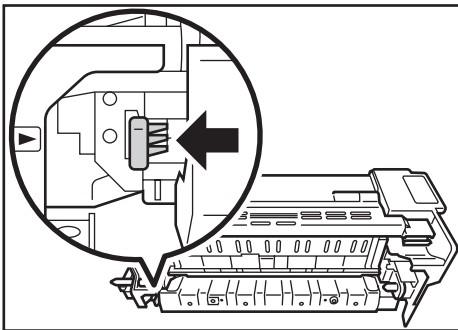
CZC103

**5. Remove the screw.**



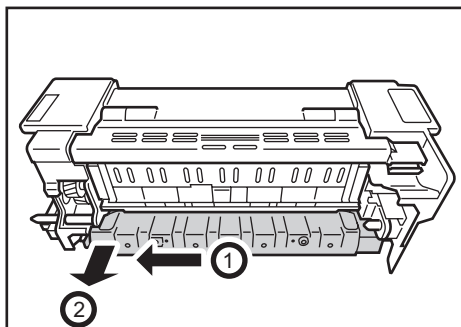
CZC104

**6. Push the lock lever.**



CZC171

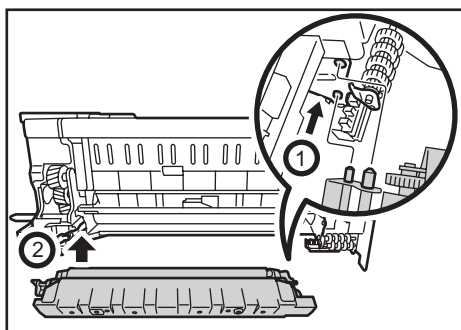
**7. Remove the cleaning unit for the fusing unit.**



CZC105

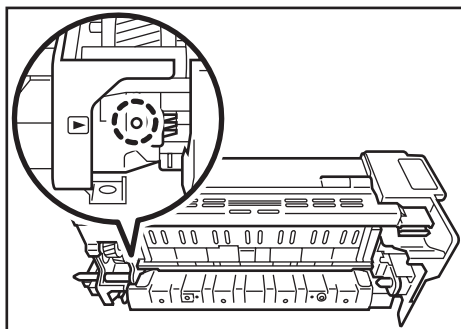
**8. Attach the cleaning unit for the fusing unit by engaging its sides.**

When you replace the fusing unit, it is necessary to attach the cleaning unit for the fusing unit to the new fusing unit.



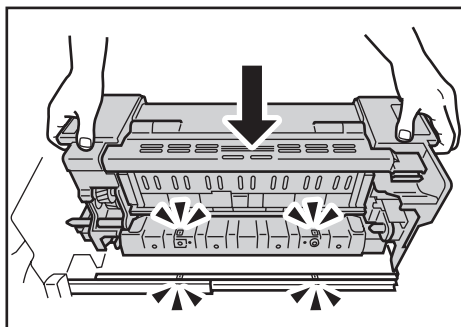
CZC110

**9. Secure the cleaning unit for the fusing unit with the screw.**



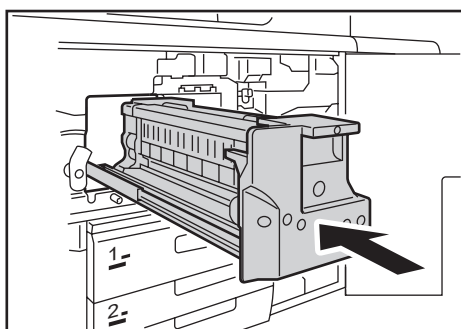
CZC109

**10. Mount the fusing unit on the guide.**



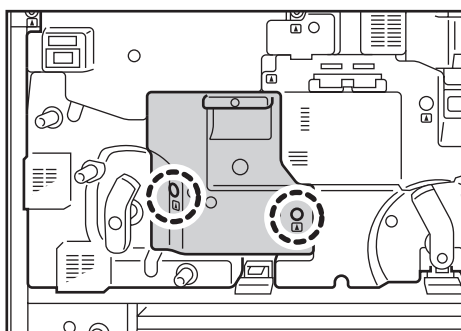
CZC108

**11. Push the new fusing unit back into the machine.**



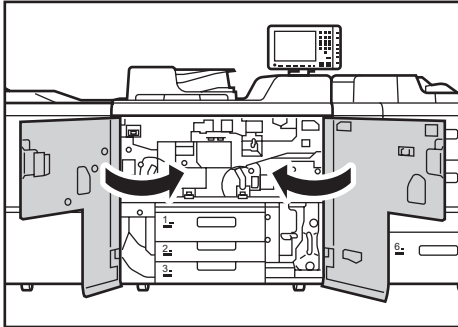
CZC107

**12. Secure the fusing unit with the 2 screws.**



CZC106

**13. Close the front covers.**



CZC006

**14. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.

See page 24 "Resetting the Replaceable Parts Counter".





# 7. Developer

---

## Before You Begin

### ★ Important

- Replace the developer with the machine's power turned on. A message reporting that the cover is open appears during replacement, but proceed with the replacement anyway.

### What You Need

- Hex screwdriver
- Newspaper or other paper
- Developer bottle

### Time for Replacement

A message will appear when it nears the time to replace a component.

### Print the counter list.

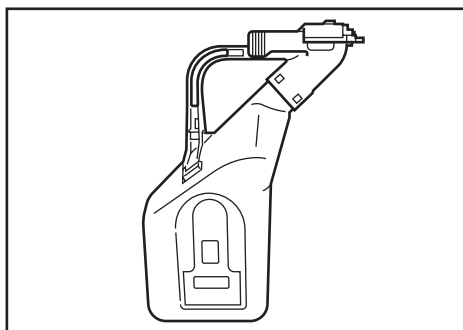
1. Press the [Counter] key and print out the counter list.

See page 18 "Control Panel".

---

## Replaceable Parts

---



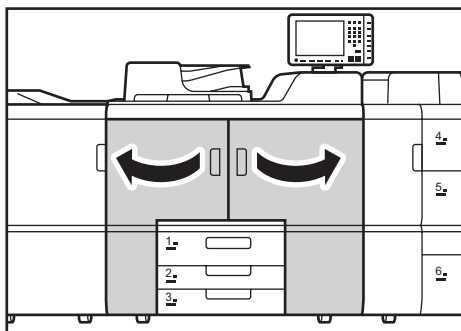
CZC111

# Replacing the Developer

1. Access the Adjustment Settings for Skilled Operators menu.

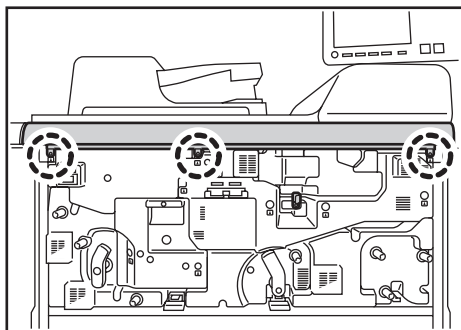
See "Adjustment Settings for Skilled Operators", Adjustment Item Menu Guide: TCRU/ORU.

2. Open the front covers.



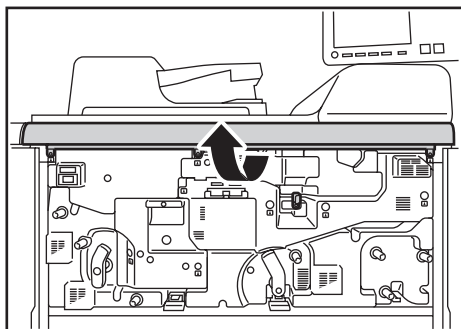
CZC001

3. Remove the 3 screws.



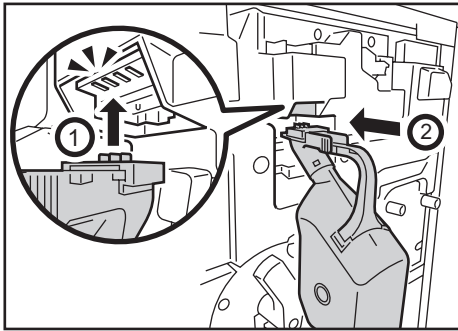
CZC054

4. Remove the cover.



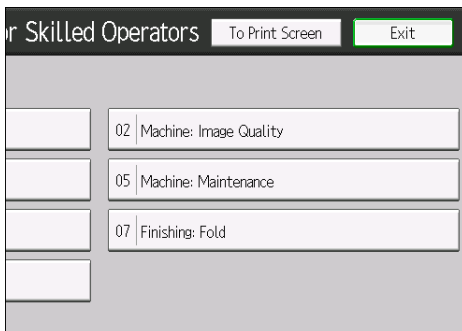
CZC055

**5. Attach the developer bottle.**

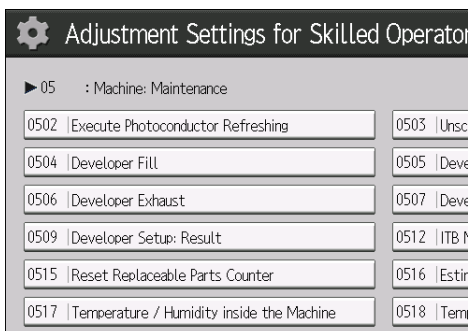


C2C112

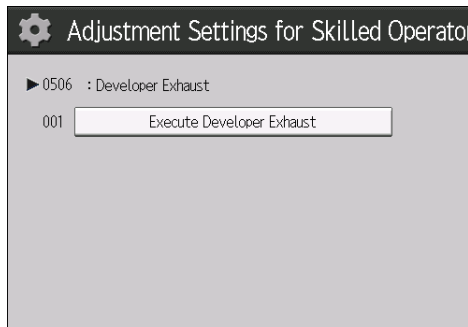
**6. Press [Machine: Maintenance].**



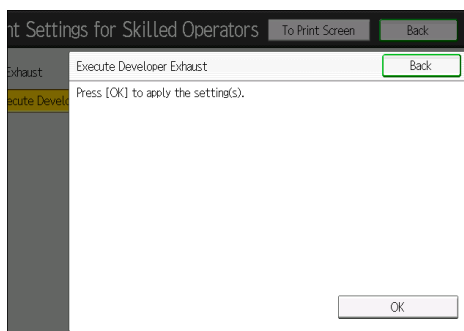
**7. Press [Developer Exhaust].**



**8. Press [Execute Developer Exhaust].**



**9. Press [OK].**

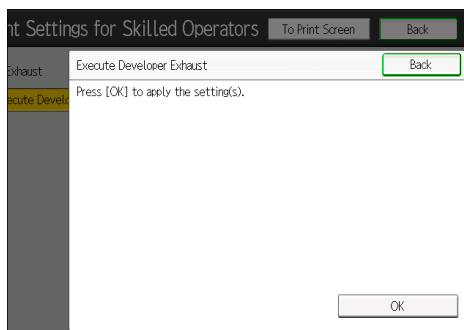


7

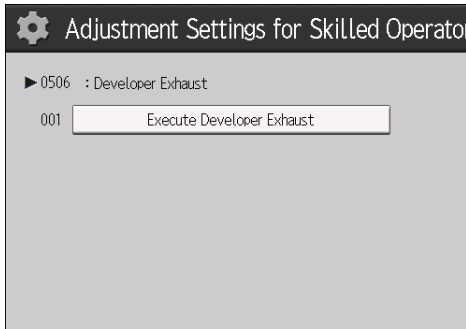
Discharge starts. It takes about 3 minutes.

**10. Check that developer discharge has completed, and then press [Exit].**

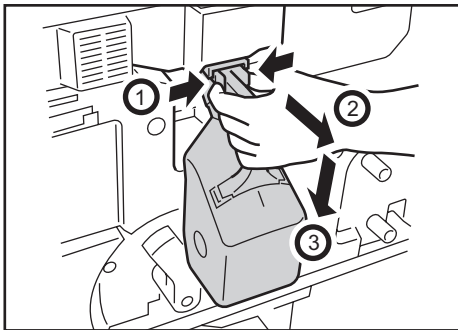
**11. Press [Back].**



**12. Press [Back].**

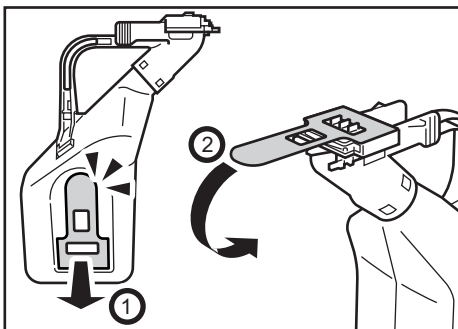


**13. Release the developer bottle's catch, and then remove the bottle.**



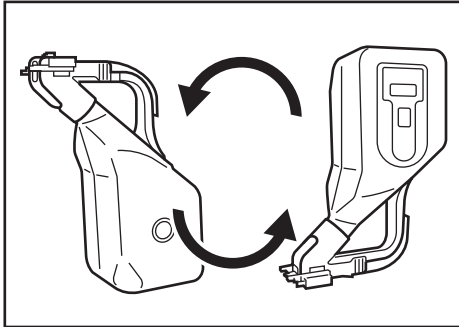
CZC118

**14. Remove the seal on the side of the bottle, and then affix it to the bottle's opening.**



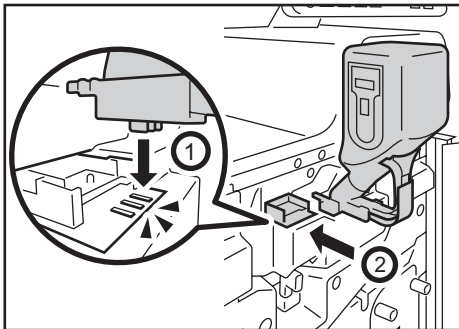
CZC113

15. Turn the new developer bottle a few times to loosen the developer.



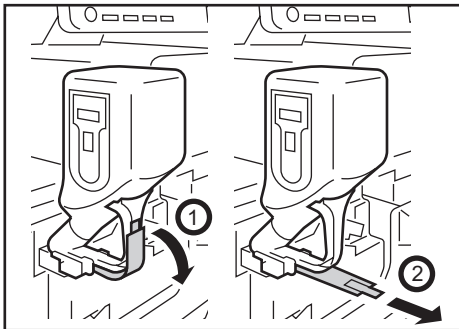
CZC114

16. Attach the new developer bottle.



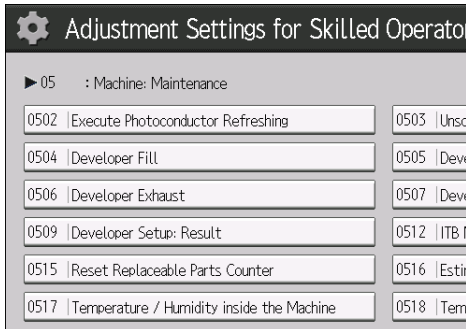
CZC115

17. Pull out the seal.



CZC116

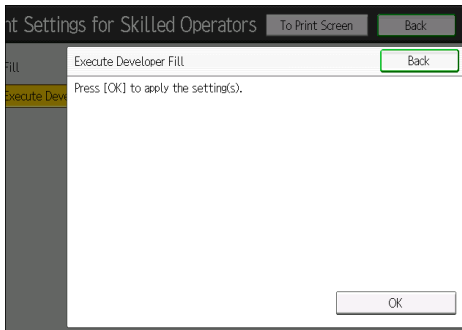
## 18. Press [Developer Fill].



## 19. Press [Execute Developer Fill].



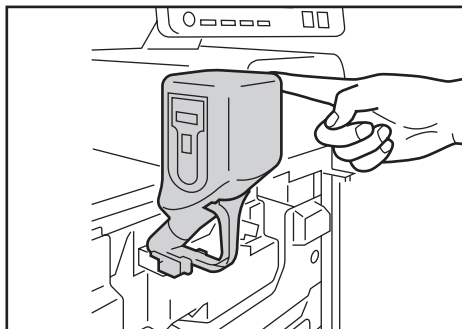
## 20. Press [OK].



Replenishment starts. It takes about a minute.

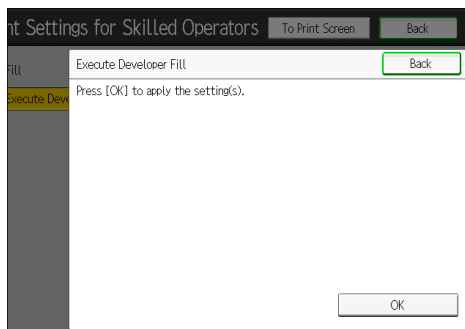


- 21. While pouring in the developer, tap the bottle a few times so that no developer is left in the bottle.



CZC117

- 22. Check that developer replenishment has completed, and then press [Exit].
- 23. Press [Back].

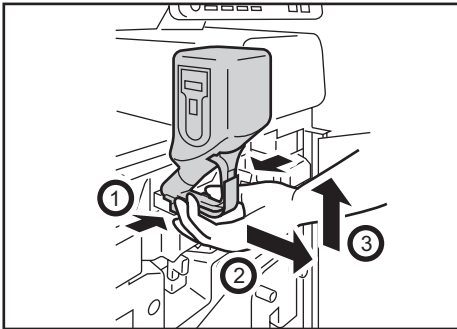


7

- 24. Press [Back].



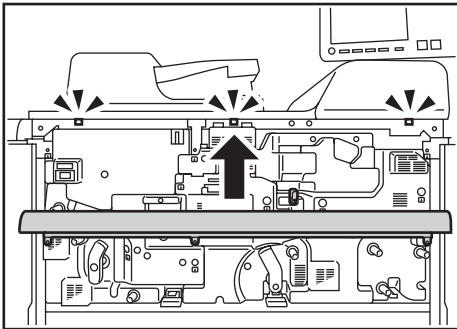
- 25. Release the developer bottle's catch, and then remove the bottle.**



CZC119

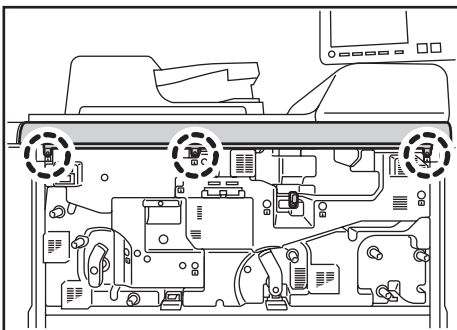
Keep the bottle.

- 26. Attach the cover by aligning it with the 3 catches.**



CZC067

- 27. Secure the cover with the 3 screws.**



CZC066

- 28. Reset the counter for replaceable parts.**

See page 24 "Resetting the Replaceable Parts Counter".



# 8. Waste Toner Bottle

## Before You Begin

### **WARNING**

- Do not incinerate toner (new or used) or toner containers. Doing so risks burns. Toner will ignite on contact with naked flame.

### **WARNING**

- Do not store toner (new or used) or toner containers anywhere near naked flames. Doing so risks fire and burns. Toner will ignite on contact with naked flame.

### **WARNING**

- Do not use a vacuum cleaner to remove spilled toner (including used toner). Absorbed toner may cause a fire or explosion due to electrical contact flickering inside the vacuum cleaner. However, it is possible to use a vacuum cleaner that is explosion-proof and dust ignition-proof. If toner is spilled on the floor, remove the spilled toner slowly using a wet cloth, so that the toner is not scattered.

### **WARNING**

- The following explains the warning messages on the plastic bag used in this product's packaging.
  - Keep the polythene materials (bags, etc.) supplied with this machine away from babies and small children at all times. Suffocation can result if polythene materials are brought into contact with the mouth or nose.

### **CAUTION**

- Do not crush or squeeze toner containers. Doing so can cause toner spillage, possibly resulting in dirtying of skin, clothing, and floor, and accidental ingestion.

### **CAUTION**

- Store toner (new or used), toner containers, and components that have been in contact with toner out of reach of children.

### **CAUTION**

- If toner or used toner is inhaled, gargle with plenty of water and move into a fresh air environment. Consult a doctor if necessary.

**⚠ CAUTION**

- If toner or used toner gets into your eyes, flush immediately with large amounts of water. Consult a doctor if necessary.

**⚠ CAUTION**

- If toner or used toner is swallowed, dilute by drinking a large amount of water. Consult a doctor if necessary.

**What You Need**

- Newspaper or other paper

**Time for Replacement**

A message will appear when it nears the time to replace a component.

**Print the counter list.**

1. **Press the [Counter] key and print out the counter list.**

See page 18 "Control Panel".

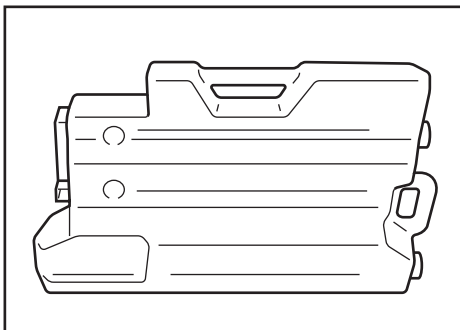
2. **Turn the machine off.**

See page 19 "Turning Off/On the Power".

---

**Replaceable Parts**

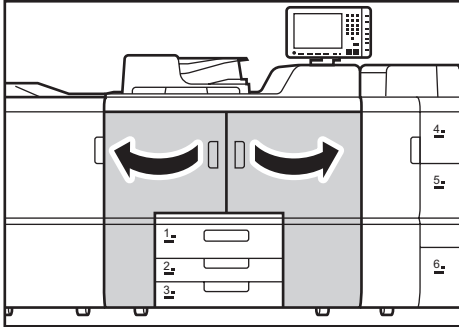
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CZC120

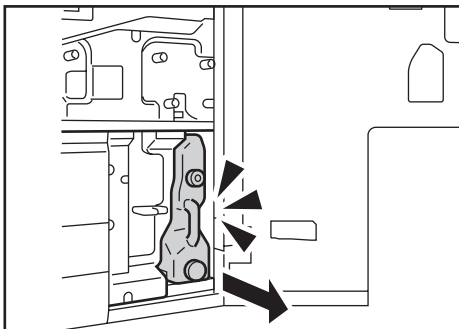
# Replacing the Waste Toner Bottle

1. Open the front covers.



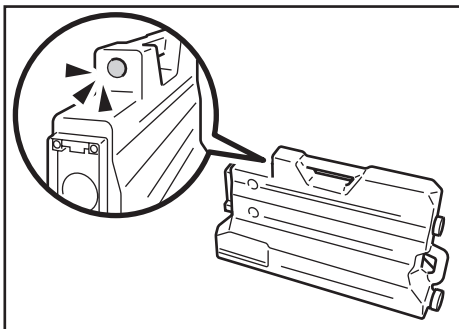
CZC001

2. Holding the handle, pull out the waste toner bottle.



CZC121

3. Affix the seal to its opening.

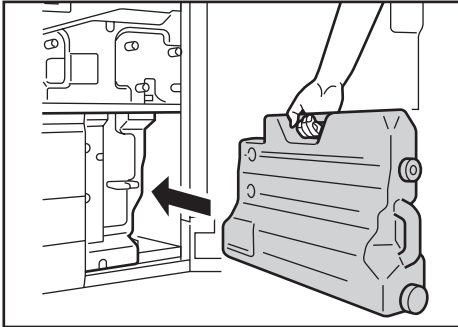


CZC122

The seal is supplied with the new waste toner bottle.

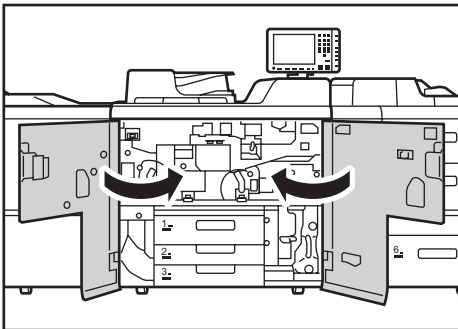
4. Put the used waste toner bottle into the bag and keep it in the box.

**5. Attach the new waste toner bottle.**



CZC123

**6. Close the front covers.**



CZC006

**8**

**7. Reset the counter for replaceable parts.**

Do not turn the machine on until you have read how to do so.  
See page 24 "Resetting the Replaceable Parts Counter".









# **Pro 8100s/8110s/8120s**

**Operating Instructions**

**Adjustment Item Menu Guide: TCRU/ORU**



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# Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

---

# How to Read This Manual

---

## Symbols

---

This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

 **Reference**

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

---

## Disclaimer

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Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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## Notes

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The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

For good output quality, the manufacturer recommends that you use genuine toner from the manufacturer.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

---

# Manuals for This Machine

The following manuals are for skilled operators only.

## **Adjustment Item Menu Guide**

This manual explains the items in [Adjustment Settings for Skilled Operators] and the advanced settings for custom paper adjustment in "Advanced Settings".

## **Replacement Guide**

This manual explains how to replace the machine's components.

## **Troubleshooting**

This manual explains how to troubleshoot problems related to image quality, paper delivery, and other aspects of machine operation.



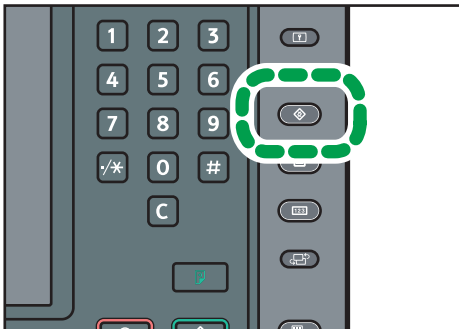


# 1. Adjustment Settings for Skilled Operators

## Displaying the [Adjustment Settings for Skilled Operators] Button

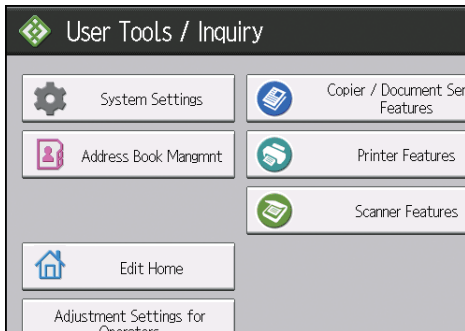
To use the Adjustment Settings for Skilled Operators, you must first configure your machine's Administrator Authentication Management setting.

1. Press the [User Tools] key on the control panel.

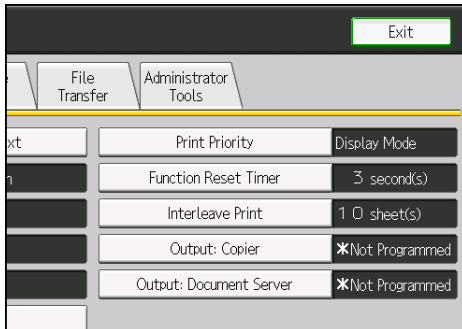


CWW222

2. Press [System Settings] on the display.

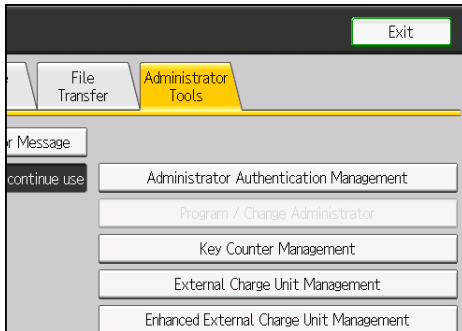


**3. Press [Administrator Tools].**

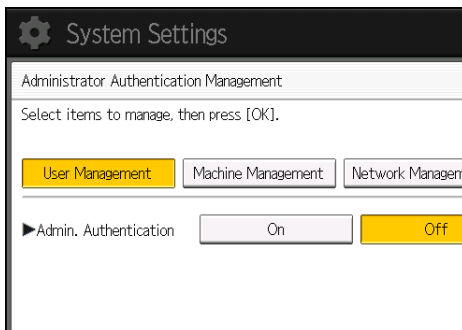


**4. Press [▼Next].**

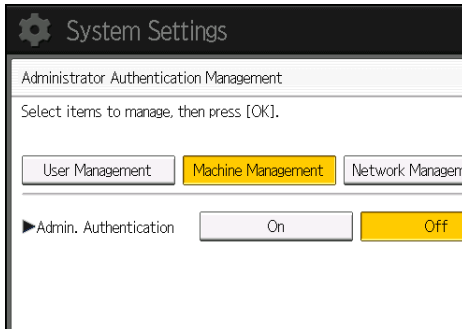
**5. Press [Administrator Authentication Management].**



**6. Press [Machine Management].**



**7. Select [On] for "Admin. Authentication".**

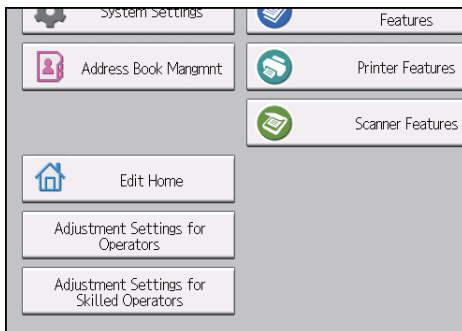


1

**8. Press [OK].**

**9. Press [Exit].**

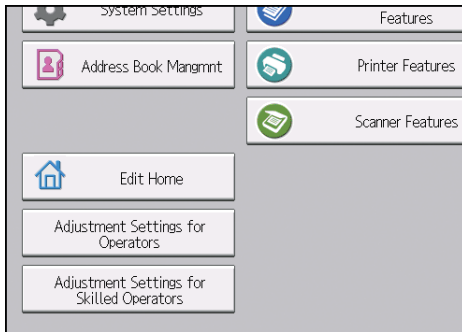
The [Adjustment Settings for Skilled Operators] button appears.



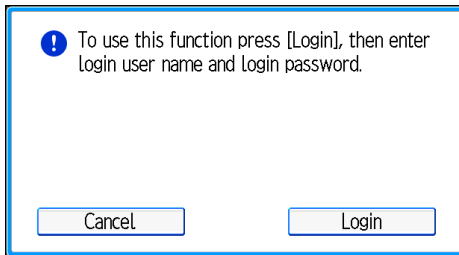
# Accessing Adjustment Settings for Skilled Operators

1

1. Press [Adjustment Settings for Skilled Operators].

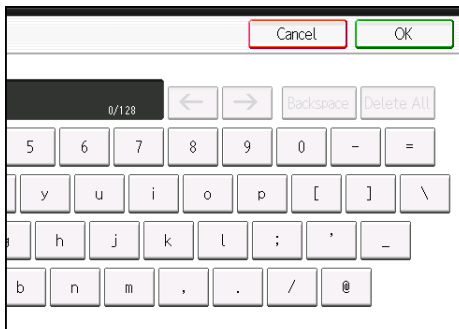


2. Press [Login].

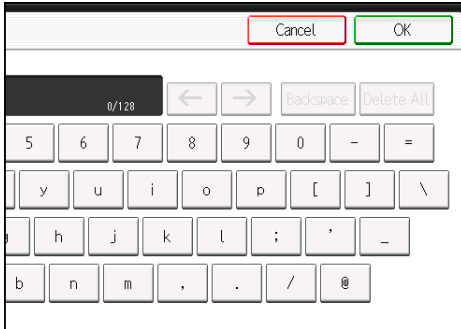


3. Enter your login user name, and then press [OK].

If you are logging on as the administrator for the first time, enter "admin".

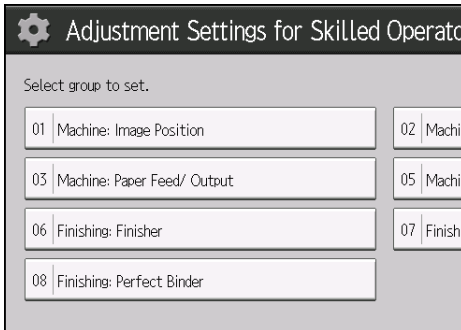


4. Enter your login password, and then press [OK].



1

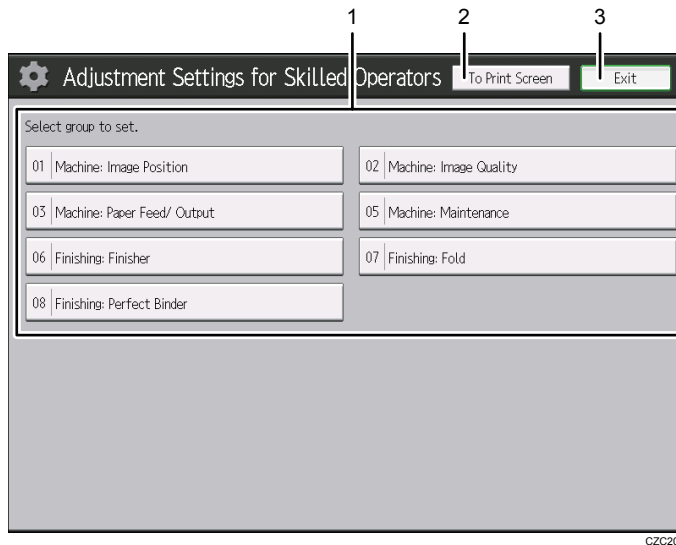
The Adjustment Settings for Skilled Operators appears.



# Layout of Adjustment Settings for Skilled Operators

1

This section explains how to use Adjustment Settings for Skilled Operators.



1. Adjustment items are displayed in this area. Select the setting you want to specify or change.
2. Press this button to display the print screen. You can use this screen to view the changes you have made.
3. Press this button to close Adjustment Settings for Skilled Operators.

# Features of the Displayed Items and Setting Operations

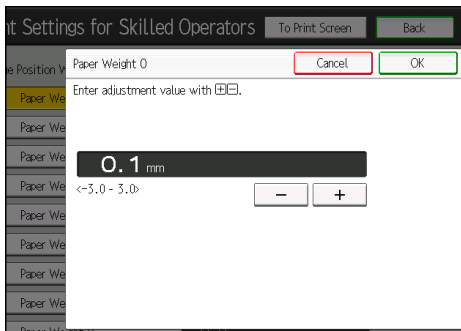
The following operations are available for each adjustment item:

- Value setting
- Item setting
- Executing
- Display only

## Value setting

Press [+] to increase the value, or [-] to decrease.

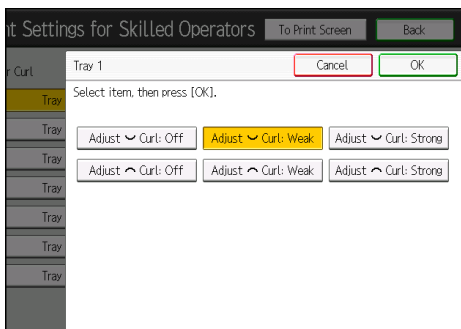
Select [OK] to apply the new setting.



## Item setting

Select the item you require.

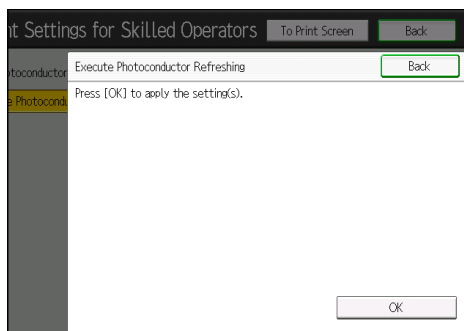
Select [OK] to apply the new setting.



## Executing

Press [OK] to perform a selected function.





### Display only

You can check the setting for the selected item.



# Notes on How Adjustment Settings are Applied to Printed Copies

The adjustment settings are applied to printed copies according to the settings specified for each paper tray, paper size, and paper weight.

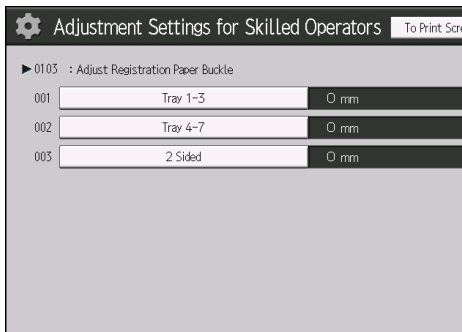
Depending on the adjustment setting, the same settings specified under different categories may be applied to printed copies concurrently.

- Settings for each paper tray
- Settings for each paper weight
- Settings for each paper size

## Settings for each paper tray

These adjustment settings can be specified for each paper tray.

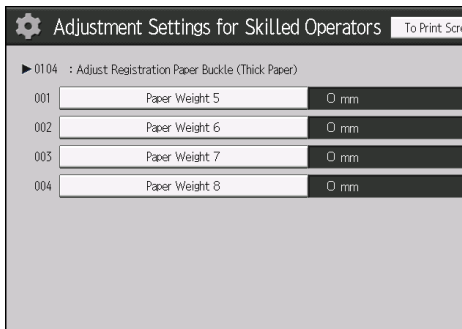
The settings are applied only to printed copies fed from each paper tray.



## Settings for each paper weight

These adjustment settings can be specified for each paper weight.

The settings are applied only to printed copies of each paper weight <sup>\*1</sup>.

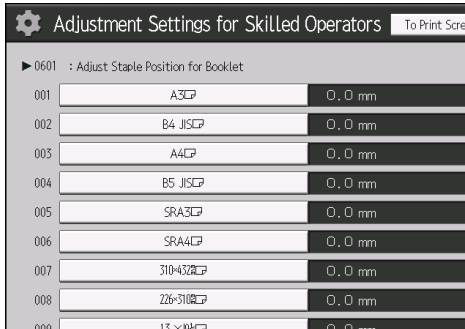


\*1 This appears as [Paper Thickness] in "Tray Paper Settings".

### Settings for each paper size

These adjustment settings can be specified for each paper size.

The settings are applied only to printed copies of each paper size.



#### Note

- For information about the paper tray, paper thickness, and tray paper size settings that can be specified for a particular function, see the manual for the relevant function.

# 2. Details of Menu Items in Adjustment Settings for Skilled Operators

## Menu Items and Functions

### [Machine: Image Position]

For details about the following items, see page 23 "[Machine: Image Position]".

No.	Item	Description
0101	[Adjust Image Position With Feed Direction]	Adjust the horizontal position of the print image.
0102	[Adjust Image Position Across Feed Direction]	Adjust the vertical position of the print image.
0103	[Adjust Registration Paper Buckle]	Adjust the degree of paper arching at the registration gate.
0104	[Adjust Registration Paper Buckle (Thick Paper)]	Adjust the degree of paper arching at the registration gate when using paper of Paper Weight 5 to 7.
0105	[Deactivate Image Position Adjustment Across Feed Dir]	Specify whether or not the machine automatically detects paper pathway deviations during the paper feeding process and adjusts the horizontal position of the print image accordingly.
0106	[Select Test Pattern for Image Position Adjustment]	Select the test image for adjusting the image position.
0107	[ADF Adjustment]	Adjust the position and scaling applied to scanned images when using the Auto Document Feeder (ADF).
0108	[ADF Double Feed Detection]	Specify whether or not to detect multiple feeding of originals loaded in the Auto Document Feeder (ADF).

### [Machine: Image Quality]

For details about the following items, see page 29 "[Machine: Image Quality]".

No.	Item	Description
0201	[Adjust Erase Margin With Feed Direction]	Adjust the mask width at the leading edge or trailing edge of the image.

No.	Item	Description
0202	[Adjust Image Density]	Execute image density control manually.
0203	[Image Density Adjustment Execute Interval]	Specify the number of sheets the machine prints before it automatically adjusts image density.
0204	[Adjust Maximum Image Density]	Specify the adhesion of toner to the drum surface and intermediate transfer belt when image density adjustment is executed.
0205	[Adjust Line Width]	Adjust the intensity of the laser for transferring image data to the drum.
0206	[Adjust Density Difference Across Feed Direction]	Adjust the image density difference between the top and bottom of the image.
0207	[Adjust Fusing Temperature on Standby]	Adjust the set fusing temperature according to the machine status.
0208	[Avoid Ppr Trnsf Shock Jitter: Feed Interval Adj]	Specify whether or not to enable the mode to reduce the jitter produced when paper enters the paper transfer roller.
0211	[Toner Refreshing Mode]	Specify the threshold for the average image area ratio at which toner refreshing mode is enabled.
0212	[Productivity Priority Mode]	Specify whether or not to increase throughput on a job that involves printing on thick and then on thin paper.

### [Machine: Paper Feed/ Output]

For details about the following items, see page 34 "[Machine: Paper Feed/ Output]".

No.	Item	Description
0301	[Double Feed Detection]	Specify whether or not to detect double feeding of paper.
0302	[When Double Feed is Detected]	Specify how the machine behaves when it detects a double feed.
0304	[Skew Detection]	Specify whether or not to detect paper skew.
0305	[Skew Detection Level]	Adjust the permissible range of skew.
0306	[Adjust Wide LCT Fan Level]	Adjust the airflow of the Wide LCT (LCIT RT5080) for fanning the sheets.

No.	Item	Description
0307	[Adjust Wide LCT Fan Timer]	Adjust the duration of the airflow of the Wide LCT (LCIT RT5080) for fanning the sheets.
0308	[Pickup Assist Setting]	Specify the paper feed roller movement.
0309	[Adjust Paper Separation Time]	To prevent multi-feeding, adjust the paper separation time when feeding paper.
0310	[Adjust Paper Curl]	Specify the method for straightening curled sheets.

### [Machine: Maintenance]

For details about the following items, see page 40 "[Machine: Maintenance]".

No.	Item	Description
0502	[Execute Photoconductor Refreshing]	Remove dust on the drum surface.
0503	[Unscrew/Screw-on Cap to Replace Toner Bottle]	Screw on or unscrew the toner bottle cap.
0504	[Developer Fill]	Fill the developer unit with fresh developer.
0505	[Developer Fill: Result]	Display the result of filling developer.
0506	[Developer Exhaust]	Discharge used developer into the developer bottle.
0507	[Developer Exhaust: Result]	Display the result of discharging developer.
0512	[ITB Manual Lubrication]	Lubricate the intermediate transfer belt.
0515	[Reset Replaceable Parts Counter]	Counter Reset the counter for replaceable parts.
0516	[Estimated Life Already Used]	Display the duty cycle counters of replaceable parts.
0517	[Temperature / Humidity inside the Machine]	Display the internal temperature and humidity.
0518	[Temperature / Humidity outside the Machine]	Display the external temperature and humidity.
0520	[Back Up / Restore Custom Paper Data]	Back up and restore custom paper profiles.

**[Finishing: Finisher]**

For details about the following items, see page 45 "[Finishing: Finisher]".

No.	Item	Description
0601	[Adjust Staple Position for Booklet]	Adjust the horizontal position of the booklet staples when using Booklet Finisher SR5060.
0602	[Adjust Folding Position for Booklet]	Adjust the horizontal position of the folding when using Booklet Finisher SR5060.
0603	[Adjust Staple Position Across Feed Direction 1]	Adjust the vertical position of the staple (applied at an edge) when using the Finisher SR5050 or Booklet Finisher SR5060.
0604	[Adjust Staple Position Across Feed Direction 2]	Adjust the vertical position of the staples (dual) when using the Finisher SR5050 or Booklet Finisher SR5060.
0605	[Adjust Staple Position With Feed Direction]	Adjust the horizontal position of the staples when using Finisher SR5050 or Booklet Finisher SR5060.
0606	[Adjust Punch Position Across Feed Direction]	Adjust the vertical position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.
0607	[Adjust Punch Position With Feed Direction]	Adjust the horizontal position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.
0608	[Paper Alignment for Booklet Across Feed Dir.]	Adjust the width of the staple jogger for booklets when using Booklet Finisher SR5060.
0609	[Set Number of Folds for Booklet]	Specify the number of additional booklet folds when using the Booklet Finisher SR5060.
0610	[Adjust Claw Shift for Center Folding]	Adjust the paper alignment in the paper feed direction for center folding when using Booklet Finisher SR5060.
0611	[Paper Alignment for Stapling Across Feed Direction]	Adjust the width of the staple jogger for edge stapling when using Finisher SR5050 or Booklet Finisher SR5060.
0612	[Paper Alignment in Shift Tray Across Feed Direction]	Adjust the width of the paper alignment jogger in the shift tray when using Finisher SR5050 or Booklet Finisher SR5060.
0613	[Adjust Paper Tapping for Extra Feed for Stapling]	Adjust the paper tapping for extra paper feed to the paper guide for stapling.

No.	Item	Description
0614	[Punch Skew Correction]	Disable punch skew correction if jams or edge-folding problems occur particularly when punching lightweight paper using Finisher SR5050 or Booklet Finisher SR5060.
0615	[Z-fold Skew Correction]	Specify how to correct skew (occurring during paper transport) when Z-folding with the folding unit.
0616	[Correct Z-fold Skew]	Adjust the length of sheets moved for Z-fold skew correction.
0617	[Correct Z-fold Skew (Reverse)]	Adjust how much the registration roller rotates in reverse for Z-fold skew correction.
0618	[Correct Punch Skew]	Adjust the amount of skew correction for punching when using Finisher SR5050 or Booklet Finisher SR5060.
0619	[Paper Alignment in Shift Tray Setting]	Specify the accuracy of printed paper alignment when applying shift-sorting with the Finisher SR5050 or Booklet Finisher SR5060.
0620	[Number of Sheet Align for Stapling]	Specify the number of sheets the staple unit aligns at a time for stapling.

### [Finishing: Fold]

For details about the following items, see page 63 "[Finishing: Fold]".

No.	Item	Description
0701	[Half Fold Position (Multi-sheet Fold)]	Adjust the fold position of half folded sheets when using the multi-folding unit.
0702	[Letter Fold-out Position 1 (Multi-sheet Fold)]	Adjust the fold position for the bottom segment of letter fold-out sheets when using the multi-folding unit.
0703	[Letter Fold-out Position 2 (Multi-sheet Fold)]	Adjust the overall fold size of letters fold-out sheets when using the multi-folding unit.
0704	[Letter Fold-in Position 1 (Multi-sheet Fold)]	Adjust the fold position of the bottom segment of letter fold-in sheets when using the multi-folding unit.
0705	[Letter Fold-in Position 2 (Multi-sheet Fold)]	Adjust the fold position of letters fold-in sheets when using the multi-folding unit.



No.	Item	Description
0706	[Folding Unit Tray Full Detection]	Specify whether or not to automatically detect when the folding unit tray becomes full.
0707	[Number of Sheets Folded after Full Detection]	Specify the number of sheets the machine prints when it detects that the folding unit tray is full before displaying a warning message.

**[Finishing: Perfect Binder]**

For details about the following items, see page 70 "[Finishing: Perfect Binder]".

No.	Item	Description
0801	[Cover Sheet Position for Perfect Binding With Feed Dir]	Adjust the horizontal alignment of the cover sheet position when performing perfect binding.
0802	[Cover Sheet Position for Perfect Binding Across Feed Dir]	Adjust the vertical alignment of the cover sheet position when performing perfect binding.
0803	[Adjust Perfect Binding Finishing Angle]	Square the top, bottom, and outside edges when trimming a deck of paper.
0804	[Adjust Applying Binding Glue]	Adjust the amount of glue applied to the book block's spine when you bind copies with the perfect binder.

# Setting Values

## [Machine: Image Position]

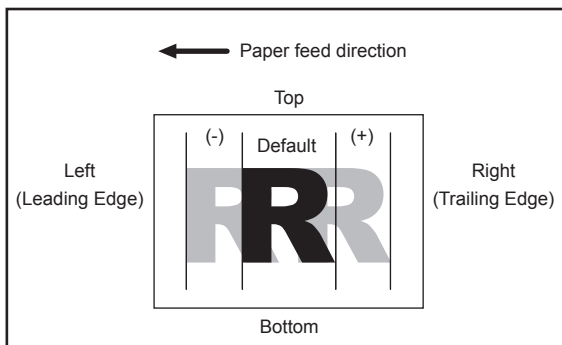
### 0101: [Adjust Image Position With Feed Direction]

2

Adjust the horizontal position of the print image.

You cannot individually adjust the image position on sides 1 and 2.

#### Side 1

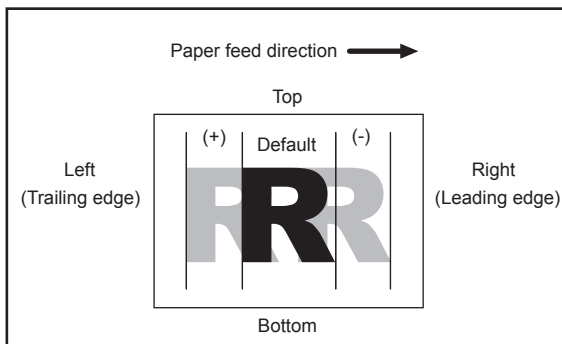


CEZ012

Press [+] to shift the image to the right (trailing edge).

Press [-] to shift the image the left (leading edge).

#### Side 2



CEZ013

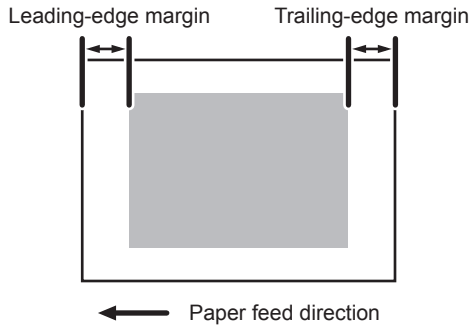
Press [+] to shift the image to the left (trailing edge).

Press [-] to shift the image to the right (leading edge).

#### ↓ Note

- If sheets are delivered face down, turn them over horizontally and check the image position.

- If the leading-edge margin on Side 1 of the paper is too narrow, paper jams may occur.
- If the trailing-edge margin on Side 1 of the paper is too narrow, paper jams may occur when printing on the back side of paper during duplex printing.



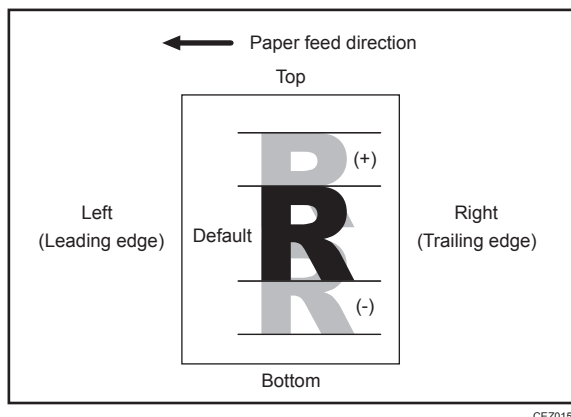
CEZ586

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 08: [Adj Image Position of Side 1 With Feed], 09: [Adj Image Position of Side 2 With Feed] in "Advanced Settings" takes precedence.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Paper Weight 0]	0.0	3.0	-3.0	0.1	mm
[Paper Weight 1]					
[Paper Weight 2]					
[Paper Weight 3]					
[Paper Weight 4]					
[Paper Weight 5]					
[Paper Weight 6]					
[Paper Weight 7]					

**0102: [Adjust Image Position Across Feed Direction]**

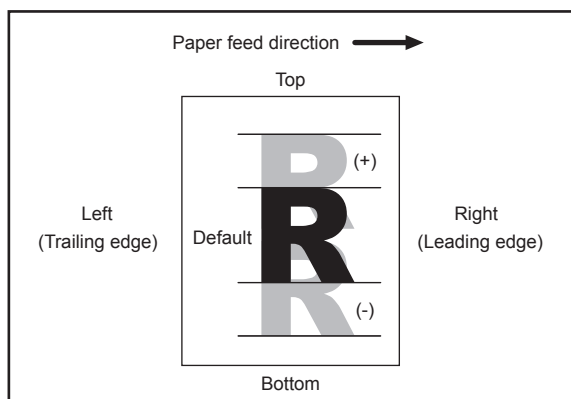
Adjust the vertical position of the print image.

**Side 1**

CEZ015

Press [+] to shift the image to the top.

Press [-] to shift the image to the bottom.

**Side 2**

CEZ014

Press [+] to shift the image to the top.

Press [-] to shift the image to the bottom.

**Note**

- If sheets are delivered face down, turn them over horizontally and check the image position.
- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 10: [Adj Image Position of Side 1 Across Feed], 11: [Adj Image Position of Side2 Across Feed] in "Advanced Settings" takes precedence.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 1]	0.0	3.0	-3.0	0.1	mm
[Tray 2]					
[Tray 3]					
[Tray 4]					
[Tray 5]					
[Tray 6]					
[Tray 7]					
[2 Sided]					

### 0103: [Adjust Registration Paper Buckle]

Adjust the degree of paper arching at the registration gate.

If the paper arching is too small or too large, the image may be misaligned or the paper may become skewed.

This setting is only effective for paper of Paper Weight 1 to 4.

When using paper of Paper Weight 5 to 7, the setting specified in 0104: [Adjust Registration Paper Buckle (Thick Paper)] takes precedence.

Press [+ ] or [- ] to adjust the degree of paper arching.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 1-3]	2	5	-5	1	mm
[Tray 4-7]					
[2 Sided]					

### 0104: [Adjust Registration Paper Buckle (Thick Paper)]

Adjust the degree of paper arching at the registration gate when using paper of Paper Weight 5 to 7.

By adjusting the degree of paper arching for relatively stiff thick paper, you can prevent image misalignment and paper skew.

For paper of Paper Weight 1 to 4, specify 0103: [Adjust Registration Paper Buckle].

Press [+] or [-] to adjust the degree of paper arching.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Paper Weight 5]	0	5	-5	1	mm
[Paper Weight 6]					
[Paper Weight 7]					

### 0105: [Deactivate Image Position Adjustment Across Feed Dir]

Specify whether or not the machine automatically detects paper pathway deviations during the paper feeding process and adjusts the horizontal position of the print image accordingly.

This function relies on a sensor that receives light reflected from the paper's surface. Because of this, it may not work with non-reflective paper such as dark paper, paper with transparent film such as OHP transparencies, or printed paper that has no margins. If this function does not work with the paper you have loaded, disable this function by selecting [Off].

#### ↓ Note

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 12: [Deactivate Image Position Adjustment] in "Advanced Settings" takes precedence.

Setting Items	Values	Default Value
[Tray 1]	[On]	[Off]
[Tray 2]	[Off]	
[Tray 3]		
[Tray 4]		
[Tray 5]		
[Tray 6]		
[Tray 7]		
[2 Sided]		

**0106: [Select Test Pattern for Image Position Adjustment]**

Select the test image for adjusting the image position.

If [Copy Image] is selected, the image scanned using the Auto Document Feeder (ADF) or exposure glass is printed.

If [Frame Image] is selected, stripe test patterns are printed.

Setting Items	Values	Default Value
[Test Pattern]	[Copy Image] [Frame Image]	[Copy Image]

**0107: [ADF Adjustment]**

Adjust the position and scaling applied to scanned images when using the Auto Document Feeder (ADF).

By specifying this setting, you can correct image misalignment, expansion, and shrinkage due to non-uniform paper feeding.

In [Adjust Image Position of Side 1 With Feed Dir], adjust the position of the image on side 1 parallel to the paper feed direction. Press [+] to shift the image to the left (leading edge) or [-] to shift it to the right (trailing edge).

In [Adjust Image Position of Side 2 With Feed Dir], adjust the position of the image on side 2 parallel to the paper feed direction. Press [+] to shift the image to the right (leading edge) or [-] to shift it to the left (trailing edge).

In [Adjust Magnification With Feed Direction], adjust the horizontal image scaling on sides 1 and 2. Press [+] to reduce the scaling and [-] to increase it.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Adjust Image Position of Side 1 With Feed Dir]	0.0	5.0	-5.0	0.1	mm
[Adjust Image Position of Side 2 With Feed Dir]					
[Adjust Magnification With Feed Direction]					%

## 0108: [ADF Double Feed Detection]

Specify whether or not to detect multiple feeding of originals loaded in the Auto Document Feeder (ADF).

If [On] is selected, the machine stops printing and displays a message reporting a paper jam when it detects multiple feeding. The machine may erroneously detect double feeding when you use creased, scratched or torn originals, originals with holes, perforated originals, or originals with sticky notes or tape affixed. In such a case, select [Off] to prevent erroneous detection.

Setting Items	Values	Default Value
[Double Feed Detection]	[On] [Off]	[On]

## [Machine: Image Quality]

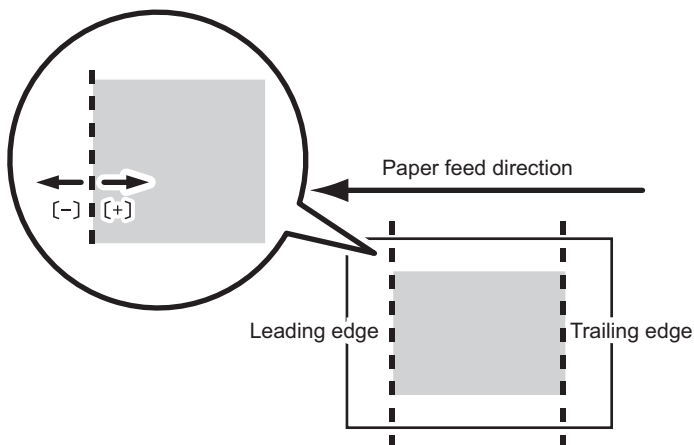
### 0201: [Adjust Erase Margin With Feed Direction]

Adjust the mask width at the leading edge or trailing edge of the image.

By increasing the mask width, you can increase the paper margin at the leading edge, or trailing edge of the paper.

If misfeeding of paper occurs when using loose paper such as thin or coated paper, increase the mask width. This will increase the unprinted area at the leading edge or trailing edge of the paper and facilitate paper separation from the fusing belt.

Press [+] or [-] to adjust the mask width.



CZC211



**Note**

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 13: [Adjust Erase Margin of Leading Edge], 14: [Adjust Erase Margin of Trailing Edge] in "Advanced Settings" takes precedence.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Adjust Erase Margin of Leading Edge]	0.0	6.0	0.0	0.1	mm
[Adjust Erase Margin of Trailing Edge]					

**0202: [Adjust Image Density]**

Execute image density control manually.

The machine adjusts the image density. This operation takes about 30 seconds during which a message appears on the control panel. Do not pull out the drawer while the message is being displayed.

If the density does not change after applying this function several times, contact your sales or service representative.

**Note**

- The machine executes automatic image density adjustment after a set interval or after printing a specified number of sheets. However, you can also manually initiate automatic image density adjustment whenever you want.

Setting Items	Values
[Image Density Adjustment: Manual Execute]	Press [OK] to apply the setting(s).

**0203: [Image Density Adjustment Execute Interval]**

Specify the number of sheets the machine prints before it automatically adjusts image density.

After printing the specified number of sheets, the machine automatically adjusts image density.

If you set this to "0", image density adjustment will not be executed automatically.

**Note**

- If you need to adjust the image density manually for machine maintenance, execute 0202: [Adjust Image Density].

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[No. of Pages per Interval (B&W Printing)]	4000	5000	0	1	sheet(s)

## 0204: [Adjust Maximum Image Density]

Specify the adhesion of toner to the drum surface and intermediate transfer belt when image density adjustment is executed.

After specifying this setting, execute 0202: [Adjust Image Density].

Press [+] or [-] to adjust the toner adhesion.

### ↓ Note

- Increasing the toner adhesion might reduce fusibility, causing toner splatter or distorted text and thin lines.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Black]	0	5	-5	1	None

## 0205: [Adjust Line Width]

Adjust the intensity of the laser for transferring image data to the drum.

If you increase the laser intensity, the line width is increased. By adjusting the laser intensity, you can adjust the line width.

After specifying this setting, execute 0202: [Adjust Image Density].

Press [+] or [-] to adjust the laser intensity.

### ↓ Note

- Adjusting this setting may cause distorted text and blurred lines. Check the printed images while making the adjustment.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Black]	0	5	-5	1	None

## 0206: [Adjust Density Difference Across Feed Direction]

Adjust the image density difference between the top and bottom of the image.

To make the adjusted settings take effect, turn the main power off and then back on.

Press [+] to increase the density at the bottom (and decrease it at the top) and press [-] to decrease the density at the bottom (and increase it at the top).

### ↓ Note

- Depending on the machine's other settings, this setting may have no effect.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Black]	0	10	-10	1	None

## 0207: [Adjust Fusing Temperature on Standby]

Adjust the set fusing temperature according to the machine status.

To achieve proper fusing when printing, the machine adjusts the temperature of the heating roller according to the paper type or thickness. You can reduce the wait time during which the machine makes this adjustment by changing the temperature in effect during standby.

In [Temperature on Standby Mode], specify the fusing temperature in standby mode (when the panel is lit and the machine is ready for immediate operation).

In [Temperature on Low Power Mode], specify the fusing temperature in energy saver mode.

In [Temperature Before Performing a Process], you can specify the fusing temperature applied when the machine is accessed from the control panel or when the machine is receiving print jobs.

Press [+] or [-] to adjust the temperature.

### ↓ Note

- Depending on the machine's other settings, changing this setting might increase the waiting time before a process is performed.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Temperature on Standby Mode]	160 (Pro 8120S) 155 (Pro 8110S) 150 (Pro 8100S)	200	0	1	degree(s)
[Temperature on Low Power Mode]	75 (Pro 8120S) 160 (Pro 8110S) 155 (Pro 8100S)				
[Temperature Before Performing a Process]	175 (Pro 8120S) 170 (Pro 8110S) 165 (Pro 8100S)				

### 0208: [Avoid Ppr Trnsf Shock Jitter: Feed Interval Adj]

Specify whether or not to enable the mode to reduce the jitter<sup>\*1</sup> produced when paper enters the paper transfer roller.

If "1" is selected, the machine adjusts the interval between sheets to reduce jitter. However, the throughput may be reduced when you use paper larger than A4 $\square$  or 8 $\frac{1}{2}$  × 14 $\square$ . If this happens, turn this setting off to improve the throughput.

#### ↓ Note

- Jitter does not occur with A4 $\square$ , 8 $\frac{1}{2}$  × 14 $\square$  or smaller paper.
- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 33: [Avoid Ppr Trns Shck Jitr: Fed Intvl Adj] in "Advanced Settings" takes precedence.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Avoid Ppr Trnsf Shock Jitter: Feed Interval Adj]	0	1	0	1	–

\*1 The jitter occurs when the leading or trailing edge of paper that passes through the paper transfer unit is transmitted to the drum unit via the intermediate transfer belt, causing banding.

### 0211: [Toner Refreshing Mode]

If the average image ratio drops below the threshold, toner refreshing mode is enabled.

In toner refreshing mode, the machine monitors the average image area ratio. If it drops below the threshold, the machine forcibly consumes some toner to keep the toner consumption at the specified level. If you continuously print images with a low image area ratio, the toner in the developer unit deteriorates and may cause mottling. To prevent this, the machine can consume some toner if the average image area ratio drops below the threshold, keeping the toner consumption at the specified level.

By pressing [+], toner degradation may decrease while toner consumption increases.

By pressing [-], toner degradation increase while toner consumption decreases.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Image Area Ratio Threshold]	2.0	25.5	0.0	0.1	%

### 0212: [Productivity Priority Mode]

Specify whether or not to increase throughput on a job that involves printing on thick and then on thin paper.

After printing on the thick paper, the machine usually stops so that the fusing temperature decreases before printing on the thin paper.

If you specify [On] for this setting, the machine will print non-stop so that the fusing temperature does not decrease. This increases throughput and the job will complete quicker.

However, it might result in uneven print quality on the thin paper.

Setting Items	Values	Default Value
[Productivity Priority]	[On] [Off]	[On]

## [Machine: Paper Feed/ Output]

### 0301: [Double Feed Detection]

Specify whether or not to detect double feeding of paper.

If [On] is selected, the machine stops when it detects paper double feeding, so as to prevent mixing of unprinted paper.

The machine may not correctly detect double feeding when using special paper (two-ply paper such as release paper). In such a case, select [Off].

### Note

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 04: [Double Feed Detection] in "Advanced Settings" takes precedence.

Setting Items	Values	Default Value
[Tray 1]	[On]	[On]
[Tray 2]	[Off]	
[Tray 3]		
[Tray 4]		
[Tray 5]		
[Tray 6]		
[Tray 7]		

### 0302: [When Double Feed is Detected]

Specify how the machine behaves when it detects a double feed.

If [Suspended] is selected, the machine, on detecting a double feed, stops printing and displays a paper misfeed message.

If [Suspended After Ppr. Dvrsion.] is selected, the machine stops printing if a double feed is detected, then delivers the sheets to the paper trap inside the machine at the bottom left, and displays a paper misfeed message.

This setting is enabled only if 0301: [Double Feed Detection] is set to [On].

Setting Items	Values	Default Value
[When Double Feed is Detected]	[Suspended] [Suspended After Ppr. Dvrsion.]	[Suspended After Ppr. Dvrsion.]

### 0304: [Skew Detection]

Specify whether or not to detect paper skew.

If the machine detects a paper skew when [On] is selected, the machine will stop printing and display a message reporting a paper jam.

The machine may erroneously detect paper skew when using dark paper or paper printed to its edges. In such a case, select [Off].

**Note**

- You can adjust the skew detection level by specifying 0305: [Skew Detection Level].
- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 05: [Skew Detection] in "Advanced Settings" takes precedence.

2

Setting Items	Values	Default Value
[Tray 1]	[On]	[On]
[Tray 2]	[Off]	
[Tray 3]		
[Tray 4]		
[Tray 5]		
[Tray 6]		
[Tray 7]		
[2 Sided]		

**0305: [Skew Detection Level]**

Adjust the permissible range of skew.

By increasing the permissible range of skew, you can make the machine print without stopping for skews within the permissible range.

This is enabled only if 0304: [Skew Detection] is set to [On].

Press [+] to increase the permissible range or [-] to decrease it.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 1]	3.0	7.5	1.6	0.1	mm
[Tray 2]					
[Tray 3]					
[Tray 4]					
[Tray 5]					
[Tray 6]					
[Tray 7]					
[2 Sided]					

### 0306: [Adjust Wide LCT Fan Level]

Adjust the airflow of the Wide LCT (LCIT RT5080) for fanning the sheets.

The Wide LCT fans sheets by blowing air between the sheets before feeding them.

By increasing the airflow, you can reduce multiple feeding and paper jams when printing on coated or thick paper.

Press [+] to increase the airflow, or [-] to decrease.

#### Note

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 02: [Adjust Wide LCT Fan Level] in "Advanced Settings" takes precedence.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 4]	70	100	10	10	%
[Tray 5]					
[Tray 6]					

### 0307: [Adjust Wide LCT Fan Timer]

Adjust the duration of the airflow of the Wide LCT (LCIT RT5080) for fanning the sheets.



The Wide LCT fans sheets by blowing air between the sheets before feeding them.

By increasing the duration of the airflow, you can reduce multiple feeding and paper jams when printing on coated or thick paper.

Press [+] to increase the duration of the airflow or [-] to decrease it.

**Note**

- Increasing the duration of the airflow may reduce throughput.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 4]	3	10	1	1	second(s)
[Tray 5]					
[Tray 6]					

**0308: [Pickup Assist Setting]**

Specify the paper feed roller movement.

If the paper feed roller fails to pick up slippery paper such as coated paper, and misfeeding of paper occurs, set this to [On].

**Note**

- This setting is not effective for paper fed from paper trays with custom paper presets. For such paper, the value specified in 03: [Pickup Assist Setting] in "Advanced Settings" takes precedence.

Setting Items	Values	Default Value
[Tray 4: Wide LCT]	[Auto Select]	[Auto Select]
[Tray 5: Wide LCT]	[On]	
[Tray 6: Wide LCT]	[Off]	
[Tray 4: LCT]		
[Tray 5: LCT]		
[Tray 6: LCT]		
[Tray 7]		

### 0309: [Adjust Paper Separation Time]

To prevent multi-feeding, adjust the paper separation time when feeding paper.

Adjust this parameter if multi-feeding problems occur frequently.

Press [+] to increase the paper separation time or [-] to decrease.

#### ↓ Note

- Be aware, however, that increasing the paper separation time increases the reverse roller-paper contact time, leading to a higher risk of paper scratching.
- Also, note that optimum printing speed might not be possible if the paper separation time is increased.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Tray 4: Wide LCT]	0	1000	0	5	millisecond(s)
[Tray 5: Wide LCT]					
[Tray 6: Wide LCT]					
[Tray 4: LCT]					
[Tray 5: LCT]					
[Tray 6: LCT]					
[Tray 7]					

### 0310: [Adjust Paper Curl]

Specify the method for straightening curled sheets.

Select the method according to the direction and degree of curl.

If the paper is curled face up, select "∩Curl". If it is curled face down, select "∪Curl". Depending on how much the paper is curled, specify the degree of correction by selecting "Weak" or "Strong".

Setting Items	Values	Default Value
[Tray 1]	[Adjust $\sim$ Curl: Off]	[Adjust $\sim$ Curl: Off]
[Tray 2]	[Adjust $\sim$ Curl: Weak]	
[Tray 3]	[Adjust $\sim$ Curl: Strong]	
[Tray 4]	[Adjust $\sim$ Curl: Off]	
[Tray 5]	[Adjust $\sim$ Curl: Weak]	
[Tray 6]	[Adjust $\sim$ Curl: Strong]	
[Tray 7]		

**[Machine: Maintenance]**

**0502: [Execute Photoconductor Refreshing]**

Remove dust on the drum surface.

This operation takes about 4 minutes. Do not open the front covers during the operation.

Setting Items	Values
[Execute Photoconductor Refreshing]	Press [OK] to apply the setting(s).

**0503: [Unscrew/Screw-on Cap to Replace Toner Bottle]**

Screw on or unscrew the toner bottle cap.

By pressing [OK], the cap is screwed on. Screwing on the cap allows you to remove a toner bottle still in use. Use this to replace a toner bottle in use with a new toner bottle.

Setting Items	Values
[Unscrew / Screw-on Cap of Toner Bottle 1]	Press [OK] to apply the setting(s).
[Unscrew / Screw-on Cap of Toner Bottle 2]	

**0504: [Developer Fill]**

Fill the developer unit with fresh developer.

Use this to replace the developer. This operation can take up to 2 minutes. Do not pull the unit out during the operation. For details about filling developer, see the Replacement Guide.

Setting Items	Values
[Execute Developer Fill]	Press [OK] to apply the setting(s).

### 0505: [Developer Fill: Result]

Display the result of filling developer.

If the developer replenishment fails, check the displayed code and troubleshoot the problem accordingly. If the problem persists, contact your service representative.

For details about filling/discharging developer, see the Replacement Guide.

Code	Status	Causes	Solutions
1	Succeeded (developer replenished)	-	-
2	Developer not discharged	Developer in the developer unit has not been discharged.	A new developer bottle is required. Contact your service representative.
3	Developer not replenished	<ul style="list-style-type: none"> <li>The developer bottle is not attached to the inlet.</li> <li>The developer bottle is attached to the inlet, but its seal has not been pulled out.</li> </ul>	Attach a new developer bottle to the inlet, pull out the seal, and then try the operation again.
9	Replenishment quit forcefully	<ul style="list-style-type: none"> <li>The front covers have been closed.</li> <li>The power was turned off during the operation.</li> </ul>	Open the front covers, turn on the main power, and then try the operation again.

### 0506: [Developer Exhaust]

Discharge used developer into the developer bottle.

Use this to replace the developer. This operation can take up to 3 minutes. Do not pull the unit out during the operation. For details about discharging developer, see the Replacement Guide.

Setting Items	Values
[Execute Developer Exhaust]	Press [OK] to apply the setting(s).

### 0507: [Developer Exhaust: Result]

2

Display the result of discharging developer.

If the developer discharge fails, check the displayed code and troubleshoot the problem accordingly. If the problem persists, contact your service representative.

For details about filling/discharging developer, see the Replacement Guide.

Code	Status	Causes	Solutions
1	Succeeded (developer discharged)	-	-
2	Developer not discharged	<ul style="list-style-type: none"> <li>The developer bottle is not attached to the outlet.</li> <li>The developer bottle is attached to the outlet, but the outlet shutter is not open.</li> </ul>	Detach the developer bottle, attach it to the outlet, and then try the operation again.
9	Replenishment quit forcefully	<ul style="list-style-type: none"> <li>The front covers have been closed.</li> <li>The power was turned off during the operation.</li> </ul>	Open the front covers, turn on the main power, and then try the operation again.

### 0512: [ITB Manual Lubrication]

Lubricate the intermediate transfer belt.

Lubrication makes the surface of the intermediate transfer belt smoother, which extends the life of the cleaning unit for the intermediate transfer belt.

This operation takes about 5 minutes during which a message appears on the control panel.

After you have replaced the cleaning unit for the intermediate transfer belt, lubricate it. For details about lubricating the unit, see Replacement Guide.

Setting Items	Values
[Execute ITB Manual Lubrication]	Press [OK] to apply the setting(s).

### 0515: [Reset Replaceable Parts Counter]

Reset the duty cycle counter for replaceable parts.

After replacing a part, reset its duty cycle counter. For details about replacing units, see the Replacement Guide.

Setting Items	Values
[Developer]	Press [OK] to apply the setting(s).
[Photoconductor Unit]	
[Charge Unit]	
[Cleaning Unit for Photoconductor Unit]	
[Cleaning Unit for Intermediate Transfer Belt]	
[Transfer Unit]	
[Fusing Unit]	
[Cleaning Unit for Fusing Unit]	

### 0516: [Estimated Life Already Used]

Display the duty cycle counters of replaceable parts.

When a counter reaches 100%, replace the corresponding part. When a part is due for replacement, a notification message appears on the control panel. If you keep using the part without replacing it, its duty cycle will continue to increase up to a maximum of 255%.

Setting Items	Remarks
[Developer]	Value display only.
[Photoconductor Unit]	
[Charge Unit]	
[Cleaning Unit for Photoconductor Unit]	
[Cleaning Unit for Intermediate Transfer Belt]	
[Transfer Unit]	
[Fusing Unit]	
[Cleaning Unit for Fusing Unit]	

**0517: [Temperature / Humidity inside the Machine]**

Display the internal temperature and humidity.

If your service representative requests it, report this information.

Setting Items	Remarks
[Temperature]	Value display only.
[Humidity]	

**0518: [Temperature / Humidity outside the Machine]**

Display the external temperature and humidity.

If your service representative requests it, report this information.

Setting Items	Remarks
[Temperature]	Value display only.
[Humidity]	

**0520: [Back Up / Restore Custom Paper Data]**

Back up and restore custom paper profiles.

With [Back Up Saved Paper Library], custom paper profiles saved in [Saved Paper Library] can be backed up to the SD card inserted in the back of the machine.

With [Back Up Custom Paper Settings], custom paper profiles registered under the [Edit Custom Paper] setting can be backed up to the SD card inserted in the side of the control panel.

With [Restore Custom Paper Settings], custom paper profiles backed up with [Restore Custom Paper Settings] can be restored.

For details, see page 79 "Backing up and Restoring Custom Paper Profiles".

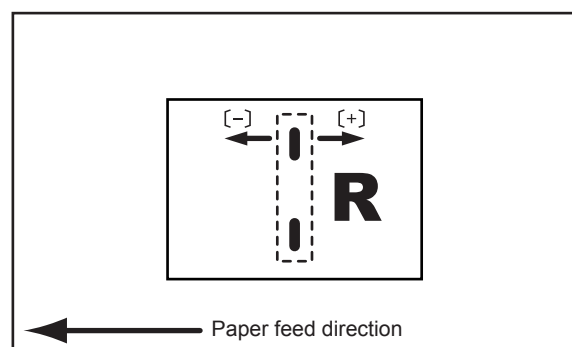
Setting Items	Values
[Back Up Saved Paper Library]	Press [OK] to apply the setting(s).
[Back Up Custom Paper Settings]	
[Restore Custom Paper Settings]	

## [Finishing: Finisher]

### 0601: [Adjust Staple Position for Booklet]

Adjust the horizontal position of the booklet staples when using Booklet Finisher SR5060.

Press [+] to move the position to the right (across horizontally-spreading pages), or press [-] to move it to the left.



CDS024

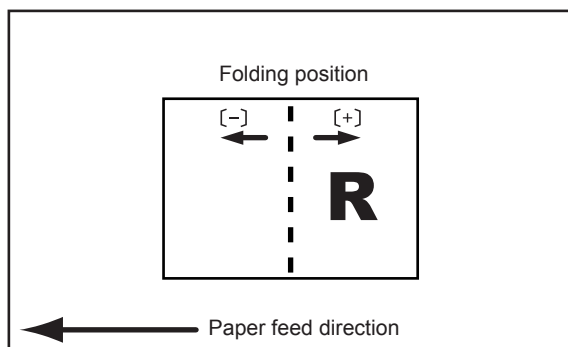


Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	1.0	-1.0	0.1	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[SRA3☐]					
[SRA4☐]					
[310 × 432m/m☐]					
[226 × 310m/m☐]					
[13 × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[13 × 19☐]					
[13 × 18☐]					
[12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> ☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[Other Paper Sizes]					

**0602: [Adjust Folding Position for Booklet]**

Adjust the horizontal position of the folding when using Booklet Finisher SR5060.

Press [+ ] to move the position to the right (across horizontally-spreading pages), or press [- ] to move it to the left.



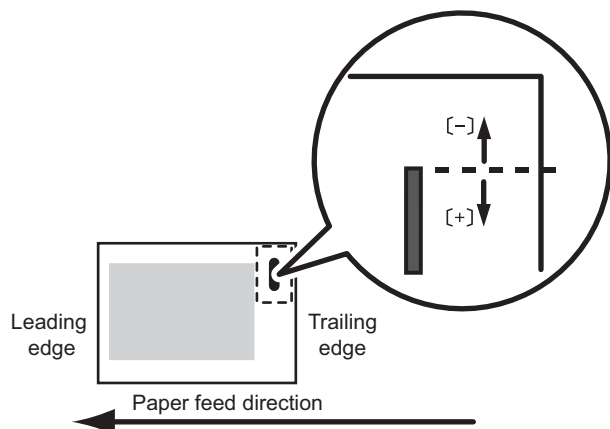
CDS025

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	1.0	-1.0	0.1	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[SRA3☐]					
[SRA4☐]					
[310 × 432m/m☐]					
[226 × 310m/m☐]					
[13 × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[13 × 19☐]					
[13 × 18☐]					
[12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> ☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[Other Paper Sizes]					

**0603: [Adjust Staple Position Across Feed Direction 1]**

Adjust the vertical position of the staple (applied at an edge) when using the Finisher SR5050 or Booklet Finisher SR5060.

Press [+ ] to move the stapling position away from the side edge of the sheet or [- ] to move it toward the edge.



CZC212

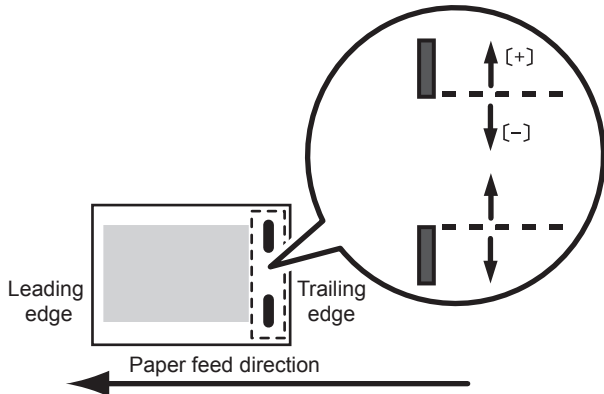
Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3 <input type="checkbox"/>	0	2	-2	1	mm
[B4 JIS <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[11 × 17 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 14 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[Other Paper Sizes]					

## 0604: [Adjust Staple Position Across Feed Direction 2]

Adjust the vertical position of the staples (dual) when using the Finisher SR5050 or Booklet Finisher SR5060.

Press [+] to move the two stapling positions away from the center and each other or [-] to move them toward each other.

2



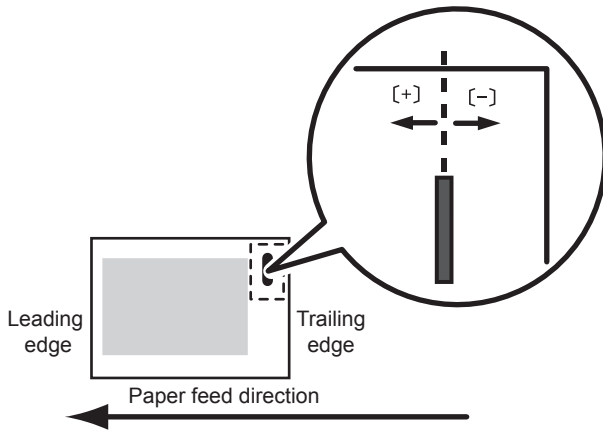
C2C215

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0	115	-16	1	mm
[B4 JIS☐]		75			
[A4☐]		115			
[A4☐]		28			
[B5 JIS☐]		75			
[B5 JIS☐]		0			
[11 × 17☐]		98			
[8 <sup>1</sup> / <sub>2</sub> × 14☐]		34			
[8 <sup>1</sup> / <sub>2</sub> × 11☐]		98			
[8 <sup>1</sup> / <sub>2</sub> × 11☐]		34			
[8K☐]		85			
[16K☐]		85			
[16K☐]		12			
[Other Paper Sizes]		115			

### 0605: [Adjust Staple Position With Feed Direction]

Adjust the horizontal position of the staples when using Finisher SR5050 or Booklet Finisher SR5060.

Press [+] to move the stapling position away from the trailing edge of the sheet or [-] to move it toward the edge.

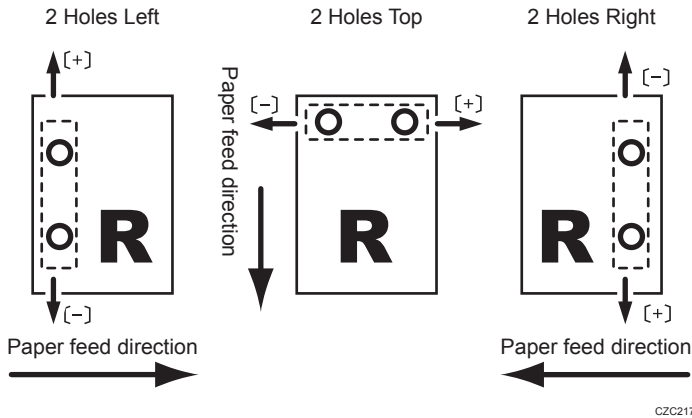


CZC216

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3 <input type="checkbox"/>	0	2	-2	1	mm
[B4 JIS <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[11 × 17 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 14 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[Other Paper Sizes]					

## 0606: [Adjust Punch Position Across Feed Direction]

Adjust the vertical position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.  
Press [+] to move punch holes forward (up), or [-] to move them backward (down).



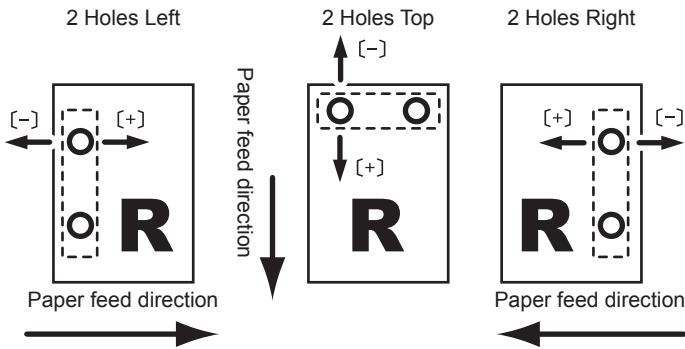
Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[2 Holes Type JP / EU]	0.0	2.0	-2.0	0.5	mm
[3 Holes Type US]					
[4 Holes Type EU]					
[4 Holes Type NE]					
[2 Holes Type US]					

## 0607: [Adjust Punch Position With Feed Direction]

Adjust the horizontal position of the punch holes when using Finisher SR5050 or Booklet Finisher SR5060.

Press [+] to move the punch holes away from the sheet's trailing edge or [-] to move them toward the edge.





CZC218

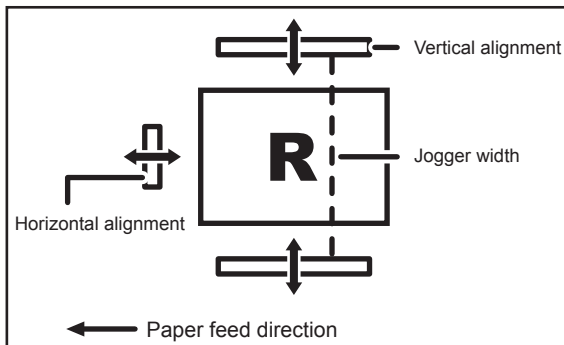
Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[2 Holes Type JP / EU]	0.0	4.0	-4.0	0.5	mm
[3 Holes Type US]					
[4 Holes Type EU]					
[4 Holes Type NE]					
[2 Holes Type US]					

**0608: [Paper Alignment for Booklet Across Feed Dir.]**

Adjust the width of the staple jogger for booklets when using Booklet Finisher SR5060.

Use this to reduce the vertical variation in paper alignment due to differing size, thickness, or paper curl.

Press [+] to make the width of the staple jogger wider, or [-] to make narrower.



CEZ018

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	0.5	-0.5	0.1	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[SRA3☐]					
[SRA4☐]					
[310 × 432m/m☐]					
[226 × 310m/m☐]					
[13 × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[13 × 19☐]					
[13 × 18☐]					
[12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> ☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[Other Paper Sizes]					

### 0609: [Set Number of Folds for Booklet]

Specify the number of additional booklet folds when using the Booklet Finisher SR5060.

The number specified in this setting is added to the factory default setting. The factory default setting for the number of additional booklet folds depends on the number of sheets to be folded.

#### Factory default settings for additional booklet folds

1 to 13 sheets: 1

14 to 15 sheets: 2

16 to 25 sheets: 3

If you select a negative value (-1 to -3), values resulting in additional booklet folds below "0" will be counted as "0" additional booklet folds.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Number of Folds for Booklet]	0	9	-3	1	time(s)

2

### **0610: [Adjust Claw Shift for Center Folding]**

---

Adjust the paper alignment in the paper feed direction for center folding when using Booklet Finisher SR5060.

Adjust this setting if the paper alignment in the paper feed direction is inaccurate because of inconsistent paper size and paper curling when using certain types of paper.

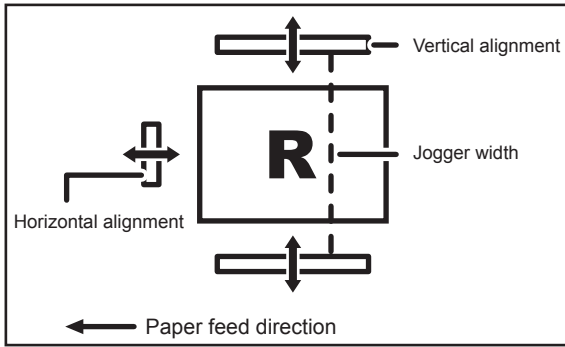
Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	2.0	-2.0	0.1	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[SRA3☐]					
[SRA4☐]					
[310 × 432m/m☐]					
[226 × 310m/m☐]					
[13 × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[13 × 19☐]					
[13 × 18☐]					
[12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> ☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[Other Paper Sizes]					

### 0611: [Paper Alignment for Stapling Across Feed Direction]

Adjust the width of the staple jogger for edge stapling when using Finisher SR5050 or Booklet Finisher SR5060.

Use this to reduce the vertical variation in paper alignment due to differing size, thickness, or paper curl.

Press [+ ] to make the width of the staple jogger wider, or [- ] to make narrower.



CEZ018

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3 <input type="checkbox"/>	0.0	1.0	-1.0	0.1	mm
[B4 JIS <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[11 × 17 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 14 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[16K <input type="checkbox"/>					
[Other Paper Sizes]					

**0612: [Paper Alignment in Shift Tray Across Feed Direction]**

Adjust the width of the paper alignment jogger in the shift tray when using Finisher SR5050 or Booklet Finisher SR5060.

Use this to reduce the vertical variation in paper alignment due to differing size, thickness, or paper curl. Press [+ ] to make the width of the paper alignment jogger wider, or [- ] to make narrower.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3 <input type="checkbox"/>	0.0	1.0	-1.0	0.1	mm
[B4 JIS <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[A4 <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[B5 JIS <input type="checkbox"/>					
[A5 <input type="checkbox"/>					
[A5 <input type="checkbox"/>					
[11 × 17 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 14 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[8 <sup>1</sup> / <sub>2</sub> × 11 <input type="checkbox"/>					
[5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> <input type="checkbox"/>					
[5 <sup>1</sup> / <sub>2</sub> × 8 <sup>1</sup> / <sub>2</sub> <input type="checkbox"/>					
[Other Paper Sizes]					

### 0613: [Adjust Paper Tapping for Extra Feed for Stapling]

Adjust the paper tapping for extra paper feed to the paper guide for stapling.

Adjust this setting if the paper delivered to the paper guide for stapling overshoots or stops short of the guide.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	2.5	-2.5	0.1	mm
[B4 JIS☐]					
[A4☐]					
[A4☐]					
[B5 JIS☐]					
[B5 JIS☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[8K☐]					
[16K☐]					
[16K☐]					
[Other Paper Sizes]					

**0614: [Punch Skew Correction]**

Disable punch skew correction if jams or edge-folding problems occur particularly when punching lightweight paper using Finisher SR5050 or Booklet Finisher SR5060.

Setting Items	Values	Default Value
[Punch Skew Correction]	[On] [Off]	[On]

**0615: [Z-fold Skew Correction]**

Specify how to correct skew (occurring during paper transport) when Z-folding with the folding unit.

If [Off] is selected, skew is not corrected.

If [On] is selected, skew is corrected by bringing the sheets flush against a guide.

If [On (Reverse)] is selected, skew is corrected by bringing the sheets flush against a guide while the registration roller rotates in reverse to prevent the Z-folded sheets from passing through the registration roller.

Setting Items	Values	Default Value
[Z-fold Skew Correction]	[On] [On (Reverse)] [Off]	[On (Reverse)]

### 0616: [Correct Z-fold Skew]

Adjust the length of sheets moved for Z-fold skew correction.

Use this if the Z-fold skew correction causes problems.

With the factory default setting of "0", the length of the sheets moved is set to 9 mm. Press [-] to reduce the length. With "9", the length of sheets moved for Z-fold skew correction is reduced to "0".

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Correct Z-fold Skew]	0.0	0.0	-9.0	0.5	mm

### 0617: [Correct Z-fold Skew (Reverse)]

Adjust how much the registration roller rotates in reverse for Z-fold skew correction.

Use this if the Z-fold skew correction causes problems.

With the initial factory setting of "0", the reverse rotation is set to 3 mm. By pressing [-], you can reduce the reverse rotation down to "0".

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Correct Z-fold Skew (Reverse)]	0.0	0.0	-9.0	0.5	mm

### 0618: [Correct Punch Skew]

Adjust the amount of skew correction for punching when using Finisher SR5050 or Booklet Finisher SR5060.

Use this to reduce punching skew due to differing size, thickness, or paper curl.

If the sheets become skewed as a result of punching, press [+] to increase the degree of skew correction.



Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A4☐]	0.0	1.0	-1.0	0.5	mm
[B5 JIS☐]					
[A5☐]					
[A5☐]					
[8 1/2 × 11☐]					
[5 1/2 × 8 1/2☐]					
[5 1/2 × 8 1/2☐]					
[Other Paper Sizes]					

**0619: [Paper Alignment in Shift Tray Setting]**

Specify the accuracy of printed paper alignment when applying shift-sorting with the Finisher SR5050 or Booklet Finisher SR5060.

Use this if the tops of the sheets stacked by shift-sorting are misaligned.

If [Speed Priority (Normal)] is selected, the shifting speed is reduced by approximately half to reduce the misalignment at the top due to inertia when the tray is moved. If [Accuracy Priority] is selected, the throughput may decrease. To give higher priority to throughput, select [Speed Priority (Normal)].

Setting Items	Values	Default Value
[Paper Alignment in Shift Tray Setting]	[Speed Priority (Normal)] [Accuracy Priority]	[Speed Priority (Normal)]

**0620: [Number of Sheet Align for Stapling]**

Specify the number of sheets the staple unit aligns at a time for stapling.

Depending on the type of paper, if too many sheets are sent to the staple unit at a time, they may not be aligned properly. If this happens, reduce the number of sheets. However, doing this will increase the time it takes to align the sheets and may reduce throughput.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	4	4	0	1	None
[B4 JIS☐]					
[A4☐]	6	6			
[A4☐]	4	4			
[B5 JIS☐]	6	6			
[B5 JIS☐]	4	4			
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]	6	6			
[8 <sup>1</sup> / <sub>2</sub> × 11☐]	4	4			
[8K☐]					
[16K☐]	6	6			
[16K☐]	4	4			
[Other Paper Sizes]	0	9			

## [Finishing: Fold]

### 0701: [Half Fold Position (Multi-sheet Fold)]

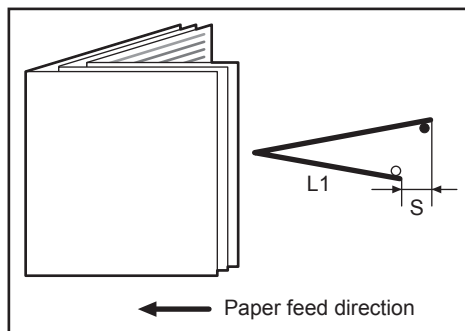
Adjust the folded position (S) of half folded sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (S).

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

2



CDS014

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	4.0	-4.0	0.2	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[SRA3☐]					
[SRA4☐]					
[310 × 432m/m☐]					
[226 × 310m/m☐]					
[13 × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[13 × 19☐]					
[13 × 18☐]					
[12 <sup>3</sup> / <sub>5</sub> × 19 <sup>1</sup> / <sub>5</sub> ☐]					
[12 <sup>3</sup> / <sub>5</sub> × 18 <sup>1</sup> / <sub>2</sub> ☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[8K☐]					
[Other Paper Sizes]					

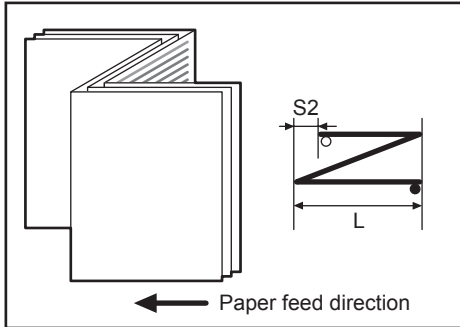
### 0702: [Letter Fold-out Position 1 (Multi-sheet Fold)]

Adjust the fold position for the bottom segment (S2) of letters fold-out sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (S2).

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CDS015

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[B4 JIS]	0.0	4.0	-4.0	0.2	mm
[A4]					
[B5 JIS]	0.0	3.0	-3.0	0.2	mm
[8 <sup>1</sup> / <sub>2</sub> × 14]	0.0	4.0	-4.0	0.2	mm
[8 <sup>1</sup> / <sub>2</sub> × 11]					
[Other Paper Sizes]					

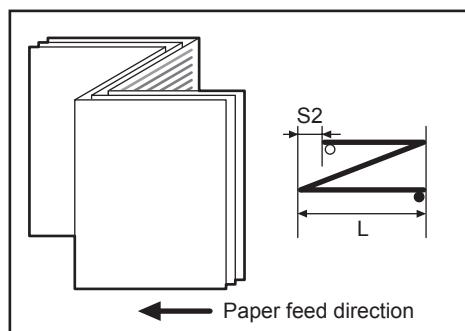
### 0703: [Letter Fold-out Position 2 (Multi-sheet Fold)]

Adjust the overall fold size (L) of letters fold-out sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CDS015

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[B4 JIS]	0.0	4.0	-4.0	0.2	mm
[A4]					
[B5 JIS]	0.0	3.0	-3.0	0.2	mm
[8 <sup>1</sup> / <sub>2</sub> × 14]	0.0	4.0	-4.0	0.2	mm
[8 <sup>1</sup> / <sub>2</sub> × 11]					
[Other Paper Sizes]					

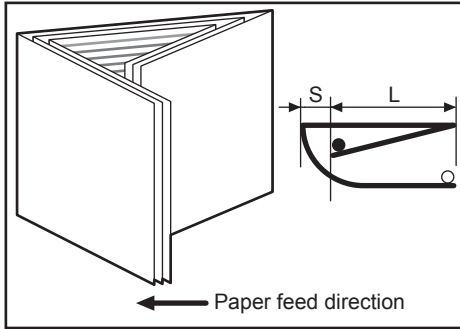
#### 0704: [Letter Fold-in Position 1 (Multi-sheet Fold)]

Adjust the fold position of the bottom segment (S) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (S).

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CDS017

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	4.0	-4.0	0.2	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]					
[8K☐]					
[Other Paper Sizes]					

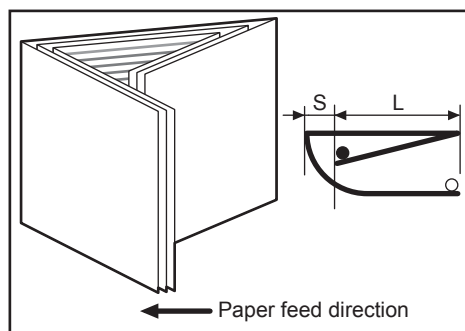
### 0705: [Letter Fold-in Position 2 (Multi-sheet Fold)]

Adjust the fold position (L) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.

Press [+] to increase and [-] to reduce (L).

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CDS017

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[A3☐]	0.0	4.0	-4.0	0.2	mm
[B4 JIS☐]					
[A4☐]					
[B5 JIS☐]					
[12 × 18☐]					
[11 × 17☐]					
[8 <sup>1</sup> / <sub>2</sub> × 14☐]					
[8 <sup>1</sup> / <sub>2</sub> × 11☐]	0.0	4.0	0.0 <sup>*1</sup>	0.2	mm
[8K☐]	0.0	4.0	-4.0	0.2	mm
[Other Paper Sizes]					

\*1 If the machine in use allows -0.1 mm or less to be selected, this will be interpreted as 0.0 mm.

## 0706: [Folding Unit Tray Full Detection]

Specify whether or not to automatically detect when the folding unit tray becomes full.

If [On] is selected, the machine detects when the folding unit tray becomes full and displays a warning message after printing the number of sheets specified in 0707: [Number of Sheets Folded after Full Detection].



Setting Items	Values	Default Value
[Folding Unit Tray Full Detection]	[On] [Off]	[On]

### 0707: [Number of Sheets Folded after Full Detection]

Specify the number of sheets the machine prints when it detects that the folding unit tray is full before displaying a warning message.

By increasing the number of sheets printed, you can decrease warning messages, prevent the machine from stopping printing, and so increase throughput.

A multi-sheet fold copy is counted as a single sheet.

This setting becomes effective only if 0706: [Folding Unit Tray Full Detection] is set to [On].

#### ↓ Note

- If the display of the warning message is delayed, the paper delivered to the folding unit tray may not be stacked properly or the delivered paper may block the paper exit and cause subsequent paper to be misfed.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[No. of Sheets Folded after Full Detection]	0	250	0	1	sheet(s)

## [Finishing: Perfect Binder]

### 0801: [Cover Sheet Position for Perfect Binding With Feed Dir]

Adjust the horizontal alignment of the cover sheet position when performing perfect binding.

When you bind the copies with the perfect binder, apply this adjustment if the center of the book block's spine and the center of the cover sheet are misaligned horizontally.

Press [+] or [-] to change the image feed direction or reverse feed direction.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Cover Sheet Position for Perfect Binding With Feed Dir]	0.0	5.0	-5.0	0.1	mm

## 0802: [Cover Sheet Position for Perfect Binding Across Feed Dir]

Adjust the vertical alignment of the cover sheet position when performing perfect binding.

When you bind the copies with the perfect binder, apply this adjustment if the center of the book block's spine and the center of the cover sheet are misaligned vertically.

Press [+] or [-] to move the image backward or forward.

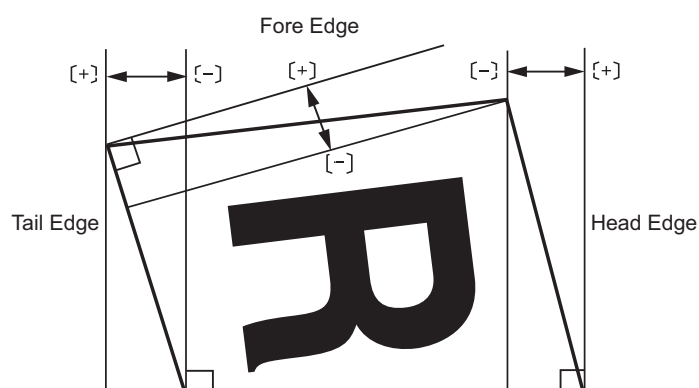
Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Cover Sheet Position for Perfect Binding Across Feed Dir]	0.0	5.0	-5.0	0.1	mm

## 0803: [Adjust Perfect Binding Finishing Angle]

Square the top, bottom, and outside edges when trimming a deck of paper.

Apply this adjustment if the three edges of the deck of paper cut by the perfect binder are not square.

Enter the distance from the square part at each edge.



GZC219

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Head Edge]	0.0	10.0	-10.0	0.1	mm
[Tail Edge]					
[Fore Edge]					

### 0804: [Adjust Applying Binding Glue]

---

Adjust the amount of glue applied to the book block's spine when you bind copies with the perfect binder.

Use this if the glue for binding is applied too thinly or so thickly that it permeates too far into the book block's spine.

The amount of glue applied can be varied by adjusting the distance between the book block and the glue tank.

Press [+] to increase the amount of glue applied or [-] to decrease it.

Setting Items	Default Value	Max. Value	Min. Value	Step	Unit
[Adjust Applying Binding Glue]	0.00	0.30	-0.30	0.05	mm

# 3. Custom Paper Settings for Administrators

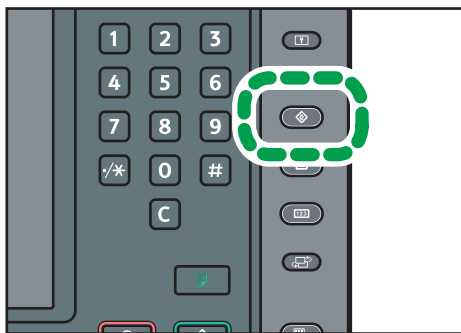
## Accessing Advanced Settings

### Access Using the Control Panel

Only the machine administrator can adjust the custom paper profiles registered in "Advanced Settings".

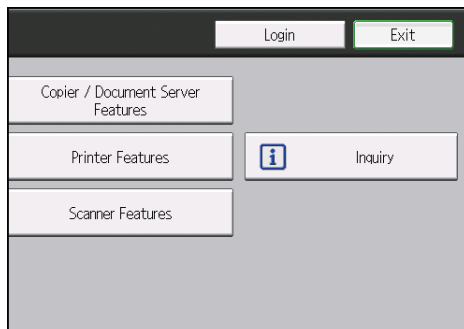
To directly access the advanced settings for custom paper adjustment, you must first configure your machine's Administrator Authentication Management setting. (See page 7 "Displaying the [Adjustment Settings for Skilled Operators] Button".)

- 1. Press the [User Tools] key.



CWW222

- 2. Press [Login].



**3. Press [Login].**



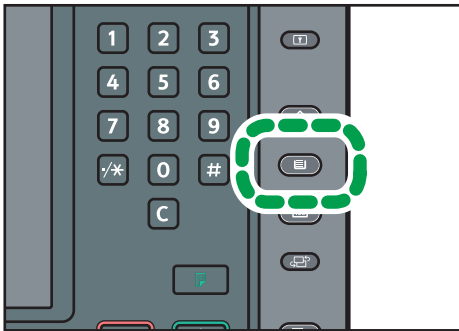
3

**4. Enter your login user name, and then press [OK].**

If you are logging in as the administrator for the first time, enter "admin".

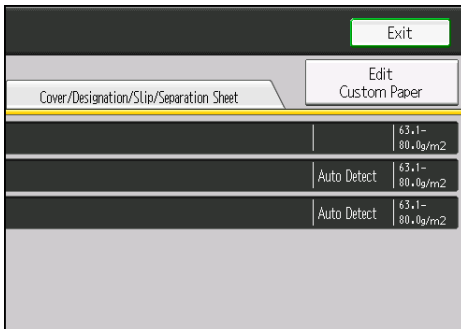
**5. Enter your login password, and then press [OK].**

**6. Press the [Paper Setting] key.**



CWY003

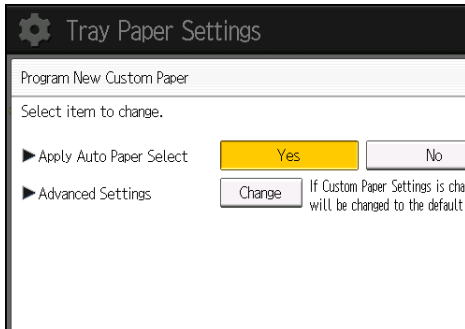
**7. Press [Edit Custom Paper].**



**8. Select the program number of the custom paper profile you wish to adjust.**

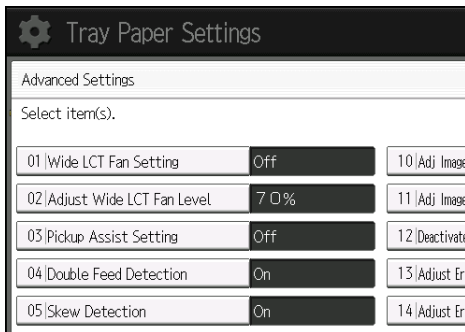
**9. Press [▼Next].**

**10. Press [Change] for "Advanced Settings".**



3

The advanced settings for custom paper adjustment appear.



## Access Using Web Image Monitor

1. Log in as the machine administrator from Web Image Monitor.
2. Point to [Device Management], and then click [Configuration].
3. Click [Custom Paper] under "Device Settings".
4. Check the radio button next to the number of the custom paper profile you wish to adjust, and then click [Program/Change].

The advanced settings for custom paper adjustment appear.

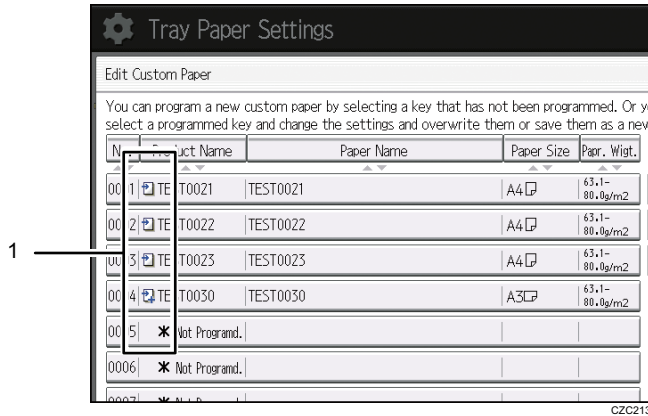
5. Change the settings as desired, and then click [OK].

The setting is changed.

6. Log out.

# Description of Paper Icons

You can check the custom paper status by checking the paper icon in the [Edit Custom Paper] screen. If you change the custom paper profile in the advanced settings, the paper icon changes as follows:



## 1. Paper icon

	Not adjusted	Custom paper profile set to the default setting in the advanced settings
	Adjusted	Custom paper profile changed from the default setting in the advanced settings

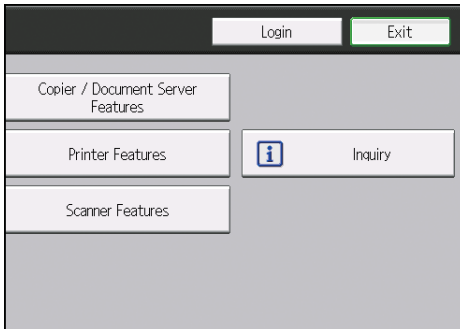
### Note

- If you specify a custom paper profile in the [Edit Custom Paper] screen without registering it from the paper library, the paper icon will not appear for that custom paper profile.
- If you change the custom paper profile from the default setting in the advanced settings, and then change the setting back to the default again, the paper icon will remain as "Adjusted".

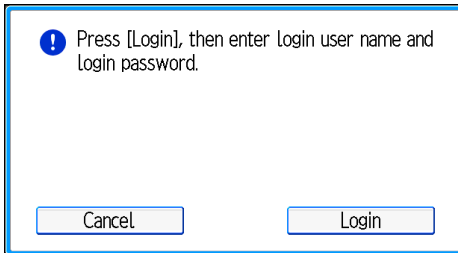
# Deleting Saved Custom Paper Profiles

Only the machine administrator can delete the custom paper profile saved in the paper library. To delete custom paper profiles, you must first specify the machine administrator authentication information.

1. Press the [User Tools] key.
2. Press [Login].



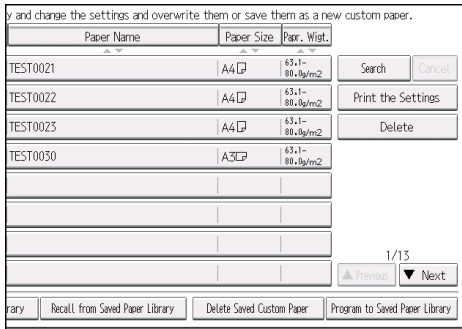
3. Press [Login].



4. Enter your login user name, and then press [OK].  
If you are logging in as the administrator for the first time, enter "admin".
5. Enter your login password, and then press [OK].
6. Press the [Paper Setting] key.
7. Press [Edit Custom Paper].

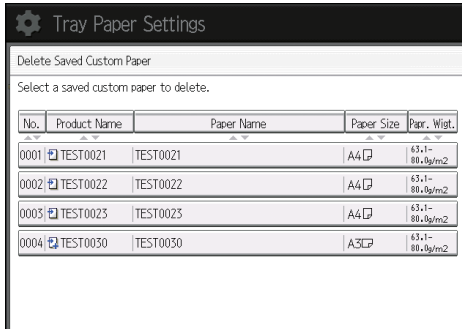


### 8. Press [Delete Saved Custom Paper].

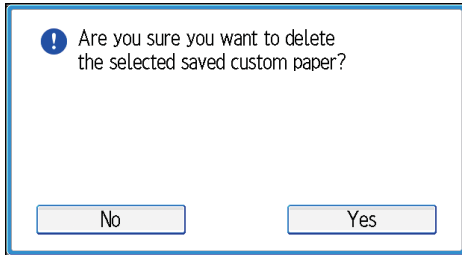


3

### 9. Select the program number of the custom paper profile you wish to delete.



### 10. Press [Yes].



The custom paper profile is deleted.

# Backing up and Restoring Custom Paper Profiles

## Backing up Custom Paper Profiles Saved in the Saved Paper Library

The machine administrator can back up custom paper profiles saved in the Saved Paper Library to the SD card inserted in the back of the machine.

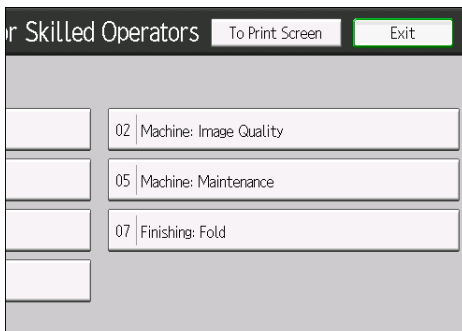
The backup can be used to restore the custom paper profiles if the controller board has to be replaced.

To prevent data loss, we recommend making regular backups. Only the customer engineer is allowed to perform data restoration using a backup. Contact your service representative.

1. Open the [Adjustment Settings for Skilled Operators] menu.

For details, see page 10 "Accessing Adjustment Settings for Skilled Operators".

2. Press [Machine: Maintenance].



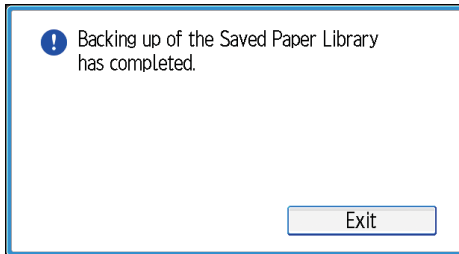
3. Press [Back Up / Restore Custom Paper Data].



4. Press [Back Up Saved Paper Library].

5. Press [OK].

**6. Press [Exit].**



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## Backing up Custom Paper Profiles Registered Under the [Edit Custom Paper] Setting

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The machine administrator can back up and restore custom paper profiles registered under the [Edit Custom Paper] setting.

### Backing up the Data

1. Insert an SD card into the SD card slot on the side of the control panel.
2. Open the [Adjustment Settings for Skilled Operators] menu.
3. Press [Machine: Maintenance].
4. Press [Back Up / Restore Custom Paper Data].
5. Press [Back Up Custom Paper Settings].
6. Press [OK].

### Restoring the Data

1. Insert the SD card containing the backup custom paper profiles into the SD card slot on the side of the control panel.
2. Cancel all custom paper profiles allocated to paper trays.
3. Open the [Adjustment Settings for Skilled Operators] menu.
4. Press [Machine: Maintenance].
5. Press [Back Up / Restore Custom Paper Data].
6. Press [Restore Custom Paper Settings].
7. Press [OK].

#### ↓ Note

- If a previously created backup file is on the SD card, it is overwritten by the back-up.
- All custom paper profiles registered in the machine are overwritten during the data restoration
- The backup data is restored under the registration number allocated at the time of the back-up.

# Paper Presets in "Advanced Settings"

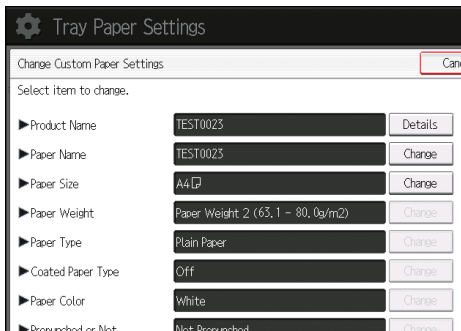
In "Advanced Settings", there are paper presets for various types of commercially-available paper. Even if you select a paper preset corresponding to a commercially-available paper from the Paper Library and register it in the [Edit Custom Paper] screen, the preset, depending on the custom paper profile version, may not be an exact match for the actual paper. For details about the paper presets in "Advanced Settings", contact your service representative.

## Displaying the Paper Profile Version

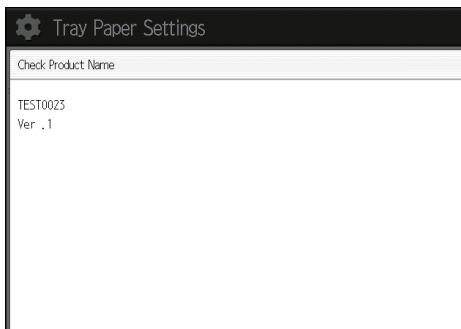
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This section explains how to display the version of the custom paper profiles registered in the [Edit Custom Paper] screen. For details about updating paper profiles, contact your service representative.

1. Press [Edit Custom Paper].
2. Select the program number of a custom paper profile to display the product name of the supported paper type and the paper profile version.
3. Press [Details] for "Product Name".



The product name of the supported paper type and the paper profile version appear.





# 4. Details of Menu Items in Advanced Settings

## Menu Items and Functions

### Paper Feed Adjustment

For details about the following items, see page 89 "Paper Feed Adjustment".

No.	Item	Description
01	[Wide LCT Fan Setting]	Specify the movement of the Wide LCT (LCIT RT5080) fan.
02	[Adjust Wide LCT Fan Level]	Adjust the capacity of the Wide LCT (LCIT RT5080) fan.
03	[Pickup Assist Setting]	Specify the paper feed roller movement.

### Paper Delivery Adjustment

For details about the following items, see page 90 "Paper Delivery Adjustment".

No.	Item	Description
04	[Double Feed Detection]	Specify whether or not to detect double feeding of paper.
05	[Skew Detection]	Specify whether or not to detect paper skew.
06	[Color Paper Edge Detection Adjustment]	Adjust the luminance of the contact image sensor (CIS).
07	[Regist Jam Detection with Feed Dir]	Specify whether or not to stop printing if the horizontal misalignment of the delivered paper exceeds the adjustable range (3 mm/0.1 inch).

### Image Position/Scaling Adjustment

For details about the following items, see page 91 "Image Position/Scaling Adjustment".

No.	Item	Description
08	[Adj Image Position of Side1 With Feed]	Adjust the horizontal position of the image to be printed on Side 1 of the paper.

No.	Item	Description
09	[Adj Image Position of Side2 With Feed]	Adjust the horizontal position of the image to be printed on Side 2 of the paper.
10	[Adj Image Position of Side1 Across Feed]	Adjust the vertical position of the image to be printed on Side 1 of the paper.
11	[Adj Image Position of Side2 Across Feed]	Adjust the vertical position of the image to be printed on Side 2 of the paper.
12	[Deactivate Image Position Adjustment]	Specify whether or not the machine automatically detects paper pathway deviations during the paper feeding process and adjusts the horizontal position of the print image accordingly.
13	[Adjust Erase Margin of Leading Edge]	Adjust the mask width at the leading edge of the image.
14	[Adjust Erase Margin of Trailing Edge]	Adjust the mask width at the trailing edge of the image.
15	[Adj Magnification of Side1 Across Feed]	Adjust the vertical image scaling on the Side 1 of the paper according to the paper expansion or shrinkage.
16	[Adj Magnification of Side1 With Feed]	Adjust the horizontal image scaling on the Side 1 of the paper according to the paper expansion or shrinkage.
17	[Adj Magnification of Side2 Across Feed]	Adjust the vertical image scaling on Side 2 of the paper according to the paper expansion or shrinkage.
18	[Adj Magnification of Side2 With Feed]	Adjust the horizontal image scaling on Side 2 of the paper according to the paper expansion or shrinkage.

### Line Speed Adjustment

For details about the following items, see page 97 "Line Speed Adjustment".

No.	Item	Description
19	[Process Speed Setting]	Adjust the machine's copy/print speed.
20	[Transfer Timing Roller Feed Speed Adj]	Adjust the transfer timing roller speed.
21	[Fusing Feed Speed Adjustment]	Adjust the fusing roller's speed.

No.	Item	Description
22	[Exit Motor Feed Speed Adjustment]	Adjust the exit motor's speed.
23	[Switchback Entrance Feed Speed Adj]	Adjust the paper feed speed at the switchback entrance.
24	[Switchback Exit Feed Speed Adj]	Adjust the paper feed speed at the switchback exit.

### Toner Adhesion Adjustment

For details about the following items, see page 99 "Toner Adhesion Adjustment".

No.	Item	Description
25	[Adjust Toner Adhesion]	Adjust the intermediate transfer belt toner adhesion.

### Transfer Adjustment

For details about the following items, see page 100 "Transfer Adjustment".

No.	Item	Description
26	[Image Transfer Current Setting]	Adjust the current for image transfer.
27	[Paper Transfer Current Setting: Side 1]	Adjust the current applied to Side 1 for paper transfer.
28	[Paper Transfer Current Setting: Side 2]	Adjust the current applied to Side 2 for paper transfer.
29	[Paper Transfer Current; Lead Edge]	Adjust the paper transfer current at the leading edge of the paper.
30	[Paper Transfer Current; Lead Edge Dist]	Adjust the area at the leading edge of the paper for application of paper transfer current.
31	[Paper Transfer Current; Trail Edge]	Adjust the paper transfer current at the trailing edge of the paper.
32	[Paper Transfer Current; Trail Edge Dist]	Adjust the area at the trailing edge of the paper for application of paper transfer current.



No.	Item	Description
33	[Avoid Ppr Trns Shck Jitr: Fed Intvl Adj]	Specify whether or not to enable the mode to reduce the jitter produced when paper enters the paper transfer roller.

### Fuser Adjustment

For details about the following items, see page 102 "Fuser Adjustment".

No.	Item	Description
34	[Put Pressure before Fusing]	Specify whether or not to have the fusing pressure roller come into contact with the fusing belt before the printing operation (paper feeding) starts.
35	[Startng Time of Ptng Presr before Fusing]	Adjust the timing for the fusing pressure roller to come into contact with the fusing belt before the printing operation (paper feeding) starts.
36	[Fusing Heat Roller Temperature Adj]	Adjust the heat roller temperature.
37	[Fusing Pressure Roller Temperature Adj]	Adjust the pressure roller temperature.
38	[Fusing Nip Width Setting]	Adjust the nip width between the fusing belt and pressure roller.
39	[Paper Feed Interval Setting]	Adjust the interval between the feeding of each sheet.
40	[Reduce Initial CPM: Low Temp. Envrnmt.]	Select one of the three levels of initial print speed reduction at low temperatures.
41	[Reduce Inital CPM: Norml/High Temp Env]	Select one of the three levels of initial print speed reduction at normal room temperatures and above.
42	[Adjust Cleaning Web Motor Interval]	Specify the interval between each activation of the cleaning web.

### Decurler Adjustment

For details about the following items, see page 106 "Decurler Adjustment".

No.	Item	Description
43	[Decurler Feed Speed Adj: Curl Adj Off]	Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Off".
44	[Decurler Feed Speed Adj: Curl Adj Weak]	Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Weak".
45	[Decurler Feed Speed Adj: Curl Adj Strg]	Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Strong".

### Finishing Position Adjustment

For details about the following items, see page 107 "Finishing Position Adjustment".

No.	Item	Description
46	[Adjust Z-fold Position 1]	Adjust the width of the bottom end segment of Z- folded sheets when using the multi-folding unit.
47	[Adjust Z-fold Position 2]	Adjust the overall fold size of Z-fold sheets when using the multi-folding unit.
48	[Half Fold Position:Single-sheet Fold]	Adjust the fold position of half fold sheets when using the multi-folding unit.
49	[Letter Fold-out Posn 1: Single-sheet Fld]	Adjust the fold position for the bottom segment of letter fold-out sheets when using the multi-folding unit.
50	[Letter Fold-out Posn 2: Single-sheet Fld]	Adjust the overall fold size of letter fold-out sheets when using the multi-folding unit.
51	[Letter Fold-in Posn 1: Single-sheet Fold]	Adjust the fold position of the bottom segment of letter fold-in sheets when using the multi-folding unit.
52	[Letter Fold-in Posn 2: Single-sheet Fold]	Adjust the overall fold size of letter fold-in sheets when using the multi-folding unit.
53	[Double Parallel Fold Position 1]	Adjust the fold position of the bottom segment 1 of double parallel folded sheets when using the multi-folding unit.

No.	Item	Description
54	[Double Parallel Fold Position 2]	Adjust the fold position of the bottom segment 2 of double parallel folded sheets when using the multi-folding unit.
55	[Adjust Gate Fold Position 1]	Adjust the fold width of the bottom segment 1 of gate folded sheets when using the multi-folding unit.
56	[Adjust Gate Fold Position 2]	Adjust the fold width of the bottom segment 2 of gate folded sheets when using the multi-folding unit.
57	[Adjust Gate Fold Position 3]	Adjust the fold position of the bottom segment 3 of gate folded sheets when using the multi-folding unit.

# Setting Values

## Paper Feed Adjustment

### 01: [Wide LCT Fan Setting]

Specify the movement of the Wide LCT (LCIT RT5080) fan.

If [On] is selected, air is discharged from the duct in the paper tray. By blowing air between the sheets, sheets stuck to each other can be separated.

Setting Items	Values
[Wide LCT Fan Setting]	[On] [Off]

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### 02: [Adjust Wide LCT Fan Level]

Adjust the capacity of the Wide LCT (LCIT RT5080) fan.

If double feeding or misfeeding of paper occurs when this setting is at its default value, increase the fan capacity.

Press [+] to increase the fan capacity and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Wide LCT Fan Level]	100	10	10	%

### 03: [Pickup Assist Setting]

Specify the paper feed roller movement.

If the paper feed roller fails to pick up paper and misfeeding of paper occurs, set this to [On].

Setting Items	Values
[Pickup Assist Setting]	[On] [Off]

## Paper Delivery Adjustment

### 04: [Double Feed Detection]

Specify whether or not to detect double feeding of paper.

If [On] is selected, the machine stops when it detects paper double feeding, so as to prevent mixing of unprinted paper.

The machine may not correctly detect double feeding when using special paper (two-ply paper such as release paper). In such a case, select [Off].

Setting Items	Values
[Double Feed Detection]	[On] [Off]

### 05: [Skew Detection]

Specify whether or not to detect paper skew.

If the machine detects a paper skew when [On] is selected, the machine will stop printing and display a message reporting a paper jam.

The machine may erroneously detect paper skew when you use dark paper or paper printed to its edges. In such a case, select [Off].

#### Note

- You can adjust the skew detection level by specifying 0305: [Skew Detection Level].

Setting Items	Values
[Skew Detection]	[On] [Off]

### 06: [Color Paper Edge Detection Adjustment]

Adjust the luminance of the contact image sensor (CIS).

The machine's contact image sensor (CIS) may fail to correctly detect paper edges when dark colored paper or paper printed to its edges is used. In such a case, adjust the luminance so that the sensor can correctly detect paper edges.

Press [+] to increase the luminance and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Color Paper Edge Detection Adjustment]	5.00	1.00	0.01	None

## 07: [Regist Jam Detection with Feed Dir]

Specify whether or not to stop printing if the horizontal misalignment of the delivered paper exceeds the adjustable range (3 mm/0.1 inch).

If [On] is selected, an error message appears and the machine stops printing if the paper misalignment exceeds the adjustable range.

If [Off] is selected, the machine continues printing while the maximum correction of 3 mm (0.1 inch) is applied even though the paper misalignment exceeds the adjustable range.

Setting Items	Values
[Registration Jam Detection with Feed Direction]	[On] [Off]

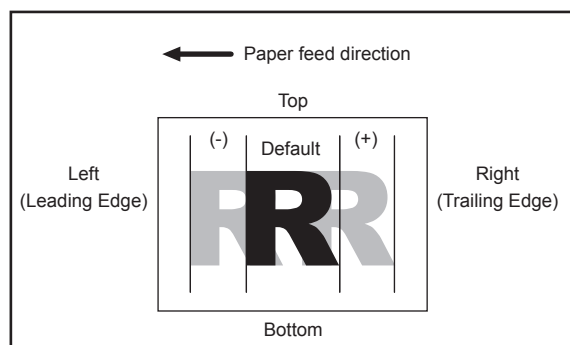
## Image Position/Scaling Adjustment

### 08: [Adj Image Position of Side1 With Feed]

Adjust the horizontal position of the image to be printed on Side 1 of the paper.

Press [+] to shift the image to the right (trailing edge).

Press [-] to shift the image to the left (leading edge).



CEZ012

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Image Position of Side 1 With Feed Dir]	3.0	-3.0	0.1	mm

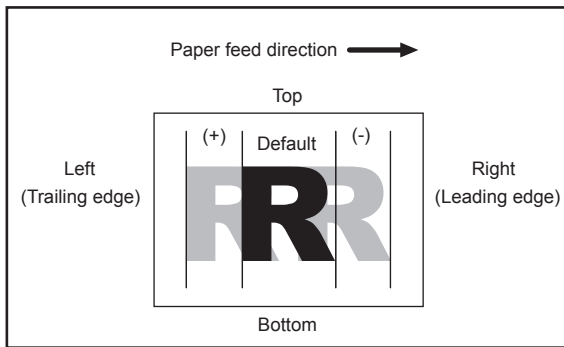
### 09: [Adj Image Position of Side2 With Feed]

Adjust the horizontal position of the image to be printed on Side 2 of the paper.

Press [+] to shift the image to the left (trailing edge).

Press [-] to shift the image to the right (leading edge).

4



CEZ013

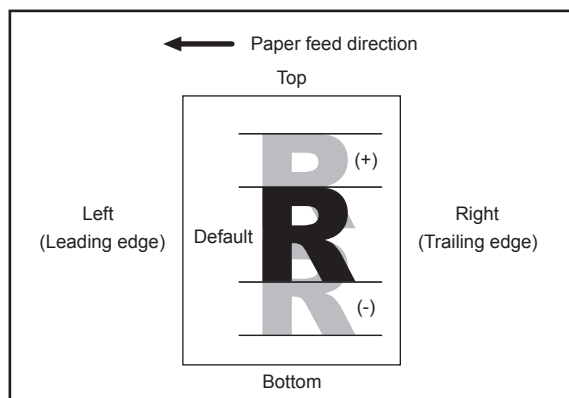
Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Image Position of Side 2 With Feed Dir]	3.0	-3.0	0.1	mm

### 10: [Adj Image Position of Side1 Across Feed]

Adjust the vertical position of the image to be printed on Side 1 of the paper.

Press [+] to shift the image to the top.

Press [-] to shift the image to the bottom.



CEZ015

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Image Position of Side 1 Across Feed Dir]	3.0	-3.0	0.1	mm

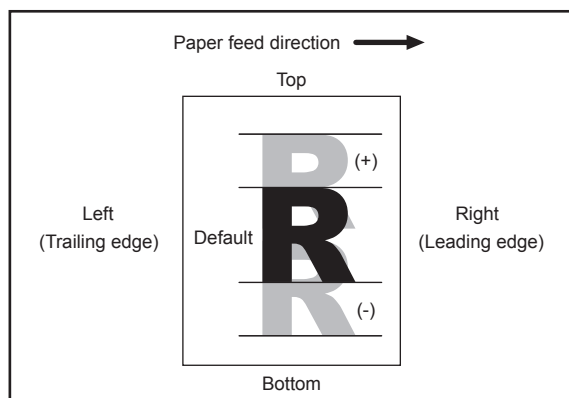
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### 11: [Adj Image Position of Side2 Across Feed]

Adjust the vertical position of the image to be printed on Side 2 of the paper.

Press [+] to shift the image to the top.

Press [-] to shift the image to the bottom.



CEZ014

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Image Position of Side 2 Across Feed Dir]	3.0	-3.0	0.1	mm



### 12: [Deactivate Image Position Adjustment]

Specify whether or not the machine automatically detects paper pathway deviations during the paper feeding process and adjusts the horizontal position of the print image accordingly.

The machine's contact image sensor (CIS) may fail to correctly detect paper edges when using dark colored paper or paper printed to its edges. In such a case, select [On].

Setting Items	Values
[Deactivate Image Position Adjustment Across Feed Dir]	[On] [Off]

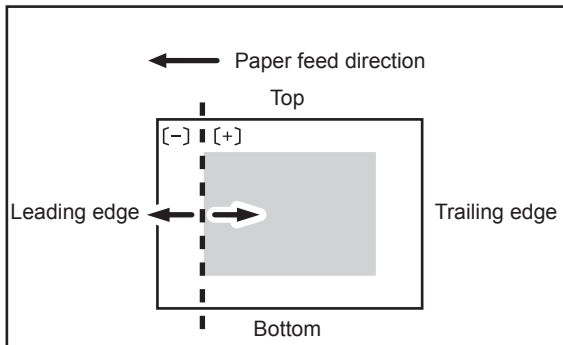
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### 13: [Adjust Erase Margin of Leading Edge]

Adjust the mask width at the leading edge of the image.

By increasing the mask width, you can increase the paper margin at the leading edge of the paper.

Press [+] to increase the mask width and [-] to reduce it.



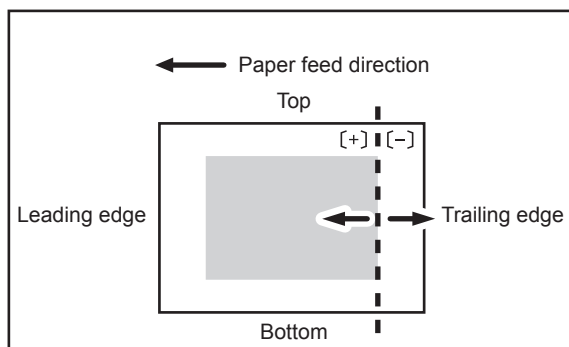
Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Erase Margin of Leading Edge]	6.0	0.0	0.1	mm

### 14: [Adjust Erase Margin of Trailing Edge]

Adjust the mask width at the trailing edge of the image.

By increasing the mask width, you can increase the paper margin at the trailing edge of the paper.

Press [+] to increase the mask width and [-] to reduce it.



CEZ021

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Erase Margin of Trailing Edge]	6.0	0.0	0.1	mm

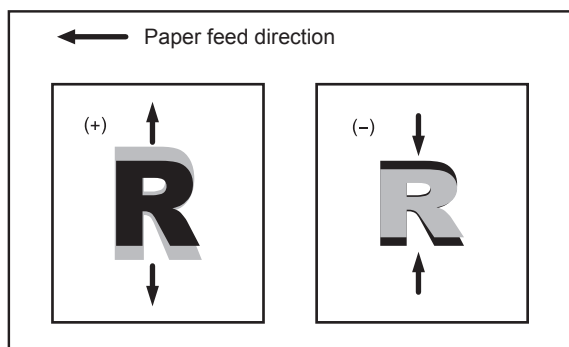
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### 15: [Adj Magnification of Side1 Across Feed]

Adjust the vertical image scaling on the Side 1 of the paper according to the paper expansion or shrinkage.

This allows you to adjust the image according to the paper expansion or shrinkage.

Press [+] to increase the scaling and [-] to reduce it.



CEZ022

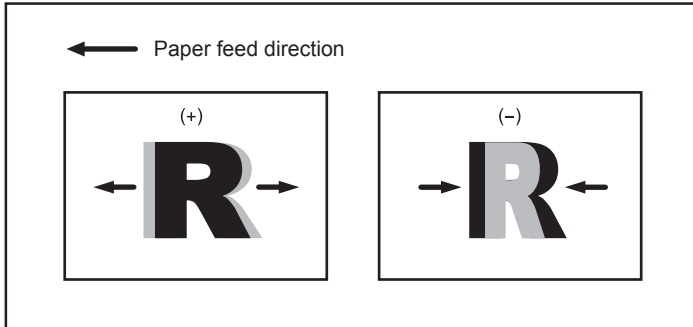
Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Magnification of Side 1 Across Feed Dir]	0.500	-0.500	0.025	%

### 16: [Adj Magnification of Side1 With Feed]

Adjust the horizontal image scaling on the Side 1 of the paper according to the paper expansion or shrinkage.

This allows you to adjust the image according to the paper expansion or shrinkage.

Press [+] to increase the scaling and [-] to reduce it.



CEZ023

4

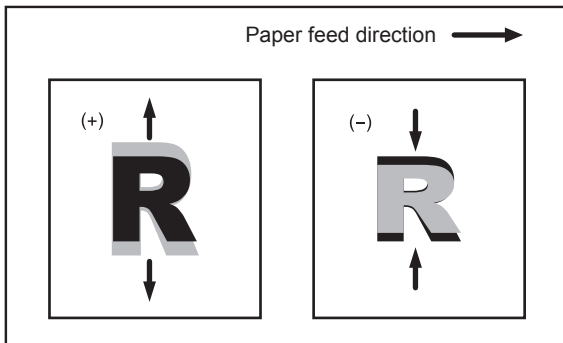
Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Magnification of Side 1 With Feed Dir]	0.500	-0.500	0.025	%

### 17: [Adj Magnification of Side2 Across Feed]

Adjust the vertical image scaling on Side 2 of the paper according to the paper expansion or shrinkage.

In duplex printing, this allows you to reduce the scaling error on Side 2 of the paper and so minimize the resultant difference in print size between the front and the back.

Press [+] to increase the scaling and [-] to reduce it.



CEZ024

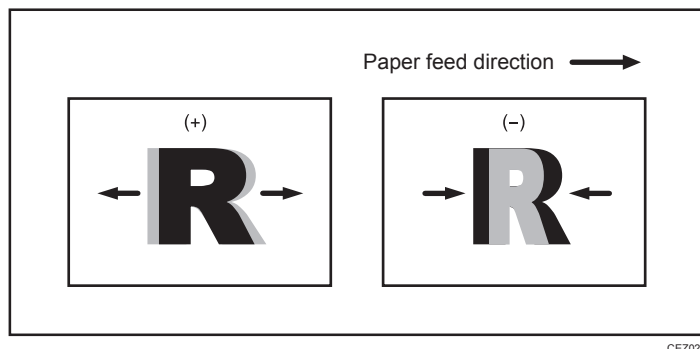
Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Magnification of Side 2 Across Feed Dir]	0.500	-0.500	0.025	%

## 18: [Adj Magnification of Side2 With Feed]

Adjust the horizontal image scaling on Side 2 of the paper according to the paper expansion or shrinkage.

In duplex printing, this allows you to reduce the scaling error on Side 2 of the paper and so minimize the resultant difference in print size between the front and the back.

Press [+] to increase the scaling and [-] to reduce it.



CEZ025

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Magnification of Side 2 With Feed Dir]	0.500	-0.500	0.025	%

## Line Speed Adjustment

To prevent the paper becoming too tight or too slack during transfer, set all the line speed adjustment settings for the paper transfer path to the same value. However, if adjustment of individual items is necessary to correct image degradation, perform the adjustment according to the instructions in Troubleshooting.

## 19: [Process Speed Setting]

Adjust the machine's copy/print speed.

- [High] (full speed)
  - 135 cpm (Pro 8120S)
  - 110 cpm (Pro 8110S)
  - 95 cpm (Pro 8100S)
- [Middle]
  - 110 cpm (Pro 8120S)

- [Low]  
95 cpm (Pro 8120S)  
95 cpm (Pro 8110S)

**Note**

- In some cases, if you change this setting from [Low] to [Middle] or from [Middle] to [High], the toner may not properly fuse to the paper.
- Depending on the type of paper, you can increase the toner gloss by changing this setting from [High] to [Middle] or from [Middle] to [Low].

Setting Items	Values
[Process Speed Setting]	[Low] [Middle] [High]

**20: [Transfer Timing Roller Feed Speed Adj]**

Adjust the transfer timing roller speed.

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Transfer Timing Roller Feed Speed Adjustment]	1.0	-1.0	0.1	%

**21: [Fusing Feed Speed Adjustment]**

Adjust the fusing roller's speed.

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Fusing Feed Speed Adjustment]	10.0	-10.0	0.1	%

**22: [Exit Motor Feed Speed Adjustment]**

Adjust the exit motor's speed.

The exit motor drives the rollers at the paper exit.

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Exit Motor Feed Speed Adjustment]	5.0	-5.0	0.1	%

### 23: [Switchback Entrance Feed Speed Adj]

Adjust the paper feed speed at the switchback entrance.

Adjust the rollers' speed to deliver paper that is turned over or duplex-printed.

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Switchback Entrance Feed Speed Adjustment]	3.0	-3.0	0.1	%

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### 24: [Switchback Exit Feed Speed Adj]

Adjust the paper feed speed at the switchback exit.

Adjust the rollers' speed to deliver paper that is turned over.

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Switchback Exit Feed Speed Adjustment]	3.0	-3.0	0.1	%

## Toner Adhesion Adjustment

### 25: [Adjust Toner Adhesion]

Adjust the intermediate transfer belt toner adhesion.

Use this to adjust the density of the printed image. Depending on the paper being used, it may be necessary to make this adjustment to achieve optimal toner adhesion.

Press [+] to increase the toner adhesion and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Toner Adhesion]	5	-5	1	None

## Transfer Adjustment

### 26: [Image Transfer Current Setting]

Adjust the current for image transfer.

Use this to reduce image quality degradation due to the paper (for example, due to the paper's moisture content).

Press [+] to increase the current and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Image Transfer Current Setting]	150	0	1	μA

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### 27: [Paper Transfer Current Setting: Side 1]

Adjust the current applied to Side 1 for paper transfer.

Use this to reduce image quality degradation due to the paper (for example, due to the paper's moisture content).

Press [+] to increase the current and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current Setting: Side 1]	0	-400	1	μA

### 28: [Paper Transfer Current Setting: Side 2]

Adjust the current applied to Side 2 for paper transfer.

Use this to reduce image quality degradation due to the paper (for example, due to the paper's moisture content).

Press [+] to increase the current and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current Setting: Side 2]	0	-400	1	μA

### 29: [Paper Transfer Current; Lead Edge]

Adjust the paper transfer current at the leading edge of the paper.

Specify the paper transfer currents as a percentage of the currents specified in 27: [Paper Transfer Current Setting: Side 1] and 28: [Paper Transfer Current Setting: Side 2].

Use this to reduce image quality degradation at the leading edge of the paper.

Press [+] to increase the percentage and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current; Lead Edge]	300	0	1	%

### 30: [Paper Transfer Current; Lead Edge Dist]

Adjust the area at the leading edge of the paper for application of paper transfer current.

Specify the length of area at the leading edge of the paper to which the current set in 29: [Paper Transfer Current; Lead Edge] is applied.

Use this to reduce image quality degradation at the leading edge of the paper.

Press [+] to increase the length of area at the leading edge to apply the current and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current; Lead Edge Dist]	30	0	1	mm

### 31: [Paper Transfer Current; Trail Edge]

Adjust the paper transfer current at the trailing edge of the paper.

Specify the paper transfer currents as a percentage of the currents specified in 27: [Paper Transfer Current Setting: Side 1] and 28: [Paper Transfer Current Setting: Side 2].

Use this to reduce image quality degradation at the trailing edge of the paper.

Press [+] to increase the percentage and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current; Trail Edge]	300	0	1	%

### 32: [Paper Transfer Current; Trail Edge Dist]

Adjust the area at the trailing edge of the paper for application of paper transfer current.

Specify the length of area at the trailing edge of the paper to which the current set in 31: [Paper Transfer Current; Trail Edge] is applied.

Use this to reduce image quality degradation at the trailing edge of the paper.



Press [+] to increase the length of area at the trailing edge to apply the current and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Transfer Current; Trail Edge Dist]	30	0	1	mm

### 33: [Avoid Ppr Trns Shck Jitr: Fed Intvl Adj]

Specify whether or not to enable the mode to reduce the jitter<sup>\*1</sup> produced when paper enters the paper transfer roller.

If [On] is selected, the machine adjusts the interval between sheets to reduce jitter. However, the throughput may be reduced when you use paper larger than A4<sup>□</sup> or 8<sup>1</sup>/<sub>2</sub> × 14<sup>□</sup>. In such a case, select [Off] to improve the throughput.

#### ↓ Note

- Jitter does not occur with A4<sup>□</sup>, 8<sup>1</sup>/<sub>2</sub> × 14<sup>□</sup> or smaller paper.

Setting Items	Values
[Avoid Ppr Trnsf Shock Jitter: Feed Interval Adj]	[On] [Off]

\*1 The jitter occurs when the leading or trailing edge of paper that passes through the paper transfer unit is transmitted to the drum unit via the intermediate transfer belt, causing banding.

## Fuser Adjustment

### 34: [Put Pressure before Fusing]

Specify whether or not to have the fusing pressure roller come into contact with the fusing belt before the printing operation (paper feeding) starts.

If [On] is selected, the fusing pressure roller comes into contact with the fusing belt before the paper is fed, preventing the temperature of the fusing unit from dropping.

#### ↓ Note

- If [On] is selected, image degradation (uneven luster) may occur.

Setting Items	Values
[Put Pressure before Fusing]	[On] [Off]

### 35: [Starting Time of Ptng Presr before Fusing]

Adjust the timing for the fusing pressure roller to come into contact with the fusing belt before the printing operation (paper feeding) starts.

Once a job starts, the fusing pressure roller comes into contact with the fusing belt after the time specified in this setting has elapsed.

If this is set to 30 seconds, the fusing pressure roller comes into contact with the fusing belt 30 seconds after a job starts, and printing starts once warm-up is complete (when the temperature at which paper feeding is allowed is reached).

Use this to adjust the fusibility and reduce image degradation (such as uneven luster and blisters).

If you reduce the starting time, the temperature drop the machine is able to handle can be increased, but uneven luster may occur.

If you increase the starting time, the temperature drop the machine is able to handle is reduced, but uneven luster is reduced.

Press [+] or [-] to adjust the start timing.

Setting Items	Max. Value	Min. Value	Step	Unit
[Starting Time of Putting Pressure before Fusing]	500.0	0.0	0.1	second(s)

### 36: [Fusing Heat Roller Temperature Adj]

Adjust the heat roller temperature.

Press [+] to increase the temperature and [-] to reduce it.

#### Note

- Decreasing the temperature too much may cause the toner to not properly fuse to the paper (cold offset).
- Increasing the temperature too much may distort the paper and cause glossy lines, paper jams, and insufficient toner fusing (hot offset).
- Depending on the type of paper, you can increase the toner gloss by increasing the temperature by 5 to 10°C over the initial factory setting.

Setting Items	Max. Value	Min. Value	Step	Unit
[Fusing Heat Roller Temperature Adjustment]	200	100	1	degree(s)

### 37: [Fusing Pressure Roller Temperature Adj]

Adjust the pressure roller temperature.

Press [+] to increase the temperature and [-] to reduce it.

#### ↓ Note

- Decreasing the temperature too much may cause the toner to not properly fuse to the paper. (cold offset).

Setting Items	Max. Value	Min. Value	Step	Unit
[Fusing Pressure Roller Temperature Adjustment]	200	50	1	degree(s)

4

### 38: [Fusing Nip Width Setting]

Adjust the nip width between the fusing belt and the pressure roller.

You can reduce creases produced when printing envelopes.

The default setting is 2. To reduce creases, change the setting to 4.

However, doing this may result in insufficient toner fusing, causing toner to shed from the envelopes (cold offset).

Although values from 1 to 4 are displayed, 1 and 3 are not usable.

Setting Items	Max. Value	Min. Value	Step	Unit
[Fusing Nip Width Setting]	4	1	1	None

### 39: [Paper Feed Interval Setting]

Adjust the interval between the feeding of each sheet.

The standard interval is "100". If you set this to "50", the throughput will be reduced in half.

Press [+] to increase the interval and [-] to reduce it.

#### ↓ Note

- Depending on the fusing unit's temperature and the size of paper, if you increase the interval by pressing [-], the copy/print speed may decrease.

Setting Items	Max. Value	Min. Value	Step	Unit
[Paper Feed Interval Setting]	100	1	1	%

#### 40: [Reduce Initial CPM: Low Temp. Envrnt.]

Select one of the three levels of initial print speed reduction at low temperatures.

The selected initial print speed reduction level in copies-per-minute (CPM) is applied only when printing starts (for approximately 15 to 20 seconds).

This helps improve throughput if the fusing temperature can be kept constant. However, the throughput may decrease in an environment in which the temperature varies.

- [Do not Reduce]  
Full speed.
- [Reduce Level 1]  
80% of full speed.
- [Reduce Level 2]  
65% of full speed.
- [Reduce Level 3]  
50% of full speed.

#### ↓ Note

- The setting will take effect if the ambient temperature is 17°C (62.6°F) or lower. Since the temperature of the fusing unit may decrease in a cold environment, specify this setting in addition to 41: [Reduce Initl CPM: Norml/High Temp Env].

Setting Items	Values
[Reduce Initial CPM: Low Temperature Environment]	[Do not Reduce] [Reduce Level 1] [Reduce Level 2] [Reduce Level 3]

#### 41: [Reduce Initl CPM: Norml/High Temp Env]

Select one of the three levels of initial print speed reduction at normal room temperatures and above.

The selected initial print speed reduction level in copies-per-minute (CPM) is applied only when printing starts (for approximately 15 to 20 seconds).

This helps improve throughput if the fusing temperature can be kept constant. However, the throughput may decrease in an environment in which the temperature varies.

- [Do not Reduce]  
Full speed.
- [Reduce Level 1]

80% of full speed.

- [Reduce Level 2]

65% of full speed.

- [Reduce Level 3]

50% of full speed.

**Note**

- The setting will take effect if the ambient temperature is higher than 17°C (62.6°F).

Setting Items	Values
[Reduce Initial CPM: Normal/High Temp. Environment]	[Do not Reduce] [Reduce Level 1] [Reduce Level 2] [Reduce Level 3]

4

**42: [Adjust Cleaning Web Motor Interval]**

Specify the interval between each activation of the cleaning web.

You can remove stains from the fusing pressure roller by reducing the interval between each activation of the cleaning web. However, doing this causes the cleaning web to wear out faster, resulting in more frequent replacement. If you set this to "0.01", cleaning is always performed during paper feeding.

Press [+] to increase the interval and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Cleaning Web Motor Interval]	3.00	0.01	0.01	None

**Decurler Adjustment**

**43: [Decurler Feed Speed Adj: Curl Adj Off]**

Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Off".

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Decurler Feed Speed Adjustment: Curl Adj Off]	7.5	-1.0	0.5	%

#### 44: [Decurler Feed Speed Adj: Curl Adj Weak]

Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Weak".

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Decurler Feed Speed Adjustment: Curl Adj Weak]	7.5	-1.0	0.5	%

4

#### 45: [Decurler Feed Speed Adj: Curl Adj Strg]

Adjust the paper feed speed of the decurler unit when 0310: [Adjust Paper Curl] in the [Adjustment Settings for Skilled Operators] menu is set to "Strong".

Press [+] to increase the speed and [-] to reduce it.

Setting Items	Max. Value	Min. Value	Step	Unit
[Decurler Feed Speed Adjustment: Curl Adj Strong]	7.5	-1.0	0.5	%

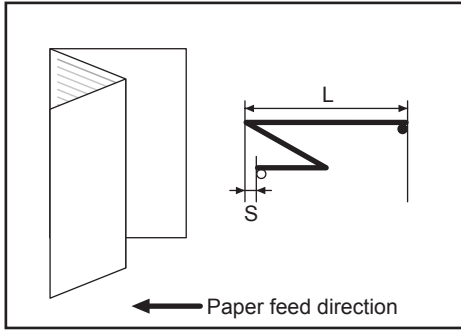
### Finishing Position Adjustment

#### 46: [Adjust Z-fold Position 1]

Adjust the width of the bottom end segment (S) of Z- folded sheets when using the multi-folding unit.

Press [+] to increase (S) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ001

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Z-fold Position 1]	4.0	-4.0	0.2	mm

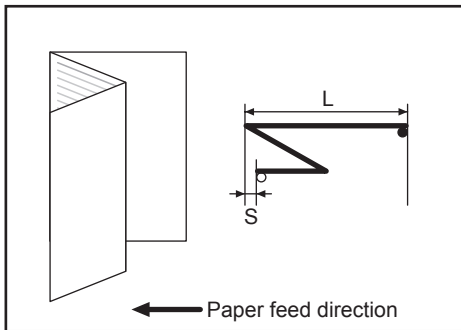
4

#### 47: [Adjust Z-fold Position 2]

Adjust the overall fold size (L) of Z- folded sheets when using the multi-folding unit.

Press [+] to increase (L) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ001

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Z-fold Position 2]	4.0	-4.0	0.2	mm

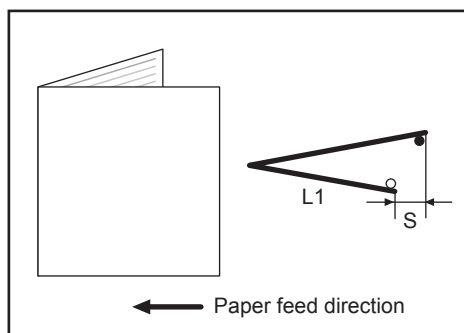
#### 48: [Half Fold Position: Single-sheet Fold]

Adjust the fold position (S) of half folded sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase (S) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ002

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Half Fold Position: Single-sheet Fold]	4.0	-4.0	0.2	mm

4

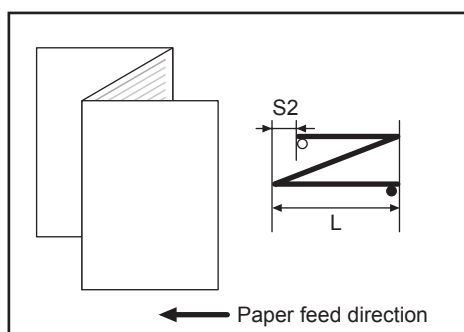
#### 49: [Letter Fold-out Posn 1: Single-sheet Fld]

Adjust the fold position for the bottom segment (S2) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase (S2) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ003

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Letter Fold-out Position 1: Single-sheet Fold]	4.0 <sup>*1</sup>	-4.0 <sup>*1</sup>	0.2	mm



\*1 For B5□ paper, any adjustment greater than 3 mm is rounded down to 3 mm.

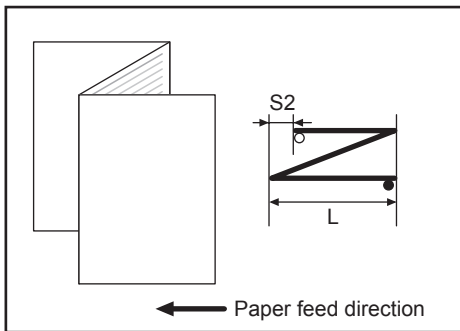
### 50: [Letter Fold-out Posn 2: Single-sheet Fld]

Adjust the overall fold size (L) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase (L) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Letter Fold-out Position 2: Single-sheet Fold]	4.0*1	-4.0*1	0.2	mm

\*1 For B5□ paper, any adjustment greater than 3 mm is rounded down to 3 mm.

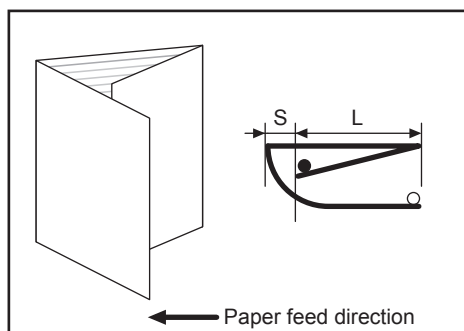
### 51: [Letter Fold-in Posn 1: Single-sheet Fold]

Adjust the fold position of the bottom segment (S) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase (S) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ004

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Letter Fold-in Position 1: Single-sheet Fold]	4.0	-4.0	0.2	mm

4

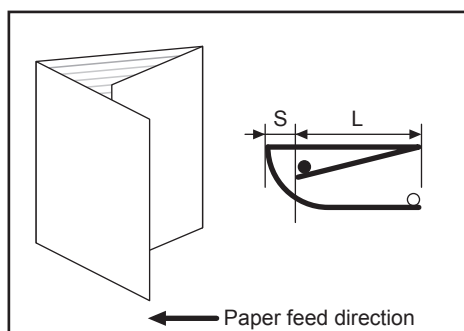
## 52: [Letter Fold-in Posn 2: Single-sheet Fold]

Adjust the overall fold size (L) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.

Press [+] to increase (L) and [-] to reduce it.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ004

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Letter Fold-in Position 2: Single-sheet Fold]	4.0	-4.0	0.2	mm

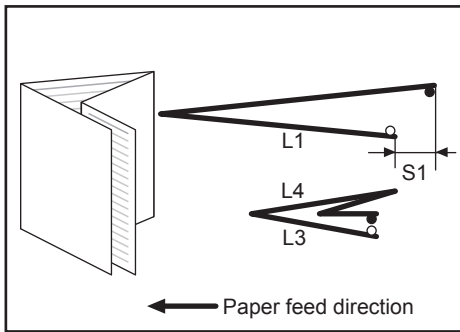
### 53: [Double Parallel Fold Position 1]

Adjust the fold position of the bottom segment 1 (S1) of double parallel-folded sheets when using the multi-folding unit.

Press [+] to increase (S1) and [-] to reduce it.

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ006

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Double Parallel Fold Position 1]	4.0	-4.0	0.2	mm

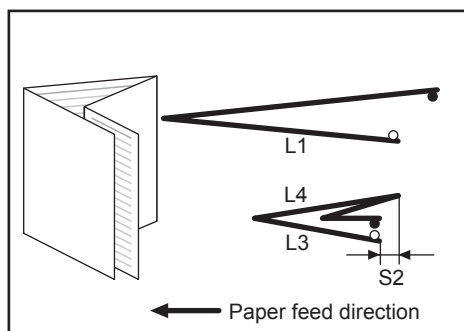
### 54: [Double Parallel Fold Position 2]

Adjust the fold position of the bottom segment 2 (S2) of double parallel-folded sheets when using the multi-folding unit.

Press [+] to increase (S2) and [-] to reduce it.

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ007

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Double Parallel Fold Position 2]	4.0	-4.0	0.2	mm

4

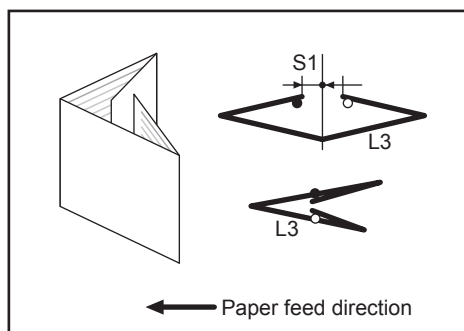
### 55: [Adjust Gate Fold Position 1]

Adjust the fold width of the bottom segment 1 (S1) of gate folded sheets when using the multi-folding unit.

Press [+] to increase (S1) and [-] to reduce it.

The upper right illustration shows a partly opened, gate folded sheet, and the lower right illustration shows a fully folded sheet.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ008

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Gate Fold Position 1]	4.0	-4.0	0.2	mm

#### ↓ Note

- You cannot specify this setting when using 12" × 18" paper.

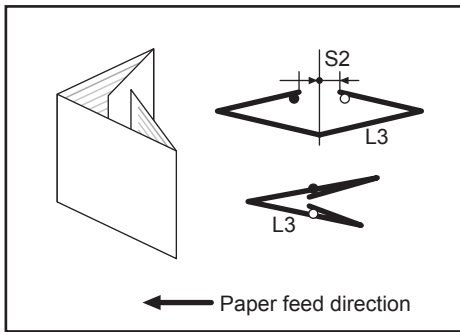
### 56: [Adjust Gate Fold Position 2]

Adjust the fold width of the bottom segment 2 (S2) of gate folded sheets when using the multi-folding unit.

Press [+] to increase (S2) and [-] to reduce it.

The upper right illustration shows a partly opened, gate folded sheet, and the lower right illustration shows a fully folded sheet.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Gate Fold Position 2]	4.0	-4.0	0.2	mm

#### ↓ Note

- You cannot specify this setting when using 12" × 18" paper.

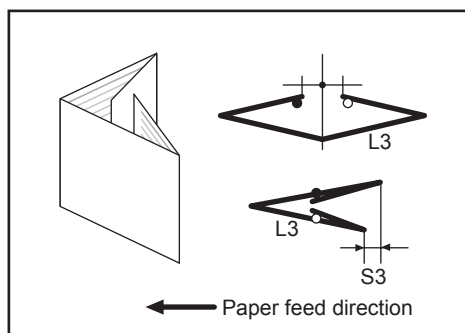
### 57: [Adjust Gate Fold Position 3]

Adjust the fold position of the bottom segment 3 (S3) of gate folded sheets when using the multi-folding unit.

Press [+] to increase (S3) and [-] to reduce it.

The upper right illustration shows a partly opened, gate folded sheet, and the lower right illustration shows a fully folded sheet.

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.



CEZ010

Setting Items	Max. Value	Min. Value	Step	Unit
[Adjust Gate Fold Position 3]	4.0	-4.0	0.2	mm

---

MEMO









# **Pro 8100s/8110s/8120s**

**Operating Instructions**

**Troubleshooting: TCRU/ORU**



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# Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.



---

# How to Read This Manual

---

## Symbols

---

This manual uses the following symbols:

 **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

 **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

 **Reference**

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys on the machine's display or control panels.

---

## Disclaimer

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Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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## Notes

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The manufacturer shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the manufacturer with your office products.

For good output quality, the manufacturer recommends that you use genuine toner from the manufacturer.

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Depending on which country you are in, certain units may be optional. For details, please contact your local dealer.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

# 1. Before You Begin

---

## About This Manual

If the machine will not print, does not print as expected, or exhibits any other problem, find the problem in this manual and troubleshoot accordingly.

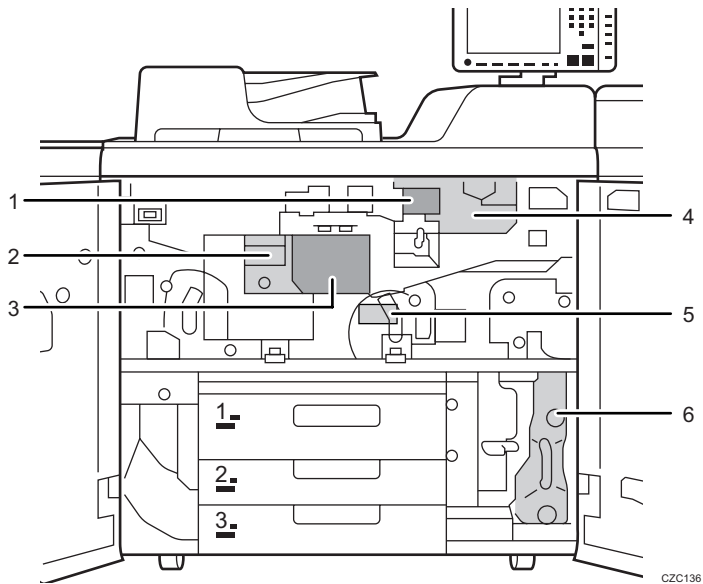
### CAUTION

- Before you replace any unit:
  - To prevent electrical shock, turn off the printer controller on the machine control panel, switch off the operation power switch then the main power switch, and then disconnect the machine from the power supply.
  - Allow the machine to cool for at least 30 minutes before replacing a part.

# Guide to Components

## **⚠ WARNING**

- Do not remove any covers or screws other than those explicitly mentioned in this manual. Inside this machine are high voltage components that are an electric shock hazard and laser components that could cause blindness. Contact your sales or service representative if any of the machine's internal components require maintenance, adjustment, or repair.
- Do not attempt to disassemble or modify this machine. Doing so risks burns and electric shock. Note again that exposure to the laser components inside this machine risks blindness.



1. Developer Outlet/Inlet
2. Fusing Unit
3. Cleaning Unit for Intermediate Transfer Belt
4. Development Unit
5. Transfer Unit
6. Waste Toner Bottle

# About the Display for Options

This machine displays all of the adjustment items in the Adjustment Settings for Skilled Operators menu and advanced settings for custom paper regardless of whether or not the items are for options. Note that any modifications to the option settings do not take effect unless the applicable options are installed on this machine.

## Note

- For details about the options available for this machine, see "Guide to Functions of the Machine's Options", About This Machine.

## Before you change a setting

### ★ Important

- If the problem persists despite the setting being changed, restore the value you made a note of.
- Operating the machine with the changed setting may cause problems such as reduced print quality.
- If the problem persists even though the setting has been changed, restore the value noted. Operating the machine with the changed setting may cause problems, such as inferior printed images.

# About Printing Surfaces

Side 1 is the surface of the paper printed during one-sided printing, or the surface of the first print during duplex printing.

Side 2 is the surface of the paper printed after side 1 has been printed during duplex printing.



# 2. Troubleshooting Service Call Problems (SC Codes)

---

## What Are SC Codes?

If an error occurs during operation, the machine displays an SC code ("SCnnn", where "nnn" is a three-digit number). The machine stops and cannot be used when an SC code is displayed.

---

### If an SC code appears:

---

1. Write down the SC number.
2. Turn off the main power switch.
3. Wait a few moments, then turn the machine on again.

In most cases, cycling the machine off and on will restore it to full operation.

4. If the SC code reappears, check it against the SC code table. For details, see page 14 "SC Code List".

Check for the SC code in the table.

If the SC code is listed in the table, carry out the recommended procedure.

If the SC code is not listed in the table, contact your service representative.



## SC Code List

This table contains a list of selected SC codes. If the SC code that is displayed on the control panel is listed in this table, carry out the recommended procedure. If the SC Code is not listed in this table, contact your service representative.

### ★ Important

- If the error persists after replacing the unit, contact your service representative.

Code	Error	Procedure
332-01	Toner supply motor 1 error (left bottle)	Check that toner supply motor 1 operates properly.
332-05	Toner supply motor 2 error (right bottle)	Check that toner supply motor 2 operates properly.
336-01	Developer imperfect setting (K)	Check the developer.
410-01	Remaining potential: Vr detection error (K)	Replace the photoconductor unit.
411-01	Charge potential: Vd adjustment error (K)	Replace the charger.
412-01	Exposure potential: Vpl adjustment error (K)	Replace the charger.

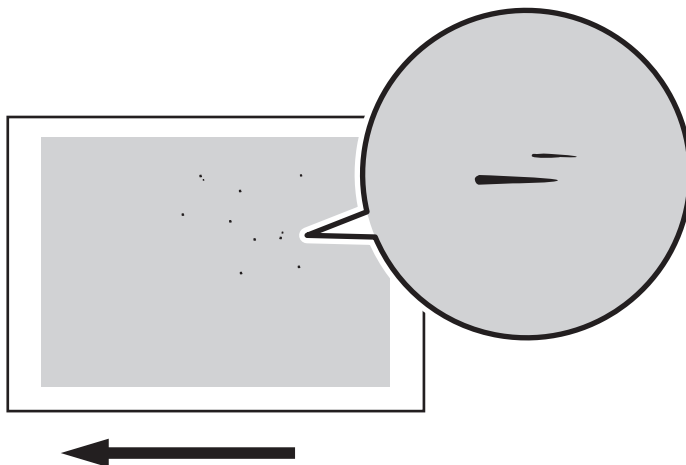
# 3. Troubleshooting Image Quality Problems

## Toner Spotting/Staining

### Paper Is Spotted with Toner

3

Paper is soiled with toner spots of 0.5–1 mm (0.02–0.04 inches) in diameter.



CEZ538

#### Cause:

Toner fragments have slipped through the cleaning web, which cleans the pressure roller, and re-adhered to paper.

This may occur if:

- Printing on both sides of paper
- Printing on uncoated (especially rough-textured) paper
- Printing a single-dot halftone image

#### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

**Solution:**

Increasing the temperature when using thin paper with a thickness equivalent to Paper Weight 0 or 1 may cause paper curling, resulting in paper jams at the fusing unit. Carry out steps from Step 6 when using thin paper with a thickness equivalent to Paper Weight 0 or 1.

**1. Increase the temperature by 5 °C in [Fusing Heat Roller Temperature Adj] in [Advanced Settings] for the custom paper in use.**

**2. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

**3. Increase the temperature an additional 5 °C in [Fusing Heat Roller Temperature Adj].**

**4. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

**5. Have changes to the settings resulted in glossy lines or paper misfeed?**

<b>Yes</b>	Decrease the temperature by 10 °C, and then go to the next step.
<b>No</b>	Go to the next step.

**6. Set [Adjust Cleaning Web Motor Interval] to 0.01 in [Advanced Settings] for the custom paper in use.**

**7. Print the image. Is the problem resolved?**

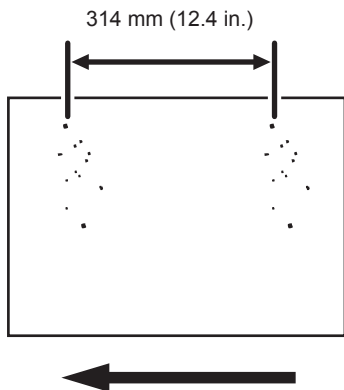
<b>Yes</b>	Finished!
<b>No</b>	No further improvement is likely. Contact your service representative.

**Note**

- Decreasing the value in [Adjust Cleaning Web Motor Interval] will shorten the replacement cycle of the cleaning web.

**Black Spots**

Black spots appear at 314 mm (12.4 inches) intervals.



CZC307

3

**Cause:**

The drum is scratched or stained.

**Solution:**

1. Detach the photoconductor unit and check the drum surface. Is the surface scratched?

Yes	Replace the drum.
No	Contact your service representative.

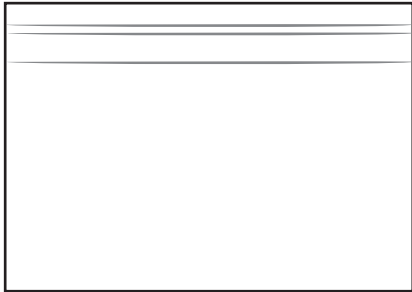
2. If the problem persists, contact your service representative.

**Note**

- For details about replacing the drum, see Replacement Guide.

**Streaks (1)**

Streaks parallel to the paper feed direction appear.



CZC346

3

**Cause:**

- The charger is stained.
- The cleaning unit for PCU has worn out.
- The drum surface is scratched.

**Solution:**

**1. Detach the charger and check its surface. Is the surface stained?**

<b>Yes</b>	Contact your service representative.
<b>No</b>	Go to the next step.

**2. Detach the photoconductor unit and check the drum surface. Is the surface stained or scratched?**

<b>Stained:</b>	Replace the cleaning unit for PCU.
<b>Scratched:</b>	Replace the drum.
<b>Neither:</b>	Contact your service representative.

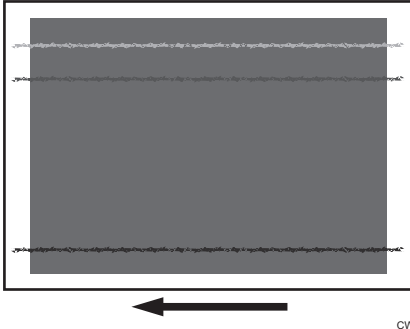
**3. If the problem persists even though you have replaced the cleaning unit for PCU or drum, contact your service representative.**

**Note**

- For details about replacing the charger, cleaning unit for PCU and drum, see Replacement Guide.

## Streaks (2)

Extended, blurred streaks parallel to the paper feed direction appear. The streaks also appear randomly in the margins.



3

### Cause:

If the temperature or humidity is low, remaining toner might be missed by the cleaning blade of the cleaning unit for intermediate transfer belt or transfer unit, causing streaks to appear sporadically.

### Solution:

#### 1. Is the printed side affected by the problem?

Yes	Go to the next step.
No	Contact your service representative.

2. Replace the cleaning unit for intermediate transfer belt.
3. If the problem persists even though you have replaced the cleaning unit for intermediate transfer belt, contact your service representative.

#### ↓ Note

- For details about replacing the cleaning unit for intermediate transfer belt, see Replacement Guide.

## Streaks (3)

Streaks appear in solid-filled areas.



CEZ542

3

**Cause:**

---

If the toner contains small clumps, they disintegrate in the development unit, producing streaks. This problem may occur if the machine is left unattended for a long period or the toner bottle is kept out of its moisture-proof bag for a long period.

**Solution:**

---

1. Print 350 full-page, solid-fill A3 or DLT sheets.
2. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Replace the toner bottle.

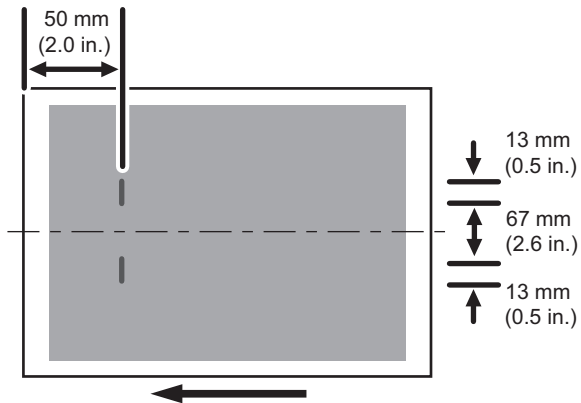
3. Print 350 full-page, solid-fill A3 or DLT sheets.
4. If the problem persists, contact your service representative.

---

**Two 13-mm Long Vertical Streaks**

---

Two 13-mm long vertical streaks appear within 50 mm (2.0 inches) from the leading edge.



CZC313

3

### Cause:

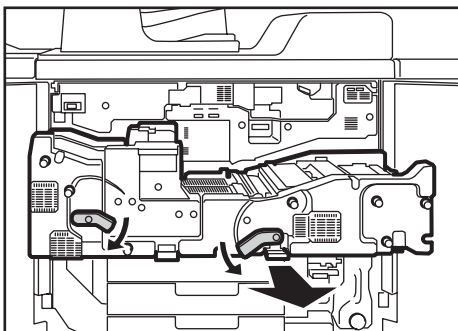
The invert exit drive rollers or invert exit idle rollers in the drawer are soiled.

This may occur if sheets are delivered face down after one-sided printing.

### Solution:

Clean the rollers, sensors, and guide boards in the drawer.

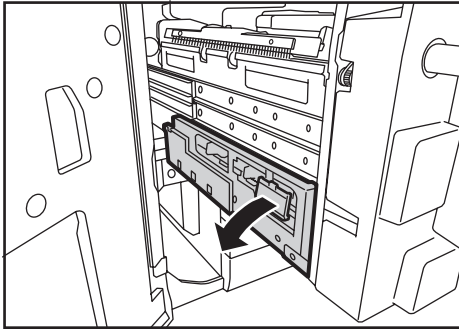
1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
2. Open the front covers.
3. Lower the levers C1 and C2, and then pull the drawer out completely until it stops.



CZC300



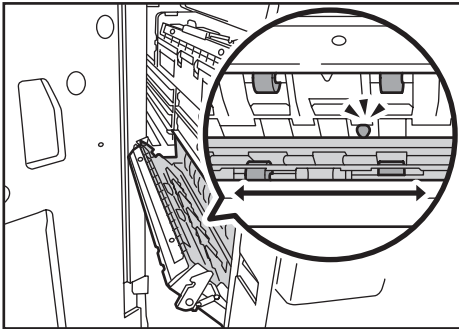
**4. Pull down and open the cover D4.**



CZC301

**5. Clean the rollers, sensors, and guide boards.**

For details about cleaning the parts, see page 85 "Cleaning the Paper Feed Path".



CZC302

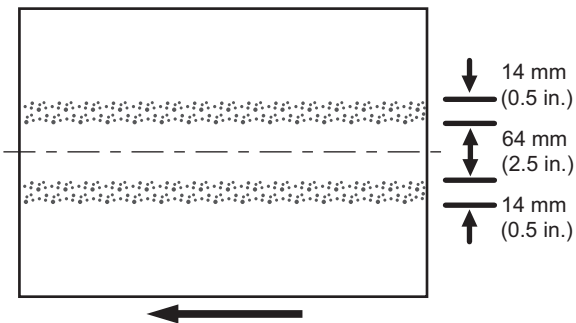
**6. After cleaning, restore the machine so that it resumes operation.**

---

## Two 14-mm Wide Streaks

---

Two 14-mm wide streaks parallel to the paper feed direction appear.



CZC314

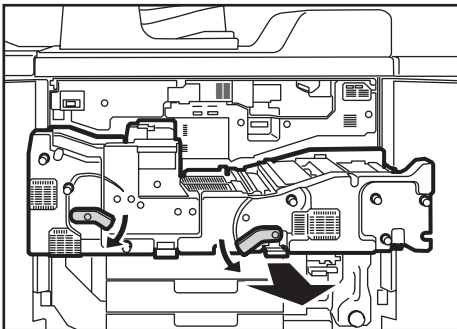
**Cause:**

The exit drive rollers, exit idle rollers, exit relay drive rollers, or exit relay idle rollers in the drawer are soiled.

**Solution:**

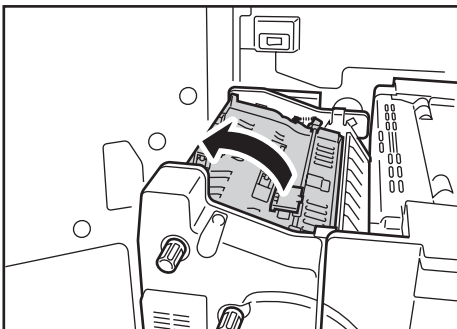
Clean the rollers, sensors, and guide boards in the drawer.

1. Make sure that the system is turned off and the machine power cord is disconnected from the power source.
2. Open the front covers.
3. Lower the levers C1 and C2, and then pull the drawer out completely until it stops.



CZC300

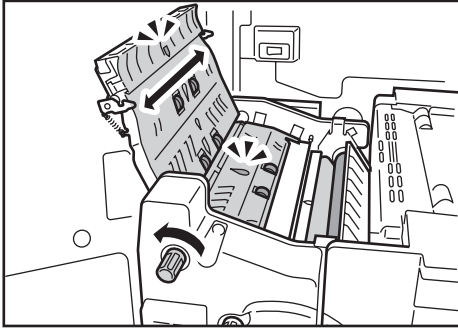
4. Pull up and open the cover D3.



CZC341

5. Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.

For details about cleaning the parts, see page 85 "Cleaning the Paper Feed Path".



3

6. After cleaning, restore the machine so that it resumes operation.

---

## Stained Paper Edges

---

### Solution:

1. If the paper edges are stained, carry out the procedure in page 57 "Insufficient Toner Fusing".

---

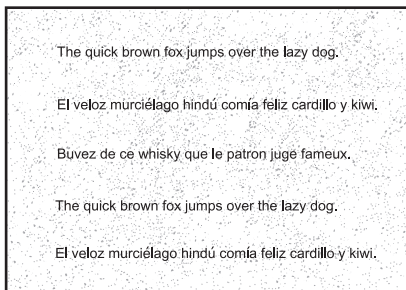
## Stained Background

---

Random "powdered" dots appear, creating a dirty background.

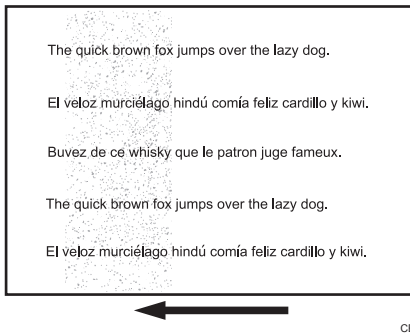
The background may be partially or completely stained.

### Completely stained background



CEZ543

## Partially stained background



3

### Cause:

This may occur because of wearing of the developer, drum unit, or charger.

### Solution:

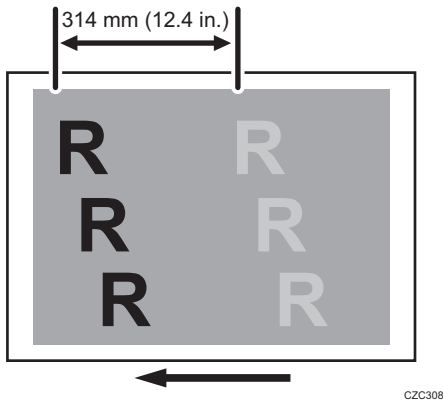
1. If a message prompting replacement of a unit has appeared, replace the unit.
2. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
3. Print the image. Is the problem resolved?

Yes	Finished!
No	In the [Machine: Maintenance] group on the [Adjustment Settings for Skilled Operators] menu, execute [Execute Process Initial Setting].

4. If the problem persists, contact your service representative.

## Ghosting

A ghost image of an image to be printed appears at a distance of 314 mm (12.4 in.) to the side of the intended image.



3

**Cause:**

The image transfer current is transmitted to the drum, where a potential difference occurs between a developed area and non-developed area and causes the intended image to be reproduced.

This may occur if:

- Solid filled images or bold characters are printed in black on a halftone background
- Printing is done at low temperature or humidity
- Many screening lines are used

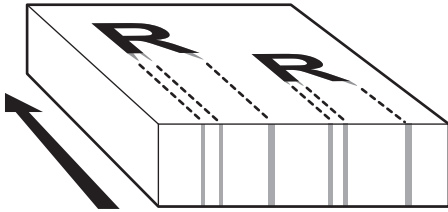
**Solution:**

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

**Scratched Images and Stained Paper Edges**

Scratched images or soiled paper edges appear.



CNT008

3

### Cause:

When a relatively stiff, thick paper is delivered, the entrance guide board for the transfer unit is warped toward the intermediate transfer belt due to the stiffness of the paper. The edge of the entrance guide board comes into contact with the toner on the belt to cause images to be scratched and paper edges to be soiled.

This may occur if:

- Paper with a thickness equivalent to Paper Weight 7 is used
- Paper with its grain parallel to the paper feed direction is used. For example, A3/DLT long grain paper is delivered, A4/LT short grain paper is delivered from its long edge, or A4/LT long grain paper is delivered from its short edge.
- Paper is stored at low temperature or humidity

### Solution:

Change the direction of paper grain for paper delivery.

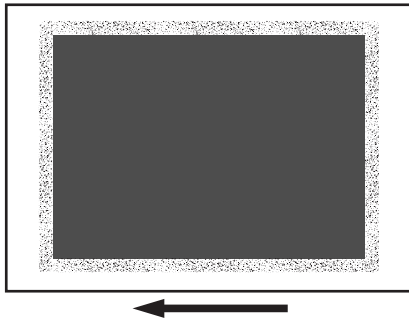
#### ↓ Note

- When storing paper at low humidity, wrap the paper in coated paper or a plastic sheet.

# Toner Scatter

## Toner Scatter (1)

Toner is scattered around a solid-fill print.



3

### Cause:

This may occur if printed at low temperature or humidity.

#### ↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

### Solution:

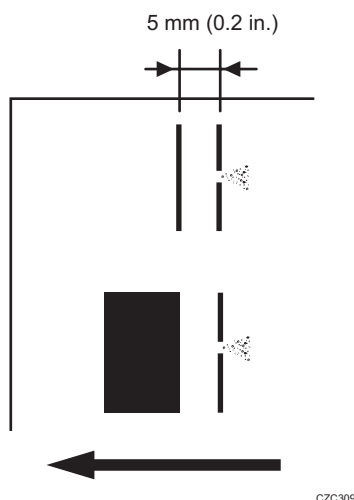
1. Check both sides of the paper for the problem. If this problem appears only on the side 2 of the paper, skip to Step 3.
2. Adjust the setting for the side 1 of the paper. In [Advanced Settings] for the custom paper in use, increase the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 1].  
Example: If the present current is  $-40 \mu\text{A}$ , change it to  $-42 \mu\text{A}$ .
3. Adjust the setting for the side 2 of the paper. In [Advanced Settings] for the custom paper in use, increase the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 2].  
Example: If the present current is  $-40 \mu\text{A}$ , change it to  $-42 \mu\text{A}$ .
4. Print the image. Is the problem resolved?

Yes	Finished!
-----	-----------

No	Repeat Steps 1 to 4. If the problem persists, contact your service representative.
----	--

## Toner Scatter (2)

Parts of a line that is 5 mm (0.2 inches) or less from an image exhibit splatter.



3

### Cause:

Air contained between images is compressed and blows off parts of a line.

This may occur if:

- Printing is done at high temperature or humidity
- Using coated or other slippery paper
- Printing line images at less than 5 mm (0.2 inches) intervals

### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

### Solution:

The solution depends on the area in which the line splatter occurs. If the splatter occurs 1.5 mm (0.6 inches) or less from the leading edge, follow Procedure (a) on the following page; otherwise, follow Procedure (b) on the following page.



**a) Line splatter that is 15 mm (0.6 inches) or less from the leading edge**

Increase the leading edge margin to more than 15 mm (0.6 inches) using one of the following procedures:

1. Adjusting the shift image  
 In [Advanced Settings] for the custom paper in use, specify [Adj Image Position of Side1 With Feed] for the side 1 of the paper and [Adj Image Position of Side2 With Feed] for the side 2.
2. Adjusting the mask width at the leading edge  
 In [Advanced Settings] for the custom paper in use, specify [Adjust Erase Margin of Leading Edge].
3. Adjusting the file's leading edge margin

Increase the leading edge margin in the print settings for the image to be printed.

For details about adjusting the shift image and adjusting the mask width at the leading edge, see "Adjustment Item Menu Guide".

If you cannot increase the leading edge margin to more than 15 mm (0.6 inches), contact your service representative.

**b) Line splatter that is in an area more than 15 mm (0.6 inches) from the leading edge**

1. In [Advanced Settings] for the custom paper in use, select [Image Transfer Current Setting].
2. Check the present value. Is it the upper limit?

<b>Yes</b>	Go to Step 5.
<b>No</b>	Go to the next step.

3. Increase the absolute value of the current by 5  $\mu$ A in [Image Transfer Current Setting].
4. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Increase the value by 5 $\mu$ A. If the problem persists even though you have increased the value to the upper limit (150 $\mu$ A), go to the next step.

5. Do you mind if image density is low?

<b>Yes</b>	Contact your service representative.
<b>No</b>	Go to the next step.

6. In [Advanced Settings] for the custom paper in use, select [Adjust Toner Adhesion].
7. Check the present value. Is it the lower limit?

<b>Yes</b>	Contact your service representative.
------------	--------------------------------------

<b>No</b>	Decrease the value by 1 in [Adjust Toner Adhesion].
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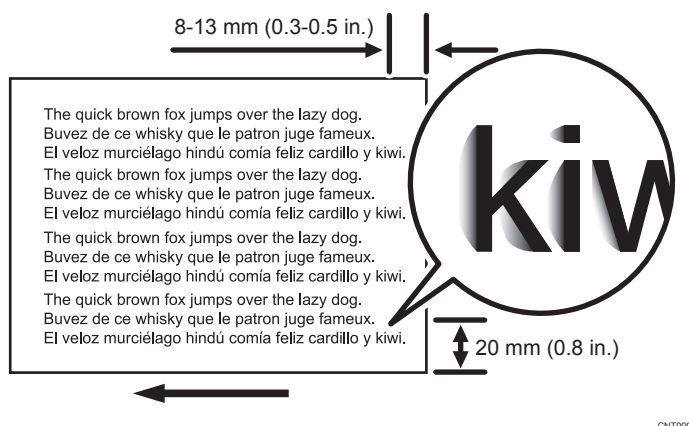
8. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 5 to 7. If the problem persists even though you have decreased the value to the lower limit, contact your service representative.

## Toner Scatter (3)

3

Parts of a line or character exhibit splatter. This may occur in a line or character that is 8 to 13 mm (0.3 to 0.5 inches) from the trailing edge and 20 mm (0.8 inches) or less from the left edge facing the paper feed direction.



CNT009

### Cause:

A shock jitter occurs when the trailing edge of the paper leaves the paper guide during paper transfer and causes toner scattering.

This may occur if paper with a thickness equivalent to Paper Weight 4 or higher is used.

#### ↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.
- Changing the transfer current may produce either or both of the following side effects:
  - Reduction in toner yields
  - Occurrence of banding (streaks)

**Solution:**

---

1. In [Advanced Settings] for the custom paper in use, select [Image Transfer Current Setting].
2. Check the present value. Is it lower than 100  $\mu$ A?

<b>Yes</b>	Carry out all of the following: (1) Increase the value by 5 $\mu$ A in [Image Transfer Current Setting]. (2) Set [Paper Transfer Current; Trail Edge] to "200%". (3) Set [Paper Transfer Current; Trail Edge Dist] to "30 mm".
<b>No</b>	No further improvement is likely. Contact your service representative.

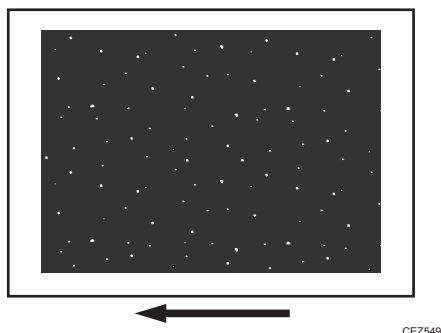
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 1 to 3. If the problem persists even though you have increased the value to 100 $\mu$ A, contact your service representative.

# Color Loss

## White Spots

White spots of 0.2–0.3 mm (0.008–0.01 inches) in diameter appear.



3

### Cause:

This may occur if printed at low temperature or humidity.

#### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.
- If you reduce the paper transfer current to eliminate white spots, copies may become too faint.

### Solution:

1. Check both sides of the paper for the problem. If this problem appears only on the side 2 of the paper, skip to Step 3.
2. Adjust the setting for the side 1 of the paper. In [Advanced Settings] for the custom paper in use, decrease the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 1].  
Example: If the present current is  $-40 \mu\text{A}$ , change it to  $-38 \mu\text{A}$ .
3. Adjust the setting for the side 2 of the paper. In [Advanced Settings] for the custom paper in use, decrease the absolute value of the negative current by 5% in [Paper Transfer Current Setting: Side 2].  
Example: If the present current is  $-40 \mu\text{A}$ , change it to  $-38 \mu\text{A}$ .

**4. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 1 to 4. If the problem persists, contact your service representative.

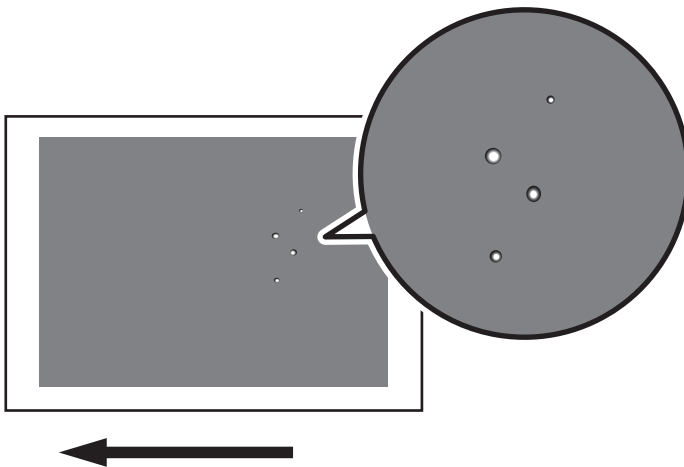
---

### Blister-like White Spots

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3

White spots 0.3–0.5 mm (0.01–0.02 inches) in diameter surrounded by denser spots (blister-like white spots) appear.



**Cause:**

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This may occur if a solid image is printed on coated paper, if a solid image is printed during duplex printing, or if printing is done at low temperature.

**Solution:**

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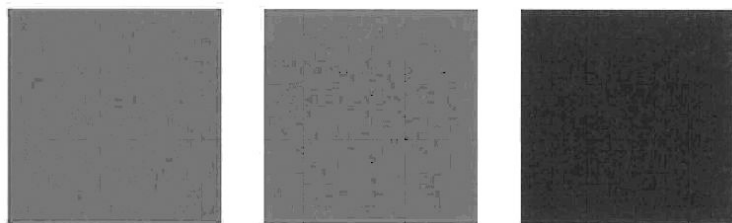
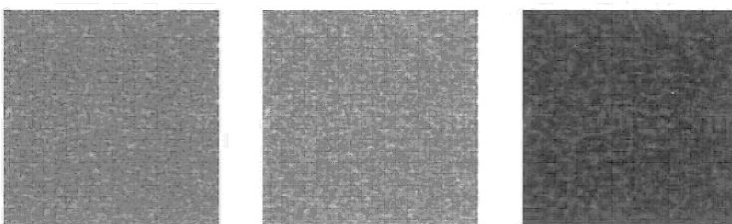
If blister-like white spots appear, carry out the procedure in page 57 "Insufficient Toner Fusing".

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### Mottling

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Mottling occurs in solid-filled areas.

**Normal****Mottled**

3

**Cause:**

The transfer electric field on the concave portion of paper is weakened to cause a decrease in transcription.

This may occur if:

- Using paper with a rough surface
- Continuously printing an image that consumes little toner
- Printing is done at high temperature or humidity

**Solution:**

Before you perform the solution procedure, make sure that the periodic replacement parts have not reached their expiration period. For details about checking the replacement date, see the Adjustment Item Menu Guide. If the periodic replacement parts have reached their expiration period, replace them. For details about replacing the parts, see the Replacement Guide.

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

Yes	Finished!
-----	-----------

<b>No</b>	Go to the next step.
-----------	----------------------

**3. Print 100 full-page, solid-fill A4 or LT sheets. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Reload with new paper.

**4. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Replace the paper with smoother paper.

**5. If the problem persists, contact your service representative.**

# Density Problems

## Uneven Image Density

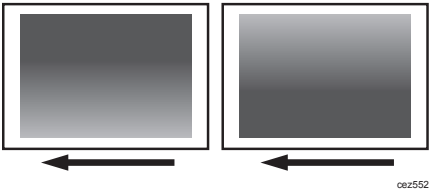
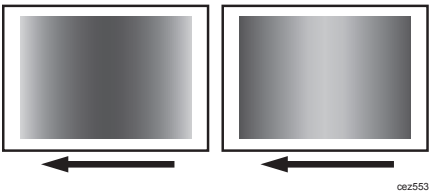
The density is uneven.

### Solution:

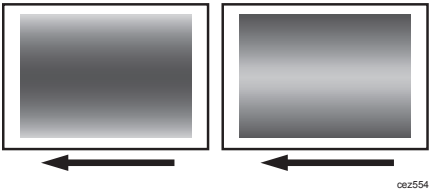
The solution depends on the type of unevenness.

Carry out the appropriate procedure from those in the following table:


#### (A) The density is uneven across the entire image.

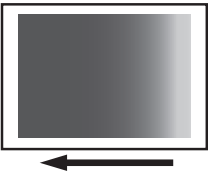
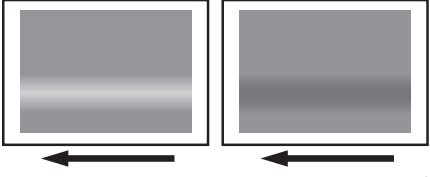
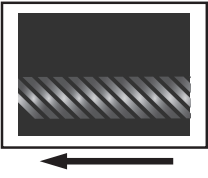
	Affected area	Solution
The density from top to bottom is uneven.		<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, see page 40 "Uneven Density from Top to Bottom".</li> </ol>
The sides are fainter or denser.		<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, contact your service representative.</li> </ol>



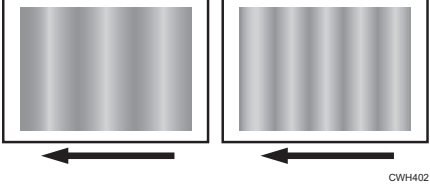
Affected area		Solution
<p>The top and bottom are fainter or denser.</p>	 <p>caz554</p>	<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, contact your service representative.</li> </ol>

**(B) The density is uneven in a part of the image.**

Affected area		Solution
<p>The leading edge is fainter.</p>	 <p>caz555</p>	<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, see page 41 "Fainter Leading Edge".</li> </ol>

	Affected area	Solution
The trailing edge is fainter.	 <p style="text-align: right; font-size: small;">ce2556</p>	<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, see page 42 "Fainter Trailing Edge".</li> </ol>
The center is fainter or denser	 <p style="text-align: right; font-size: small;">ce2558</p>	<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, contact your service representative.</li> </ol>
Wavy unevenness	 <p style="text-align: right; font-size: small;">ce2559</p>	<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, contact your service representative.</li> </ol>

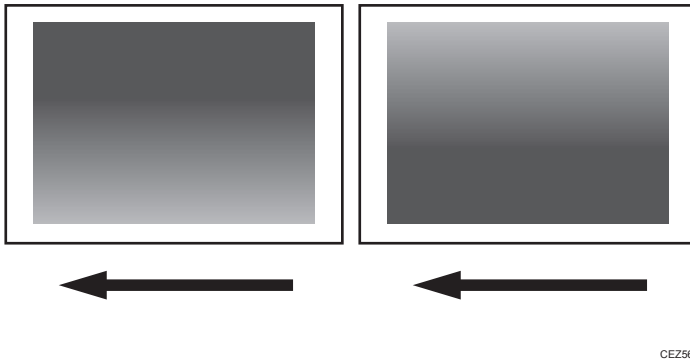
**(C) The density is uneven in the direction perpendicular to the paper feed direction at regular intervals.**

	Affected area	Solution
Periodic vertical density fluctuation		<ol style="list-style-type: none"> <li>1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].</li> <li>2. If the problem persists, see page 45 "Periodic Density Fluctuation".</li> </ol>

3

### Uneven Density from Top to Bottom

The density is uneven from top to bottom.



**★ Important**

- You can adjust the density of halftone images, but not that of solid fills.

**Cause:**

This may occur at high temperature or humidity.

**Solution:**

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Density Difference Across Feed Direction].

Decreasing the value makes the area above the center denser and that below fainter.

Increasing the value makes the area above the center fainter and that below denser.

2. Turn off the power and the main power switch, and then turn the main power switch back on.

The setting specified in step 1 will be in effect.

3. Print the image. Is the problem resolved?

Yes	Finished!
No	Replace the charger and photoconductor unit.

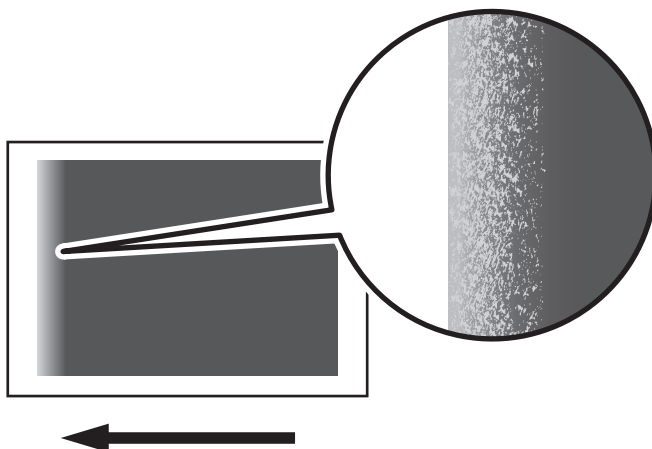
4. If unit replacement does not resolve the problem, contact your service representative.

**Note**

- For details about replacing the charger and photoconductor unit, see Replacement Guide.

**Fainter Leading Edge**

The leading edge is fainter.



CEZ562

**Cause:**

At low temperature or when using thin coated paper, this may occur if the paper transfer current is insufficient.

At high temperature, this may occur if the paper transfer current is excessive.

**★ Important**

- This solution only works when the thickness of the paper is equivalent to Paper Weight 4 or higher. Do not try this as a solution when using paper with a thickness equivalent to Paper Weight 3 or lower, as it may cause paper misfeeding.

**↓ Note**

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

**Solution:**

1. In [Advanced Settings] for the custom paper in use, make a note of the present value in [Paper Transfer Current: Lead Edge].
2. Increase the scaling factor in the above setting by 10 percentage points.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Increase the scaling factor by 10 percentage points.

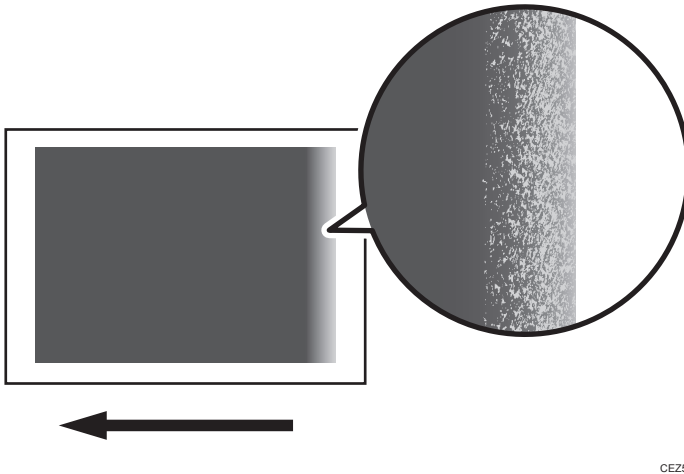
4. Repeat Step 3. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 1 and go to the next step.
5. Decrease the scaling factor in the above setting by 10 percentage points.
6. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Decrease the scaling factor by 10 percentage points.

7. Repeat Step 6. If the problem persists even though you have decreased the scaling factor by 50 percentage points, restore the value noted in Step 1 and contact your service representative.

**Fainter Trailing Edge**

The trailing edge is fainter.



CEZ563

### Cause:

This may occur because of insufficient or excessive paper transfer current when using paper weighing approximately  $160 \text{ g/m}^2$  (60 lb. Cover) or heavier at low temperature or humidity.

### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

### Solution:

- Measure in millimeters how far the fainter area extends from the trailing edge.
- Configure the following settings in [Advanced Settings] for the custom paper in use.  
In [Paper Transfer Current; Trail Edge Dist], enter the value you measured in Step 1 plus an additional 10 mm.
- In [Advanced Settings] for the custom paper in use, make a note of the present value in [Paper Transfer Current; Trail Edge].
- Increase the scaling factor in the above setting by 10 percentage points.
- Print the image. Is the problem resolved?

Yes	Finished!
No	Increase the scaling factor by 5 percentage points.

- Repeat Step 5. If the problem persists even though you have increased the scaling factor by 50 percentage points, restore the value noted in Step 3 and go to the next step.

7. Decrease the scaling factor in the above setting by 10 percentage points.
8. Print the image. Is the problem resolved?

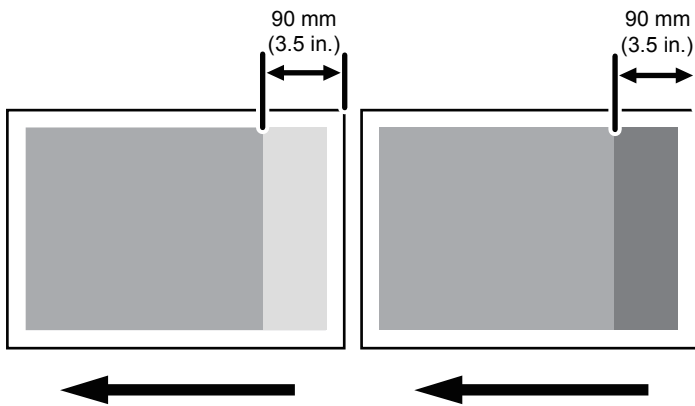
<b>Yes</b>	Finished!
<b>No</b>	Decrease the scaling factor by 5 percentage points.

9. Repeat Step 8. If the problem persists even though you have decreased the scaling factor by 50 percentage points, restore the value noted in Step 3 and contact your service representative.

3

### Uneven Density within 90 mm (3.5 in.) of the Trailing Edge

Printing in the area extending approximately 90 mm (3.5 inches) from the trailing edge is fainter or denser.



CEZ564

#### Cause:

This may occur if:

- Printing is done at low temperature or humidity
- Printing a single-dot halftone image

**Note**

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

**Solution:**

The solution depends on whether the area within 90 mm (3.5 inches) of the trailing edge is denser or fainter.

**<If the area within 90 mm (3.5 inches) of the trailing edge is fainter>**

1. In [Advanced Settings] for the custom paper in use, check the present value in [Transfer Timing Roller Feed Speed Adj]. Is it higher than +1.0%?

<b>Yes</b>	Contact your service representative.
<b>No</b>	Go to the next step.

2. Increase the value in [Transfer Timing Roller Feed Speed Adj] by 0.1 percentage point.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 2 and 3. If the problem persists even though you have increased the value to +1.0%, contact your service representative.

**<If the area within 90 mm (3.5 inches) of the trailing edge is denser>**

1. In [Advanced Settings] for the custom paper in use, check the present value in [Transfer Timing Roller Feed Speed Adj]. Is it lower than -1.0%?

<b>Yes</b>	Contact your service representative.
<b>No</b>	Go to the next step.

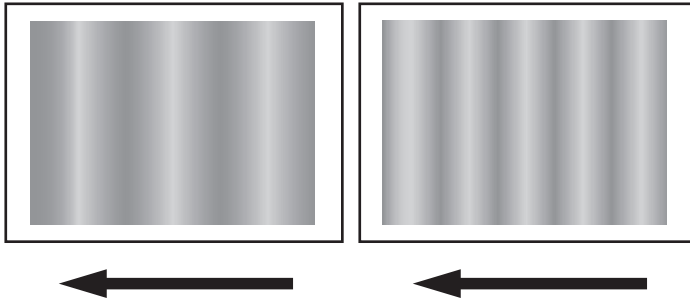
2. Decrease the value in [Transfer Timing Roller Feed Speed Adj] by 0.1 percentage point.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 2 and 3. If the problem persists even though you have decreased the value to -1.0%, contact your service representative.

**Periodic Density Fluctuation**

The vertical density fluctuates periodically.





CWH407

**Solution:**

Before you perform the solution procedure, make sure that the environmental conditions where you are using the machine meet those recommended for use. For details on the environmental conditions for use, see "Where to Put Your Machine", About This Machine.

The solution depends on the interval.

**Note**

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

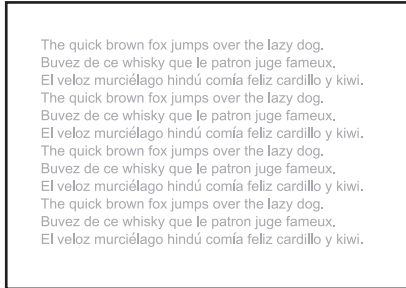
Interval	Solution
Approximately 12-18 mm (0.5-0.7 inches)	Contact your service representative.
Approximately 60 mm (2.4 inches)	In [Advanced Settings] for the custom paper in use, adjust the value in [Transfer Timing Roller Feed Speed Adj] according to the type and thickness of paper in use. If the problem persists, contact your service representative.
Approximately 95 mm (3.7 inches)	Contact your service representative.
Approximately 314 mm (12.4 inches)	Replace the photoconductor unit. If the problem persists, contact your service representative.

**Note**

- For details about replacing the photoconductor unit, see Replacement Guide.

## Entire Image Faint

The entire image is fainter than normal.



CEZ585

3

### Cause:

This may occur if:

- Continuously printing an image that consumes little toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

### Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Increase the value by 1 in [Adjust Maximum Image Density].

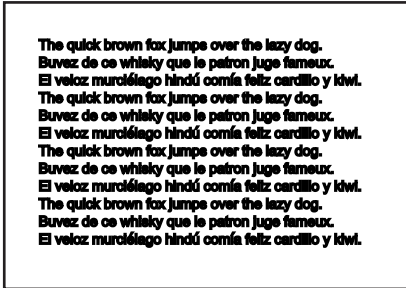
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, contact your service representative.

## Color Is Too Dense

The entire image is denser than normal.



CEZ568

### Cause:

This may occur if:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

### Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

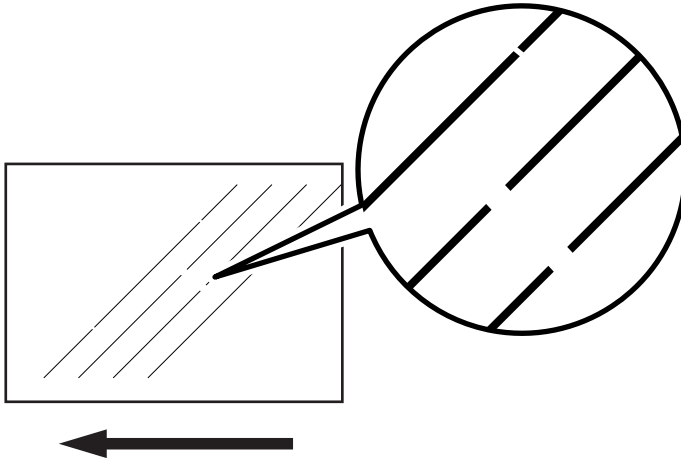
Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in [Adjust Maximum Image Density].
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, contact your service representative.

## Broken Thin Lines

Thin lines (1 dot lines in 1200 dpi images) break.



CEZ569

3

### Cause:

Oblique (approximately 45°) thin lines or thin lines printed in faint colors are likely to contain breaks.

### Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

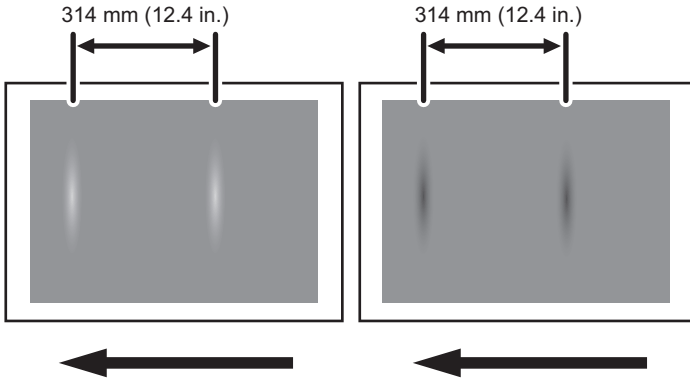
<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

3. Increase the value by 1 in [Adjust Line Width].
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
5. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 3 to 5. If the problem persists even though you have increased the value to 5, contact your service representative.

## Blurred Images

Lens-shaped blurred images appear at 314 mm (12.4 inches) intervals.



CZC310

### Cause:

If the machine is left unattended for a long period in an environment where temperature and humidity are high, corona products on the drum absorb moisture to prevent a buildup or removal of static electricity on the drum.

### Solution:

1. In the [Machine: Maintenance] group on the [Adjustment Settings for Skilled Operators] menu, execute [Execute Photoconductor Refreshing].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

## Dropouts (Character Voids)

Dropouts (character voids) occur when characters or lines are printed.



CNT003

### Cause:

This may occur if:

- Continuously printing an image that consumes much toner
- The machine has not been used for a long time
- The machine is located somewhere very humid and has not been used for a while

### Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].

2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Decrease the value by 1 in [Adjust Maximum Image Density].

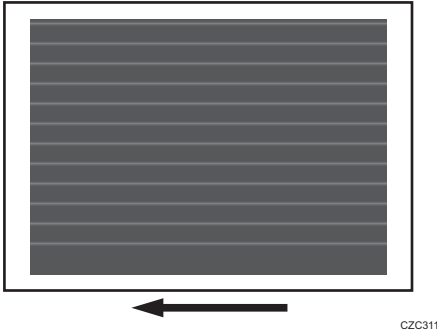
4. Select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].

5. Print the image. Is the problem resolved?

Yes	Finished!
No	Repeat Steps 3 to 5. If the problem persists even though you have decreased the value to -5, contact your service representative.

## Afterimages

An afterimage of the image printed just before the intended image appears.



CZC311

### Cause:

This may occur when the image record on the intermediate transfer belt has largely changed. For example, this may occur when a solid-fill image is printed after vertical lines are printed continuously. A potential difference occurs between an image portion and non-image portion on the intermediate transfer belt as a result of continuous printing of vertical lines, causing the vertical lines to become obvious on the next solid-fill image.

This may occur if:

- Printing is done at high temperature or humidity
- Printing on thin coated paper (Paper Weight 3 or lower) or on OHP sheet
- Printing an extremely different type of image

### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

### Solution:

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Image Density] and execute [Image Density Adjustment: Manual Execute].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

### 3. In [Advanced Settings] for the custom paper in use, perform adjustment as follows:

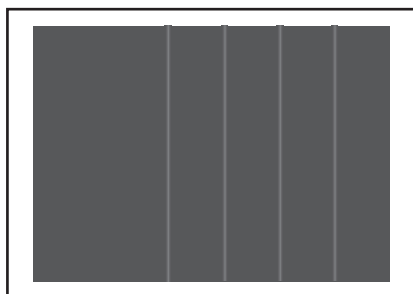
- Side 1: Decrease the absolute value by 10 points in [Paper Transfer Current Setting: Side 1].
- Side 2: Decrease the absolute value by 10 points in [Paper Transfer Current Setting: Side 2].

### 4. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 3 and 4. If the problem persists even though you have decreased the value to -100, contact your service representative.

## White Streaks

White streaks perpendicular to the paper feed direction appear.



CZC312

### Cause:

A separating discharge occurs between the intermediate transfer belt and paper edge during paper transfer, which causes a streak-like electric charge on the intermediate transfer belt. This residual electric charge may cause white streaks during image transfer.

This may occur at low temperature or humidity.

### ↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

### Solution:

1. In [Advanced Settings] for the custom paper in use, select [Paper Transfer Current; Trail Edge Dist].



**2. Check the present value. Is it the upper limit?**

<b>Yes</b>	Go to Step 5.
<b>No</b>	Go to the next step.

**3. Increase the value by 5 mm in [Paper Transfer Current; Trail Edge Dist].**

**4. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

**5. In [Advanced Settings] for the custom paper in use, select [Paper Transfer Current; Trail Edge].**

**6. Check the present value. Is it the lower limit?**

<b>Yes</b>	Reset the value back to the factory-default settings and perform steps from Step 1 again.
<b>No</b>	Decrease the value by 20% in [Paper Transfer Current; Trail Edge].

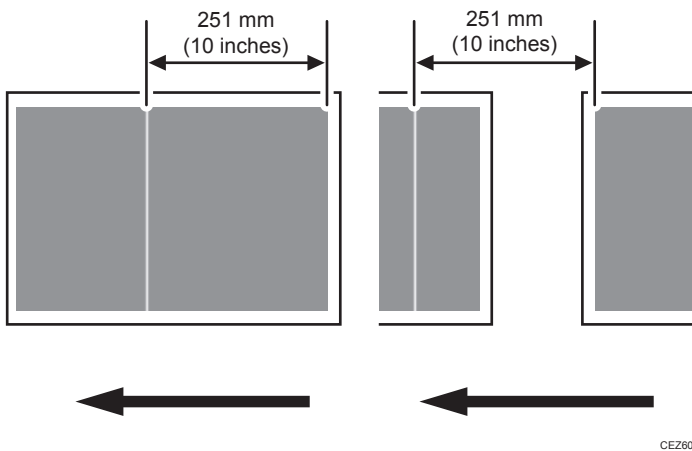
**7. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Repeat Steps 5 to 7. If the problem persists even though you have decreased the value to the lower limit, contact your service representative.

# Gloss Problems

## Vertical Glossy Lines

Glossy lines perpendicular to the paper feed direction appear.



3

### Cause:

Glossy lines perpendicular to the paper feed direction may appear 251 mm (10 inches) from the boundary of the margin and the solid image (in the direction opposite to the paper feed direction).

### Solution:

1. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?

Yes	Go to the next step.
No	You cannot resolve the problem with this procedure. Contact your service representative.

2. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and decrease the value by 5 °C.

**3. Print the image on twenty sheets. Do glossy lines appear on the tenth sheet and later sheets?**

<b>Yes</b>	Repeat Step 2 and 3. If the problem persists even though the setting has reached its minimum value, contact your service representative. If the problem is resolved, go to the next step.
<b>No</b>	Go to the next step.

**4. Check the toner fusion. Is it satisfactory?**

<b>Yes</b>	Finished!
<b>No</b>	Restore the previous setting and contact your service representative.

---

### **Insufficient Gloss**

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The image is not glossy enough.

**Solution:**

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If the gloss of the image is not glossy enough, carry out the procedures in Procedure 1, "Changing the fusing temperature" and Procedure 2, "Changing the process speed" of page 57 "Insufficient Toner Fusing".

# Fusing Problems

## Insufficient Toner Fusing

This section explains how to resolve the problem of insufficient toner fusing on printed copies.

### ↓ Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.
- Changing the fusing temperature or changing the process speed may produce one or more of the following side effects:
  - Paper curling
  - Paper misfeeding
  - Blisters
  - Glossy lines
  - Change of gloss
- If one or more of the above side effects occurs, adjust the fusing temperature and process speed by decreasing the fusing temperature and increasing the process speed.

3

### Solution:

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

#### Procedure 1: Changing the fusing temperature

1. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and increase the temperature by 5 °C.
2. Print the image and check toner fusion. Is the problem resolved?

Yes	Finished!
No	Increase the temperature an additional 5 °C.

3. Repeat Step 2 until the temperature reaches 185 °C. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

**4. Check the type of your machine. Is it Pro 8100S?**

<b>Yes</b>	No further improvement is likely. Contact your service representative.
<b>No</b>	Perform Procedure 2, "Changing the process speed".

**Procedure 2: Changing the process speed**

This procedure is available only for Pro 8120S and Pro 8110S.

This will slow down the printing to give the toner more time to fuse. However, because of this, throughput will be reduced.

Example when printing on A4/LT paper:

**<Pro 8120S>**

If the process speed is changed from [High] to [Middle]: 135 cpm → 110 cpm

If the process speed is changed from [Middle] to [Low]: 110 cpm → 95 cpm

**<Pro 8110S>**

If the process speed is changed from [High] to [Low]: 110 cpm → 95 cpm

Pro 8110S does not have the [Middle] setting.

- 1. In [Advanced Settings] for the custom paper in use, select [Process Speed Setting].**
- 2. Decrease the value by one level.**  
If the present value is [High], select [Middle]. If it is [Middle], select [Low].
- 3. Print the image and check toner fusion. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	If the problem persists, the machine may be faulty or the paper unsupported. Contact your service representative.

# 4. Troubleshooting Paper Delivery Problems

## Frequent Paper Misfeeds

Depending on the cause of the problem, do one of the following:

### **Coated or another type of unsupported paper is loaded in the machine's tray.**

Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray supporting the paper.

For details about the size and type of paper that can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

### **The side fences in the paper tray are too close together.**

If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

### **The side fences in the paper tray are too far apart.**

If the side fences are too far apart, paper misfeeds may occur due to wrong paper size detection.

Adjust the side fences to match the paper width.

For details about loading paper, see "Loading Paper ", About This Machine.

### **The paper size/orientation/type is not specified correctly.**

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings Reference.

### **Too many sheets of paper are loaded in the paper tray.**

When loading paper, do not exceed the limit.

For details about how many sheets can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

### **The edges of the sheets are rough.**

Turn the sheets the other way up or smooth the edges before loading.

**Sheets are curled or wavy.**

- Flatten curls and waviness before loading paper.
- Turn the sheets the other way up or smooth the edges before loading.
- Stacking too many sheets may cause the sheets on top to curl greatly. If this happens, reduce the number of stacked sheets.

**Sheets absorbed moisture and became limp.**

Sheets that will not be used for a long time should be protected from moisture by, for example, storing them in a sealed bag.

If the machine is plugged in, the heater inside the paper tray starts operating when the main power is off to prevent sheets from absorbing moisture.

4

**The paper feed sensor is stained with paper dust.**

Clean the part of the paper feed sensor where the paper misfeed is detected.

For details about cleaning the paper feed sensor, see page 85 "Cleaning the Paper Feed Path".

**The paper feed performance is less sufficient because the paper transport roller is soiled with toner.**

Clean the part of the paper transport roller where the paper misfeed is detected.

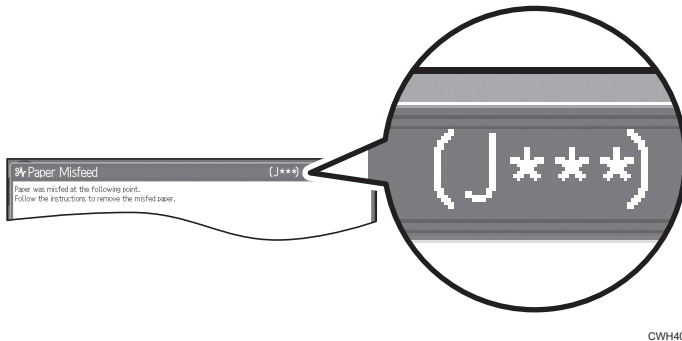
For details about cleaning the paper transport roller, see page 85 "Cleaning the Paper Feed Path".

# Messages Reporting Paper Misfeeds

Paper misfeeds are reported by messages prefixed with problem codes.

Resolve the problem according to the code.

This section only lists the codes for problems that can be resolved by the user. If a problem code not listed in this section appears, contact your service representative.



CWH406

4

## If (J049) Appears

### Cause:

Paper is skewed.

### Solution:

Depending on the cause of the problem, do one the following:

#### **The side fences in the paper tray are too far apart.**

If the side fences are too far apart, the paper may be skewed.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper.

To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

#### **The paper size/orientation/type is not specified correctly.**

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings Reference.



### Colored paper or transparencies are loaded in the paper tray.

Paper edges may not have been detected correctly.

Adjust the color paper edge detection.

1. In [Advanced Settings] for the custom paper in use, select [Color Paper Edge Detection Adjustment] and make a note of the present value.
2. Increase the value in [Color Paper Edge Detection Adjustment].
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.

4. Decrease the value in [Color Paper Edge Detection Adjustment].
5. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].
7. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

### An envelope is used.

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable the skew detection function.

#### <If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].

#### <If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

### **The skew detection level is too high.**

The skew detection level may be too high.

Decrease the skew detection level.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Skew Detection Level].

Increase the value to reduce the detection level.

2. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, go to the next step.

3. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

#### **Note**

- If the skew detection level is reduced or the skew detection function is disabled, no misfeed report will be displayed. However, this may result in paper skew feeding. If you do not want this result, contact your service representative.
- If the machine wrongly detects skew, see page 68 "Wrong Detection of Skew".

## **If (J050) Appears**

### **Cause:**

Sheets cannot be positioned properly by image position adjustment.

### **Solution:**

Depending on the cause of the problem, do one of the following:

#### **The side fences in the paper tray are too far apart.**

If the side fences are too far apart, the paper may shift.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper.

To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

**The paper size/orientation/type is not specified correctly.**

In tray paper settings, specify the size, orientation, and type of the paper in use.

For details about tray paper settings, see "Changing Tray Paper Settings", Paper Settings Reference.

**Colored paper or transparencies are loaded in the paper tray.**

Paper edges may not have been detected correctly.

Adjust the color paper edge detection.

1. In [Advanced Settings] for the custom paper in use, select [Color Paper Edge Detection Adjustment] and make a note of the present value.
2. Increase the value in [Color Paper Edge Detection Adjustment].
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep increasing the value until the problem is resolved. If the problem persists even though the setting has reached its maximum value, restore the value noted in step 1 and go to the next step.

4. Decrease the value in [Color Paper Edge Detection Adjustment].
5. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep decreasing the value until the problem is resolved. If the problem persists even though the setting has reached its minimum value, restore the value noted in step 1 and go to the next step.

6. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].
7. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

**Sheets of mixed type, thickness, or color are loaded in the paper tray.**

Load identical sheets in the paper tray.

## If (J080) Appears

### Cause:

The paper feed is delayed.

This may occur if slippery paper with a low paper-to-paper friction coefficient is used.

### Solution:

1. In [Advanced Settings] for the custom paper in use, set [Regist Jam Detection with Feed Dir] to [Off].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

### Note

- When you set [Regist Jam Detection with Feed Dir] to [Off], the printed image may become misaligned at the leading edge.

## If (J099) Appears

### Cause:

Double feeding has occurred.

### Solution:

Depending on the cause of the problem, do one of the following:

#### Coated or another type of unsupported paper is loaded in the machine's tray.

Load paper not supported by the machine's paper tray (Trays 1-3) in the wide LCT or another paper tray that supports the paper.

For details about the size and type of paper that can be loaded in the paper trays, see "Recommended Paper Sizes and Types", About This Machine.

#### Sheets are stuck to each other.

Fan the paper before loading it to loosen the sheets.

For details about fanning the paper, see "Fanning the Paper", About This Machine.

**The edges of the sheets are rough.**

Turn the sheets the other way up or smooth the edges before loading the paper.

# Paper Skew

Depending on the cause of the problem, do one of the following:

## **The side fences in the paper tray are too far apart.**

If the side fences are too far apart, the paper may be skewed.

Adjust the side fences to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

## **A scrap of paper or some other small fragment is jammed in the paper feed path.**

Remove the fragment.

For details about cleaning the paper feed path, see page 85 "Cleaning the Paper Feed Path".

## **The correct degree of paper arching has not been specified.**

Adjust the degree of paper arching at the registration gate.

### **<If using paper of Paper Weight 1 to 4>**

1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, change the value in [Adjust Registration Paper Buckle].

### **<If using paper of Paper Weight 5 to 7>**

1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, change the value in [Adjust Registration Paper Buckle (Thick Paper)].

Increase the value for the paper tray in use, and then print the image. If the problem persists even though the setting has reached its maximum value, try decreasing the setting.

If the problem persists even though you have tried the complete range of settings from minimum to maximum, contact your service representative.

## **The skew detection level is too low.**

Increase the skew detection level.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Skew Detection Level] and reduce the value.

Reduce the value to increase the detection level.

This will allow the machine to report a paper misfeed and stop printing even for a slight skew.

# Wrong Detection of Skew

Depending on the cause of the problem, do one of the following:

## **An envelope is used.**

If an envelope flap at the trailing edge is oblique, a skew may be wrongly detected when the envelope is transferred with its flap open.

Disable skew detection function.

### **<If custom paper is used>**

1. In [Advanced Settings] for the custom paper in use, set [Skew Detection] to [Off].

### **<If custom paper is not used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Skew Detection] to [Off].

#### **Note**

- Disabling the skew detection function will allow skewed printing. If this is not acceptable, contact your service representative.

# Double Feeding

Depending on the cause of the problem, do one of the following:

## Is the paper feed roller covered with paper dust?

Paper dust may decrease the traction of the paper feed roller and result in double feeding due to paper slippage or insufficient separation.

Cleaning the paper feed roller will restore traction and so prevent double feeding.

For details about cleaning the paper feed roller, see page 85 "Cleaning the Paper Feed Path".

For details about removing the paper feed roller, see the Replacement Guide.

## Have you ruffled the paper sufficiently?

Double feeding may result if the paper is not ruffled properly.

Remove the paper, ruffle it, and reload it.

For details about ruffling the paper, see "Fanning the Paper", About This Machine.

## Is the Pickup Assist setting enabled?

If the Pickup Assist function operates too much, it may cause double feeding with coated paper.

By disabling the Pickup Assist setting, you can prevent double feeding.

### <If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, set [Pickup Assist Setting] to [Off].

### <If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Pickup Assist Setting] to [Off].

## Special or coated paper is used.

- Is the airflow strong enough?

The factory-set airflow of the wide LCT may not be strong enough to separate the sheets. Increase the airflow.

### <If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, increase the value in [Adjust Wide LCT Fan Level].

### <If custom paper is not used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Adjust Wide LCT Fan Level].

- Is the tab sheet holder attached?

By attaching the tab sheet holder, you can prevent air from leaking at the trailing edge of the paper and improve separation.



For details about attaching the tab sheet holder, see "About This Machine" supplied with the machine.

# Wrong Detection of Double Feeding

Depending on the cause of the problem, do one the following:

## **Paper with high paper-to-paper adhesion is used.**

Paper with high paper-to-paper adhesion may be wrongly detected as double feeding.

Disable the double feeding detection function.

### **<If custom paper is used>**

1. In [Advanced Settings] for the custom paper in use, set [Double Feed Detection] to [Off].

### **<If custom paper is not used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Double Feed Detection] to [Off].

## **An envelope is being used.**

The seams of envelopes may cause double feeds to be erroneously detected.

Disable the double feed detection.

### **<If custom paper is used>**

1. In [Advanced Settings] for the custom paper in use, set [Double Feed Detection] to [Off].

### **<If custom paper is not used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Double Feed Detection] to [Off].

## **The double feed detection sensor is soiled.**

If the double feed detection sensor is soiled with paper dust or other fragments, it may wrongly detect double feeding.

Clean the double feed detection sensor.

For details about cleaning the double feed detection sensor, see page 85 "Cleaning the Paper Feed Path".

### **Note**

- Disabling double feed detection may reduce print image quality or cause blank sheets to be delivered.

# Paper Misfeeding

Depending on the cause of the problem, do one of the following:

## **Have you ruffled the paper properly?**

Not ruffling the paper properly may cause paper misfeeding.

Remove the paper, ruffle it, and reload it.

For details about ruffling paper, see "Fanning the Paper", About This Machine.

## **The side fences in the paper tray are too close together.**

If the distance between the side fences is less than the paper width, it may interfere with paper transfer and so cause paper misfeeds.

Adjust the paper guides to match the paper width.

When you close the paper tray, the side fences may become misaligned due to the weight of the paper. To prevent this, close the paper tray slowly.

For details about loading paper, see "Loading Paper", About This Machine.

## **Special or coated paper is used.**

- Is the airflow powerful enough?

The factory-set airflow of the wide LCT may not be strong enough to separate the sheets. Increase the airflow.

### **<If custom paper is used>**

1. In [Advanced Settings] for the custom paper in use, increase the value in [Adjust Wide LCT Fan Level].

### **<If custom paper is not used>**

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, increase the value in [Adjust Wide LCT Fan Level].

- Is the tab sheet holder attached?

By attaching the tab sheet holder, you can prevent air from escaping at the trailing edge of the paper and so improve separation.

For details about attaching the tab sheet holder, see "About This Machine" supplied with the machine.

- Is the paper feed roller covered with paper dust?

Paper dust on the surface of coated paper may reduce the traction of the paper feed roller and cause paper misfeeding due to paper slippage or insufficient separation.

By cleaning the paper feed roller, the frictional force can be restored so that paper misfeeding will not occur.

For details about cleaning the paper feed roller of the wide LCT, see page 85 "Cleaning the Paper Feed Path".

### **An envelope is used.**

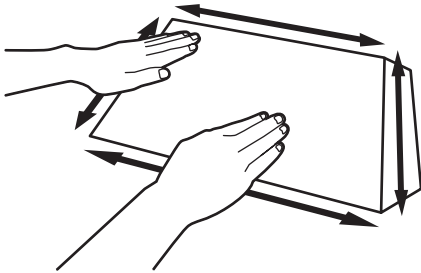
Depending on the type of envelope, air trapped inside may be squeezed out when the paper feed roller picks up the envelope and cause slippage leading to a misfeed.

- Is the wide LCT fan disabled?

In [Advanced Settings] for the custom paper in use, set [Wide LCT Fan Setting] to [Off].

- Have you flattened the envelope?

Flatten the envelope and all its edges to eliminate air before loading. If the envelope is curled, decurl it before loading.



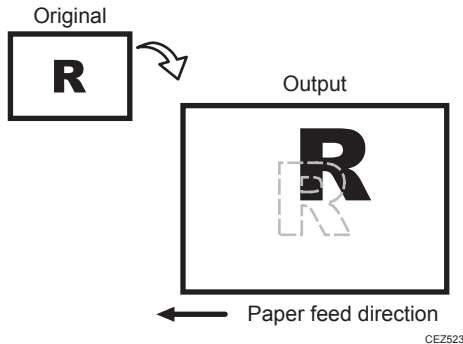
CEZ500

# Paper Feed Problems Affecting Image Quality

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## The Image Is Positioned Incorrectly

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4

### Cause:

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Depending on the paper thickness, floppiness, edge roughness, and curl, the image may become mispositioned.

### Solution:

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Adjust the image position.

<If custom paper is used>

1. In [Advanced Settings] for the custom paper in use, adjust the image position.

- Side 1
  - To adjust the position horizontally, change the value in [Adj Image Position of Side1 With Feed].
  - To adjust the position vertically, change the value in [Adj Image Position of Side1 Across Feed].
- Side 2
  - To adjust the position horizontally, change the value in [Adj Image Position of Side2 With Feed].
  - To adjust the position vertically, change the value in [Adj Image Position of Side2 Across Feed].

**<If custom paper is not used>****1. In the [Machine: Image Position] group on the [Adjustment Settings for Skilled Operators] menu, adjust the image position.**

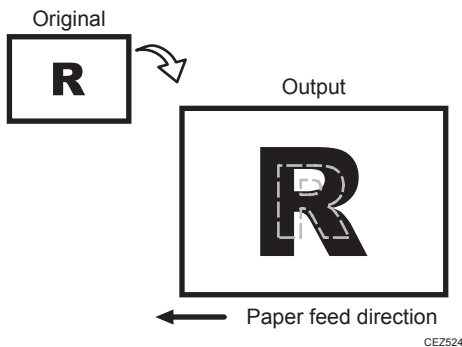
- To adjust the position horizontally, change the value in [Adjust Image Position With Feed Direction].
- To adjust the position vertically, change the value in [Adjust Image Position Across Feed Direction].

If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your service representative.

**Note**

- For details about specifying settings in the [Adjustment Settings for Skilled Operators] menu, see the Adjustment Item Menu Guide.

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**Image Scaling Error on the Side 1 of Paper****Cause:**

An image scaling error may occur because of expansion or contraction of the paper.

**Solution:**

Adjust the image scaling.

**1. In [Advanced Settings] for the custom paper in use, adjust the image scaling.**

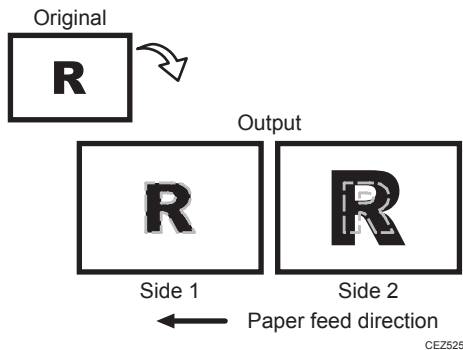
- To adjust the horizontal scaling, change the value in [Adj Magnification of Side1 Across Feed].
- To adjust the vertical scaling, change the value in [Adj Magnification of Side1 With Feed].

Press [+] to increase the scaling and [-] to decrease it.

**2. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	If the problem persists even though you have adjusted the setting to its maximum and minimum values, contact your service representative.

**Image Scaling Error on the Side 2 of Paper**



**Cause:**

An image scaling error on the side 2 of the paper may occur because the paper expands or contracts after the image on the side 1 of the paper has been fused.

**Solution:**

Adjust the scaling for the side 2 of the paper and minimize the difference in print size between the side 1 and the side 2.

**1. In [Advanced Settings] for the custom paper in use, adjust the image scaling.**

- To adjust the horizontal scaling, change the value in [Adj Magnification of Side2 Across Feed].
- To adjust the vertical scaling, change the value in [Adj Magnification of Side2 With Feed].

Press [+] to increase and [-] to decrease the scaling.

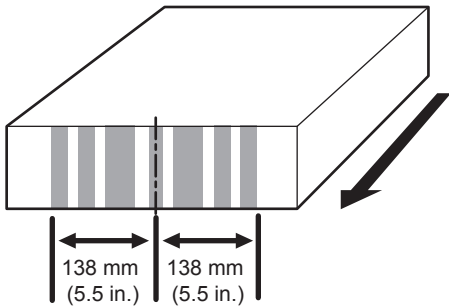
**2. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

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## Paper Edges Are Soiled (1)

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CNT011

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### Cause:

The exit rollers in the drawer are soiled.

### Solution:

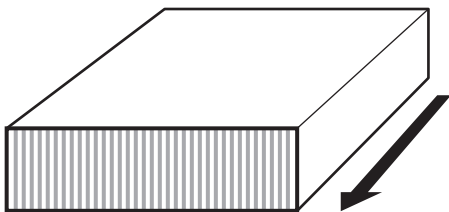
Clean the exit rollers in the drawer.

For details about cleaning the exit rollers, see page 22 "Two 14-mm Wide Streaks".

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## Paper Edges Are Soiled (2)

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CNT012

### Cause:

The antistatic brushes in the exit transport and invert transport of the drawer are soiled or the anti-static brushes in Finisher SR5050/SR5060 are soiled.



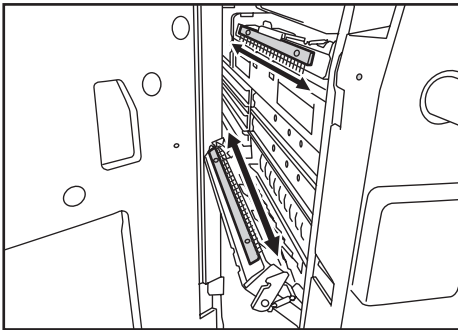
**Solution:**

Carry out the following sequence of procedures. Terminate the sequence as soon as the problem is resolved.

**Procedure 1: Cleaning the antistatic brushes in the exit transport and inverter transport of the drawer**

Clean the antistatic brushes in the exit transport and inverter transport of the drawer with a blower brush.

- Antistatic brushes in the exit transport and inverter transport



CZC306

**Procedure 2: Disabling the decurl setting and delivering sheets with their printed side facing down**

**Note**

- Apply this procedure only when all of the following conditions are met.
  - A back-curl is required to flatten curls with the decurler unit.
  - Sheets are delivered with their printed side facing up in the post-processing machine.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Paper Curl] and check the present degree of decurling (Off, Weak, or Strong).

2. Is it "Adjust ∩ Curl: Weak" or "Adjust ∩ Curl: Strong"?

<b>Yes</b>	Go to the next step.
<b>No</b>	Contact your service representative.

3. Is this setting essential?

<b>Yes</b>	Go to the next step.
<b>No</b>	Set [Adjust Paper Curl] to "Adjust ∩ Curl: Off" (set it back to the default value).

4. Are the sheets delivered with their printed side facing up.

<b>Yes</b>	Go to the next step.
<b>No</b>	Contact your service representative.

5. Is this setting essential?

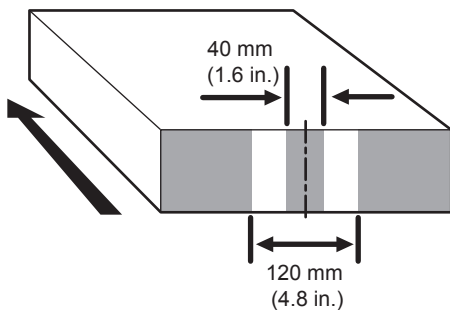
<b>Yes</b>	Contact your service representative.
<b>No</b>	Change the setting so that the sheets are delivered with their printed side facing down.

6. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

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### Paper Edges Are Soiled (3)



CNT014

#### Cause:

The paper feed speed of the decurler unit is too high.

#### Note

- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.
- Decreasing the paper feed speed of the decurler unit may result in creases, scratches, or paper jams if thin paper is used.

#### Solution:

You can lessen the problem by decreasing the paper feed speed of the decurler unit.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].
2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Off", reduce the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
  - If the degree of decurling is set to "Weak", reduce the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
  - If the degree of decurling is set to "Strong", reduce the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, contact your service representative.

## Scratches, Streaks, or Vertical Creases Appear on the Image

### Cause:

The paper feed speed of the exit motor, switchback entrance, or switchback exit is too high or too low.

### Solution:

#### <If scratches or streaks appear on the side 2 of the paper>

You can lessen the problem by decreasing the paper feed speed.

1. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed for delivery. Depending on the type of printing, specify one of the following:
  - For one-sided printing, reduce the value in [Exit Motor Feed Speed Adjustment] by 0.1%.
  - For duplex printing, reduce the value in [Switchback Entrance Feed Speed Adj] by 0.1%.
  - For one-sided printing (delivery of inverted paper), reduce the value in [Switchback Exit Feed Speed Adj] by 0.1%.
2. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep decreasing the value by 0.1% until the problem is resolved. If the problem persists even though you have decreased the value by 1.0%, contact your service representative.

### <If scratches or streaks appear on the side 1 of the paper>

You can lessen the problem by increasing the paper feed speed.

1. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed for delivery.

Depending on the type of printing, specify one of the following:

- For one-sided printing, increase the value in [Exit Motor Feed Speed Adjustment] by 0.1%.
  - For duplex printing, increase the value in [Switchback Entrance Feed Speed Adj] by 0.1%.
  - For one-sided printing (delivery of inverted paper), increase the value in [Switchback Exit Feed Speed Adj] by 0.1%.
2. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep increasing the value by 0.1% until the problem is resolved. If the problem persists even though you have increased the value by 1.0%, contact your service representative.

## Decurling Results in Scratches, Streaks, or Creases

### Cause:

The paper feed speed of the decurler unit is too high or too low.

### Solution:

#### <If scratches or streaks appear on the side 2 of the paper or continuous noise results>

You can lessen the problem by decreasing the paper feed speed of the decurler unit.

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].

2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Off", reduce the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
  - If the degree of decurling is set to "Weak", reduce the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
  - If the degree of decurling is set to "Strong", reduce the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep decreasing the value by 0.5% until the problem is resolved. If the problem persists even though the setting has reached its minimum value, contact your service representative.

**<If scratches, streaks, or creases appear on the side 1 of the paper>**

You can lessen the problem by increasing the paper feed speed of the decurler unit.

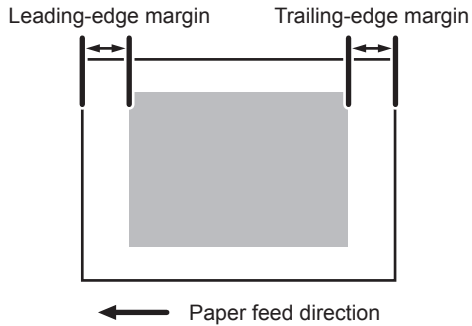
1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, check the present degree of decurling (Off, Weak, or Strong) in [Adjust Paper Curl].
2. In [Advanced Settings] for the custom paper in use, adjust the paper feed speed of the decurler unit.
  - If the degree of decurling is set to "Off", increase the value in [Decurler Feed Speed Adj: Curl Adj Off] by 0.5%.
  - If the degree of decurling is set to "Weak", increase the value in [Decurler Feed Speed Adj: Curl Adj Weak] by 0.5%.
  - If the degree of decurling is set to "Strong", increase the value in [Decurler Feed Speed Adj: Curl Adj Strg] by 0.5%.
3. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Keep increasing the value by 0.5% until the problem is resolved. If the problem persists even though the value has reached its maximum value, contact your service representative.

## The Leading/Trailing Edge Margin Is Long

### Cause:

In some custom paper presets, the leading/trailing edge margins are wide enough to prevent paper jams.



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### Solution:

Adjust the leading/trailing edge margins.

1. In [Advanced Settings] for the custom paper in use, reduce the value by 0.5 mm in [Adjust Erase Margin of Leading Edge].
2. Reduce the value by 0.5 mm in [Adjust Erase Margin of Trailing Edge].
3. Print the image. Is the problem resolved?

Yes	Finished!
No	If this results in a paper jam during duplex printing, restore the previous setting.

### Note

- The adjusted margin cannot be applied to masked images that are solid-filled or contain ruled lines at the leading/trailing edges.
- Reducing the leading/trailing edge margin may result in a paper jam on the fusing belt stripper plate.

## Curling

To eliminate curling without using the decurler unit, lower the heat roller temperature.

Lowering the temperature may result in:

- Unsatisfactory fusing
  - Reduced glossiness
  - Smearred for halftone images on uncoated paper
1. In [Advanced Settings] for the custom paper in use, select [Fusing Heat Roller Temperature Adj] and reduce the value by 5 °C.
  2. Print a full-page solid-fill image. Is the problem resolved?

Yes	Finished!
No	Further reduce the value by 5 °C until the problem is resolved. If the problem persists, contact your service representative.

4

**Note**

- To use the decurler unit, specify [Adjust Paper Curl] in the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu.

# Cleaning the Paper Feed Path

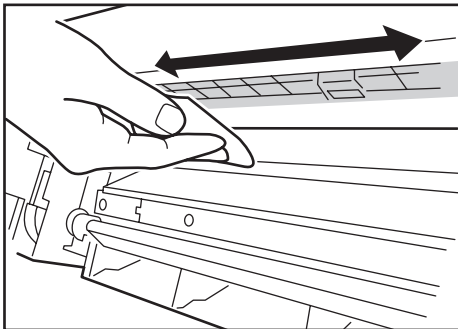
Paper dust sticking to the paper transfer guide board, roller, paper feed roller, or sensor may cause white spots, paper jam, or double feeding. Clean the paper feed path from the paper tray to the paper exit in the drawer.

## ★ Important

- Turn off the main power before performing the operations described in this manual. See "Turning Off/On the Power", Replacement Guide.

### Guide Board

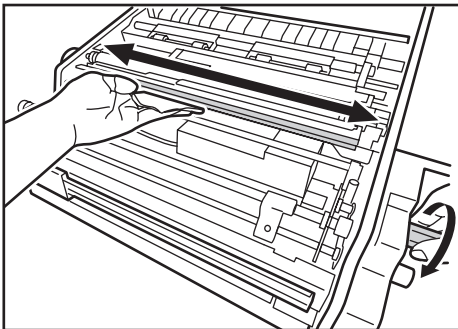
Wipe the guide board with a well-wrung-out damp cloth. To clean the innermost recesses, use a cloth that is as large as your palm.



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### Roller

Wipe the roller with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.

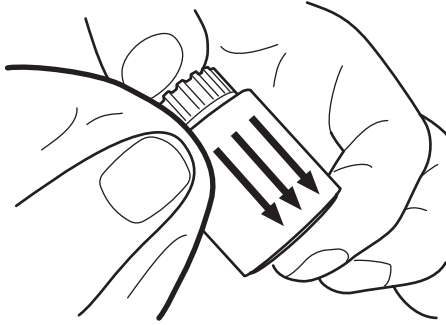


CZC349

### Paper Feed Roller

Wipe the entire surface of the paper feed roller lengthwise with a well-wrung-out damp cloth, and then wipe with a dry, unused, lint-free cloth until no moisture remains.



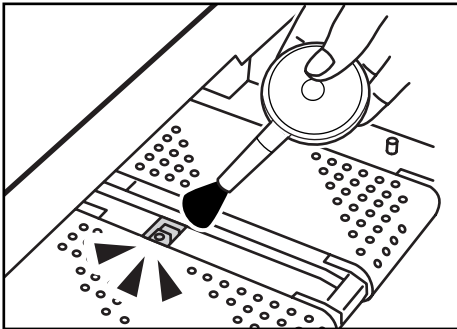


CEZ306

### Sensor

Remove dust with a blower brush.

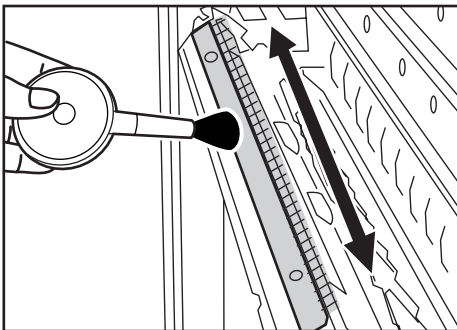
4



CZC347

### Antistatic Brush

Remove dust with a blower brush.



CZC351

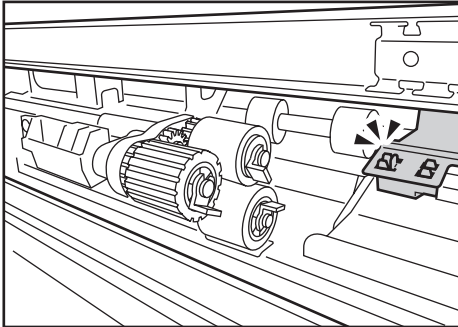
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## Cleaning Paper Trays 1-3

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1. Remove the paper tray.

2. Clean the sensor.



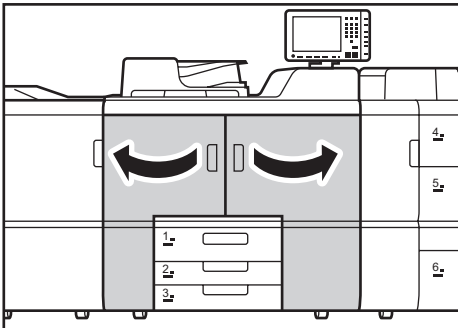
CZC316

**Note**

- For details about detaching and reattaching the parts, see the Replacement Guide.

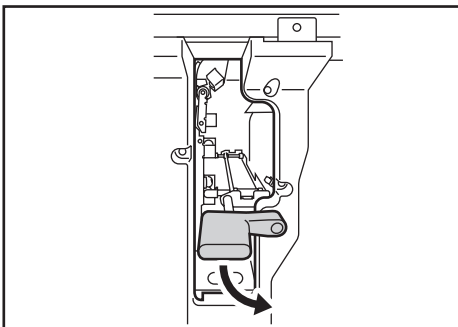
## Cleaning the Paper Feed Path for Paper Trays 1-3

1. Open the front covers.



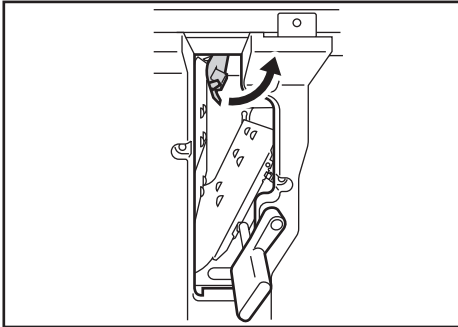
CZC001

2. Pull down the lever A1.



CZC317

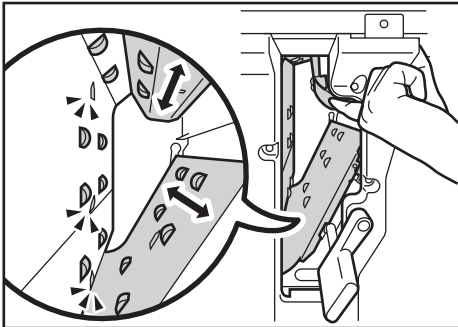
**3. Pull up the plate.**



CZC318

**4**

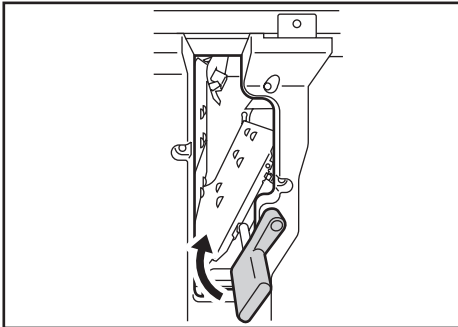
**4. Clean the rollers, sensors, and guide boards.**



CZC319

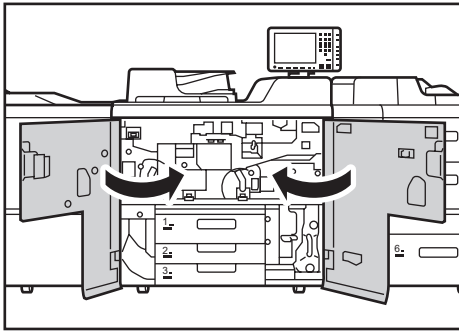
**5. Pull down the plate.**

**6. Pull up the lever A1.**



CZC320

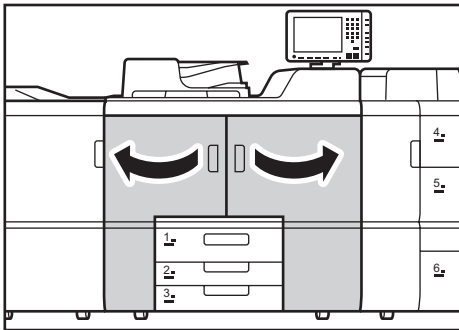
7. Close the front covers.



CZC006

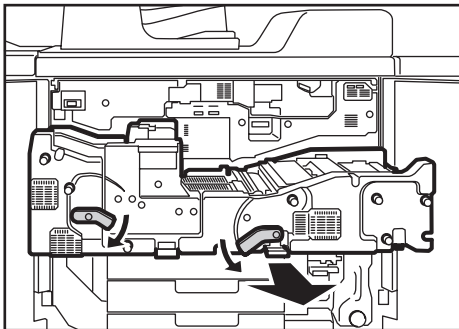
Cleaning the Paper Feed Path in the Drawer

1. Open the front covers.



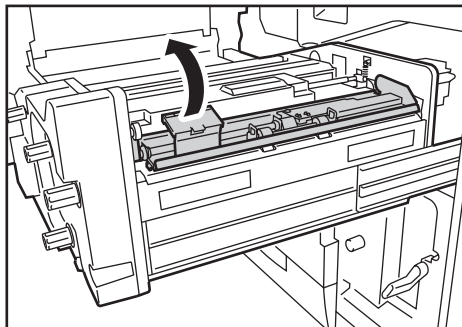
CZC001

2. Pull down the levers C1 and C2, and then pull the drawer out completely until it stops.



CZC300

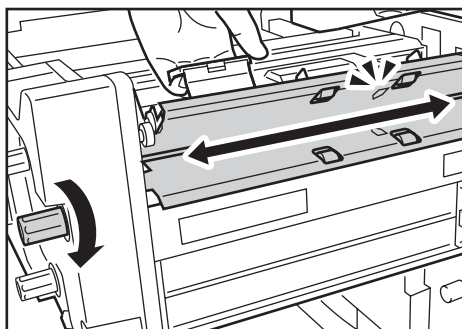
**3. Pull up and open the cover B6.**



CZC321

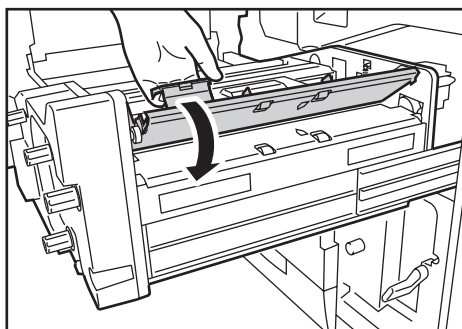
**4**

**4. Clean the rollers while turning the knob B2. Clean the sensors and guide boards also.**



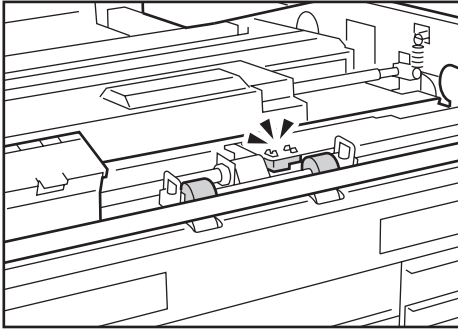
CZC322

**5. Close the cover B6.**



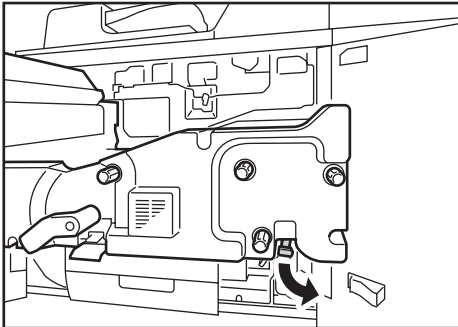
CZC323

**6. Clean the rollers and sensors.**



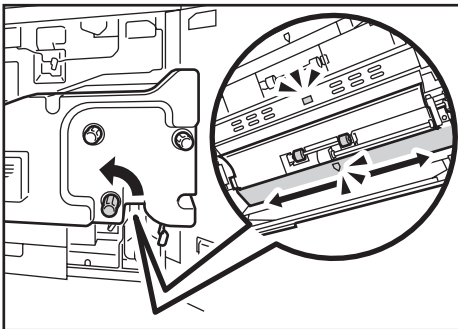
CZC324

**7. Pull down and open the cover B3.**



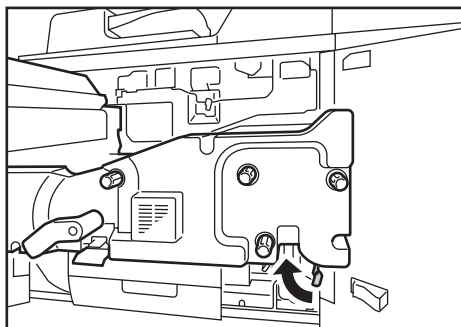
CZC325

**8. Clean the rollers while turning the knob B1. Clean the sensors and guide boards also.**



CZC326

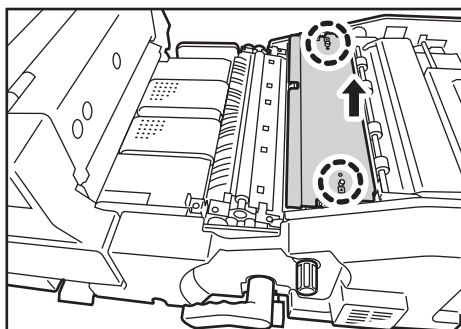
9. Close the cover B3.



CZC327

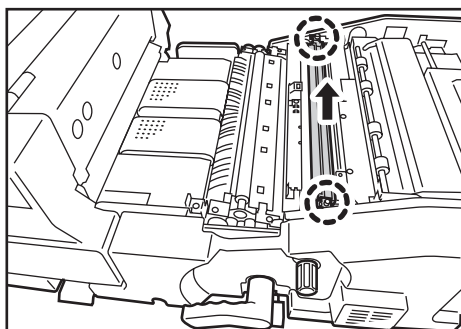
4

10. Remove the 2 screws, and then remove the cover.



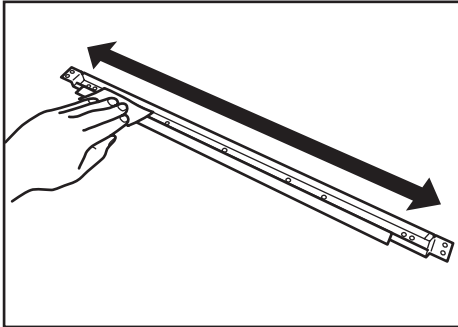
CZC328

11. Remove the 2 screws, and then remove the dust catcher.



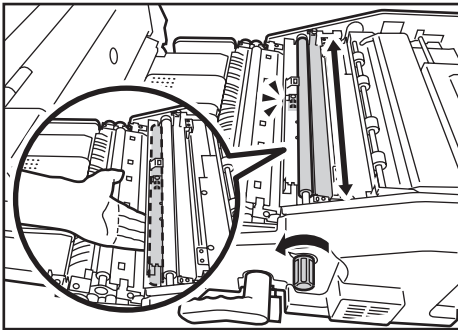
CZC329

12. Clean the dust catcher.



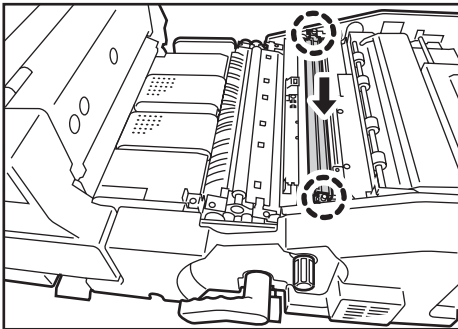
CZC345

13. Clean the roller while turning the knob B5. Clean the sensor, guide board, and roller in the paper transfer unit also.



CZC330

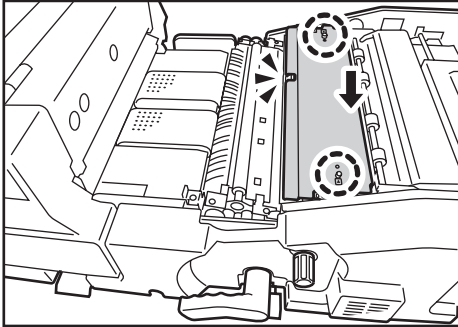
14. Attach the dust catcher, and then secure it with the 2 screws.



CZC332



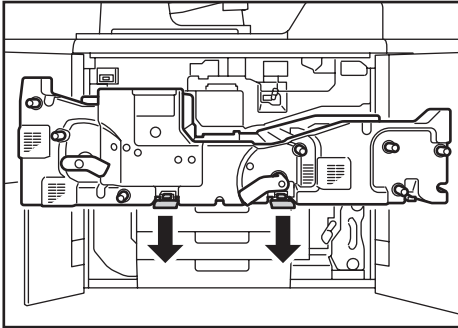
15. Attach the cover, aligning the notch on the cover with the claw, and then secure it with the 2 screws.



CZC331

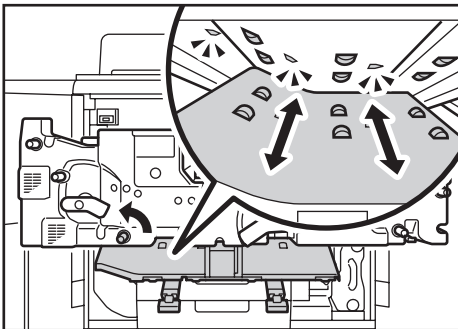
4

16. Pull down the levers Z2 and Z3.



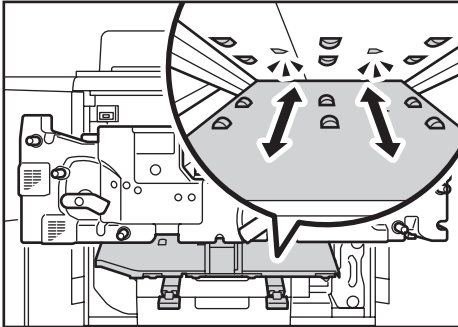
CZC333

17. Clean the left-hand side rollers while turning the knob Z1. Clean the left-hand side sensors and guide boards also.



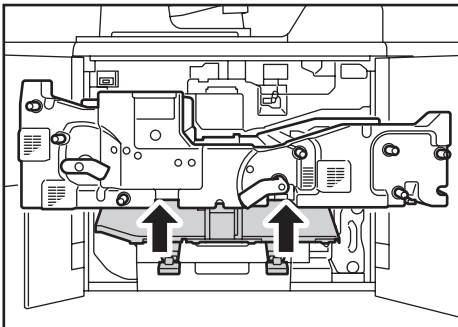
CZC334

18. Clean the right-hand side rollers, sensors, and guide boards.



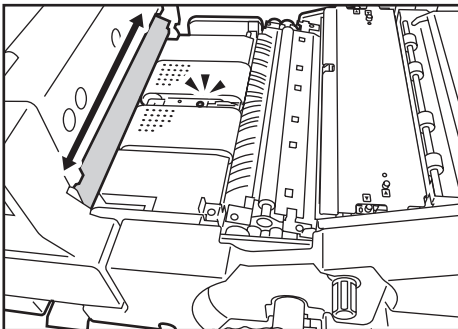
CZC335

19. Pull up the levers Z2 and Z3.



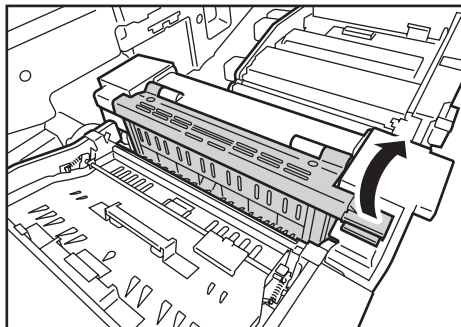
CZC336

20. Clean the sensor and guide board on the entrance of the fusing unit.



CZC337

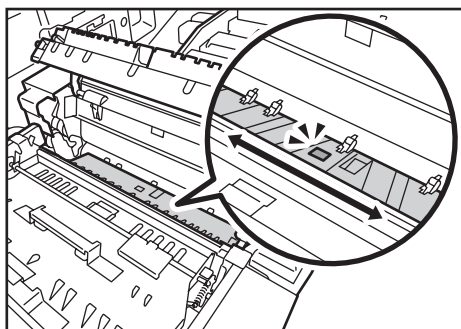
**21. Pull up and open the cover D2.**



CZC338

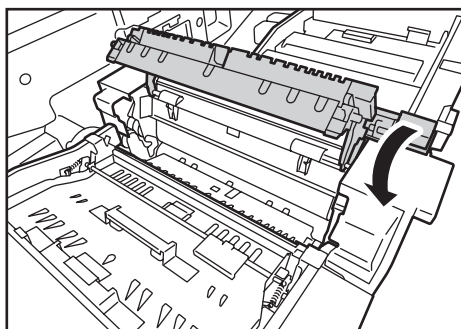
4

**22. Clean the sensor and guide board.**



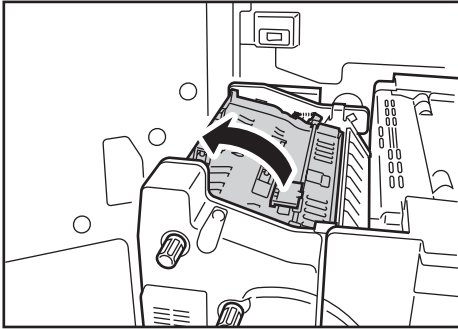
CZC339

**23. Close the cover D2.**



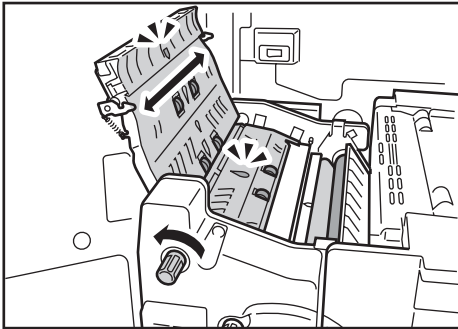
CZC340

24. Pull up and open the cover D3.



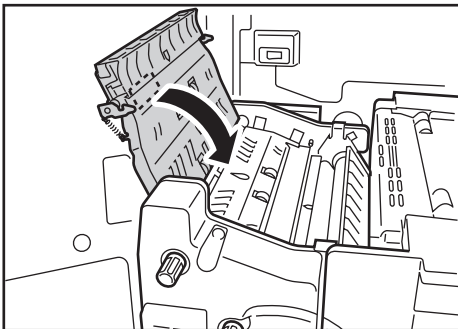
CZC341

25. Clean the rollers while turning the knob D1. Clean the sensors and guide boards also.



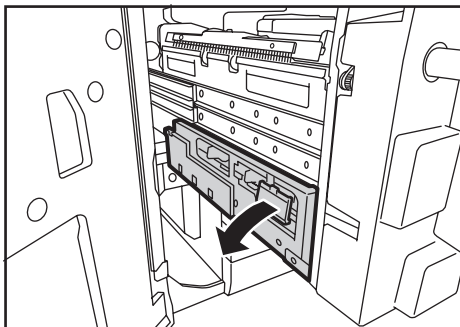
CZC342

26. Close the cover D3.



CZC343

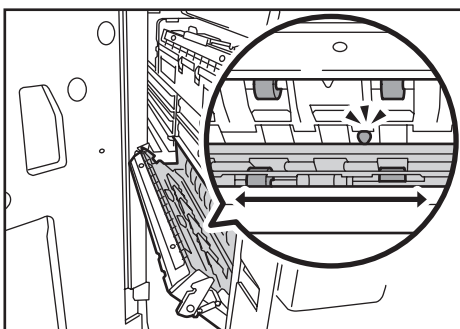
**27. Pull down and open the cover D4.**



CZC301

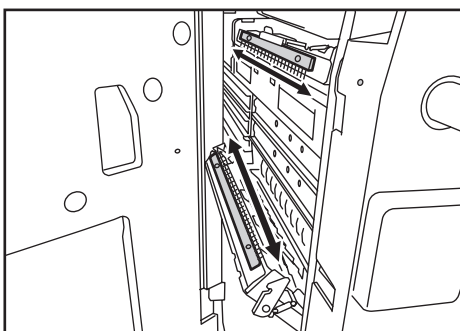
4

**28. Clean the rollers, sensor, and guide boards.**



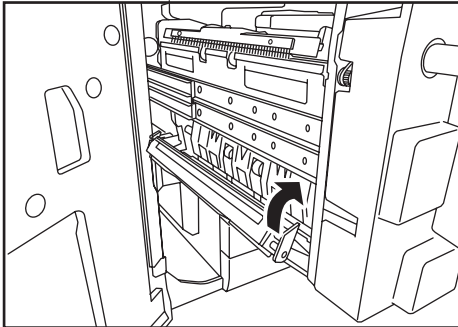
CZC302

**29. Clean the antistatic brushes.**



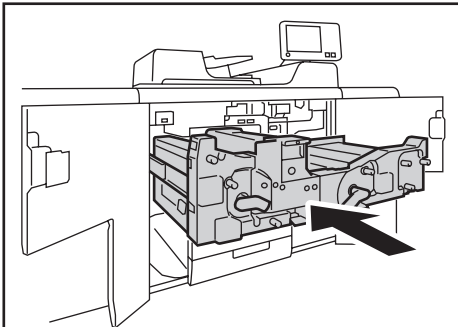
CZC306

**30. Close the cover D4.**



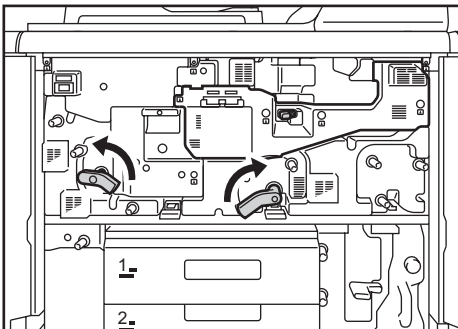
CZC344

**31. Push the drawer back into the machine.**



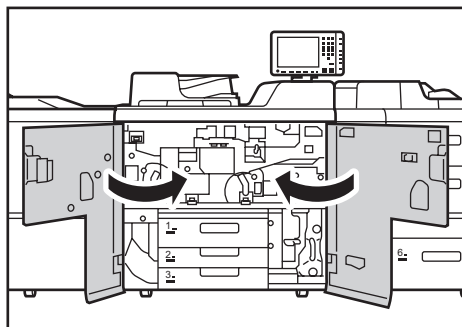
CZC097

**32. Pull up the levers C1 and C2.**



CZC086

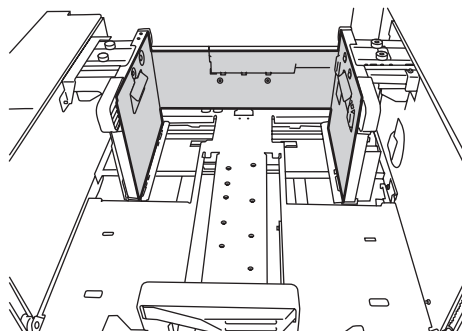
**33. Close the front covers.**



CZC006

## Cleaning the Paper Feed Path in the Wide LCT

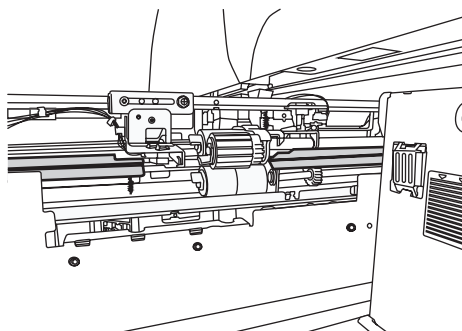
**1. Clean the side fences and front guide.**



CEZ502

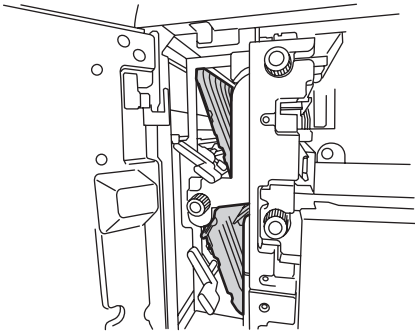
**2. Clean the paper feed rollers.**

**3. Clean the guide board of the paper feed unit.**



CEZ503

#### 4. Clean the guide board interior.



CZC305

#### 5. After cleaning, restore the machine so that it resumes operation.

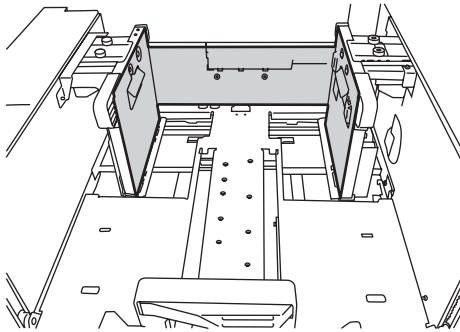
##### ↓ Note

- For details about detaching and reattaching the parts, see the Replacement Guide.

4

## Cleaning the Paper Feed Path in the LCT

#### 1. Clean the side fences and front guide.

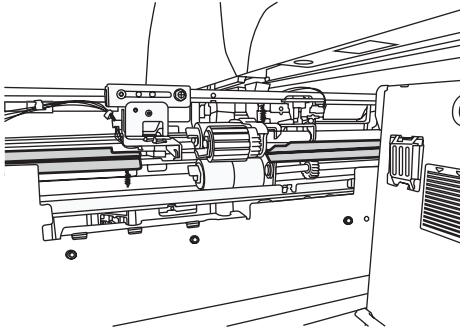


CEZ502

#### 2. Clean the paper feed rollers.



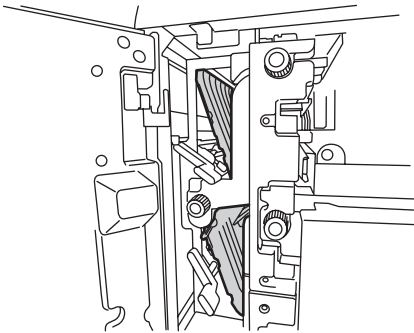
**3. Clean the guide board of the paper feed unit.**



CEZ503

**4**

**4. Clean the guide board interior.**



CZC305

**5. After cleaning, restore the machine so that it resumes operation.**

**Note**

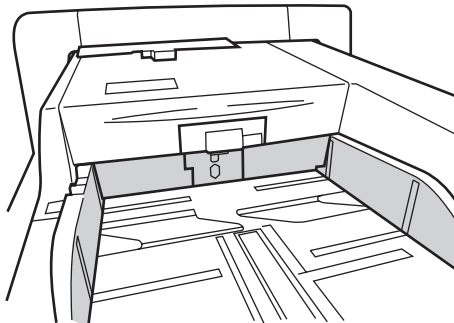
- For details about detaching and reattaching the parts, see the Replacement Guide.

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## Cleaning the Paper Feed Path in the Multi Bypass Tray

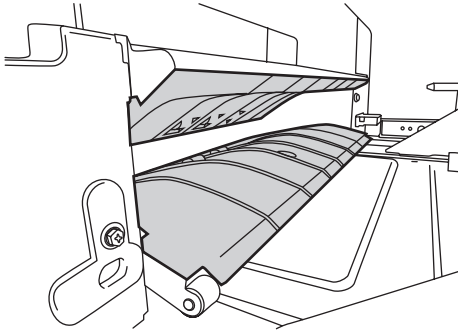
---

**1. Clean the side fences and front guide.**



CEZ587

2. Clean the paper feed rollers.
3. Clean the guide board.



CEZ506

4. After cleaning, restore the machine so that it resumes operation.

**Note**

- For details about detaching and reattaching the parts, see the Replacement Guide.

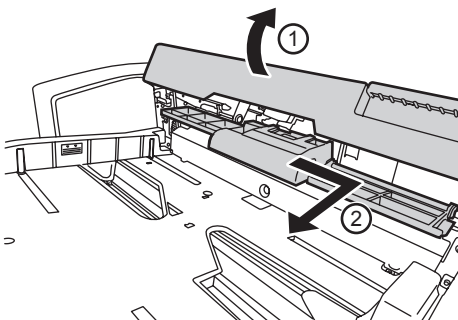
## Cleaning the Paper Feed Rollers and Paper Feed Belt in the Interposer

Clean the paper feed belt and paper feed rollers in the interposer.

The procedure is explained using the interposer upper tray. The procedure is the same for the lower tray.

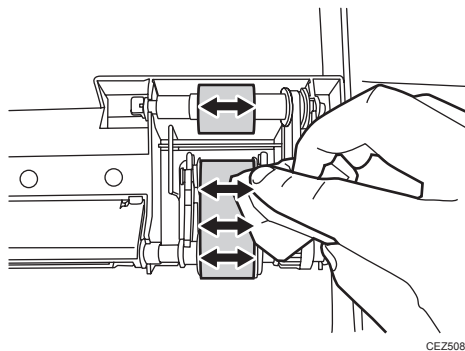
1. Remove the loaded paper.
2. Open the upper cover, and then detach the paper feed unit.

Pull it out slightly, release the metal shaft, and then detach it.



CEZ507

3. Clean the paper feed belt and paper feed rollers in the detached paper feed unit.



4. After cleaning, restore the machine so that it resumes operation.

# 5. Post-Processing Option Troubleshooting

## Finisher SR5050/SR5060

### Delivered Sheets Are Not Stacked Properly

#### Solution:

Depending on the cause of the problem, do one of the following:

#### Coated paper is being used.

If coated paper is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

#### There is airflow in the room.

Minimize the airflow. For instance, turn the air conditioner off.

#### Printed sheets are curled.

##### <If the decurler unit is used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, select [Adjust Paper Curl] and adjust the degree of decurling.  
To correct curls facing up, specify "Adjust  $\smile$  Curl".  
To correct curls facing down, specify "Adjust  $\frown$  Curl".  
Select "Strong" or "Weak" depending on the degree of decurling required.

##### <If the decurler unit is not used>

1. Load the sheets the other way up.

#### There are too many stacked sheets.

Reduce the number of the stacked sheets. To do this, suspend printing and remove the stacked sheets, and then resume printing.

To suspend printing, press the [Suspend] key on the finisher.

To resume printing, press the [Resume] key on the finisher.

## Large Delivered Sheets Are Not Stacked Properly

### Cause:

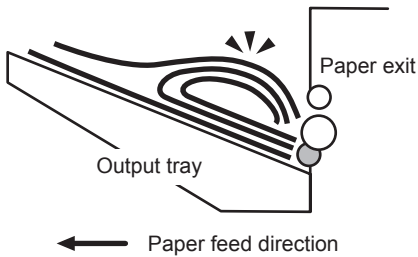
When using large-size or coated and paper-to-paper friction is very high, a sheet may push against another or paper deflection may occur.

This is likely to occur if:

- B4, 8" × 14", or larger size of paper is used.
- Paper that produces high paper-to-paper friction is used.
- The temperature or humidity is high.

### Sheet bending

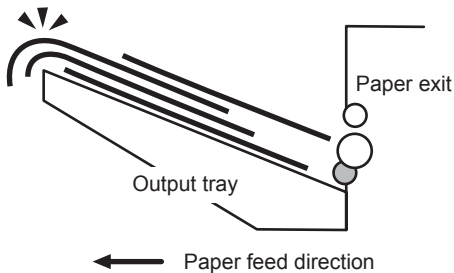
The leading edge of the delivered sheet bends upward and backward.



CEZ594

### One sheet pushing out another

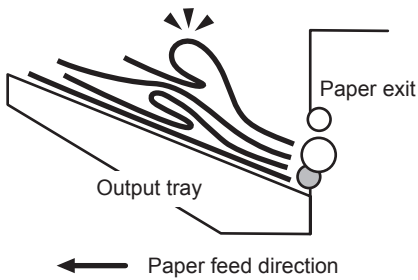
Because of high paper friction, the delivered sheet may get stuck and push out other sheets of paper.



CEZ595

### Paper deflection

Because of high paper friction, the delivered sheet may arch up and become crimped.



## Solution:

Depending on the cause of the problem, do one of the following:

### <Sheet bending>

#### **There is airflow in the room.**

Minimize the airflow. For instance, turn the air conditioner off.

#### **Sheets are curled upward.**

##### <If the decurler unit is used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust  $\smile$  Curl".

To control the level of decurling, select "Weak" if the present setting is "Off" or "Strong" if the present value is "Weak".

##### <If the decurler unit is not used>

1. Load the sheets the other way up.

#### **Paper of Paper Weight 0 is being used.**

If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

### <One sheet pushing out another or sheets becoming crimped>

#### **Sheets are curled downward.**

##### <If the decurler unit is used>

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust  $\frown$  Curl".

To control the level of decurling, select "Weak" if the present setting is "Off" or "Strong" if the present value is "Weak".

**<If the decurler unit is not used>**

1. Load the sheets the other way up.

**Paper of Paper Weight 0 is being used.**

If paper of Paper Weight 0 is being used, attach the Z-fold support tray for multi-folding unit.

For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/Document Server" supplied with the machine.

**Note**

- If the Z-fold support tray for multi-folding unit is attached, the number of sheets that can be stacked is reduced.
- If the Z-fold support tray for multi-folding unit is attached, the range of misalignment of the last print may exceed 2 mm (0.08 inches) if the Shift Collate function is used.

**5**

**Trailing edge of stapled sheets close to the paper exit**

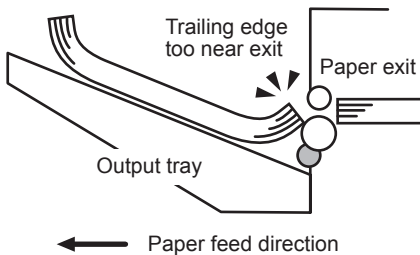
**Cause:**

If the stapled sheets are curled strongly or become limp after delivery, the trailing edge of the sheets may be too close to the paper exit when the paper is stacked.

If this happens, stapled sheets, when delivered, may push the previously delivered sheet, resulting in paper bending or misfeeding.

This is likely to occur if:

- There is a tight curl on a delivered set of stapled sheets.
- Limp paper such as thin or recycled paper is used.



CEZ593

**Solution:**

1. Attach the Z-fold support tray for multi-folding unit.

**2. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

**3. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to "Adjust ~ Curl".**

Select "Strong" or "Weak" to control the level of decurling as required.

**4. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

**Note**

- For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.
- If the Z-fold support tray for multi-folding unit is attached, the trailing edge of the ejected sheets will not be too close to the paper exit, so no problem will occur. However, the stapled sheets may not be stacked properly.

**Sheets cannot be stapled properly****Cause:**

When the sheets are fed to the staple unit inside the finisher, they may be overlaid, resulting in a misalignment of 5 mm (0.2 inches) relative to each other after stapling.

When coated or other paper producing higher paper-to-paper friction is used, the paper edges are not aligned properly, resulting in misaligned stapling.

This is likely to occur if:

- Coated or other paper producing higher paper-to-paper friction is used.
- Thin or other limp paper is used.

**Solution:**

Reduce the number of sheets to be stapled.

1. In the [Finishing: Finisher] group on the [Adjustment Settings for Skilled Operators] menu, select [Number of Sheet Align for Stapling], and reduce the number of sheets to be stapled.



**2. Print the image. Is the problem resolved?**

<b>Yes</b>	Finished!
<b>No</b>	If the problem persists even though the setting has reached its minimum value, contact your service representative.

**↓ Note**

- If the number of sheets to be stapled is reduced, paper alignment will take longer, compromising the machine's throughput.

# Multi-Folding Unit

## Inaccurate Folding (Folding Deviation)

### Cause:

Depending on paper hardness, inaccurate folds may result. This is referred to as folding deviation.

### Solution:

Change the folding position by adjusting the position of the paper edge stopper for folding.

- For multi-sheet folding, change the folding position using the following settings:
  - Half Fold Position (Multi-sheet Fold)
  - Letter Fold-out Position 1 (Multi-sheet Fold)
  - Letter Fold-out Position 2 (Multi-sheet Fold)
  - Letter Fold-in Position 1 (Multi-sheet Fold)
  - Letter Fold-in Position 2 (Multi-sheet Fold)
- For single-sheet folding, change the folding position using the following settings:
  - Adjust Z-fold Position 1
  - Adjust Z-fold Position 2
  - Half Fold Position: Single-sheet Fold
  - Letter Fold-out Posn 1: Single-sheet Fld
  - Letter Fold-out Posn 2: Single-sheet Fld
  - Letter Fold-in Posn 1: Single-sheet Fold
  - Letter Fold-in Posn 2: Single-sheet Fold
  - Double Parallel Fold Position 1
  - Double Parallel Fold Position 2
  - Adjust Gate Fold Position 1
  - Adjust Gate Fold Position 2
  - Adjust Gate Fold Position 3

### ↓ Note

- For details about specifying settings in the [Adjustment Settings for Skilled Operators] menu, see the Adjustment Item Menu Guide.

## Folding Deviation

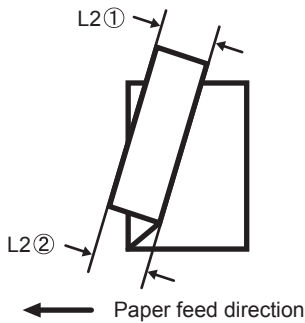
### Cause:

Depending on paper hardness, folding deviations (skewed folding) may appear.

A deviation may appear if the edge dimensions of the parts between folds are different.

For example, in the following illustration, the dimensional difference between the top (L2[2]) and bottom (L2[1]) edges is a deviation.

### <Folding deviation sample of L2 for Z-fold>

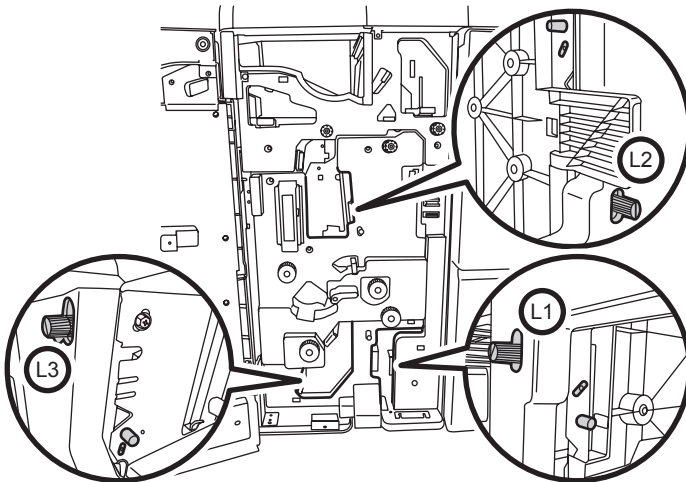


CEZ531

### Solution:

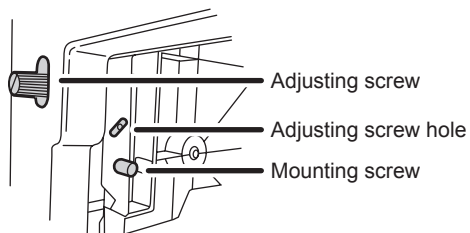
Adjust the deviation.

The multi-folding unit has three adjusting screws (L1, L2, and L3) to adjust deviation.



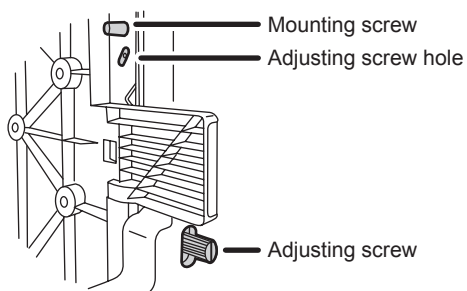
CEZ509

## L1



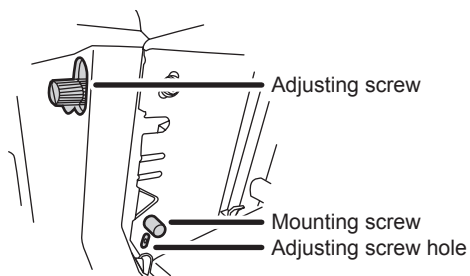
CEZ599

## L2



CEZ600

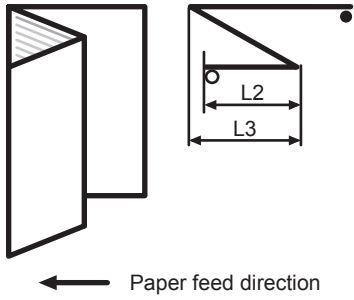
## L3



CEZ601

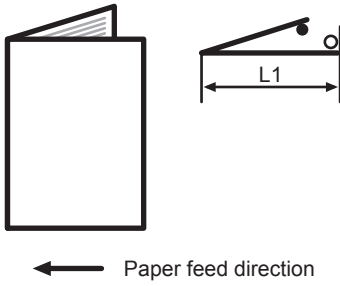
The screws adjust the folding deviations of the following parts:

### Z-fold



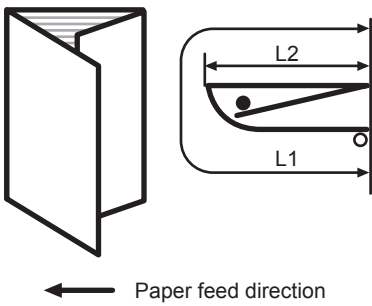
CEZ532

### Half Fold

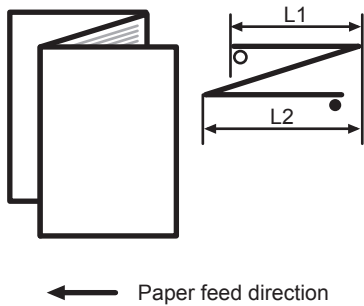


CEZ533

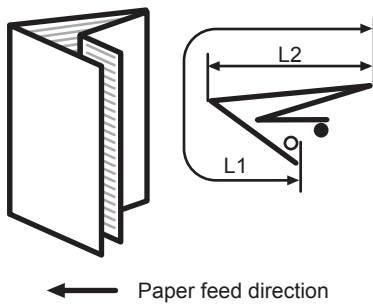
### Letter Fold-in



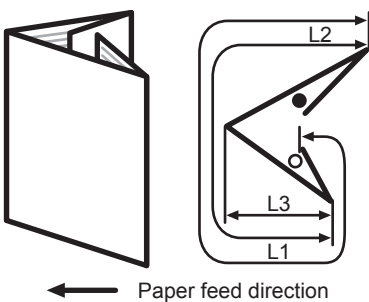
CEZ535

**Letter Fold-out**

CEZ534

**Double Parallel**

CEZ536

**Gate Fold**

CEZ537

The ○ mark indicates the leading edge (relative to the paper feed direction), and the ● mark indicates the trailing edge.

**<How to adjust the folding deviation>**

This procedure is the same for L1, L2, and L3.

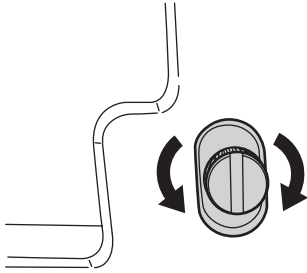
1. Open the front cover of the multi-folding unit.

**2. Remove the mounting screw.**

If the mounting screw is attached to the adjusting screw hole, unfasten it.

**3. Turn the adjusting screw to adjust the deviation.**

- To increase the length at the bottom part of paper, turn the screw clockwise.
- To decrease the length at the bottom part of paper, turn the screw counterclockwise.



CEZ510

**4. Attach the mounting screw to fasten the adjusting screw.**

If the mounting screw is attached to the adjusting screw hole, fasten it.

**5. Close the front cover of the multi-folding unit.**

**Note**

- For multi-sheet folding, the folding deviation that appears in the center of paper will be adjusted.
- If the deviation is large, the paper may be skewed. For further information, see page 67 "Paper Skew".

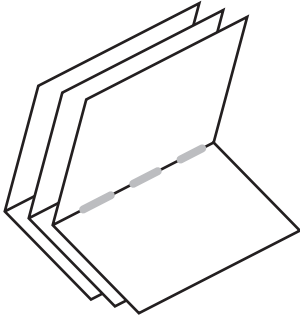
---

## Folds soiled by multi-sheet folding

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**Cause:**

If multi-sheet folding is performed after a large number of Z-folds have been performed, the tip of the blade used for the multi-sheet folding may be soiled, resulting in soiled paper.



CEZ571

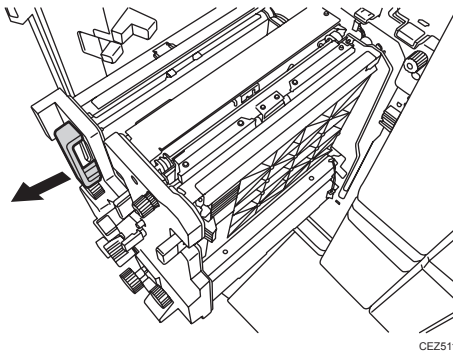
This will produce paper soil of 1-3 cm (0.4-1.2 inches) in width (equal to the width of the blade) in the fold in the center of paper.

### Solution:

Clean the blade.

5

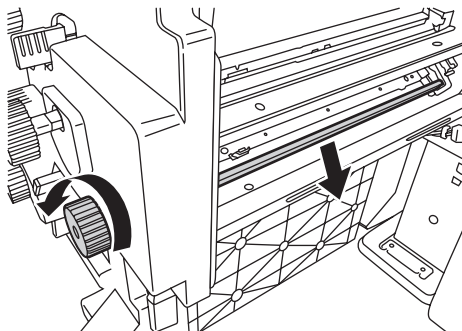
1. Open the front cover of the multi-folding unit.
2. Pull the multi-folding unit out.



CEZ511

3. Turn the N11 dial counterclockwise until the blade appears.

The blade is located in the right part of the multi-folding unit.

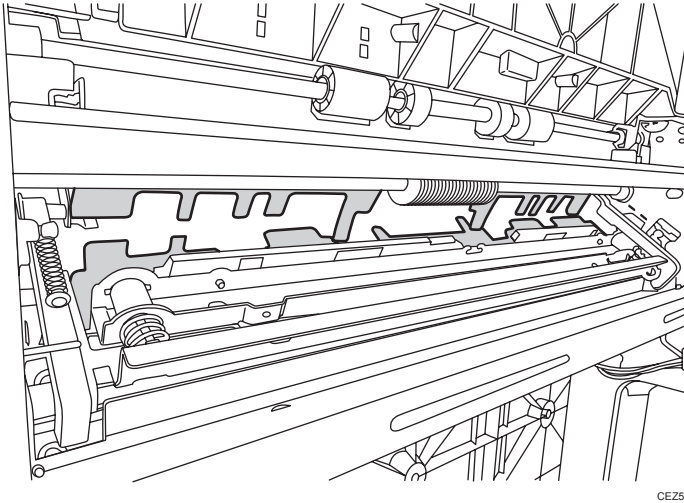


CEZ512



**4. Wipe the tip and top of the blade with a soft dry cloth.**

Be careful not to damage the blade.



CEZ513

5

**5. After cleaning, restore the machine so that it resumes operation.**

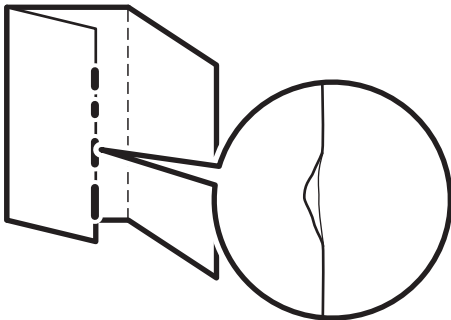
Apply multi-sheet folding and print 3-5 copies. The paper soil will disappear.

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## Edges of letter fold bent

---

When letter folding is applied, the edge of the inner flap may become bent.



CEZ592

**Solution:**

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The solution depends on whether letter folding is applied to multiple sheets or a single sheet.

**<When letter folding is applied to multiple sheets>**

- 1. Load the paper the other side up.**

## 2. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Go to the next step.

## 3. In the [Finishing: Fold] group on the [Adjustment Settings for Skilled Operators] menu, set [Letter Fold-in Position 1 (Multi-sheet Fold)] to "0.0 mm".

## 4. In [General Features] in [System Settings], set [Letter Fold-in Position] for multiple sheets to "7 mm".

## 5. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Contact your service representative.

### <When letter folding is applied to a single sheet>

#### ↓ Note

- This procedure is applied especially to coated paper.
- To adjust the following settings, pre-register the type of paper in use as a custom paper. For details about registering custom papers, see "Registering a Custom Paper", Paper Settings Reference.

## 1. In [General Features] in [System Settings], set [Letter Fold-in Position] for a single sheet to "7 mm".

## 2. In [Advanced Settings] for the custom paper in use, select [Letter Fold-in Posn 1: Single-sheet Fold].

## 3. Increase the value by 0.2 mm.

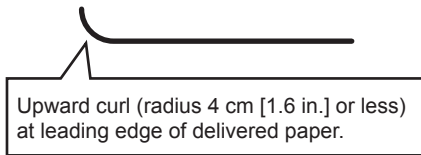
## 4. Print the image. Is the problem resolved?

<b>Yes</b>	Finished!
<b>No</b>	Repeat Step 2 to 4. If the problem persists even though the setting value is 4 mm larger than the maximum value, contact your service representative.

## Z-Folding is Not Performed Properly

### Cause:

If a sheet is curled and its edge touches the guide board, proper folding may not be possible.




← Paper feed direction

CEZ572

**Solution:**

5

1. In the [Machine: Paper Feed/ Output] group on the [Adjustment Settings for Skilled Operators] menu, set [Adjust Paper Curl] to [Adjust  Curl: Weak].
2. Print the image. Is the problem resolved?

Yes	Finished!
No	Go to the next step.

3. Load the paper the other way up.
4. Print the image. Is the problem resolved?

Yes	Finished!
No	Contact your service representative.

**Note**

- This folding error will not occur if uncurled paper is used or sheets that curl downward.

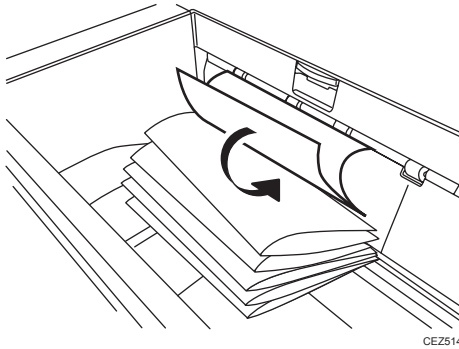
**Folded Sheets Are Not Stacked Properly**

**Cause:**

If a large number of half-folded multi-sheet is delivered, the edge of the sheets may bulge and some part of the edge will be swollen. If this happens, other sheets loaded on the bulged paper may turn over in the output tray.

This is likely to occur if:

- Thick, relatively stiff paper is used.

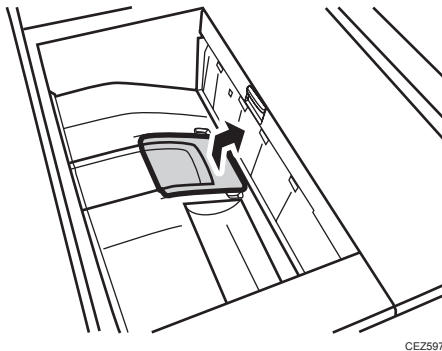


As a bundle is delivered, its folded edge may droop and catch on the stacked bundles, causing the delivered bundle to flip over.

### Solution:

Use the Z-fold support tray for multi-folding unit.

This will reduce the angle of stacked bundles and prevent bundles flipping over as they are delivered.



For details about attaching the Z-fold support tray for multi-folding unit, see "Copy/ Document Server" supplied with the machine.

#### ⬇ Note

- If the Z-fold support tray for the multi-folding unit is attached, folded paper such as letter-folded paper or gate-folded paper will not turn over in the output tray when delivered.



# 6. Improving Throughput

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## Reducing the Waiting Time Prior to Printing

After receiving a print job, the machine usually stops to let the fusing temperature reach an appropriate level for printing.

The waiting time for the fusing unit to cool down may be quite long, especially before printing on thin paper. By decreasing the fusing temperature during standby, you can reduce the waiting time.

1. In the [Machine: Image Quality] group on the [Adjustment Settings for Skilled Operators] menu, decrease the temperature by 10°C in [Adjust Fusing Temperature on Standby].

Decrease the value in [Temperature on Standby Mode], [Temperature on Low Power Mode], and [Temperature Before Performing a Process] by 10°C.

### ↓ Note

- When printing on paper other than thin paper, we recommend leaving the above settings unchanged.

# Improving Throughput When Printing on Coated Paper with a Thickness Equivalent to Paper Weight 7 or Higher

When printing on coated paper with a thickness equivalent to Paper Weight 7 or higher, the machine's copy/print speed must be reduced to 80% of full speed (for A4 paper) so that the degree of toner fixation can be enhanced.

However, depending on the type of paper in use and printed image, you can have the machine print at full copy/print speed.

The following are requirements for improving throughput when using coated paper with a thickness equivalent to Paper Weight 7 or higher:

- Room temperature
1. In [Advanced Settings] for the custom paper in use, increase the value in [Process Speed Setting] by one step.
    - If it is presently set to [Low], change it to [Middle].
    - If it is presently set to [Middle], change it to [High].
  2. Set [Fusing Heat Roller Temperature Adj] to "185°C".
  3. Print the image. Does it exhibit any fusing problem?

Yes	You cannot improve throughput under the present condition. Restore the previous setting.
No	You can operate the machine using this setting.

## ↓ Note

- The following list shows the copy/print speed for each item in [Process Speed Setting]:
  - [High] (full speed)
    - 135 cpm (Pro 8120S)
    - 110 cpm (Pro 8110S)
    - 95 cpm (Pro 8100S)
  - [Middle]
    - 110 cpm (Pro 8120S)
  - [Low]
    - 95 cpm (Pro 8120S)
    - 95 cpm (Pro 8110S)







# Notes for Users

This supplement provides corrections and additional information for the manuals provided with this machine.

## ◆ Troubleshooting

Clearing Misfeeds > Removing Jammed Paper > Removing Jammed Paper When the Procedure Is Not Displayed on the Control Panel

### Additional information

#### Note

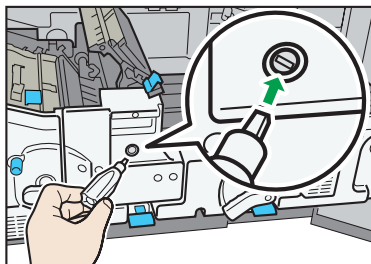
- If you cannot remove the misfed paper from the right side of the fusing unit, use the knob located on the inside of the left front cover.

1. **Open the left and right front covers, and then remove the knob from its stowage space behind the left front cover.**



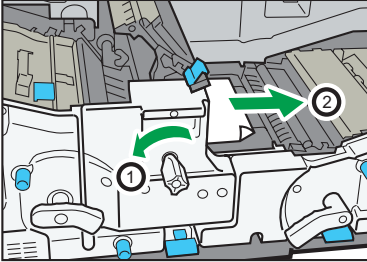
DBL001

2. **Pull out the drawer unit.**
3. **Align the knob with the slot on the fusing unit, and then insert it.**



DBL002

4. Turn the knob counterclockwise until the misfed paper comes out from the right side of the fusing unit, and then remove it.



5. Return the drawer unit to its original position.
6. Return the knob to its stowage space, and then close the front covers.

## ◆ Print

Useful Functions for Binding and Sorting Printed Documents > Booklet Printing >

★ Important

### Additional information

- If you attempt to execute booklet printing using PostScript 3 with custom size paper whose short sides are less than half the length of the long sides, the job is reset.

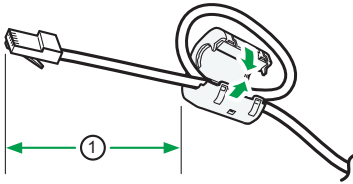
## ◆ Connecting the Machine/ System Settings

Connecting the Machine > Connecting to the Interface > Connecting to the Gigabit Ethernet

---

### Error

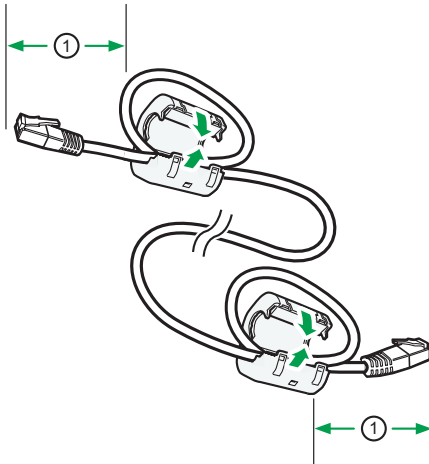
1. Make a loop 5 cm (2 inches) (1) from the end of the Ethernet cable and attach the included ferrite core to the loop as shown.



CXB005

### Correction

1. Make loops 5 cm (2.1 inch) (1) from the end of each Ethernet cable and attach included ferrite cores to each loop as shown.



CKD005

## ◆ Getting Started

### Using the Ring Binder

---

#### Additional information

##### ★ Important

- Be sure not to exit from Energy Saver mode or to switch the machine on when the ring binder door is open and the binding unit is disconnected. Doing so will affect initialization, causing the ring binder function to become unavailable (although other functions will be unaffected).
- If you inadvertently do this, connect the ring binder's binding unit again, close the door, and then turn the power off and back on to restore normal operation.

## ◆ Paper Settings

### Registering a Custom Paper > Registering a Custom Paper

---

#### Additional information

##### ★ Important

- When you print on 12×18□ coated paper weighing 163.1 to 300.0g/m<sup>2</sup>, be sure to use one of the following items in [Paper Name] in the Paper Library.
  - "Coated: Glossy 163.1-220.0 12x18"
  - "Coated: Glossy 220.1-256.0 12x18"
  - "Coated: Glossy 256.1-300.0 12x18"
  - "Coated: Matted 163.1-220.0 12x18"
  - "Coated: Matted 220.1-256.0 12x18"
  - "Coated: Matted 256.1-300.0 12x18"
- Also, when you print on custom paper with a length of 297.1 to 304.8 mm, select one of the abovementioned items in [Paper Name], and then adjust the paper size before printing.
- Printing in other configurations may affect the print quality.
- Printing on the abovementioned paper at a temperature below 15°C may affect the print quality, so it is recommended to print at 15°C or above.

## ◆ Paper Settings

### Adjustment Settings for Operators > Setting Values > Machine: Image Position > 0101: Adjust Image Position With Feed Direction

---

Error	Correction
Setting Items > Paper Weight 8	Not applicable to this model.

## ◆ Paper Settings

Adjustment Settings for Operators > Setting Values > Machine: Paper Feed/ Output > 0302: When Double Feed is Detected

Error	Correction
If you select [Suspended After Ppr. Dvr-sion.], the machine, on detecting a double feed, stops printing and delivers the double fed sheets to the purge tray. After the double fed sheets are delivered to the purge tray, the machine displays a paper misfeed message. If you select [Auto Eject], the machine delivers the double fed sheets to the proof tray.	If [Suspended After Ppr. Dvr-sion.] is selected, the machine stops printing if a double feed is detected, then delivers the sheets to the paper trap inside the machine at the bottom left, and displays a paper misfeed message. This setting is enabled only if 0301: [Double Feed Detection] is set to [On].
Selection > Auto Eject	Not applicable to this model.
Default Value > Auto Eject	Default Value > Suspended After Ppr. Dvr-sion.

## ◆ Paper Settings

- Adjustment Settings for Operators > Menu Items and Functions
- Adjustment Settings for Operators > Setting Values > Machine: Paper Feed/ Output

### **Additional information**

The following menu item and function does not apply to this model.

### **0303: After Double Feed Paper is Automatically Ejected**

## ◆ Paper Settings

- Adjustment Settings for Operators > Menu Items and Functions
- Adjustment Settings for Operators > Setting Values > Machine: Maintenance

### Additional information

Add the following menu item and function.

#### 0520: [Back Up / Restore Custom Paper Data]

Back up and restore custom paper profiles.

With [Back Up Saved Paper Library], custom paper profiles saved in [Saved Paper Library] can be backed up to the SD card inserted in the back of the machine.

With [Back Up Custom Paper Settings], custom paper profiles registered under the [Edit Custom Paper] setting can be backed up to the SD card inserted in the side of the control panel.

With [Restore Custom Paper Settings], custom paper profiles backed up with [Restore Custom Paper Settings] can be restored.

For details, see the following procedure(\*).

Setting Items	Selection
Back Up Saved Paper Library	Press [OK].
Back Up Custom Paper Settings	
Restore Custom Paper Settings	

#### \* Backing up Custom Paper Profiles Saved in the Saved Paper Library

You can back up custom paper profiles saved in the Saved Paper Library to the SD card inserted in the back of the machine.

The backup can be used to restore the custom paper profiles if the controller board has to be replaced.

To prevent data loss, we recommend making regular backups. Only the customer engineer is allowed to perform data restoration using a backup. Contact your service representative.

1. Open the [Adjustment Settings for Operators] menu.
2. Press [Machine: Maintenance].
3. Press [Back Up / Restore Custom Paper Data].
4. Press [Back Up Saved Paper Library].
5. Press [OK].
6. Press [Exit].

## \* Backing up Custom Paper Profiles Registered Under the [Edit Custom Paper] Setting

### Backing up the Data

1. Insert an SD card into the SD card slot on the side of the control panel.
2. Open the [Adjustment Settings for Operators] menu.
3. Press [Machine: Maintenance].
4. Press [Back Up / Restore Custom Paper Data].
5. Press [Back Up Custom Paper Settings].
6. Press [OK].

### Restoring the Data

1. Insert the SD card containing the backup custom paper profiles into the SD card slot on the side of the control panel.
2. Cancel all custom paper profiles allocated to paper trays.
3. Open the [Adjustment Settings for Operators] menu.
4. Press [Machine: Maintenance].
5. Press [Back Up / Restore Custom Paper Data].
6. Press [Restore Custom Paper Settings].
7. Press [OK].

#### Note

- If a previously created backup file is on the SD card, it is overwritten by the back-up.
- All custom paper profiles registered in the machine are overwritten during the data restoration.
- The backup data is restored under the registration number allocated at the time of the back-up.



## ◆ Adjustment Item Menu Guide: TCRU/ORU

- 2. Details of Menu Items in Adjustment Settings for Skilled Operators > Setting Values > [Machine: Maintenance] > 0515: [Reset Replaceable Parts Counter]
  - 2. Details of Menu Items in Adjustment Settings for Skilled Operators > Setting Values > [Machine: Maintenance] > 0516: [Estimated Life Already Used]
- 

### **Additional information**

Add the following to the setting items.

Paper Feed Roller: Tray 1

Paper Feed Roller: Tray 2

Paper Feed Roller: Tray 3

Paper Feed Roller (Tray 4: Wide LCT)

Paper Feed Roller (Tray 5: Wide LCT)

Paper Feed Roller (Tray 6: Wide LCT)

Paper Feed Roller: Tray 4

Paper Feed Roller: Tray 5

Paper Feed Roller: Tray 6

Paper Feed Roller: Tray 7

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D1812546

# For Users of This Product

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The following is an additional explanation about this product's power consumption.

## □ Regarding switching to Off mode based on the Weekly Timer's event setting

Weekly Timer is a function that allows you to set the time to switch to and recover from Sleep mode or Off mode as an event each day.

By using the Weekly Timer to set to Off mode as a daily event, the power will be turned off automatically and can provide energy consumption of 1W or less.

In order to change the settings, refer to the manuals for your product.

When the Weekly Timer is set to Off mode as a daily event, the network function is disabled, thus the factory-set default value for the Weekly Timer is [Inactive] .

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EN (US)

D181-2597

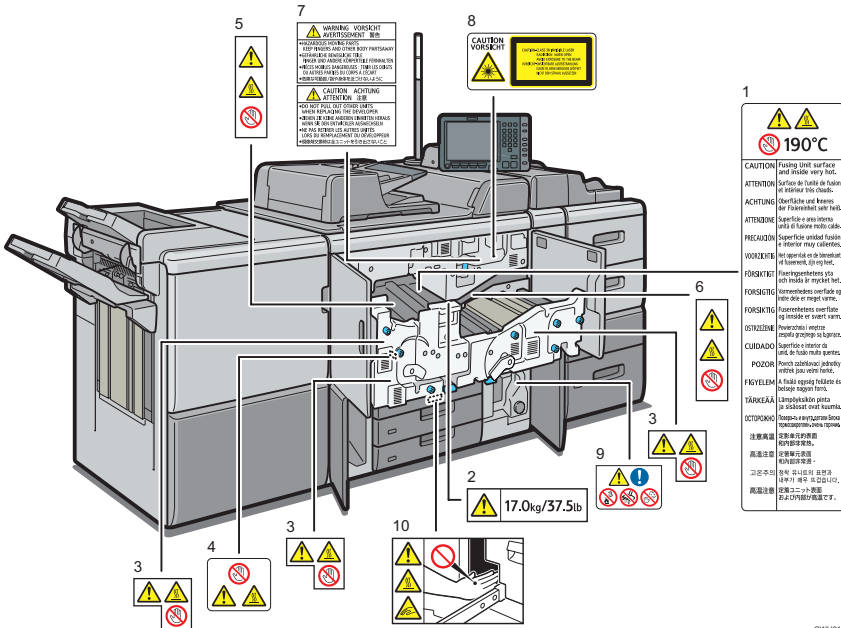


D1812597

# Notes for Users

## Additional Information

Page 22 "Positions of WARNING and CAUTION labels", Read This First



- 1  
Do not touch the parts a label indicates. The inside and surface of the fusing unit could be very hot. Caution should be taken when removing misfed paper.
- 2  
This label indicates the weight of the unit. However, this label is meant for customer engineers and operators who have received training. Do not lift a unit that has this label.
- 3, 4, 5, and 6  
Do not touch the parts a label indicates. Otherwise, an injury might occur.
- 7  
Keep your fingers and other body parts away from moving parts. Do not pull out other units when replacing the developer.
- 8  
This unit uses a laser radiation. Do not attempt to disassemble or modify this machine.
- 9  
For correct handling of the waste toner bottle, see "Handling the machine's supplies".
- 10  
Keep your hands clear of the parts a label indicates. Otherwise, you might trap your fingers and an injury might occur.

