

DIGITAL MULTIFUNCTIONAL SYSTEM

# Maintenance & Safety Guide

## Please read first

Please read this guide first to ensure safe use of the machine.

Before installing this product, be sure to read the "TO ENSURE SAFE USE OF THE MACHINE" and "INSTALLATION REQUIREMENTS" sections.

**TO ENSURE SAFE USE  
OF THE MACHINE**

**INSTALLATION  
REQUIREMENTS**

**SUPPLIES**

**REPLACING SUPPLIES AND  
MAINTENANCE**

**SPECIFICATIONS**

**INFORMATION ON DISPOSAL**

**TO THE ADMINISTRATOR  
OF THE MACHINE**

Keep this manual close at hand  
for reference whenever needed.

### Caution!

For complete electrical disconnection, pull out the main plug.



The socket-outlet shall be installed near the equipment and shall be easily accessible.

Shielded interface cables must be used with this equipment to maintain compliance with EMC regulations.

The equipment should be installed near an accessible socket outlet for easy disconnection.

## Notice for users in the UK

### MAINS PLUG WIRING INSTRUCTIONS

The mains lead of this equipment is already fitted with a mains plug which is either a non-rewireable (moulded) or a rewireable type. Should the fuse need to be replaced, a BSI or ASTA approved fuse to BS1362 marked  or  and of the same rating as the one removed from the plug must be used.

Always refit the fuse cover after replacing the fuse on the moulded plug. Never use the plug without the fuse cover fitted.

In the unlikely event of the socket outlet in your home not being compatible with the plug supplied either cut-off the moulded plug (if this type is fitted) or remove by undoing the screws if a rewireable plug is fitted and fit an appropriate type observing the wiring code below.


**DANGER:** The fuse should be removed from the cut-off plug and the plug destroyed immediately and disposed of in a safe manner. Under no circumstances should the cut-off plug be inserted elsewhere into a 13A socket outlet as a serious electric shock may occur.

To fit an appropriate plug to the mains lead, follow the instructions below:

**IMPORTANT:** The wires in this mains lead are coloured in accordance with the following code:

<b>GREEN-AND-YELLOW:</b>	<b>Earth</b>
<b>BLUE:</b>	<b>Neutral</b>
<b>BROWN:</b>	<b>Live</b>

As the colours of the wires in this mains lead may not correspond with coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured **GREEN-AND-YELLOW** must be connected to the terminal in the plug which is marked with the letter **E**, or by the safety earth symbol  , or coloured green or green-and-yellow.

The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured black.

The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured red.

If you have any doubt, consult a qualified electrician.

**WARNING: THIS APPARATUS MUST BE EARTHED.**

This machine contains the software having modules developed by Independent JPEG Group.

This product includes Adobe® Flash® technology of Adobe Systems Incorporated.  
Copyright© 1995-2007 Adobe Macromedia Software LLC. All rights reserved.

---

## **EMC (this machine and peripheral devices)**

### **Warning:**

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## **For the users of the fax function**

### **FAX interface cable and Line cable:**

These special accessories must be used with the device.

The Declaration of Conformity can be viewed at the following URL address.

**<http://www.sharp.de/doc/MX-FXX3.pdf>**

## **MATERIAL SAFETY DATA SHEET**

The MSDS (Material Safety Data Sheet) can be viewed at the following URL address:

**<http://www.sharp-world.com/corporate/info/index.html>**

## Contents

### **TO ENSURE SAFE USE OF THE MACHINE . . . . . 4**

Cautions . . . . . 4

Warnings . . . . . 5

Laser information . . . . . 7

### **INSTALLATION REQUIREMENTS . . . 8**

### **SUPPLIES . . . . . 10**

Storage of supplies . . . . . 10

Supply of spare parts and consumables . . . . . 10

### **REPLACING SUPPLIES AND MAINTENANCE . . . . . 11**

Replacing the toner cartridges . . . . . 11

Replacing the toner collection container . . . . . 16

Replacing the developer cartridge / drum cartridge . . . . . 20

Replacing the developer cartridge . . 20

Replacing the drum cartridge . . 28

Replacing the staple cartridge in the finisher . . . . . 30

Regular maintenance . . . . . 33

Cleaning the document glass and automatic document feeder . . . . 33

Cleaning the main charger of the photoconductive drum . . . . . 34

Cleaning the bypass tray rollers . . . . . 39

Cleaning the automatic document feeder rollers . . . . . 42

Cleaning the laser unit . . . . . 45

Cleaning the PT charger of the primary transfer belt unit . . . . . 52

### **SPECIFICATIONS . . . . . 55**

Machine specifications / copier specifications . . . . . 55

Continuous copying speeds . . 59

Ambient environment . . . . . 59

Acoustic noise emission (measurement according to ISO7779) . . . . . 60

Automatic document feeder specifications . . . . . 61

Business card feeder specifications . . . . . 62

500-sheet paper feed unit specifications . . . . . 62

Finisher specifications . . . . . 63

Printer specifications . . . . . 65

Network scanner / Internet Fax specifications . . . . . 66

Pull scan function (TWAIN) specifications . . . . . 67

Facsimile specifications . . . . . 68

### **INFORMATION ON DISPOSAL . . 70**

A. Information on Disposal for Users (private households) . . . 70

B. Information on Disposal for Business Users . . . . . 71

### **TO THE ADMINISTRATOR OF THE MACHINE . . . . . 74**

Factory default passwords . . . . 74

Forwarding all transmitted and received data to the administrator (document administration function) . . 74

For the users of the fax function . . 75

Trademark acknowledgments . . 76

**Note:**

- Considerable care has been taken in preparing this manual. If you have any comments or concerns about the manual, please contact your dealer or nearest authorised service representative.
- This product has undergone strict quality control and inspection procedures. In the unlikely event that a defect or other problem is discovered, please contact your dealer or nearest authorised service representative.
- Aside from instances provided for by law, SHARP is not responsible for failures occurring during the use of the product or its options, or failures due to incorrect operation of the product and its options, or other failures, or for any damage that occurs due to use of the product.
- This manual contains references to the fax function. However, please note that the fax function is not available in some countries and regions.



Products that have earned the ENERGY STAR® are designed to protect the environment through superior energy efficiency.

The products that meet the ENERGY STAR® guidelines carry the logo shown above. The products without the logo may not meet the ENERGY STAR® guidelines.

**Warranty**

While every effort has been made to make this document as accurate and helpful as possible, SHARP Corporation makes no warranty of any kind with regard to its content. All information included herein is subject to change without notice. SHARP is not responsible for any loss or damages, direct or indirect, arising from or related to the use of this operation manual.

©Copyright SHARP Corporation 2009. All rights reserved. Reproduction, adaptation or translation without prior written permission is prohibited, except as allowed under copyright laws.

---

---

# TO ENSURE SAFE USE OF THE MACHINE

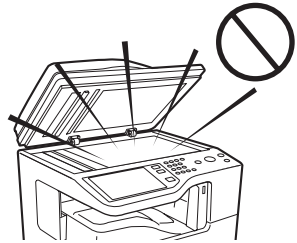
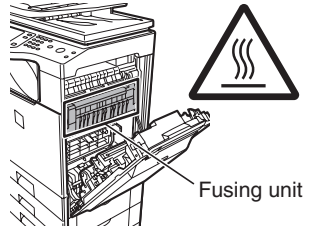
## Cautions

- Do not make any modifications to this machine. Doing so may result in personal injury or damage to the machine.
- Do not make copies of anything which is prohibited from copying by law. The following items are normally prohibited from printing by national law. Other items may be prohibited by local law.
  - Money • Stamps • Bonds • Stocks
  - Bank drafts • Checks • Passports • Driver's licences
- Do not use a flammable spray to clean the machine. If gas from the spray comes in contact with hot electrical components or the fusing unit inside the machine, fire or electrical shock may result.
- Do not place a vessel that contains water or other liquid on the machine. Do not place metal objects on the machine that may fall into the machine.
- In the event that a metal object falls or liquid spills into the machine, first turn off the machine's main power switch and then unplug the power cord.
- If a thunderstorm begins, turn off the machine's main power switch and unplug the power cord in order to prevent electrical shock and fire due to a lightning strike.
- If you find that condensation has formed on the surface of the machine or the display, open the right cover and check for condensation inside the machine. If condensation has formed inside the machine, turn off the main power. Turning on the main power when condensation has formed inside the machine may cause a failure. Leave the right cover open until the condensation evaporates naturally.

To keep foreign matter from getting on the primary transfer belt unit or secondary transfer roller unit while the right cover is open, place a cover over the opening.
- Do not plug in or unplug the power cord with a wet hand.

## Warnings

- Do not touch the transfer belt and the transfer roller. Scratches or smudges on the transfer belt or transfer roller will cause dirty prints.
- The fusing unit is extremely hot. Exercise care in this area.
- Do not look directly at the light source. Doing so may damage your eyes.
- The machine is heavy. To prevent injury when moving the machine, it is recommended that it be moved by four or more persons.
- Do not throw toner, a toner container (toner cartridge), or a toner collection container into a fire. Toner may fly and cause burns.
- Store toner, toner containers (toner cartridges), and toner collection containers out of the reach of children.
- Do not place the machine on a wobbly, slanted, or unstable surface. Install the machine only on a surface that can withstand the weight of the machine.
- When unplugging the power cord, do not grasp and pull on the cord.



## TO ENSURE SAFE USE OF THE MACHINE

---

The machine includes the document filing function, which stores document image data on the machine's hard drive. Stored documents can be called up and printed or transmitted as needed. If a hard drive failure occurs, it will no longer be possible to call up the stored document data. To prevent the loss of important documents in the unlikely event of a hard drive failure, keep the originals of important documents or store the original data elsewhere.

With the exception of instances provided for by law, Sharp Corporation bears no responsibility for any damages or loss due to the loss of stored document data.

### **"BATTERY DISPOSAL "**

THIS PRODUCT CONTAINS A LITHIUM PRIMARY MEMORY BACK-UP BATTERY THAT MUST BE DISPOSED OF PROPERLY. PLEASE CONTACT YOUR LOCAL SHARP DEALER OR AUTHORISED SERVICE REPRESENTATIVE FOR ASSISTANCE IN DISPOSING OF THIS BATTERY.

Each instruction also covers the optional units used with these products.



## Laser information

Wave length	790 nm $\pm$ 10 nm
Pulse times (North America and Europe)	4.1 $\mu$ s $\pm$ 4.1 ns /7 mm
Output power	Max 0.6 mW (LD1+ LD2)

### Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This Digital Equipment is CLASS 1 LASER PRODUCT (IEC 60825-1 Edition 1.2-2001)

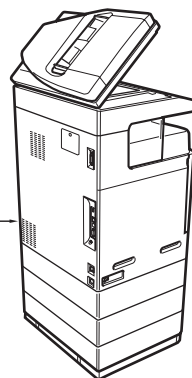
For Europe:

CLASS 1 LASER PRODUCT

LASER KLASSE 1

LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT



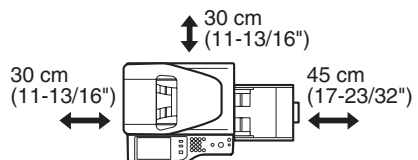
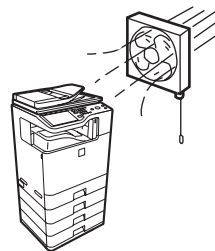
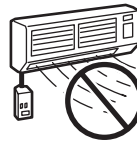
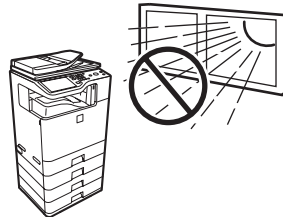
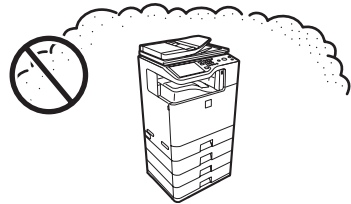
# INSTALLATION REQUIREMENTS

Improper installation may damage this product. Please note the following during initial installation and whenever the machine is moved.

1. The machine should be installed near an accessible power outlet for easy connection.
2. Be sure to connect the power cord only to a power outlet that meets the specified voltage and current requirements. Also make certain the outlet is properly grounded.
  - For the power supply requirements, see the name plate in the lower left corner of the left side of the machine.

Connect the machine to a power outlet which is not used for other electric appliances. If a lighting fixture is connected to the same outlet, the light may flicker.

3. Do not install the machine in areas that are:
  - damp, humid, or very dusty
  - exposed to direct sunlight
  - subject to extreme temperature or humidity changes, e.g., near an air conditioner or heater
  - poorly ventilated.
4. Be sure to allow the required space around the machine for servicing and proper ventilation.
5. The machine includes a built-in hard drive. Do not subject the machine to shock or vibration. In particular, never move the machine while the power is on.



**CAUTION:****Do not install the machine in a location with poor air circulation.**

A small amount of ozone is created inside the machine during printing. The amount of ozone created is not sufficient to be harmful; however, an unpleasant odor may be noticed during large copy runs, and thus the machine should be installed in a room with a ventilation fan or windows that provide sufficient air circulation. (The odor may occasionally cause headaches.)

- \* Install the machine so that people are not directly exposed to exhaust from the machine. If installed near a window, ensure that the machine is not exposed to direct sunlight.

---

---

# SUPPLIES

Standard supplies for this product that can be replaced by the user include paper, toner cartridges, and staple cartridges for the finisher.

Be sure to use only SHARP-specified products for the toner cartridges, finisher staple cartridge, and transparency film.

**SHARP**



GENUINE SUPPLIES

For best copying results, be sure to use only Sharp Genuine Supplies which are designed, engineered, and tested to maximize the life and performance of Sharp products. Look for the Genuine Supplies label on the toner package.

## Storage of supplies

### Proper storage

1. Store the supplies in a location that is:
  - clean and dry
  - at normal temperature with minimal temperature fluctuations
  - not exposed to direct sunlight
2. Store paper in the wrapper and lying flat.
3. Paper stored in packages standing up or out of the wrapper may curl or become damp, resulting in paper misfeeds.

### Storing toner cartridges

Store the box that contains the toner cartridge horizontally; do not store it standing up. If the toner cartridge is stored standing up, the toner may solidify inside the cartridge.

Store the toner in a location that is cooler than 40°C (104°F). Storage in a hot location may cause the toner in the cartridge to solidify.

### Staple cartridge

The finisher requires the following staple cartridge:

MX-SCX1 (for finisher)

Approx. 5000 per cartridge x 3 cartridges

## Supply of spare parts and consumables

The supply of spare parts for repair of the machine is guaranteed for at least 7 years following the termination of production. Spare parts are those parts of the machine which may break down within the scope of the ordinary use of the product, whereas those parts which normally exceed the life of the product are not to be considered as spare parts. Consumables too, are available for 7 years following the termination of production.

---


# REPLACING SUPPLIES AND MAINTENANCE

This section explains the procedures for replacing supplies such as toner and staple cartridges and routine maintenance.

## Replacing the toner cartridges

Be sure to replace the toner cartridge when the message "Change the toner cartridge." appears.

### In copy mode

 Ready to scan for copy.  
(Prepare a new one.)

When this message appears, replace the toner cartridge.



If you continue to use the toner cartridge without replacing it, the message below will appear.

When this message appears, printing will not be possible until the toner cartridge is replaced.



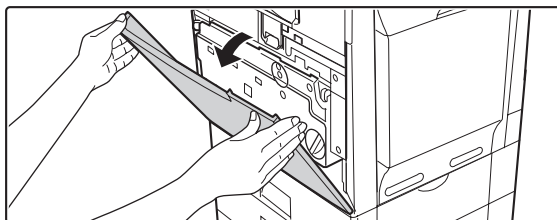
Change the toner cartridge.



To view the approximate amount of toner remaining, continually touch the [COPY] key during printing or when the machine is idle. The percentage of toner remaining will appear in the display while the key is touched. When the percentage falls to "25-0%", obtain a new toner cartridge and keep it ready for replacement.

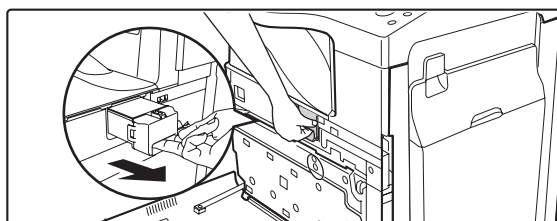
1

**Open the front cover.**

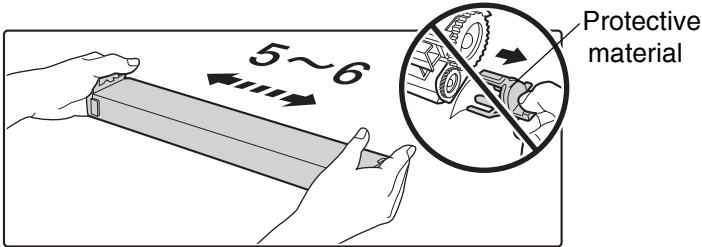


2

**Pull the toner cartridge toward you.**

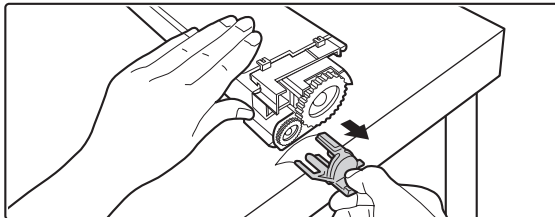


**Take out the new toner cartridge, hold it with both hands, and shake 5 or 6 times horizontally.**

**3**

- When shaking the toner cartridge, be sure to shake with the protective material inserted in the cartridge. If you shake the cartridge after removing the protective material, toner may spill out.
- Shake the toner cartridge only in the horizontal direction. If shaken in any other direction, toner may collect in one part of the cartridge.

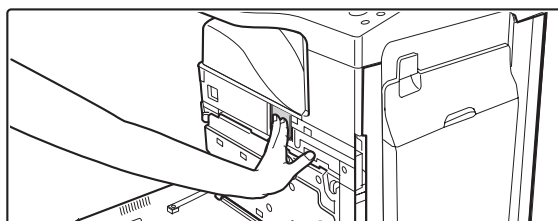
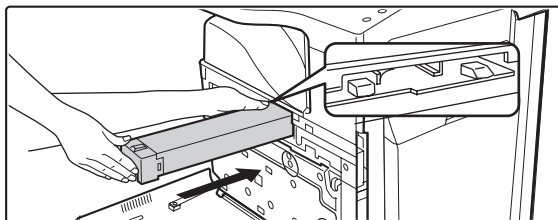
**Remove the protective material from the new toner cartridge.**

**4**

- Hold the toner cartridge firmly while removing the protective material.
- After the protective material has been removed, do not point the toner cartridge down or shake it. Toner may spill out.

5

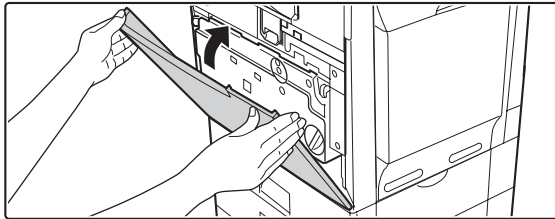
**Insert the new toner cartridge horizontally and push it firmly in.**





## Close the front cover.

6



- After the toner cartridge is replaced, the machine automatically enters image adjustment mode. Image adjustment will not take place if the cover is not closed.
- Take care that your fingers are not pinched when closing the cover.



### Caution

- **Do not throw a toner cartridge into a fire. Toner may fly and cause burns.**
- **Store toner cartridges out of the reach of small children.**



- Store the box that contains the toner cartridge horizontally; do not store it standing up. If the toner cartridge is stored standing up, the toner may solidify inside the cartridge.  
Store the toner in a location that is cooler than 40°C (104°F). Storage in a hot location may cause the toner in the cartridge to solidify.
- If a toner cartridge other than a SHARP-recommended toner cartridge is used, the machine may not attain full quality and performance and there is a risk of damage to the machine. Be sure to use a SHARP-recommended toner cartridge.



- Keep the used toner cartridge in a plastic bag (do not discard it). Your service technician will collect the used toner cartridge.
- To view the approximate amount of toner remaining, continually touch the [COPY] key during printing or when the machine is idle. The percentage of toner remaining will appear in the display while the key is touched. When the percentage falls to "25-0%", obtain a new toner cartridge and keep it ready for replacement. When the remaining toner falls to "25-0%", output images may be faint or partially missing when an original or image with dark colours is copied or printed.

Total Count	00,000,000
Toner Quantity	100-75%

## Replacing the toner collection container

The toner collection container collects excess toner that is produced during printing. When the toner collection container becomes full, "Replace used toner container." will appear. Follow the procedure below to replace the toner collection container.

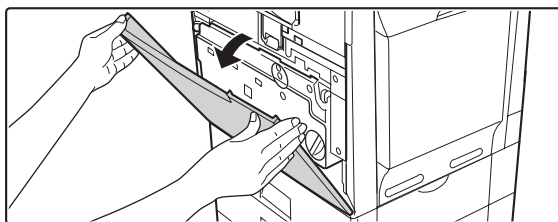
It is also necessary to remove the toner collection container in order to replace the transfer unit. Refer to the procedure below to remove the toner collection container when replacing the transfer unit.



Toner may spill when the toner collection container is replaced. Before replacing the toner collection container, take measures such as placing covers on and around the machine to prevent soiling.

1

**Open the front cover.**

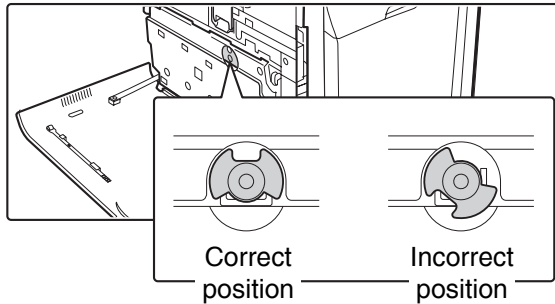


## Release the used toner collection container.

- (1) Make sure that the part indicated in the illustration has stopped in the correct position.**

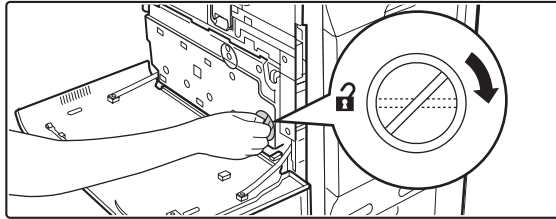
After machine operation stops suddenly due to a power outage or other reason, the part will stop in the correct position unless an attempt was made to remove the toner collection container.

If the part has not stopped in the correct position, close the front cover, turn on the power, and then follow the correct procedure to turn off the power. After the power has been turned off correctly, start again from step 1.



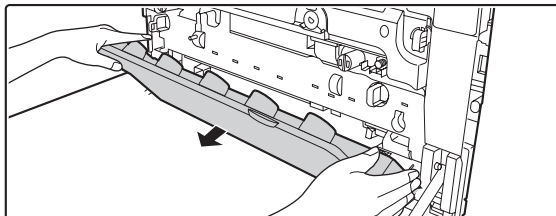
**2**

- (2) Turn the toner collection container lock lever to the right until it is horizontal.**



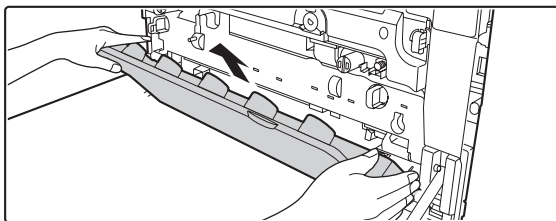
- (3) Tip the toner collection container forward.**

Grasp the top right of the toner collection container with your right hand and support the bottom left with your left hand, and slowly tip the container toward you.



3

## Remove the toner collection container.



- If the toner collection container is tipped forward too far, it will not be possible to remove it.
- Do not point the holes down as used toner will spill out.

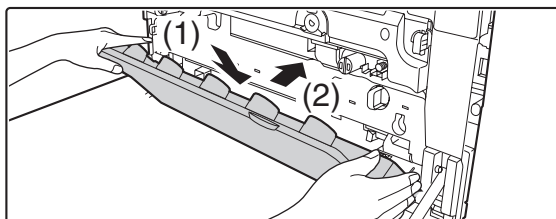


- Hold the container by both hands and lift it up slowly.
- Do not discard the toner collection container. Place it in a plastic bag and keep it until your service technician comes to perform maintenance. Your service technician will collect the toner collection container.

4

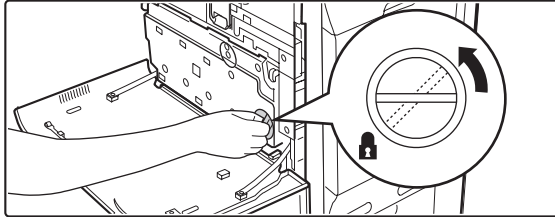
## Install the new toner collection container.

Insert the container from above at a slant. (The direction opposite to when you removed it.)



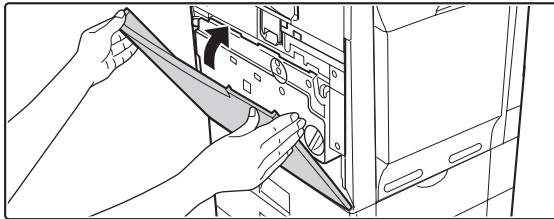
## Turn the lock lever on the toner collection container to the left.

Turn the lock lever to the left until it stops.

**5**

If the lock lever does not turn, check if the toner collection container is installed correctly. In particular, make sure that the top left corner of the toner collection container is correctly in place.

## Close the front cover.

**6**

Take care that your fingers are not pinched when closing the cover.



### Caution

- Do not throw the toner collection container into a fire. Toner may fly and cause burns.
- Store the toner collection container out of the reach of small children.



- Toner may spill when the toner collection container is replaced. Take measures so that there will be no problem if toner spills on the machine, around the machine, or on your clothes.
- Do not touch the part soiled with toner of the removed toner collection container. If you accidentally touch the toner, immediately wash your hands.

## Replacing the developer cartridge / drum cartridge

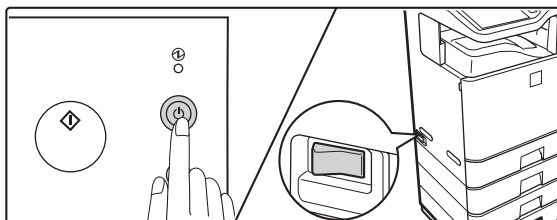
Before replacing the developer cartridge or drum cartridge, turn off the main power of the machine and wait briefly.

### Replacing the developer cartridge

Your service technician will replace the developer cartridge. Only replace the cartridge as explained below if your service technician instructs you to. Follow the instructions carefully.

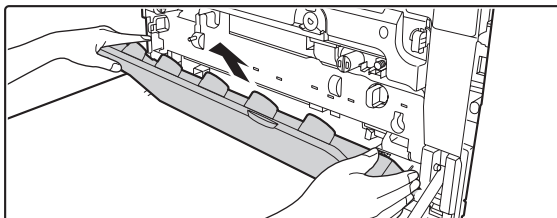
It is also necessary to remove the developer cartridge in order to replace the drum cartridge. Refer to the procedure below to remove the developer cartridge when replacing the drum cartridge.

**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**1**

**Open the front cover and remove the toner collection container.**

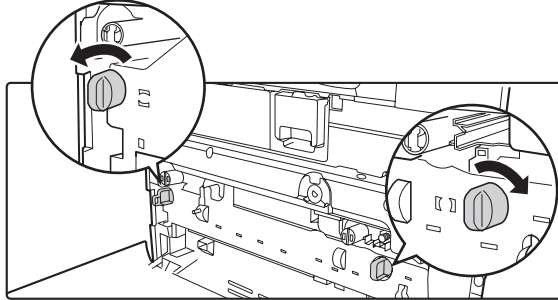
🔧 Replacing the toner collection container (page 16)

**2**

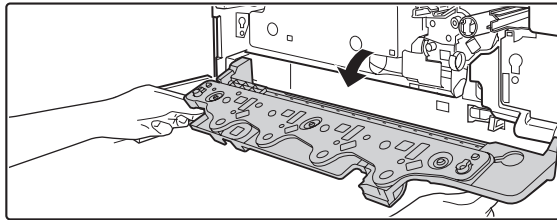
### Open the main charger cover.

- (1) Turn the main charger cover lock levers in the direction of an arrow below.

When the lock levers are horizontal, the lock is released.

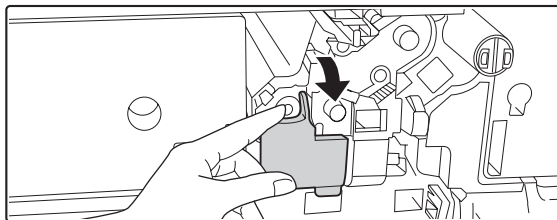


- (2) Grasp the lock levers and tip the cover forward.

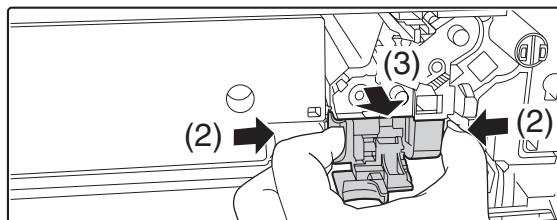


## Remove the developer cartridge.

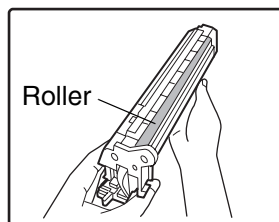
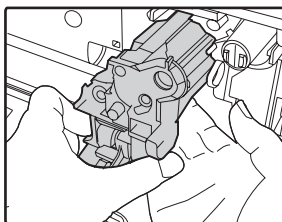
- (1) Grasp the developer cartridge lock and pull it forward and down.



- (2) Squeeze the lever on the developer cartridge.
- (3) Pull the developer cartridge out horizontally.



- (4) Support the developer cartridge near the middle with your hand and completely remove the developer cartridge.



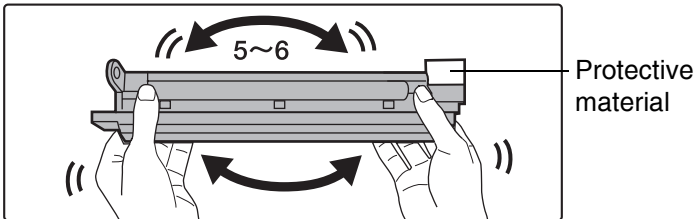
- When removing the developer cartridge, grasp it with both hands at the middle.
- Try to keep the developer cartridge horizontal as you remove it. If tipped during removal, developer may spill out.
- There will be toner on the roller area of the removed developer cartridge. Do not touch the roller area. If you accidentally touch the toner, immediately wash your hands.
- When removing the developer cartridge, the drum cartridge may also come out. Take care not to pull out the drum cartridge when you remove the developer cartridge.



## Shake the new developer cartridge 5 or 6 times as shown.

Hold the developer cartridge firmly as shown below and shake forward and back, left and right.

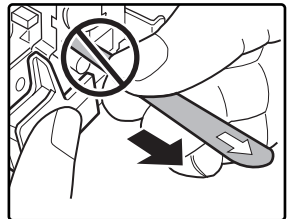
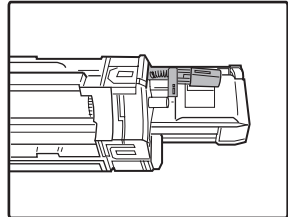
Remove the protective material after shaking the developer cartridge.

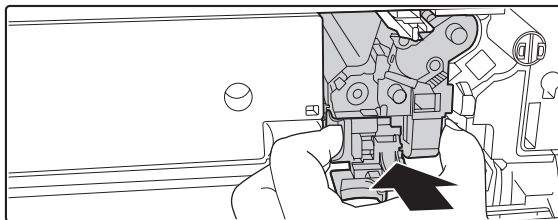


# 5



- **The part of the developer cartridge shown in the next illustration is easily deformed or damaged. Do not touch this part when handling the cartridge.**
- Do not touch the roller in the developer cartridge. If the roller is accidentally touched, image problems may result. In that case, replace the developer cartridge with a new cartridge.
- The seal must not be removed when shaking the new developer cartridge.
- Take care not to damage the developer cartridge when shaking it. If damaged, the developer in the cartridge may leak out.

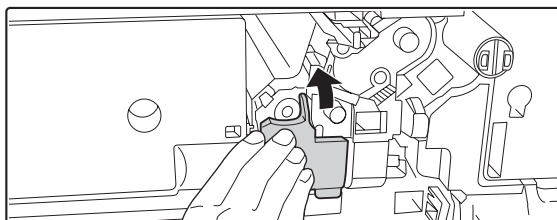


**Insert the new developer cartridge horizontally.****6**

- Do not tilt the developer cartridge or insert it in the wrong direction or orientation. This may damage the developer cartridge or drum cartridge and cause failure.
- When inserting the developer cartridge, grasp it with both hands at the middle.
- Do not remove the seal from the developer cartridge until the cartridge is installed in the machine. If the seal is removed when the cartridge is not locked, the cartridge may fall out of the machine.



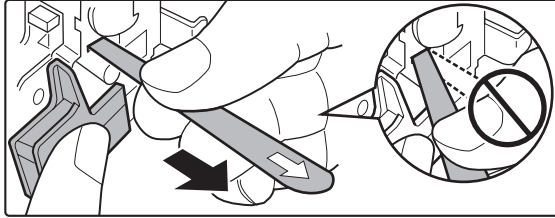
Insert with the arrow on the cartridge aligned with the arrow on the machine.

**Grasp the developer cartridge lock and replace it on the machine.****7**

## Hold the developer cartridge with one hand and slowly remove the seal with the other hand.

Slowly pull the seal straight and horizontally out.

8



If excessive force is used or the seal is pulled out diagonally, it may tear.

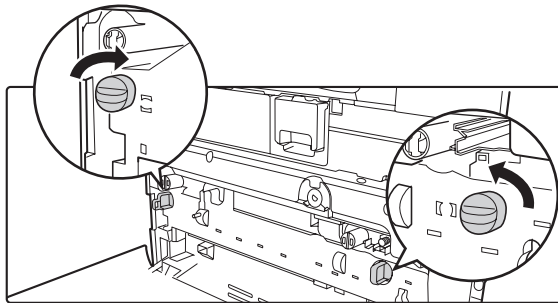


There is a mark (red belt) on the end of the seal. After removing the seal, be sure to verify that the mark (red belt) is on the end of the seal. If the seal has been cut on the developer cartridge, the cartridge cannot be used. Replace with a new developer cartridge.

## Close the main charger cover and rotate the lock levers in the direction of the arrows to lock the cover.

When the lock levers are vertical, the cover is locked.

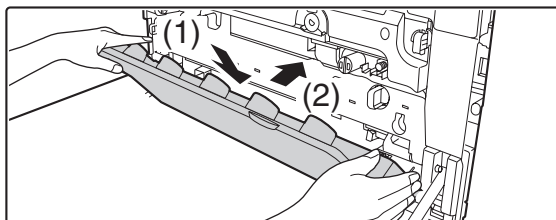
9



10

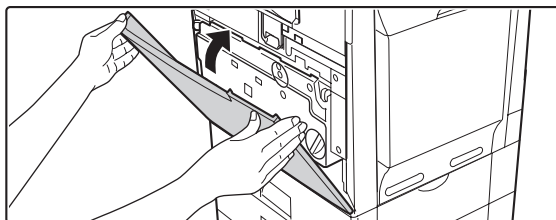
## Install the toner collection container.

☞ Replacing the toner collection container (page 16)



11

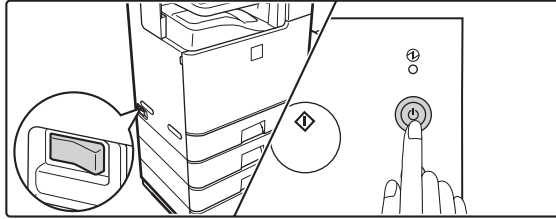
## Close the front cover.



Take care that your fingers are not pinched when closing the cover.

## Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.



### Caution

- Do not throw the developer cartridge into a fire. Toner may fly and cause burns.
- Store the developer cartridge out of the reach of small children.



- When replacing the developer cartridge, be aware that it may soil your clothes or the immediate surroundings.
- Do not touch the part soiled with toner of the removed toner collection container. If you accidentally touch the toner, immediately wash your hands.

## Replacing the drum cartridge

Your service technician will replace the drum cartridge. Only replace the cartridge as explained below if your service technician instructs you to. Follow the instructions carefully.



- Do not leave the drum cartridge outside of its package for a long time, and do not remove cartridge from its package in a location where there is bright sunlight or bright light. This may cause a failure.
- When you remove a drum cartridge, place it in a dark location and do not allow light to shine on the cartridge.

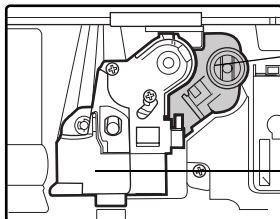
### Turn off the power and remove the developer cartridge.

For the procedure for removing the developer cartridge, see steps 1 to 4 of "Replacing the developer cartridge" (page 20).



To remove the drum cartridge, the developer cartridge must first be removed.

1

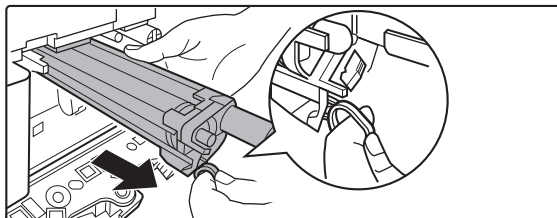


Drum cartridge

Developer cartridge

### Hold down the lever on the drum cartridge with your finger and pull the drum cartridge toward you.

Place one hand at the middle of the drum cartridge and pull out with both hands.



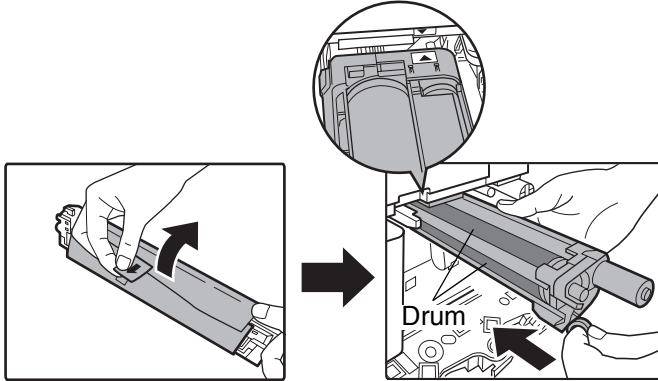
2



Do not touch toner on the old drum cartridge. If you accidentally touch the toner, immediately wash your hands.

## Remove the protective material from the drum cartridge and slowly insert the drum cartridge along the guides.

Make sure that the ▲ mark on the drum cartridge is aligned with the ▼ mark on the machine as you insert the drum cartridge.



- To remove the protective material, slowly pull it straight out so that it does not tear.
- When installing the drum cartridge, do not touch or damage the drum. This may cause a failure.
- After removing the protective material, immediately insert the drum cartridge in the machine. Do not allow the drum cartridge to be directly exposed to sunlight or electric light.
- Do not tilt the drum cartridge or insert it in the wrong direction or orientation. This may damage the drum cartridge or cause a failure.

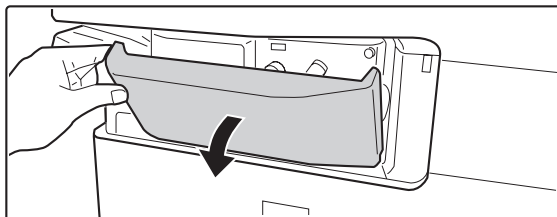
## Replace the developer cartridge and toner collection container, close the front cover of the machine, and turn on the power.

For the procedure for replacing the developer cartridge and toner collection container, see steps 7 to 8 and steps 10 to 11 of "Replacing the developer cartridge" (page 18).

## Replacing the staple cartridge in the finisher

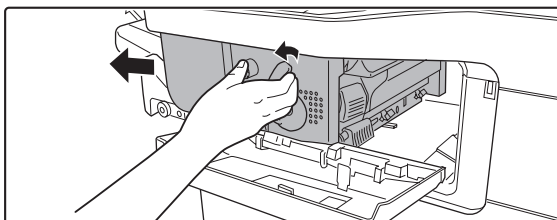
When the staple cartridge runs out of staples, a message will appear in the operation panel. Follow the procedure below to replace the staple cartridge.

### 1 Open the cover.



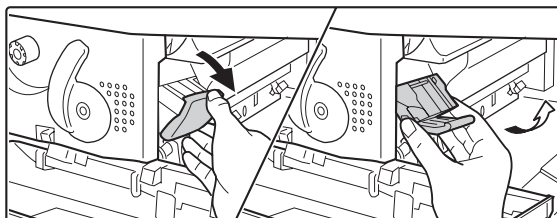
### 2 While pressing the lever over to the left, slide the finisher to the left until it stops.

Gently slide the finisher until it stops



### 3 Lower the staple case release lever and remove the staple case.

Pull the staple case out to the right.

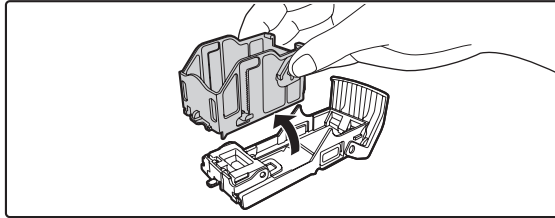




## Remove the empty staple cartridge from the staple case.

Gently grasp the right side of the staple cartridge as shown and lift to the left and up. The lock will release easily. After the lock releases, continue lifting the staple cartridge to the left and up to remove it.

4

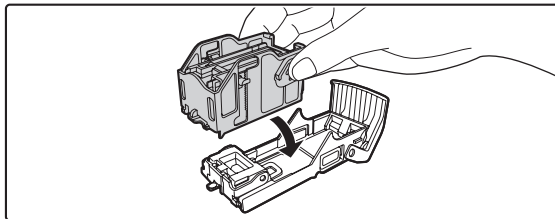


- Even when a message appears in the operation panel, staples may occasionally remain in the staple cartridge.
- If staples remain, the lock will not release easily. Forcing the lock to release may deform the staple case and staple cartridge, causing failure.

## Insert a new staple cartridge into the staple case as shown.

Push the staple cartridge in until it clicks into place.

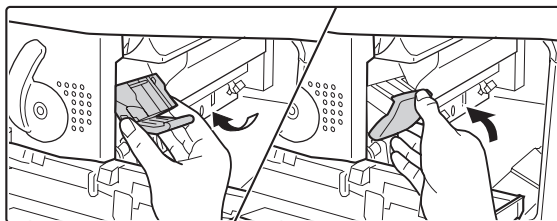
5



6

## Replace the staple case.

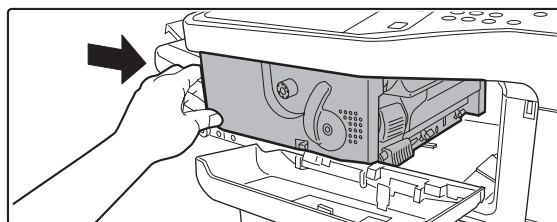
Push the staple case in until it clicks into place.



7

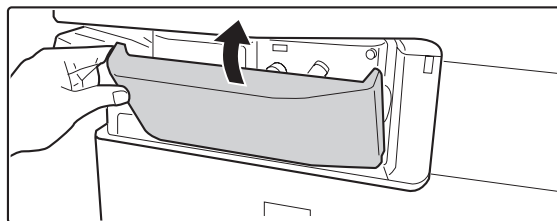
## Slide the finisher back to the right.

Gently slide the finisher back to the right until it locks into its original position.



8

## Close the cover.



Take care that your fingers are not pinched when closing the cover.



Make a test print or copy in staple sort mode to verify that stapling takes place correctly.

## Regular maintenance

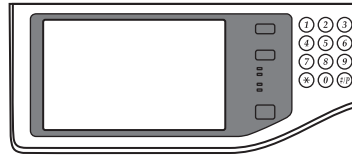
To ensure that the machine continues to provide top quality performance, periodically clean the machine.


### Warning

**Do not use a flammable spray to clean the machine. If gas from the spray comes in contact with hot electrical components or the fusing unit inside the machine, fire or electrical shock may result.**



- Do not use thinner, benzene, or similar volatile cleaning agents to clean the machine. These may degrade or discolour the housing.
- Use a soft cloth to gently wipe off dirt from the area on the operation panel with a mirror-like finish (shown at right). If you use a stiff cloth or rub hard, the surface may be damaged.



The area with a mirror-like finish is the area that is .

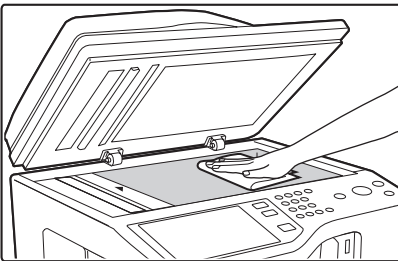
## Cleaning the document glass and automatic document feeder

If the document glass or document backplate sheet becomes dirty, the dirt will appear as dirty spots, or black or white lines in the scanned image. Always keep these parts clean.

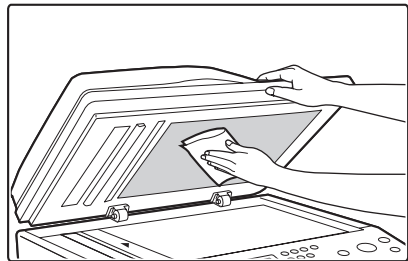
Wipe the parts with a clean, soft cloth.

If necessary, moisten the cloth with water or a small amount of neutral detergent. After wiping with the moistened cloth, wipe the parts dry with a clean dry cloth.

### Document glass



### Document backplate sheet



When wiping dirt off the machine, do not press down hard on the machine. This may damage or deform the machine.

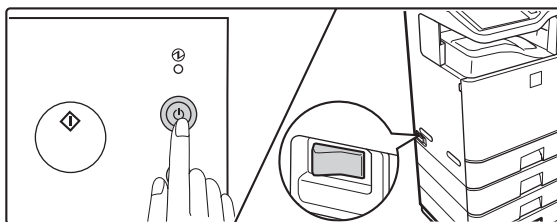
## Scanning area

If black or white lines appear in images scanned using the automatic document feeder, clean the scanning area (the thin long glass next to the document glass).

## Cleaning the main charger of the photoconductive drum

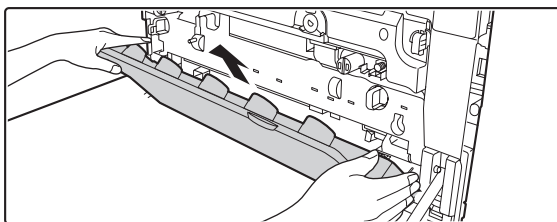
If black or white lines appear even after you have cleaned the document glass and automatic document feeder, use the charger cleaner to clean the main charger.

**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**1**

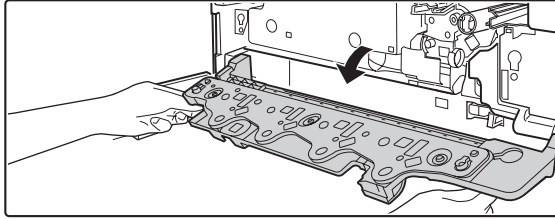
**Open the front cover and remove the toner collection container.**

☞ Replacing the toner collection container (page 16)

**2**

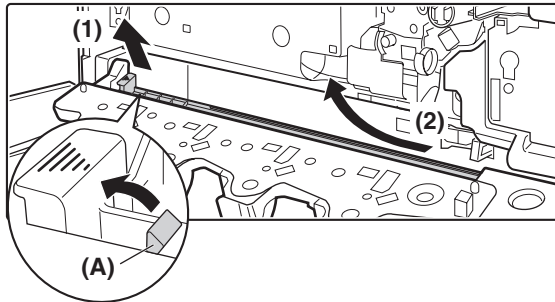
## Release the lock levers and open the main charger cover.

☞ Replacing the developer cartridge (page 20)

**3**

## Remove the charger cleaner.

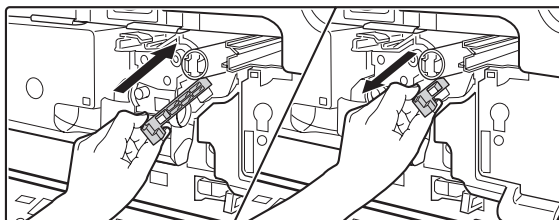
- (1) Flip down the charger cleaner lock (A) in the direction of the arrow, and lift the left end of the charger cleaner.

**4**

- (2) Move the charger cleaner to the left and pull it out.

## Clean the main charger.

- (1) Gently push the charger cleaner all the way in.
- (2) Gently pull the charger cleaner out.

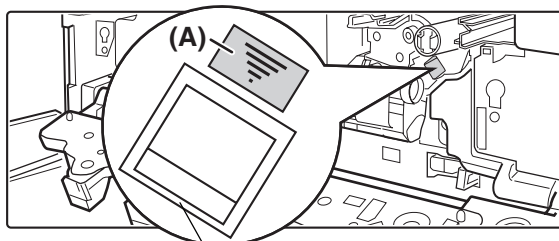


- (3) Repeat the above (1) to (2) three times.

5



- Take care not to let the tip of the charger cleaner become soiled by toner.
- Clean with the mark (≡) on the charger cleaner facing down.
- Holes to be cleaned by the charger cleaner are indicated by labels similar to (A).



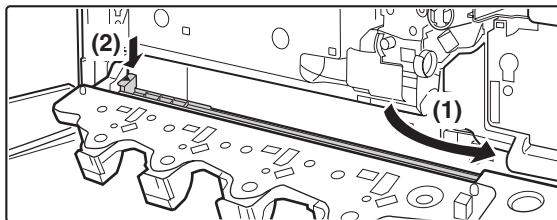
Position of mark

- Do not use the charger cleaner for any purpose other than cleaning the main charger.

6

**Replace the charger cleaner in its original position.**

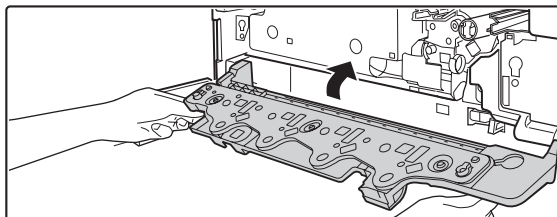
Insert the tip of the charger cleaner in toward the right and then press down on the end of the charger cleaner. The charger cleaner will lock into place.



7

**Close the main charger cover and rotate the lock levers in the direction of the arrows to lock the cover.**

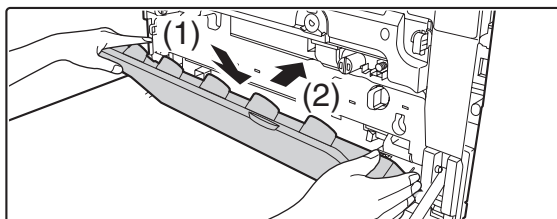
■ Replacing the developer cartridge (page 20)



8

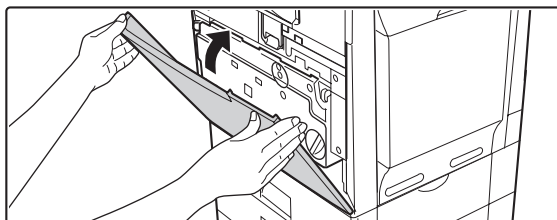
**Install the toner collection container.**

■ Replacing the toner collection container (page 16)



9

## Close the front cover.

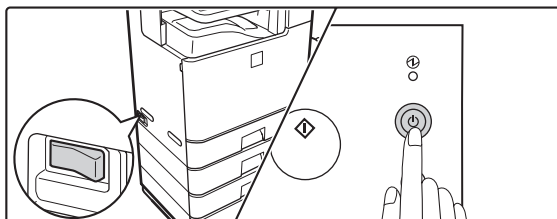


Take care that your fingers are not pinched when closing the cover.

10

## Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.



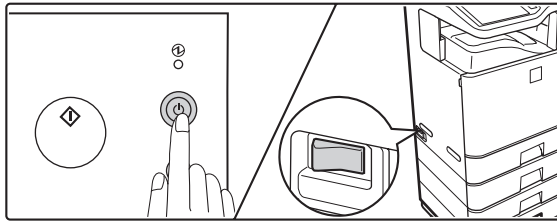


## Cleaning the bypass tray rollers

If you find that paper fed from the bypass tray misfeeds or is soiled by the roller, remove and clean the roller. If misfeeds or soiling continue to occur, replace the roller.

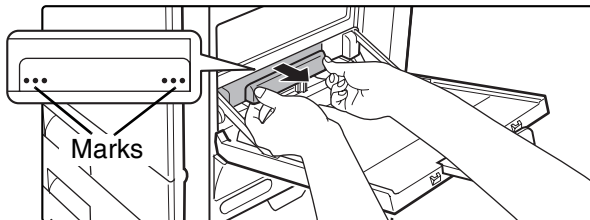
Before starting, remove the paper from the bypass tray.

**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**1**

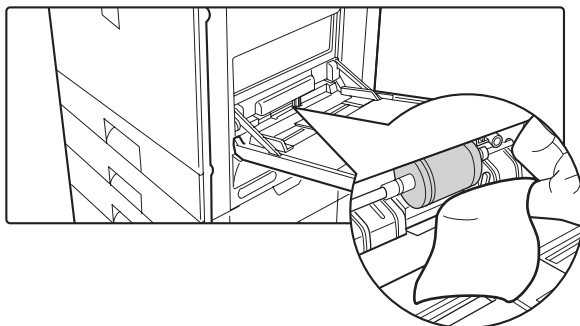
**Remove the roller cover from the bypass tray.**

Place your fingers behind the ... marks on the roller cover and pull straight toward you.

**2**

3

**To clean the rollers, wipe each roller with a clean cloth.**

**Caution**

**When cleaning the rollers, be careful not to injure your hands.**



Do not touch the surface of the roller if your hands are dirty.

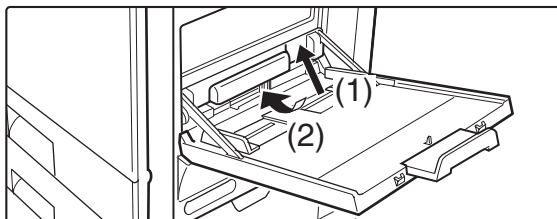


If the dirt is difficult to remove, moisten the cloth with a small amount of water or neutral detergent, and then wipe with a clean, dry cloth until no moisture remains.

4

**Attach the roller cover on the bypass tray.**

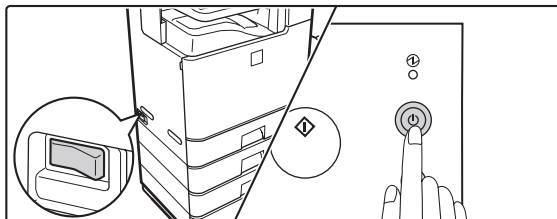
- (1) Tilt the front of the cover slightly to attach it.
- (2) Press the cover onto the bypass tray so that it locks into place.



## 5

**Turn on the power.**

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.

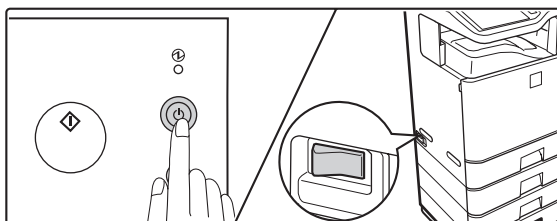


## Cleaning the automatic document feeder rollers

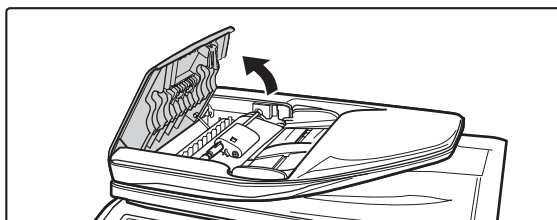
If you find that originals fed through the automatic document feeder misfeed or are soiled by the rollers, remove the rollers and clean them. If misfeeds or soiling continue to occur, replace the rollers.

Before starting, remove any originals from the automatic document feeder.

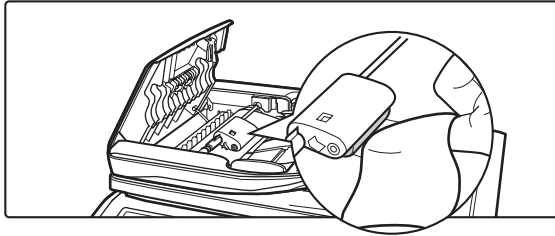
**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**1**

**Open the document conveyor cover on the automatic document feeder.**

**2**

**To clean the removed rollers, wipe each roller with a clean cloth.**

**3**

**⚠ Caution**

**When cleaning the rollers, be careful not to injure your hands.**

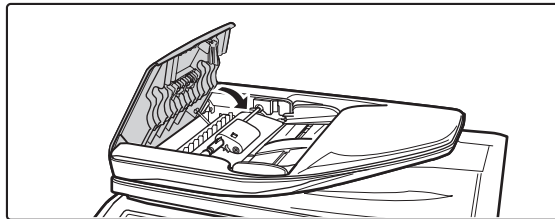


Do not touch the surface of the roller if your hands are dirty.



If the dirt is difficult to remove, moisten the cloth with water or a neutral detergent. After wiping, wipe the roller dry with a clean cloth.

**Close the document conveyor cover on the automatic document feeder.**

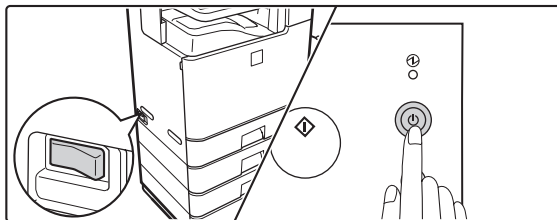
**4**

Take care that your fingers are not pinched when closing the cover.

## 5

**Turn on the power.**

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.



After turning on the power, make sure that an error message regarding replacement of the roller does not appear.

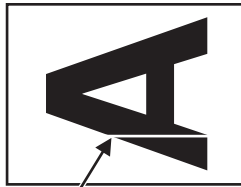
## Cleaning the laser unit

When the laser unit inside the machine becomes dirty, line patterns may form in the printed image. Follow the steps below to clean the laser unit.



### Identifying white lines caused by a dirty laser unit

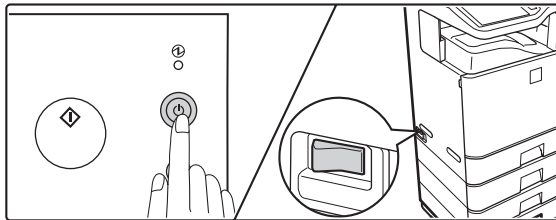
- White lines always appear in the same place.
- The white lines are parallel to the direction of paper feeding.



- White lines appear not only on copies but also on print jobs from a computer. (The same lines appear on both copies and print jobs.)

**1**

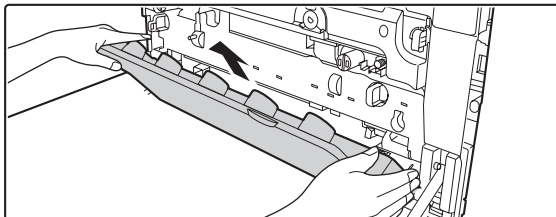
**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**



## Open the front cover and remove the toner collection container.

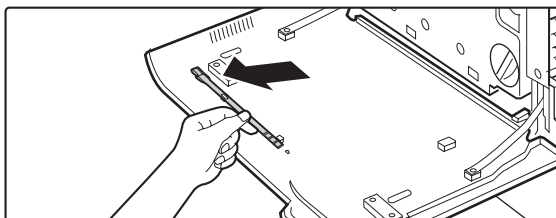
 Replacing the toner collection container (page 16)

2



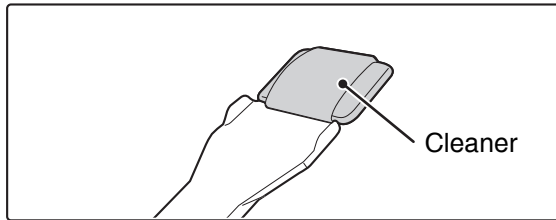
## Remove the cleaning tool for the writing unit from the front cover.

3



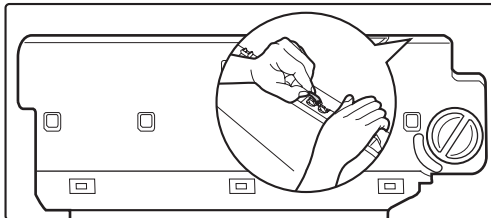


**Make sure that the cleaner at the tip of the cleaning tool is not dirty.**

**4**

If the cleaner is dirty, remove the cleaner and replace it with a clean one. For the procedure for replacing the cleaner, see steps 5 through 7. If the cleaner is not dirty, go to step 8.

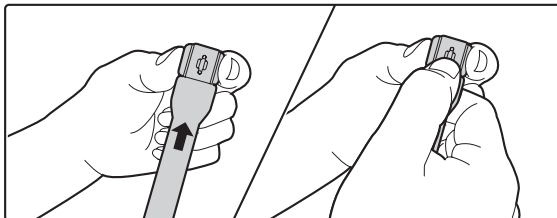
**Pull out the replacement cleaner from the toner collection container.**

**5**

6

**Remove the dirty cleaner.**

Firmly grasp the tool close to where the cleaner is attached.  
Use your other hand to press down on the hook that secures the cleaner and remove the cleaner.

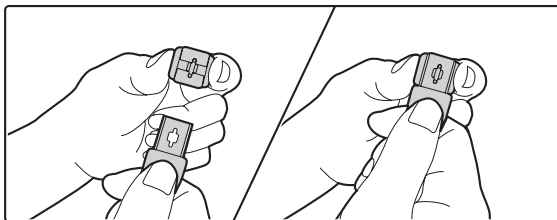


Return the removed cleaner to the toner collection container.

7

**Attach the new cleaner to the cleaning tool.**

Align the cleaner hook with the attachment hole in the cleaning tool.  
Hold the cleaner firmly and push the cleaning tool into the cleaner.

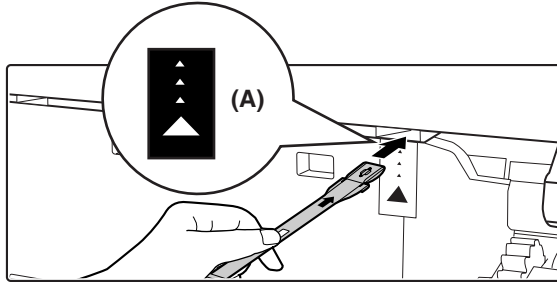


Make sure that the cleaner is firmly attached to the cleaning tool.

## Clean the laser unit.

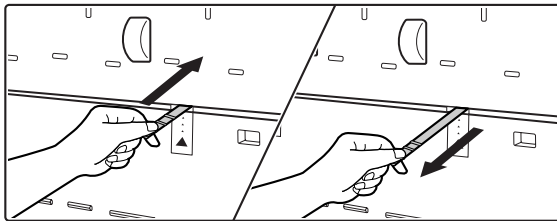
- (1) Point the cleaner down and slowly insert the tool into the hole that you wish to clean.**

The parts of the writing unit that require cleaning are indicated by labels similar to (A).

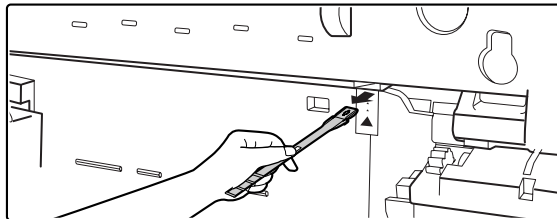


- (2) Insert the cleaning tool all the way into the hole and then pull it back out.**

Pull the cleaning tool out until you feel the tip of the tool leave the cleaning surface of the laser unit.

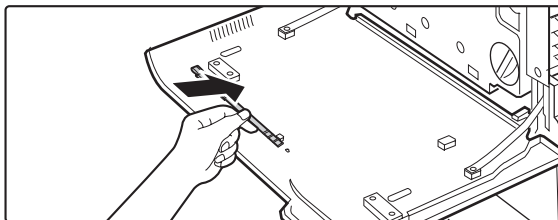


- (3) Repeat step (2) two or three times and then remove the cleaning tool.**



9

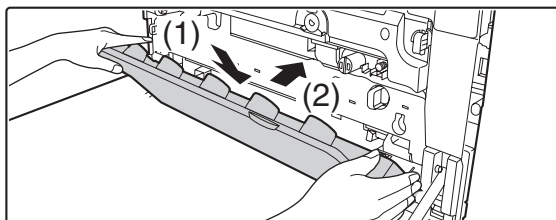
## Replace the cleaning tool.



10

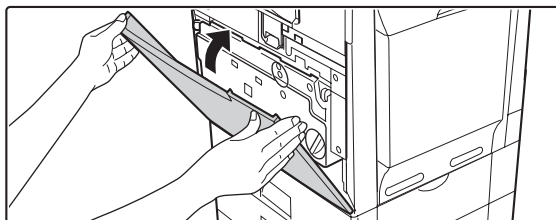
## Install the toner collection container.

 Replacing the toner collection container (page 16)



11

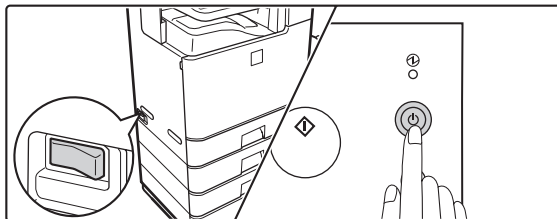
## Close the front cover.



Take care that your fingers are not pinched when closing the cover.

## Turn on the power.

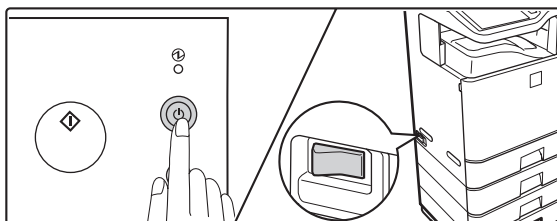
Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.



## Cleaning the PT charger of the primary transfer belt unit

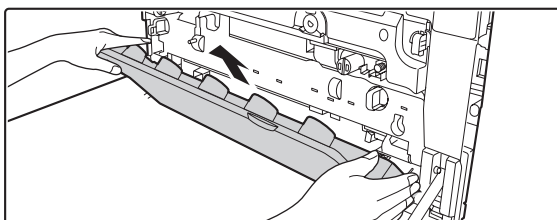
If black or white lines still remain after the document glass / automatic document feeder and main charger have been cleaned, use the PT charger cleaner to clean the PT charger.

**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**1**

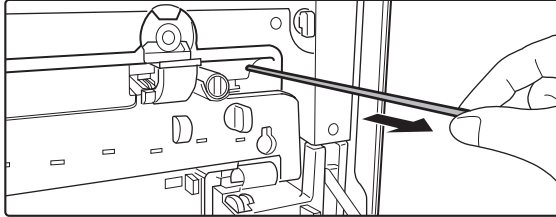
**Open the front cover and remove the toner collection container.**

 Replacing the toner collection container (page 16)

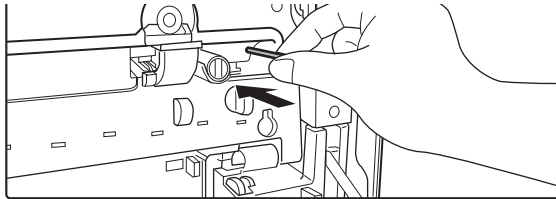
**2**

### Clean the PT charger.

- (1) Slowly pull the PT charger cleaner out until you feel a slight resistance.



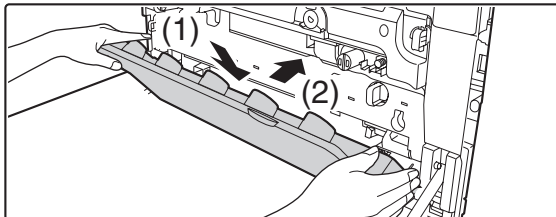
- (2) Slowly push the PT charger cleaner back in.



- (3) Repeat the above (1) to (2) three times.

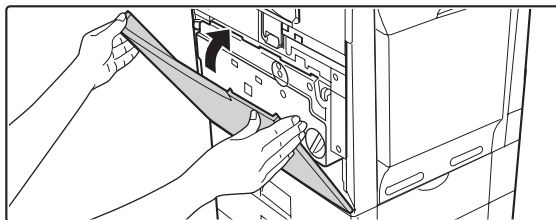
### Install the toner collection container.

☞ Replacing the toner collection container (page 16)



5

## Close the front cover.

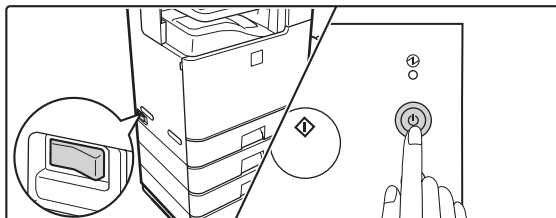


Take care that your fingers are not pinched when closing the cover.

6

## Turn on the power.

Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.





---

---

# SPECIFICATIONS

## Machine specifications / copier specifications

<b>Name</b>	Digital Multifunctional System MX-B381	
<b>Type</b>	Desktop	
<b>Display</b>	8.5 inch colour touch panel LCD	
<b>Photoconductive type</b>	OPC drum	
<b>Printing method</b>	Electrophotographic system (laser)	
<b>Developer system</b>	Dry-type two-component magnetic brush development	
<b>Fusing system</b>	Heat rollers	
<b>Scanning resolution</b>	Document glass	600 x 300 dpi, 600 x 600 dpi (factory default values)
	Reversing single pass feeder (automatic document feeder)	600 x 300 dpi (factory default values), 600 x 600 dpi
<b>Printing resolution</b>	600 x 600 dpi	
<b>Scanning gradation</b>	256 levels	
<b>Printing gradation</b>	Equivalent to 256 levels	
<b>Original sizes / types</b>	Max. A4 (8-1/2" x 11") / sheets, bound documents	
<b>Copy sizes</b>	Maximum: A4 (8-1/2" x 11") Minimum: A5 (5-1/4" x 5-3/4")	
<b>Print margins</b>	Leading edge / trailing edge: total 8 mm (21/64") or less, near edge / far edge: total 8 mm (21/64") or less	

## Machine specifications / copier specifications (Continued)

<b>Warm-up time</b>	90 seconds or less (at room temperature of 23°C (73.4°F) and rated voltage) (This may vary depending on the ambient conditions)
<b>First-copy time</b>	8.0 seconds or less (This may vary depending on the status of the machine)
<b>Copy ratios</b>	Variable: 50% to 200% in increments of 1%, total 151 increments Fixed presets: 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141% and 200% for AB sizes. 50%, 64%, 77%, 100%, 129% and 200% for inch sizes; Two reduction ratios and two enlargement ratios can be stored.
<b>Continuous copy</b>	999 copies
<b>Automatic document feeder</b>	See "Automatic document feeder specifications".
<b>Tray 1</b>	<p>Paper sizes: A4, B5, A5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2", 16K</p> <p>Paper weight: Plain paper (60 g/m<sup>2</sup> to 105 g/m<sup>2</sup> (16 lbs. to 28 lbs.))</p> <p>Paper capacity: Plain paper (80 g/m<sup>2</sup> (21 lbs.)) 500 sheets</p> <p>Paper types: SHARP-recommended plain paper, recycled paper and coloured paper</p>

## Machine specifications / copier specifications (Continued)

<b>Bypass tray</b>	Paper sizes: A4, B5, A5, envelopes, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2", 16K
	Paper weights: Thin paper (55 g/m <sup>2</sup> to 59 g/m <sup>2</sup> (15 lbs. to 16 lbs.)), plain paper (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (16 lbs. to 28 lbs.)), heavy paper (106 g/m <sup>2</sup> to 209 g/m <sup>2</sup> (28 lbs. bond to 110 lbs. index))
	Paper capacity: Standard paper 100 sheets
	Paper types: SHARP-recommended plain paper, recycled paper, coloured paper, heavy paper, thin paper, transparency film, and envelopes (Monarch, Com-10, DL, C5)
<b>Duplex module</b>	Paper sizes: A4, B5, A5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 5-1/2" x 8-1/2", 16K Paper weight: Plain paper (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (16 lbs. to 28 lbs.)) Paper types: SHARP-recommended plain paper, recycled paper, and coloured paper
<b>Output tray (Centre tray)</b>	Output method: Face-down output Output capacity: 250 sheets (using SHARP-recommended A4 or 8-1/2" x 11" paper) (The maximum number of sheets that can be held varies depending on ambient conditions in the installation location, the type of paper, and the storage conditions of the paper.) Tray full sensor: Yes

# Machine specifications / copier specifications (Continued)

<b>Interface port</b>	LAN connectivity: 10Base-T / 100Base-TX / 1000Base-T USB connectivity: Type A connector supports USB 2.0 (Hi speed)* Compatibility requirements of USB 2.0 Memory Capacity: Max. 32 GB Disk Format: FAT32 only Type B connector supports USB 2.0 (Hi speed)
<b>Required power supply</b>	Local voltage $\pm 10\%$ (For the power supply requirements, see the name plate in the lower corner of the left side of the machine.)
<b>Power consumption</b>	1.84 kW (220-240 V)
<b>Dimensions</b>	560 mm (W) x 493 mm (D) x 714 mm (H) (22-3/64" (W) x 19-13/32" (D) x 28-7/64" (H))
<b>Weight</b>	Approx. 43 kg (94.8 lbs.)
<b>Overall dimensions</b>	868 mm (W) x 493 mm (D) (34-11/64" (W) x 19-13/32" (D)) (when bypass tray is extended)

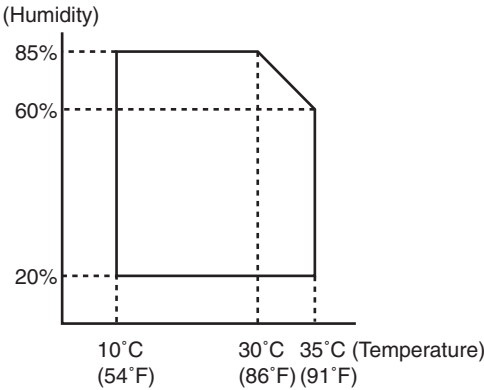
\* Type A connectors are located on the front and back right of the machine (two connectors); however, the connectors cannot be used simultaneously. The connector on the back of the machine is not initially available for use. If you wish to use the connector, contact your service assistance.

Continuous copying speeds\*

Copy ratio	100% / Reduced / Enlarged
8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13"	32 copies/min.
A4	38 copies/min.
B5, A5, 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2", 16K	40 copies/min.

\* Copy speed during output of the second copy and following copies when performing continuous one-sided copying of the same page (excluding offset output) using plain one-sided paper from a tray other than the bypass tray.

Ambient environment



Acoustic noise emission (measurement according to ISO7779)

Sound power level LwA		
Printing mode (continuous printing)		7.0 B
Standby mode		4.7 B
Sound pressure level LpA (actual measurement)		
Printing mode	Bystander positions	53 dB (A)
	Operator positions	52 dB (A)
Standby mode	Bystander positions	33 dB (A)
	Operator positions	31 dB (A)

## Automatic document feeder specifications

<b>Original sizes</b>	A4 to A5, 8-1/2" x 14" to 5-1/2" x 8-1/2", long paper (max. width 216 mm (8-1/2") x max. length 500 mm* (19-5/8"))
<b>Original weight</b>	One-sided 35 g/m <sup>2</sup> to 128 g/m <sup>2</sup> (9 lbs. to 32 lbs.) (Paper weights from 35 g/m <sup>2</sup> (9 lbs.) to 49 g/m <sup>2</sup> (13 lbs.) require the use of slow scan mode.) Two-sided 50 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (13 lbs. to 28 lbs.)
<b>Capacity</b>	50 sheets (80 g/m <sup>2</sup> (21 lbs.)) Maximum stack height of 6.5 mm (1/4")

\* Scanning in mono 2 mode of one side only is possible in fax and scan send modes.

## Business card feeder specifications

<b>Model</b>		MX-BTX1
<b>Business card*</b>	<b>Sizes</b>	51 mm x 89 mm to 55 mm x 91 mm (2" x 3-1/2" to 2-11/64" x 3-19/32")
	<b>Thickness</b>	0.1 mm to 0.2 mm (0.004" to 0.008")
<b>Scanning</b>		Single-sided (face-up)
<b>Capacity</b>		Stack height 3.5 mm (9/64") maximum
<b>Dimensions</b>		115 mm (W) x 88 mm (D) x 25 mm (H) (4-17/32" (W) x 3-15/32" (D) x 63/64" (H))
<b>Weight</b>		Approx. 40 g (0.09 lbs.)

\* Device may be unable to correctly feed and scan the business card depending on the business card's condition, material, form, and fabrication method.

## 500-sheet paper feed unit specifications

<b>Model</b>	MX-CSX1 (tray 2)	MX-CSX2 (tray 3, tray 4)
<b>Paper sizes</b>	A4, B5, A5*, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"*, 16K	
<b>Paper weight</b>	Plain paper (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (16 lbs. to 28 lbs.))	
<b>Paper capacity</b>	500 sheets (80 g/m <sup>2</sup> (21 lbs.)) x 1 tray	
<b>Paper types</b>	SHARP-recommended plain paper, recycled paper, and coloured paper	
<b>Power supply</b>	Supplied from the machine	
<b>Dimensions</b>	535 mm (W) x 438 mm (D) x 112 mm (H) (21-1/16" (W) x 17-1/4" (D) x 4-13/32" (H)) (not including adjuster)	535 mm (W) x 438 mm (D) x 110 mm (H) (21-1/16" (W) x 17-1/4" (D) x 4-21/64" (H)) (not including adjuster)
<b>Weight</b>	Approx. 6.8 kg (15.0 lbs.)	Approx. 5.6 kg (12.3 lbs.)

\* Only MX-CSX1 can be used.



## Finisher specifications

Model	MX-FN12	
Paper sizes	A4, B5, A5, envelopes, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2", 16K	
Paper weight	Thin paper (55 g/m <sup>2</sup> to 59 g/m <sup>2</sup> (15 lbs. to 16 lbs.)), plain paper (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> (16 lbs. to 28 lbs.)), heavy paper (106 g/m <sup>2</sup> to 209 g/m <sup>2</sup> (28 lbs. bond to 110 lbs. index))	
Modes	Non-sort, offset sort, staple sort	
Allowed paper sizes for offset	A4, B5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 16K	
Offset distance	25 mm (1")	
Tray capacity*1	Non-stapling*2: 280 sheets (75 g/m <sup>2</sup> to 90 g/m <sup>2</sup> (20 lbs. to 24 lbs.)) (A4, B5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 16K) 150 sheets (75 g/m <sup>2</sup> to 90 g/m <sup>2</sup> (20 lbs. to 24 lbs.)) (A5, 5-1/2" x 8-1/2")	Stapling*3: 1 to 10 sheets per set: 30 sets 11 to 30 sheets per set: 10 sets (A4, B5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 16K)
Power supply	Supplied from the machine	
Dimensions	When tray is folded up: 475 mm (W) x 333 mm (D) x 158 mm (H) (18-45/64" (W) x 13-7/64" (D) x 6-7/32" (H)) When tray is extended: 523 mm (W) x 333 mm (D) x 158 mm (H) (20-19/32" (W) x 13-7/64" (D) x 6-7/32" (H))	
Weight	Approx. 9 kg (19.8 lbs.)	
Stapler section		
Allowed paper sizes for stapling	A4, B5, 8-1/2" x 14", 8-1/2" x 13-1/2", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 16K (Stapling at one position at front of paper.)	

Finisher specifications (Continued)

Maximum number of sheets for stapling*3	30 sheets
-----------------------------------------	-----------

- \*1 The maximum number of sheets that can be held varies depending on ambient conditions in the installation location, the type of paper, and the storage conditions of the paper.
- \*2 Up to 20 envelopes can be output.
- \*3 The maximum number of sheets for stapling assumes a paper weight of 90 g/m<sup>2</sup> (24 lbs.) and includes two cover sheets of 106 g/m<sup>2</sup> to 209 g/m<sup>2</sup> (28 lbs. bond to 110 lbs. index).

**Note:**  
Special media such as transparency film and label sheets cannot be stapled.

## Printer specifications

<b>Type</b>	Built-in	
<b>Continuous printing speed</b>	Same as continuous copying speed (When printing same document continuously on A4 (8-1/2" x 11") plain paper in non-offset mode, excluding processing time.)	
<b>Printing resolution</b>	600 x 600 dpi / 1200 x 1200 dpi	
<b>Printer driver type</b>	PCL5e, PCL6, PostScript 3 compatible*1, XPS*2	
<b>Supported protocols</b>	TCP/IP, IPX/SPX, NetBEUI, EtherTalk	
<b>Supported client PC operating systems</b>	See "VERIFYING SYSTEM REQUIREMENTS" in the Software Setup Guide.	
<b>Fonts</b>	PCL5e, PCL6	80 European fonts, 28 barcode fonts*3, 1 bitmap font
	PostScript 3 compatible*1	136 European fonts
<b>Interface port</b>	LAN connectivity: 10Base-T / 100Base-TX / 1000Base-T USB connectivity: Supports USB 2.0 (Hi speed)*4	
<b>Memory</b>	Standard system memory	512 MB
	Expansion memory	1 GB*5
<b>Print area</b>	Entire page excluding margin of 4.2 mm (11/64") at each edge. The actual print area may vary depending on the printer driver and the software application.	

\*1 When the machine is used as a PostScript printer.

\*2 When the XPS expansion kit is installed.

\*3 Barcode font kit is required.

\*4 Supported operating systems are Windows 2000 / Server 2003 / XP / Vista / Server 2008.

\*5 To install the XPS expansion kit, an expansion memory board is required.

## Network scanner / Internet Fax\*1 specifications

<b>Type</b>	Built-in	
<b>Scanning resolution (dpi)</b>	100 x 100, 200 x 200, 300 x 300, 400 x 400, 600 x 600 Internet Fax: 200 x 100, 200 x 200, 200 x 400, 400 x 400, 600 x 600 (200 x 100, 200 x 200 when file type is TIFF-S) Halftone can be selected for resolutions other than 200 x 100 dpi.	
<b>Scanning speed</b>	Colour (200 x 200 dpi) One-sided: 33 pages/min. (A4), 35 pages/min. (8-1/2" x 11") Two-sided: 12 pages/min. (A4/8-1/2" x 11") Black and white (200 x 200 dpi) One-sided: 33 pages/min. (A4), 35 pages/min. (8-1/2" x 11") Two-sided: 12 pages/min. (A4/8-1/2" x 11")	
<b>Interface port</b>	LAN connectivity: 10Base-T / 100Base-TX / 1000Base-T	
<b>Supported protocols</b>	TCP/IP (IPv4)	
<b>File formats</b>	Colour (including greyscale)	File types: TIFF, JPEG, PDF, Encrypted PDF, XPS Compression ratio: High / Medium / Low
	Black and white	File types: TIFF, PDF, Encrypted PDF, XPS Compression modes: None / Medium (G3) / High (G4)
	Internet Fax (black and white only)	File types: TIFF-FX (TIFF-F, TIFF-S) Compression modes: Medium (G3) / High (G4)
<b>Remarks</b>	Number of one-touch keys for storing destinations*2	Maximum number of keys: 999
	Number of destinations that can be stored in a group (1 key)*2	Maximum number of destinations in one group (1 key): 500
	Scan destinations	Scan to E-mail / Scan to FTP / Scan to Desktop / Scan to Network Folder

\*1 Internet fax expansion kit is required.

\*2 Total number of all destinations (Scan to E-mail, Scan to FTP, Scan to Desktop, Scan to Network folder, Internet Fax, Fax, and Group)

## Pull scan function (TWAIN) specifications

<b>Supported protocol</b>	TCP/IP (IPv4)	
<b>Supported client PC operating systems</b>	Windows 98 / Me / 2000 / XP / Server 2003 / Vista / Server 2008	
<b>Colour modes</b>	Full Colour, Greyscale, Mono Diffusion, Mono 2 gradation	
<b>Resolution settings</b>	75 dpi, 100 dpi, 150 dpi, 200 dpi, 300 dpi, 400 dpi, 600 dpi (The resolution can be specified by entering a numerical value from 50 to 9600 dpi. However, when a high resolution is specified, it is necessary to reduce the scanning area.)	
<b>Scanning area</b>	Document glass	Maximum: A4 (8-1/2" x 11")
	Reversing single pass feeder (automatic document feeder)	Maximum: A4 (8-1/2" x 14")

## Facsimile specifications

<b>Model</b>	MX-FXX3
<b>Applicable telephone line</b>	Public switched telephone network, PBX
<b>Scanning resolution (supports ITU-T standards)</b>	8 x 3.85 lines/mm (Standard), 8 x 7.7 lines/mm (Fine, Fine-Halftone), 8 x 15.4 lines/mm (Super Fine, Super Fine - Halftone), 16 x 15.4 lines/mm (Ultra Fine, Ultra Fine - Halftone)
<b>Transmission speed</b>	33.6 kbps down to 2.4 kbps Automatic fallback
<b>Compression method</b>	MH / MR / MMR / JBIG
<b>Transmission modes</b>	Super G3, G3 (the machine can only send faxes to and receive faxes from machines that support G3 or Super G3)
<b>Input document size</b>	AB sizes: A4, B5, A5, 216 mm x 330 mm, 216 mm x 340 mm, 216 mm x 343 mm, 16K Inch sizes: 8-1/2" x 14", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 5-1/2" x 8-1/2" Long originals (max. width 216 mm (8-1/2") x max. length 500 mm (19-5/8")) can be transmitted using the automatic document feeder. Scanning one side is possible.)
<b>Paper sizes</b>	A4, B5, A5 (8-1/2" x 14", 8-1/2" x 13-2/5", 8-1/2" x 13", 8-1/2" x 11", 5-1/2" x 8-1/2")
<b>Transmission time *1</b>	Approx. 2 seconds (Super G3 mode/33.6 kbps, JBIG) Approx. 6 seconds (G3 ECM mode/14.4 kbps)
<b>Power supply</b>	Supplied from the machine
<b>Dimensions</b>	192 mm (W) x 52 mm (D) x 215 mm (H) (7-9/16" (W) x 2-3/64" (D) x 8-15/32" (H))
<b>Weight</b>	Approx. 1.0 kg (2.2 lbs.)

## Facsimile specifications (Continued)

<b>Remarks</b>	Extension telephone connection	Possible (1 telephone)
	Number of one-touch keys for storing destinations*2	Maximum number of keys: 999
	Number of destinations that can be stored in a group (1 key)*2	Maximum number of destinations in one group (1 key): 500
	Timer transmission	Yes
	Program function	Yes (48 programs)
	F-code transmission	Supported (SUB/SEP (sub-address) and SID/PWD (passcode) signals can be transmitted / received)
	Image memory	8 MB standard

\*1 Transmission speed is for an A4 or 8-1/2" x 11" document with approximately 700 characters at standard resolution (8 x 3.85 lines/mm) sent in high speed mode (33.6 kbps (JBIG) or 14.4 kbps). This is only the time required to transmit the image information; the time required to send protocol signals is not included. Actual transmission times will vary depending on the contents of the document, the receiving machine type, and telephone line conditions.

\*2 Total number of all destinations (Scan to E-mail, Scan to FTP, Scan to Desktop, Scan to Network folder, Internet Fax, Fax and Group)

---

---

# INFORMATION ON DISPOSAL

## A. Information on Disposal for Users (private households)

### 1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge\*. In some countries\* your local retailer may also take back your old product free of charge if you purchase a similar new one.

\*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements. By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

### 2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of [www.swico.ch](http://www.swico.ch) or [www.sens.ch](http://www.sens.ch).



Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.



## **B. Information on Disposal for Business Users**

### **1. In the European Union**

If the product is used for business purposes and you want to discard it: Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

### **2. In other Countries outside the EU**

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.



Administrator

Name:

Contact at:



Information that the administrator of the machine requires is printed on the back of this page.

(Separate this page from the manual and keep it in a safe place. In addition, fill in the name of the administrator and the administrator's contact information in the left hand margin.)

# TO THE ADMINISTRATOR OF THE MACHINE

(Separate this page from the manual and keep it in a safe place.)

## Factory default passwords

When accessing the system settings, the administrator password is required to log in with administrator rights. The system settings can be configured in the Web pages as well as on the operation panel. To access the system settings using the Web pages, a password is also required.

## Factory default administrator password

### Factory default setting: admin

Store a new administrator password as soon as the machine is installed. Once the administrator password has been changed, the new password is required to restore the factory default password. Take care to remember the new password.

## Factory default passwords (Web pages)

There are two factory default accounts: "Administrator" and "User". A person who logs in as an "Administrator" can configure all settings in the Web pages. In addition, an administrator can restrict access to other settings by enabling "User" accounts. The factory default passwords are shown below.

	Factory default account	Factory default password
User	users	users
Administrator	admin	admin

## Forwarding all transmitted and received data to the administrator (document administration function)

This function is used to forward all data transmitted and received by the machine to a specified destination (Scan to E-mail address, Scan to FTP destination, Scan to Network Folder destination, or Scan to Desktop destination).

This function can be used by the administrator of the machine to archive all transmitted and received data.

To configure the document administration settings, click [Application Settings] and then [Document Administration Function] in the Web page menu.

(Administrator rights are required.)

### Note:

- The format, exposure, and resolution settings of transmitted and received data remain in effect when the data is forwarded.
- When forwarding is enabled for data sent in fax mode,
  - The [Direct TX] key does not appear in the touch panel.
- Quick online transmission and dialling using the speaker cannot be used.

## For the users of the fax function

### Important safety instructions

- If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line, as it may cause harm to the telephone network.
- The AC power outlet shall be installed near the equipment and shall be easily accessible.
- Never install telephone wiring during a lightning storm.
- Never install telephone sockets in wet locations unless the socket is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use a telephone to report a gas leak in the vicinity of the leak.
- Do not install or use the machine near water, or when you are wet. Take care not to spill any liquids on the machine.
- Save these instructions.

## Trademark acknowledgments

The following trademarks and registered trademarks are used in conjunction with the machine and its peripheral devices and accessories.

- Microsoft®, Windows®, Windows® 98, Windows® Me, Windows NT® 4.0, Windows® 2000, Windows® XP, Windows Server® 2003, Windows Vista®, Windows Server® 2008 and Internet Explorer® are registered trademarks or trademarks of Microsoft Corporation in the U.S.A. and other countries.
- PostScript is a registered trademark of Adobe Systems Incorporated.
- Adobe and Flash are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and other countries.
- Adobe, the Adobe logo, Acrobat, the Adobe PDF logo, and Reader are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and other countries.
- Macintosh, Mac OS, AppleTalk, EtherTalk and LaserWriter are trademarks of Apple Inc., registered in the U.S. and other countries.
- Netscape Navigator is a trademark of Netscape Communications Corporation.
- Mozilla® and Firefox® are registered trademarks or trademarks of the Mozilla Foundation in the U.S.A. and other countries.
- PCL is a registered trademark of the Hewlett-Packard Company.
- IBM, PC/AT, and PowerPC are trademarks of International Business Machines Corporation.
- Sharpdesk is a trademark of Sharp Corporation.
- Sharp OSA is a trademark of Sharp Corporation.
- RealVNC is a trademark of RealVNC Limited.
- All other trademarks and copyrights are the property of their respective owners.

Candid and Taffy are trademarks of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. CG Omega, CG Times, Garamond Antiqua, Garamond Halbfett, Garamond Kursiv, Garamond and Halbfett Kursiv are trademarks of Monotype Imaging, Inc. and may be registered in certain jurisdictions. Albertus, Arial, Coronet, Gill Sans, Joanna and Times New Roman are trademarks of The Monotype Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. Avant Garde, ITC Bookman, Lubalin Graph, Mona Lisa, Zapf Chancery and Zapf Dingbats are trademarks of International Typeface Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. Clarendon, Eurostile, Helvetica, Optima, Palatino, Stempel Garamond, Times and Univers are trademarks of Heidelberger Druckmaschinen AG, which may be registered in certain jurisdictions, exclusively licensed through Linotype Library GmbH, a wholly owned subsidiary of Heidelberger Druckmaschinen AG. Apple Chancery, Chicago, Geneva, Monaco and New York are trademarks of Apple Computer Inc. and may be registered in certain jurisdictions. HGGothicB, HGMinchoL, HGP GothicB and HGPMinchoL are trademarks of Ricoh Company, Ltd. and may be registered in some jurisdictions. Wingdings is a registered trademark of Microsoft Corporation in the United States and other countries. Marigold and Oxford are trademarks of Arthur Baker and may be registered in some jurisdictions. Antique Olive is a trademark of Marcel Olive and may be registered in certain jurisdictions. Hoefler Text is a trademark of Johnathan Hoefler and may be registered in some jurisdictions. ITC is a trademark of International Typeface Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. Agfa is a trademark of the Agfa-Gevaert Group and may be registered in certain jurisdictions. Intellifont, MicroType and UFST are trademarks of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions. Macintosh and TrueType are trademarks of Apple Computer Inc. registered in the United States Patent and Trademark Office and other countries. PostScript is a trademark of Adobe Systems Incorporated and may be registered in some jurisdictions. HP, PCL, FontSmart and LaserJet are trademarks of Hewlett-Packard Company and may be registered in some jurisdictions. The Type 1 processor resident in Monotype Imaging's UFST product is under license from Electronics For Imaging, Inc. All other trademarks are the property of their respective owners.

**SHARP ELECTRONICS (Europe) GmbH**  
SonninstraÙe 3, D-20097 Hamburg

# SHARP®

SHARP CORPORATION

PRINTED IN FRANCE  
TINSE4466GHZZ

