

DIGITAL FULL COLOR 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**

**TO THE ADMINISTRATOR  
OF THE MACHINE**

Keep this manual close at hand  
for reference whenever needed.

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

**Caution!**

For complete electrical disconnection, pull out the main plug.  
The socket-outlet shall be installed near the equipment and shall be easily accessible.  
To reduce the risk of fire, use only UL-Listed No.26 AWG or larger telecommunication line cord.

**FAX interface cable and Line cable:**

These special accessories must be used with the device.

**FOR YOUR RECORDS ...**

To protect against loss or theft, record and retain for reference the machine's serial number located at the lower left corner of the left side of the machine.

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Place of Purchase \_\_\_\_\_

Authorized Sharp Printer \_\_\_\_\_

Service Department Number \_\_\_\_\_

**Notice for Users in U.S.A.**

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

**WARNING:**

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

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

**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.

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.

## Contents

### **TO ENSURE SAFE USE OF THE MACHINE . . . . . 3**

Cautions . . . . . 3

Warnings . . . . . 4

Laser information . . . . . 6

### **INSTALLATION REQUIREMENTS . . . 7**

### **SUPPLIES . . . . . 9**

Storage of supplies . . . . . 9

Supply of spare parts and consumables . . . . . 9

### **REPLACING SUPPLIES AND MAINTENANCE . . . . . 10**

Replacing the toner cartridges . . . . . 10

Replacing the toner collection container . . . . . 15

Replacing the developer cartridge / drum cartridge . . . . . 18

Replacing the developer cartridge . . 18

Replacing the drum cartridge . . 26

Replacing the staple cartridge in the finisher . . . . . 28

Regular maintenance . . . . . 31

Cleaning the document glass and automatic document feeder . . . . 31

Cleaning the main charger of the photoconductive drum . . . . . 32

Cleaning the bypass tray rollers . . . . . 37

Cleaning the automatic document feeder rollers . . . . . 40

Cleaning the laser unit . . . . . 43

Cleaning the PT charger of the primary transfer belt unit . . . . . 50

### **SPECIFICATIONS . . . . . 53**

Machine specifications / copier specifications . . . . . 53

Continuous copying speeds . . 57

Ambient environment . . . . . 57

Acoustic noise emission (measurement according to ISO7779) . . . . . 58

Automatic document feeder specifications . . . . . 59

Business card feeder specifications . . . . . 60

500-sheet paper feed unit specifications . . . . . 61

Finisher specifications . . . . . 62

Printer specifications . . . . . 64

Network scanner / Internet Fax specifications . . . . . 65

Pull scan function (TWAIN) specifications . . . . . 66

Facsimile specifications . . . . . 67

### **TO THE ADMINISTRATOR OF THE MACHINE . . . . . 70**

Factory default passwords . . . . 70

Forwarding all transmitted and received data to the administrator (document administration function) . . 70

For the users of the fax function . . 71

Trademark acknowledgments . . . 75

---

**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 SHARP Service Department.
- 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 SHARP Service Department.
- 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.



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

**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 2008. 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 licenses
- 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.

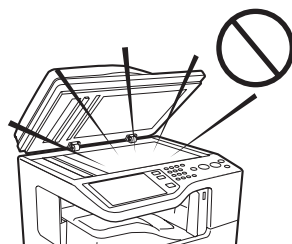
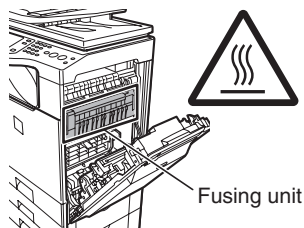
To keep foreign matter from getting on the primary transfer belt unit or secondary transfer roller unit while the right cover is open, place a cover over the opening.
- Do not plug in or unplug the power cord with a wet hand.

## Warnings

- When turning off the power, be sure to press the [POWER] key on the operation panel, then wait 20 seconds and switch off the main power switch. In the event that the main power is suddenly interrupted due to a power failure or other reason, turn the machine power back on and then turn it off in the correct order.

If the machine is left for a long time with the main power having been turned off prior to the [POWER] key, abnormal noises, degraded image quality, and other problems may result.

- Do not touch the transfer belt and the transfer roller. Scratches or smudges on the transfer belt or the 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.



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.

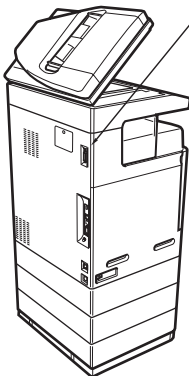
#### **"BATTERY DISPOSAL"**

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

This product utilizes a CR coin Lithium battery which contains a Perchlorate material. Special handling for this material may apply, California residents, See [www.dtsc.ca.gov/hazardouswaste/perchlorate/](http://www.dtsc.ca.gov/hazardouswaste/perchlorate/)  
Others, consult local environmental officers.

This product utilizes tin-lead solder, and fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated due to environmental consideration. For disposal or recycling information, please contact your local authorities, the Electronics Industries Alliance: [www.eiae.org](http://www.eiae.org), the lamp recycling organization: [www.lamprecycle.org](http://www.lamprecycle.org) or Sharp at 1-800-BE-SHARP.  
(For U.S.A. Only)

#### **For North America**



Non LPS

Do not connect to devices other than specified peripheral devices of our company.

## 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 North America:

### SAFETY PRECAUTIONS

This Digital Equipment is rated Class 1 and complies with 21 CFR 1040.10 and 1040.11 of the CDRH standards. This means that the equipment does not produce hazardous laser radiation. For your safety, observe the precautions below.

- Do not remove the cabinet, operation panel or any other covers.
- The equipment's exterior covers contain several safety interlock switches. Do not bypass any safety interlock by inserting wedges or other items into switch slots.

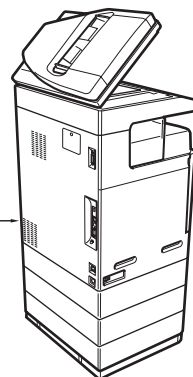
For Europe:

CLASS 1 LASER PRODUCT

LASER KLASSE 1

LUOKAN 1 LASERLAITE

KLASS 1 LASERAPPARAT





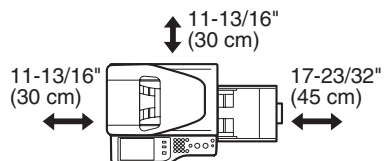
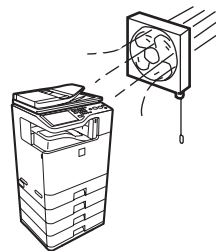
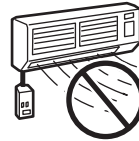
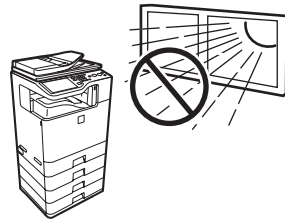
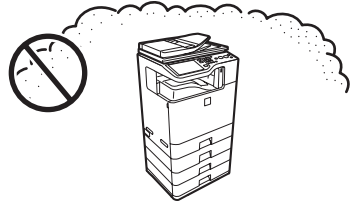
# INSTALLATION REQUIREMENTS

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.



**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 104°F (40°C). 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.

---

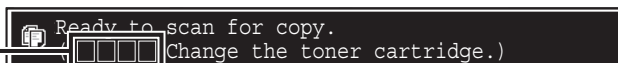
# REPLACING SUPPLIES AND MAINTENANCE

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.

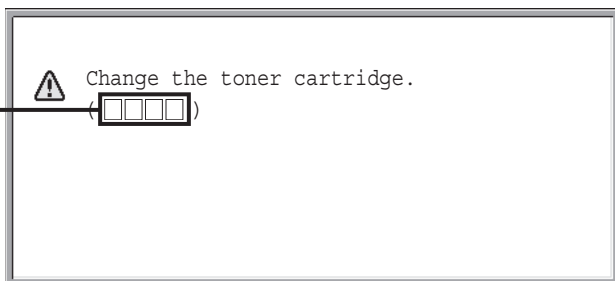
### In copy mode



When the message appears in the message display, replace the toner cartridge for the indicated color.



If you continue to use the machine without replacing the cartridge, the following message will appear when the toner runs out.

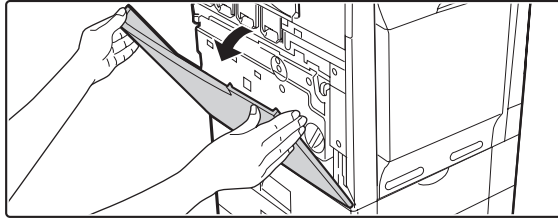


Colors that are running low or have run out of toner are indicated in (□□□□).

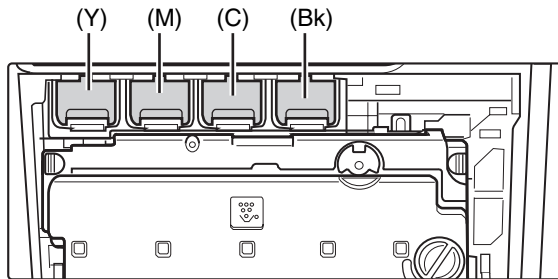
[Y]: Yellow toner, [M]: Magenta toner, [C]: Cyan toner, [Bk]: Black toner

Replace the toner cartridges of the indicated colors.

## Open the front cover.



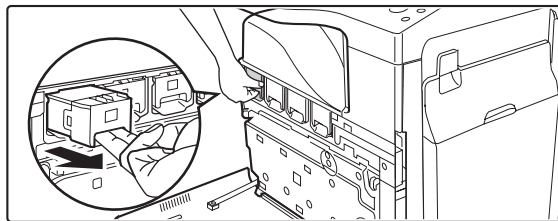
### Locations of color toner cartridges

**1**

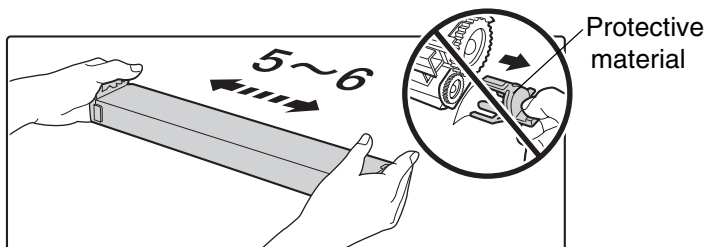
(Y): Yellow (M): Magenta  
(C): Cyan (Bk): Black

## Pull the toner cartridge toward you.

Example: Replacing the yellow toner cartridge

**2**

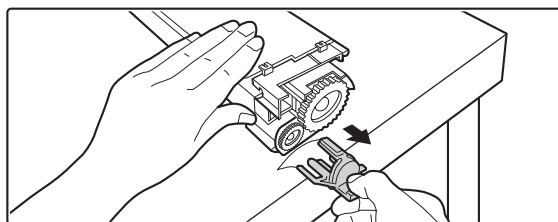
**Take out the new toner cartridge, hold it with both hands, and shake 5 or 6 times horizontally.**

**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.

**4**

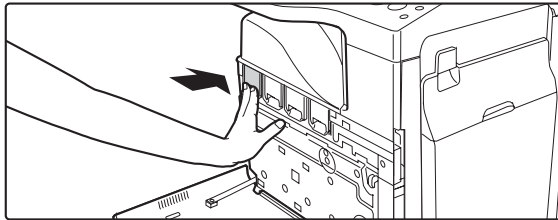
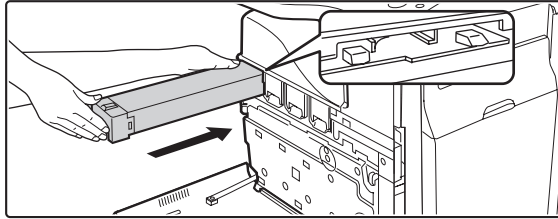
**Remove the protective material from the new toner cartridge.**



- 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.

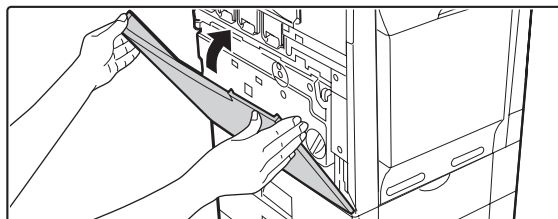
## Insert the new toner cartridge horizontally and push it firmly in.

The shape of the toner cartridge varies by color. Insert in the same location as the toner cartridge that was removed.



6

## Close the front cover.



- 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 104°F (40°C). 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%", colors in the output may be faint or partially missing when an original or image with dark colors is copied or printed.

Total Count	B/W:00,000,000
	Full Color:00,000,000
	2-color:00,000,000
	Single color:00,000,000
Toner Quantity	[Bk]:100-75%
	[C]:100-75%
	[M]:100-75%
	[Y]:100-75%



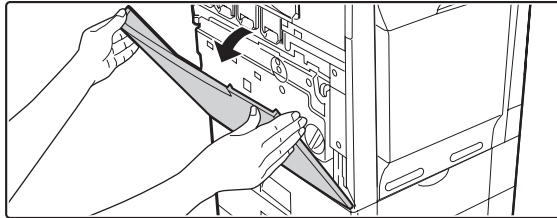
## Replacing the toner collection container

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.



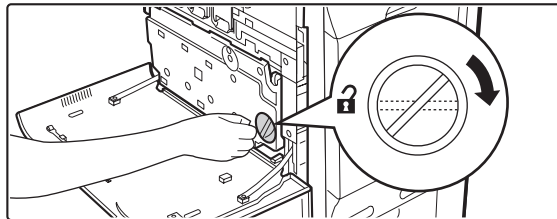
Toner may spill when the toner collection container is replaced. Before replacing the toner collection container, take measures such as placing covers on and around the machine to prevent soiling.

### Open the front cover.

**1**

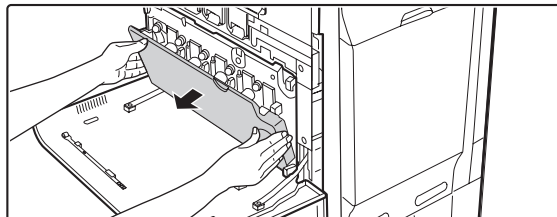
### Release the used toner collection container.

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



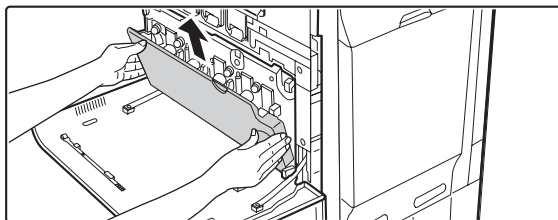
- (2) Tip the toner collection container forward.

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.

**2**

## Remove the toner collection container.

3



- 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.

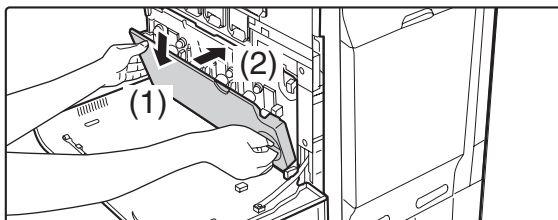


- Hold the container by both hands and lift it up slowly.
- Do not discard the toner collection container. Place it in a plastic bag and keep it until your service technician comes to perform maintenance. Your service technician will collect the toner collection container.

## Install the new toner collection container.

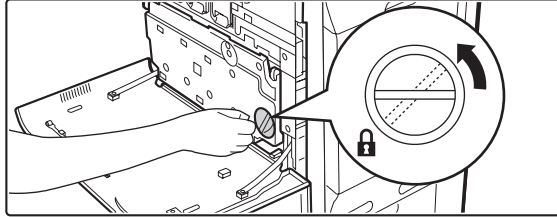
Insert the container from above at a slant. (The direction opposite to when you removed it.)

4



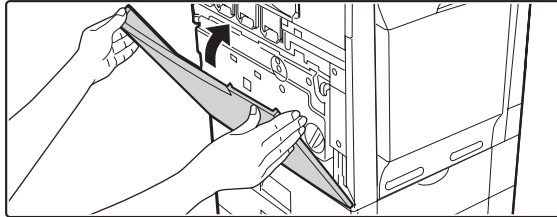
## Turn the lock lever on the toner collection container to the left.

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

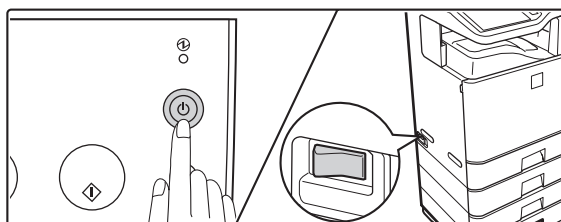
Before replacing the developer cartridge or drum cartridge, turn off the main power of the machine and wait briefly.

### 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.

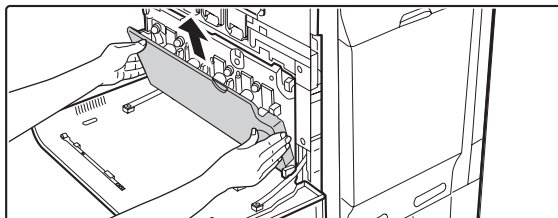
It is also necessary to remove the developer cartridge in order to replace the drum cartridge. Refer to the procedure below to remove the developer cartridge when replacing the drum cartridge.

**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.**

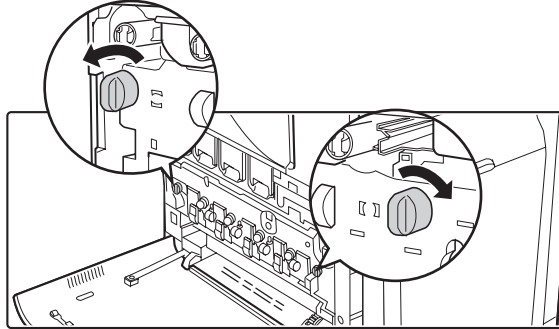
 Replacing the toner collection container (page 15)

**2**

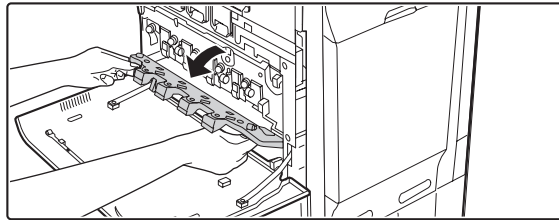
## Open the main charger cover.

- (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.

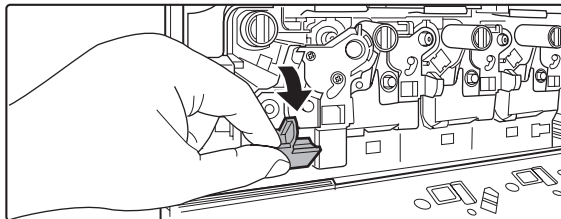


- (2) Grasp the lock levers and tip the cover forward.

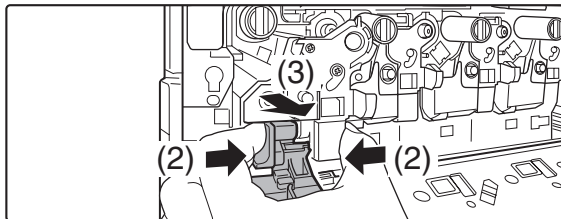


## Remove the developer cartridge.

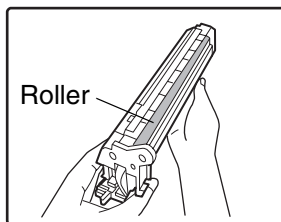
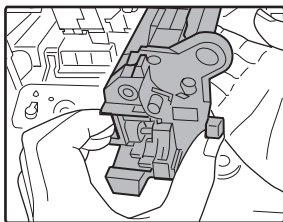
- (1) Grasp the developer cartridge lock and pull it forward and down.



- (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.

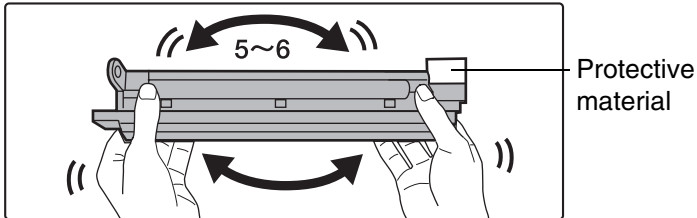


- When removing the developer cartridge, grasp it with both hands at the middle.
- Try to keep the developer cartridge horizontal as you remove it. If tipped during removal, developer may spill out.
- There will be toner on the roller area of the removed developer cartridge. Do not touch the roller area.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

## 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.

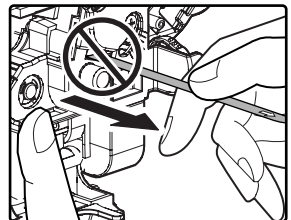
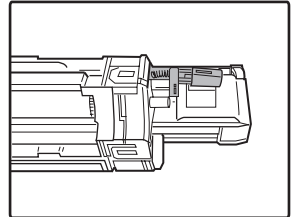
Remove the protective material after shaking the developer cartridge.



# 5



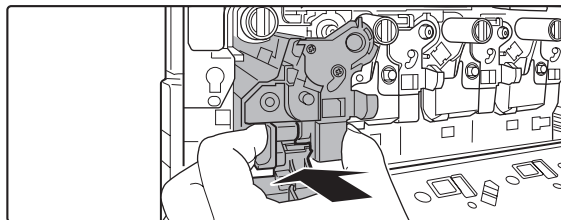
- The part of the developer cartridge shown below is easily deformed or damaged. Do not touch this part when handling the cartridge.
- Do not touch the roller in the developer cartridge. If the roller is accidentally touched, image problems may result. In that case, replace the developer cartridge with 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.



6

**Insert the new developer cartridge horizontally.**

Insert the new developer cartridge in the same location as the cartridge that was removed.

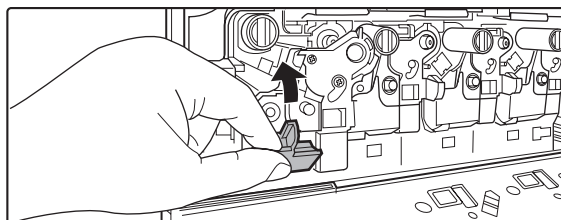


- Do not tilt the developer cartridge or insert it in the wrong direction or orientation. This may damage the developer cartridge or drum cartridge and cause failure.
- When inserting the developer cartridge, grasp it with both hands at the middle.
- Do not remove the seal from the developer cartridge 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.

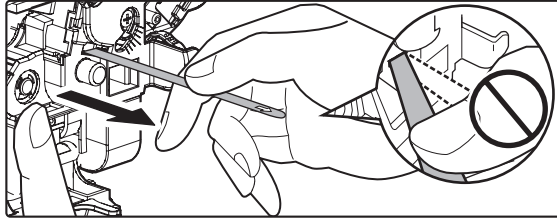
7

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



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

Slowly pull the seal straight and horizontally out.



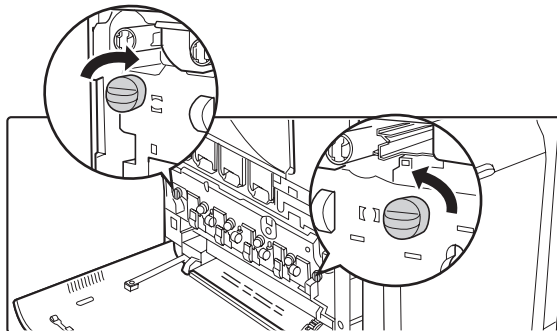
If excessive force is used or the seal is pulled out diagonally, it may tear.



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.

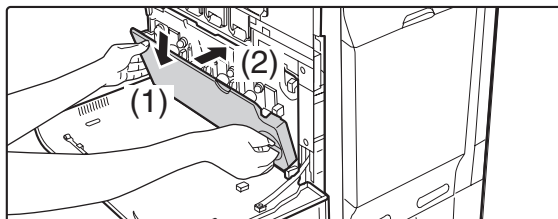
When the lock levers are vertical, the cover is locked.



## Install the toner collection container.

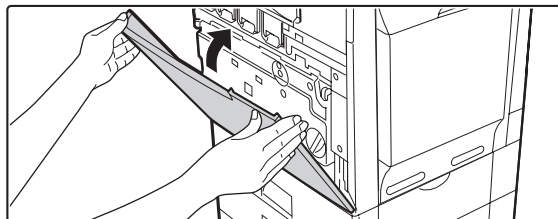
☞ Replacing the toner collection container (page 15)

10



## Close the front cover.

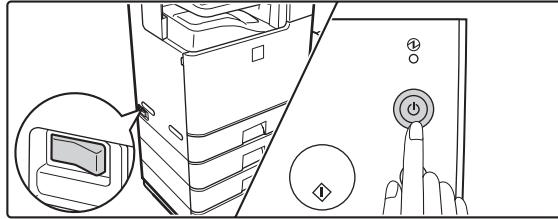
11



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.

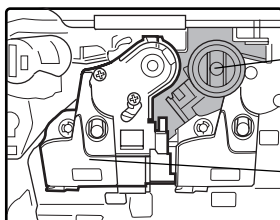
### Turn off the power and remove the developer cartridge.

For the procedure for removing the developer cartridge, see steps 1 to 4 of "Replacing the developer cartridge" (page 18).



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

1

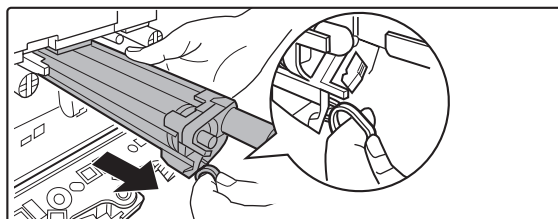


Drum cartridge

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.



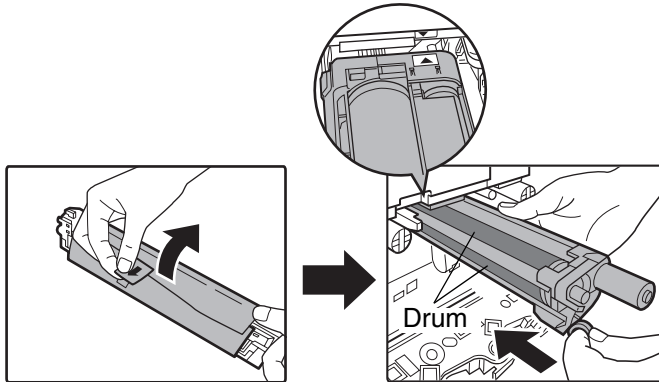
2



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.



Make sure that the colors on the new drum cartridge and the insertion label match.

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

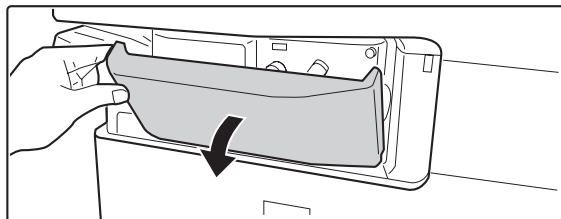
For the procedure for replacing the developer cartridge and toner collection container, see steps 7 to 8 and steps 10 to 11 of "Replacing the developer cartridge" (page 18).

## 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.

**Open the cover.**

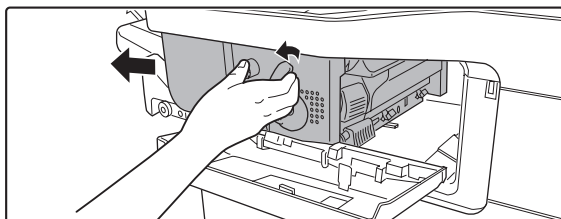
1



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

Gently slide the finisher until it stops

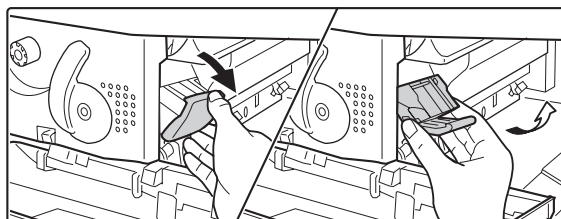
2



**Lower the staple case release lever and remove the staple case.**

Pull the staple case out to the right.

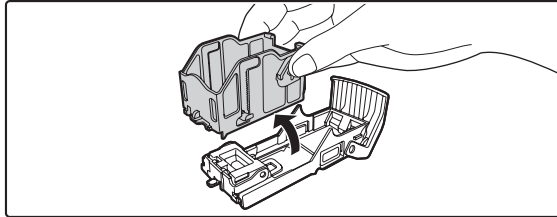
3



## 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

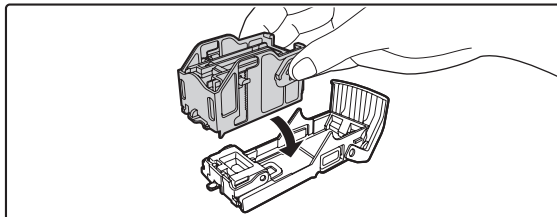


- Even when a message appears in the operation panel, staples may occasionally remain in the staple cartridge.
- If staples remain, the lock will not release easily. Forcing the lock to release may deform the staple case and staple cartridge, causing failure.

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

Push the staple cartridge in until it clicks into place.

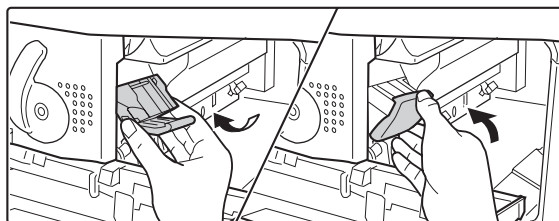
5



6

## Replace the staple case.

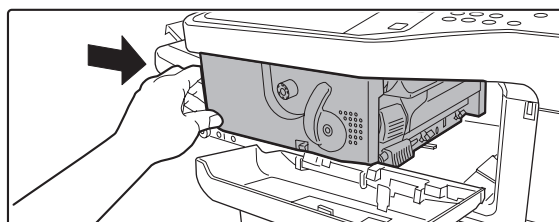
Push the staple case in until it clicks into place.



7

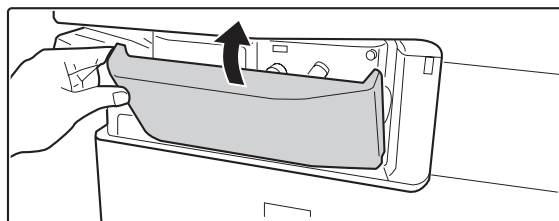
## Slide the finisher back to the right.

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

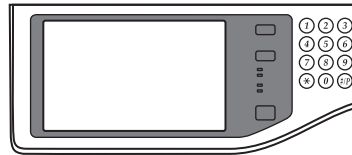
To ensure that the machine continues to provide top quality performance, periodically clean the machine.


### 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 discolor 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 .

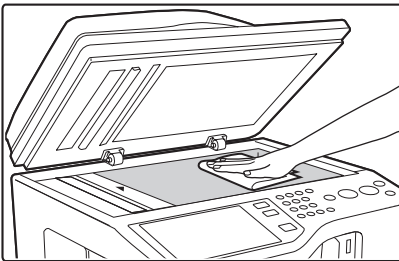
## Cleaning the document glass and automatic document feeder

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

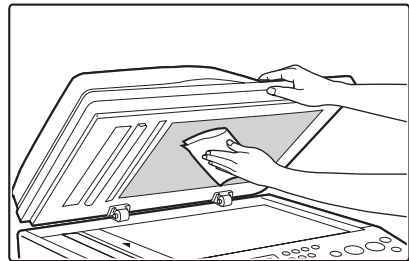
Wipe the parts with a clean, soft cloth.

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.

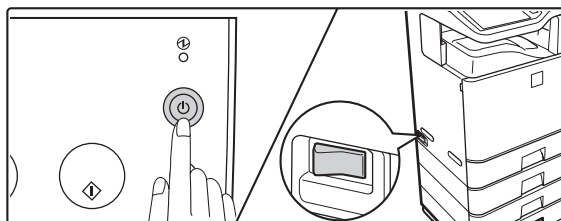
## Scanning area

If colored lines 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

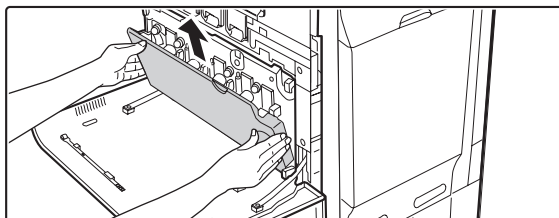
If black lines or colored lines appear even after you have cleaned the document glass and automatic document feeder, use the charger cleaner to clean the main charger.

**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**

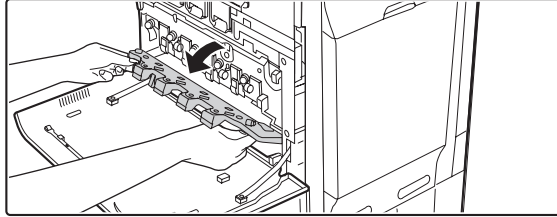
**Open the front cover and remove the toner collection container.**

 Replacing the toner collection container (page 15)

**2**

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

☞ Replacing the developer cartridge (page 18)

**3**

## Remove the charger cleaner.

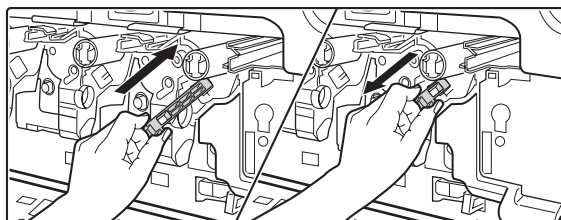
- (1) Flip down the charger cleaner lock (A) in the direction of the arrow, and lift the left end of the charger cleaner.

**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.

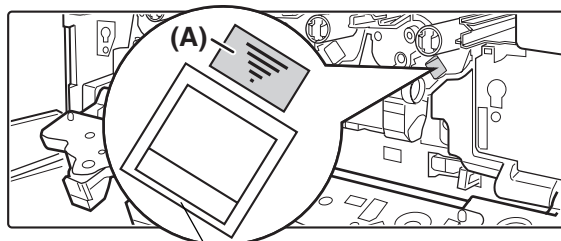


- (3) Repeat the above (1) to (2) three times.

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).

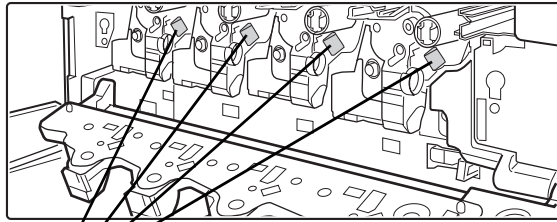


Position of mark

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

**Repeat step 5 with each of the other main chargers.**

**6**



Main charger

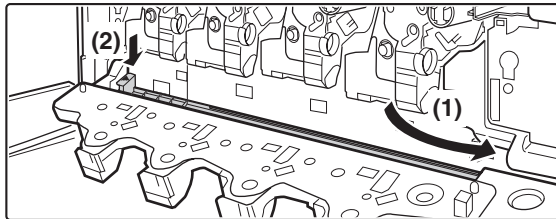


There are a total of 4 places to be cleaned in the machine as shown.

**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.

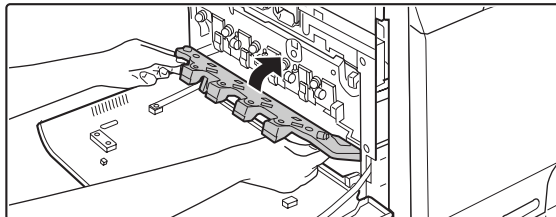
**7**



**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 18)

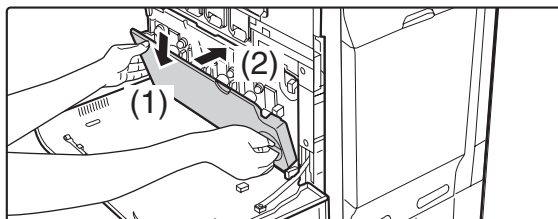
**8**



9

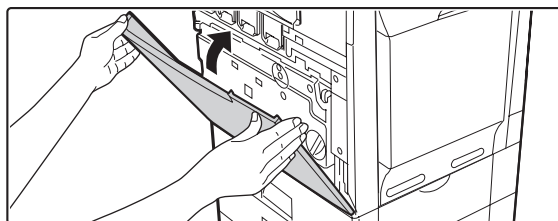
## Install the toner collection container.

Replacing the toner collection container (page 15)



10

## Close the front cover.

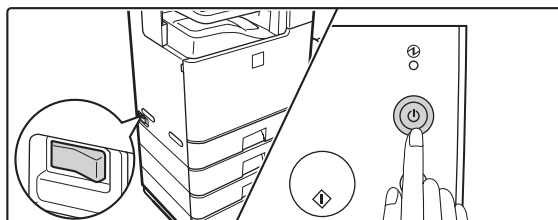


Take care that your fingers are not pinched when closing the cover.

11

## 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.

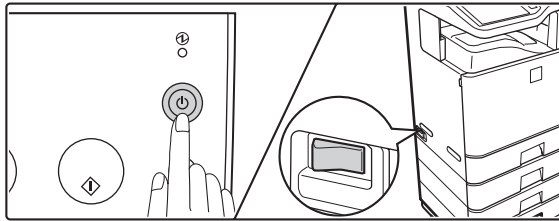


## Cleaning the bypass tray rollers

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.

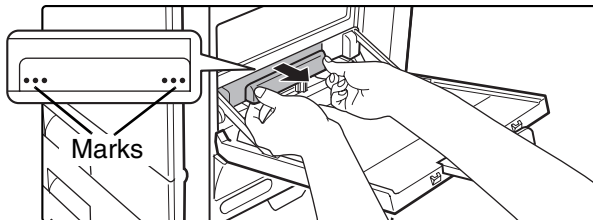
Before starting, remove the paper from the bypass tray.

**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**

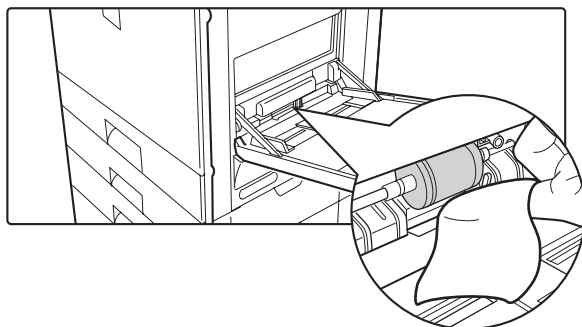
**Remove the roller cover from the bypass tray.**

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.

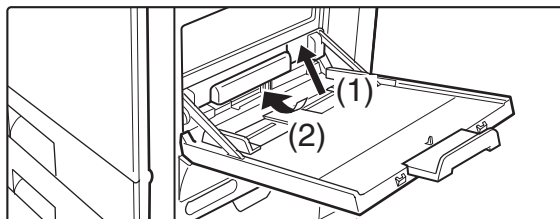


- When you replace roller, go to the next step.
- If the dirt is difficult to remove, moisten the cloth with a small amount of water or neutral detergent, and then wipe with a clean, dry cloth until no moisture remains.

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.

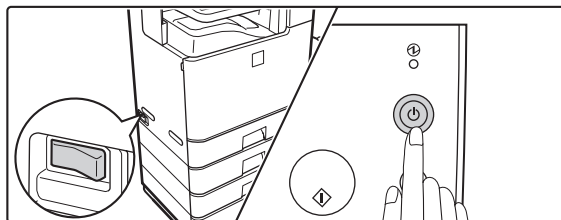




## 5

**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.

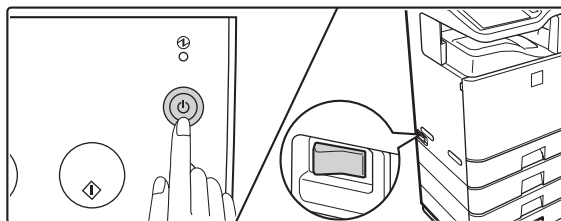


## Cleaning the automatic document feeder rollers

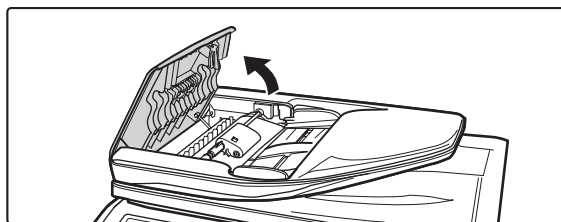
If you find that originals fed through the automatic document feeder misfeed or are soiled by the rollers, remove the rollers and clean them. If misfeeds or soiling continue to occur, replace the rollers.

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

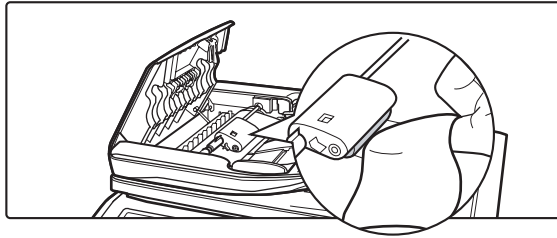
**Press the [POWER] key (⏻) on the operation panel to turn off the panel power, and then switch the main power switch to the off position.**

**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.**

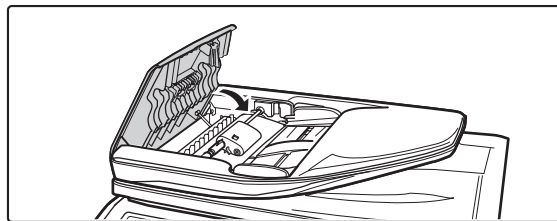


Do not touch the surface of the roller if your hands are dirty.



- 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 and go to the step 10.
- When you replace roller, go to the next step.

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

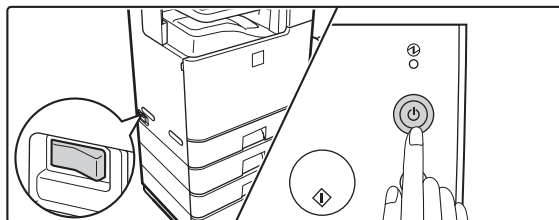
**4**

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.

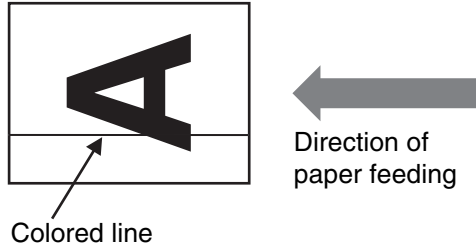
## Cleaning the laser unit

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



### Identifying lines (colored lines) caused by a dirty laser unit

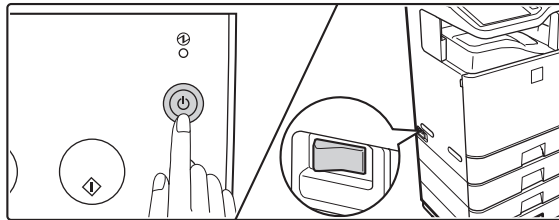
- Colored lines always appear in the same place. (The lines are never black.)
- The colored lines are parallel to the direction of paper feeding.



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

**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.**

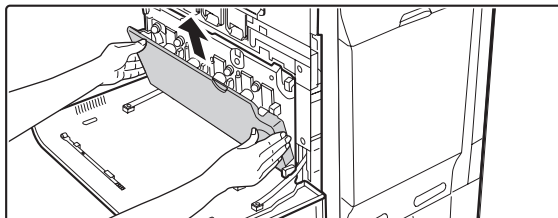
1



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

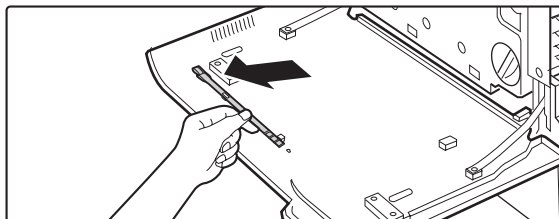
☞ Replacing the toner collection container (page 15)

2

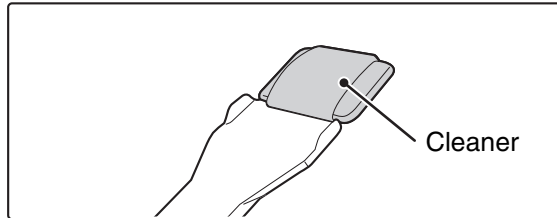


## Remove the cleaning tool for the writing unit from the front cover.

3

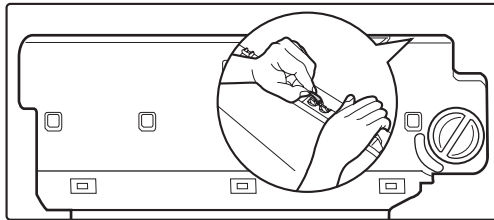


**Make sure that the cleaner at the tip of the cleaning tool is not dirty.**

**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.**

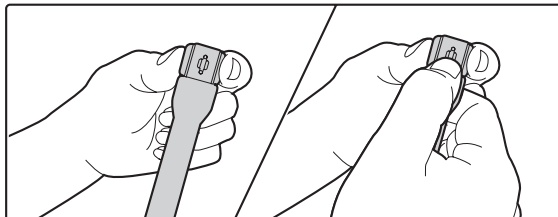
**5**

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.



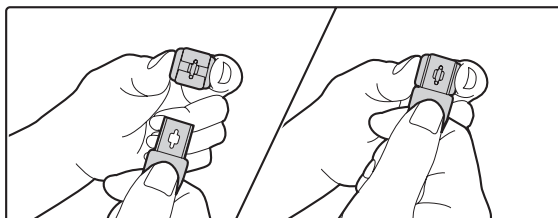
Return the removed cleaner to the toner collection container.

7

## Attach the new cleaner to the cleaning tool.

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.



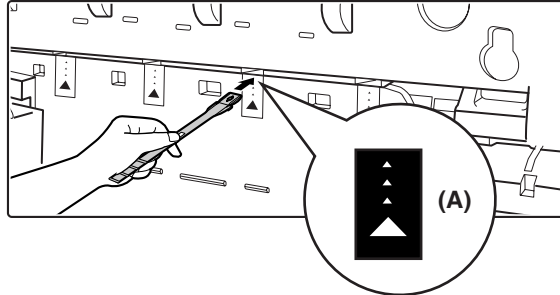
Make sure that the cleaner is firmly attached to the cleaning tool.



## Clean the laser unit.

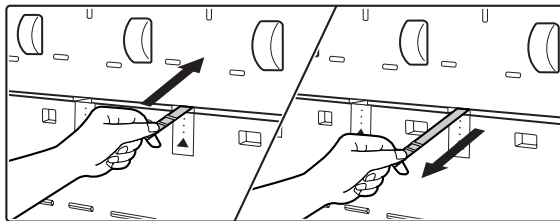
- (1) Point the cleaner down and slowly insert the tool into the hole that you wish to clean.**

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

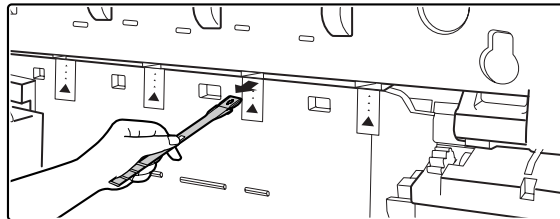


- (2) Insert the cleaning tool all the way into the hole and then pull it back out.**

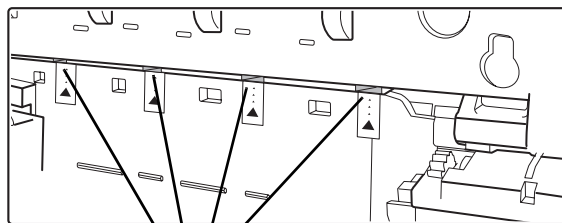
Pull the cleaning tool out until you feel the tip of the tool leave the cleaning surface of the laser unit.



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



9

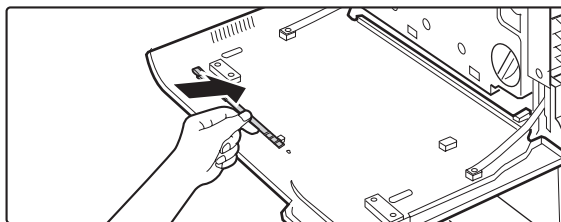
**Repeat step 8 to clean all holes in the laser unit.**

Holes to be cleaned



There are a total of 4 holes to be cleaned in the laser unit.  
If the cleaner becomes dirty during cleaning, replace with a new cleaner. For the procedure for replacing the cleaner, see steps 5 to 7.

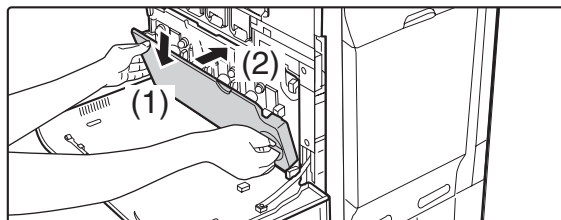
10

**Replace the cleaning tool.**

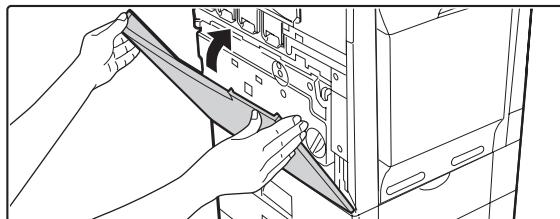
11

**Install the toner collection container.**

☞ Replacing the toner collection container (page 15)



12

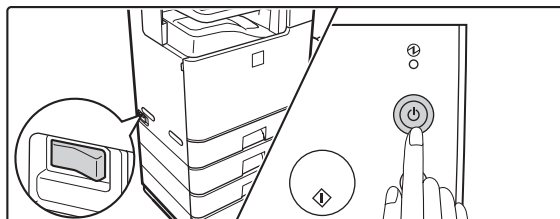
**Close the front cover.**

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

13

**Turn on the power.**

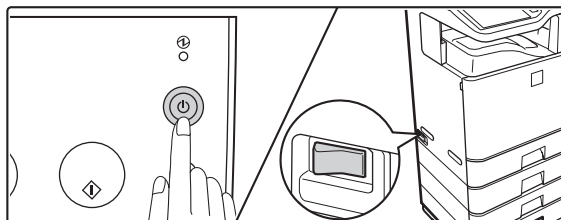
Switch the main power switch "ON" and press the [POWER] key (⏻) on the operation panel to turn on the operation panel power.



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

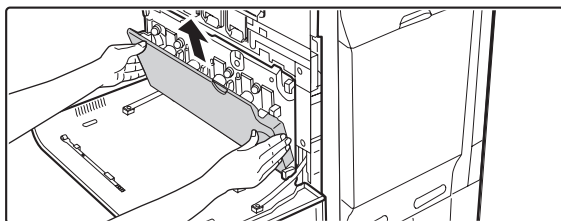
If black or colored lines still remain after the document glass / automatic document feeder and main charger have been cleaned, use the PT charger cleaner to clean the PT charger.

**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**

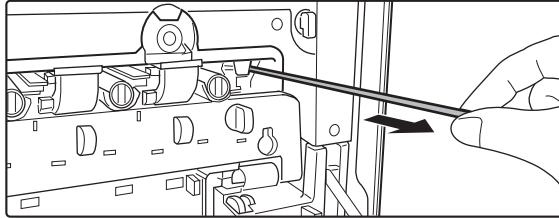
**Open the front cover and remove the toner collection container.**

 Replacing the toner collection container (page 15)

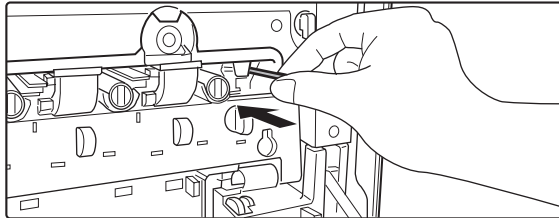
**2**

## Clean the PT charger.

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



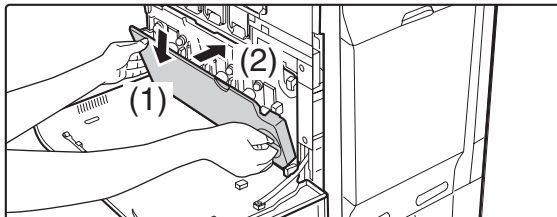
- (2) Slowly push the PT charger cleaner back in.



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

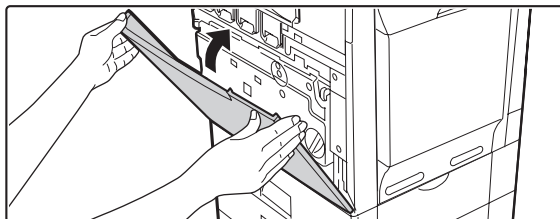
## Install the toner collection container.

☞ Replacing the toner collection container (page 15)



5

## Close the front cover.

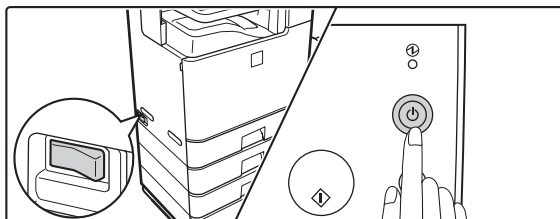


Take care that your fingers are not pinched when closing the cover.

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 Full Color Multifunctional System MX-C311/MX-C401	
<b>Type</b>	Desktop	
<b>Display</b>	8.5 inch color 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	Black and white scanning: 600 x 300 dpi (factory default values), 600 x 600 dpi Color scanning: 600 x 300 dpi, 600 x 600 dpi (factory default values)
	Reversing single pass feeder (automatic document feeder)	Black and white scanning: 600 x 300 dpi (factory default values), 600 x 600 dpi Color scanning: 600 x 300 dpi, 600 x 600 dpi (factory default values)
<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. 8-1/2" x 11" (A4) / sheets, bound documents	
<b>Copy sizes</b>	Maximum: 8-1/2" x 11" (A4) Minimum: 5-1/4" x 5-3/4" (A5)	
<b>Print margins</b>	Leading edge / trailing edge: total 21/64" (8 mm) or less, near edge / far edge: total 21/64" (8 mm) or less	

## Machine specifications / copier specifications (Continued)

<b>Warm-up time</b>	90 seconds or less (at room temperature of 73.4°F (23°C) and rated voltage)
<b>First-copy time*</b>	Color copy time: 8.9 seconds or less Black and white copy time: 8.0 seconds or less (Portrait feeding of 8-1/2" x 11" (A4) sheets from 1st paper tray, without auto color selection and auto color mode.)
<b>Copy ratios</b>	Variable: 50% to 200% in increments of 1%, total 151 increments Fixed presets: 50%, 64%, 77%, 100%, 121%, 129% and 200% for inch sizes; 50%, 70%, 81%, 86%, 100%, 115%, 122%, 141% and 200% for AB 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>	Paper sizes: 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", A4, B5, A5, 16K Paper weight: Plain paper (16 lbs. to 28 lbs. (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> )) Paper capacity: Plain paper (21 lbs. (80 g/m <sup>2</sup> )) 500 sheets Paper types: SHARP-recommended plain paper, recycled paper and colored paper

\* First copy out time is measured with original on the document glass in full ready condition with fuser at operating temperature and mirror motor at operating speed in each of black and white mode and color mode, actual time may vary based on environment conditions.



## Machine specifications / copier specifications (Continued)

<b>Bypass tray</b>	<p>Paper sizes: 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", envelopes, A4, B5, A5, 16K (Includes automatic paper size detection function. Paper sizes from 3-15/16" x 5-53/64" (100 mm x 148 mm) to 8-33/64" x 14-1/64" (216 mm x 356 mm) can be entered.)</p>
	<p>Paper weights: Thin paper (15 lbs. to 16 lbs. (55 g/m<sup>2</sup> to 59 g/m<sup>2</sup>)), plain paper (16 lbs. to 28 lbs. (60 g/m<sup>2</sup> to 105 g/m<sup>2</sup>)), heavy paper (28 lbs. bond to 110 lbs. index (106 g/m<sup>2</sup> to 209 g/m<sup>2</sup>)), envelopes (20 lbs. to 24 lbs. (75 g/m<sup>2</sup> to 90 g/m<sup>2</sup>))</p>
	<p>Paper capacity: Standard paper 100 sheets</p>
	<p>Paper types: SHARP-recommended plain paper, recycled paper, colored paper, heavy paper, thin paper, transparency film, and envelopes (Monarch, Com-10, DL, C5)</p>
<b>Duplex module</b>	<p>Paper sizes: 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", A4, B5, A5, 16K            Paper weight: Plain paper (16 lbs. to 28 lbs. (60 g/m<sup>2</sup> to 105 g/m<sup>2</sup>))            Paper types: SHARP-recommended plain paper, recycled paper, and colored paper</p>
<b>Output tray (Center tray)</b>	<p>Output method: Face-down output            Output capacity: 250 sheets (using SHARP-recommended 8-1/2" x 11" or A4 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</p>

## 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>	AC 120 V $\pm$ 10% 60 Hz
<b>Power consumption</b>	1.44 kW
<b>Typical electricity consumption</b>	MX-C311: 9.78 kWh/week MX-C401: 11.13 kWh/week
<b>Dimensions</b>	22-3/64" (W) x 19-13/32" (D) x 28-7/64" (H) (560 mm (W) x 493 mm (D) x 714 mm (H))
<b>Weight</b>	Approx. 101.4 lbs. (46 kg)
<b>Overall dimensions</b>	38-3/16" (W) x 19-13/32" (D) (970 mm (W) x 493 mm (D)) (when bypass tray is extended)

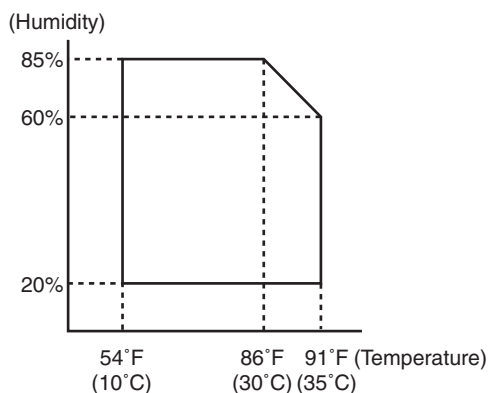
\* Type A connectors are located on the front and back right of the machine (two connectors); however, the connectors cannot be used simultaneously. The connector on the back of the machine is not initially available for use. If you wish to use the connector, contact your service assistance.

## Continuous copying speeds\*

Model	MX-C311		MX-C401	
Copy ratio	100% / Reduced / Enlarged			
Copy mode	Color	B/W	Color	B/W
A4	31 copies/min.	31 copies/min.	38 copies/min.	38 copies/min.
B5, 8-1/2" x 11", 16K	31 copies/min.	31 copies/min.	40 copies/min.	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)

Model		MX-C310/ MX-C311	MX-C400/ MX-C401
Sound power level L <sub>WA</sub>			
<b>Printing mode (continuous printing)</b>		Color: 6.9 B B/W: 6.9 B	Color: 7.0 B B/W: 7.1 B
<b>Standby mode</b>		5.3 B	5.3 B
Sound pressure level L <sub>pA</sub> (actual measurement)			
<b>Printing mode</b>	<b>Bystander positions</b>	Color: 53 dB (A) B/W: 53 dB (A)	Color: 57 dB (A) B/W: 57 dB (A)
	<b>Operator positions</b>	Color: 54 dB (A) B/W: 53 dB (A)	Color: 55 dB (A) B/W: 55 dB (A)
<b>Standby mode</b>	<b>Bystander positions</b>	37 dB (A)	38 dB (A)
	<b>Operator positions</b>	37 dB (A)	38 dB (A)

## Automatic document feeder specifications

<b>Original sizes</b>	8-1/2" x 14" to 5-1/2" x 8-1/2", A4 to A5, long paper (max. width 8-1/2" (216 mm) x max. length 19-5/8"* (500 mm), scanning in mono 2 mode of one side only is possible in fax and image scan modes)
<b>Original weight</b>	One-sided 9 lbs. to 32 lbs. (35 g/m <sup>2</sup> to 128 g/m <sup>2</sup> ) (Paper weights from 9 lbs. (35 g/m <sup>2</sup> ) to 13 lbs. (49 g/m <sup>2</sup> ) require the use of slow scan mode.) Two-sided 13 lbs. to 28 lbs. (50 g/m <sup>2</sup> to 105 g/m <sup>2</sup> )
<b>Capacity</b>	50 sheets (21 lbs. (80 g/m <sup>2</sup> )) Maximum stack height of 17/64" (6.5 mm)

\* 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>Original sizes</b>	2-1/64" x 3-33/64" to 2-11/64" x 3-19/32" (51 mm x 89 mm to 55 mm x 91 mm)
<b>Original weight</b>	13 lbs. to 32 lbs. (50 g/m <sup>2</sup> to 128 g/m <sup>2</sup> )
<b>Capacity</b>	Stack height 9/64" (3.5 mm) minimum, 17/64" (6.5 mm) maximum
<b>Dimensions</b>	4-1/2" (W) x 3-7/16" (D) x 61/64" (H) (114 mm (W) x 87 mm (D) x 24 mm (H))
<b>Weight</b>	Approx. 0.07 lbs. (34 g)

## 500-sheet paper feed unit specifications

Model	MX-CSX1 (tray 2)	MX-CSX2 (tray 3, tray 4)
<b>Paper sizes</b>	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", A4, B5, A5*, 16K	
<b>Paper weight</b>	Plain paper (16 lbs. to 28 lbs. (60 g/m <sup>2</sup> to 105 g/m <sup>2</sup> ))	
<b>Paper capacity</b>	500 sheets (21 lbs. (80 g/m <sup>2</sup> )) x 1 tray	
<b>Paper types</b>	SHARP-recommended plain paper, recycled paper, and colored paper	
<b>Automatic paper size detection</b>	When "Auto-Inch" detection is selected: 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11", 7-1/4" x 10-1/2", 5-1/2" x 8-1/2"* When "Auto-AB" detection is selected: A4, B5, A5*, 216 mm x 330 mm (8-1/2" x 13")	
<b>Power supply</b>	Supplied from the machine	
<b>Dimensions</b>	21-1/16" (W) x 17-1/4" (D) x 4-13/32" (H) (535 mm (W) x 438 mm (D) x 112 mm (H)) (not including adjuster)	21-1/16" (W) x 17-1/4" (D) x 4-21/64" (H) (535 mm (W) x 438 mm (D) x 110 mm (H)) (not including adjuster)
<b>Weight</b>	Approx. 15.0 lbs. (6.8 kg)	Approx. 12.3 lbs. (5.6 kg)

\* Only MX-CSX1 can be used.

## Finisher specifications

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



## Finisher specifications (Continued)

<b>Maximum number of sheets for stapling*3</b>	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 24 lbs. (90 g/m<sup>2</sup>) and includes two cover sheets of 28 lbs. bond to 110 lbs. index (106 g/m<sup>2</sup> to 209 g/m<sup>2</sup>).

**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 8-1/2" x 11" (A4) 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>	PCL5c, 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>	PCL5c, 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 11/64" (4.2 mm) 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\*<sup>1</sup> 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>	Color (8-1/2" x 11" / A4) One-sided: 35 pages/min. (200 x 200 dpi), Two-sided: 12 pages/min. (200 x 200 dpi) Black and white (8-1/2" x 11" / A4) One-sided: 35 pages/min. (200 x 200 dpi), Two-sided: 12 pages/min. (200 x 200 dpi)	
<b>Interface port</b>	LAN connectivity: 10Base-T / 100Base-TX / 1000Base-T	
<b>Supported protocols</b>	TCP/IP (IPv4)	
<b>File formats</b>	Color (including grayscale)	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* <sup>2</sup>	Maximum number of keys: 999
	Number of destinations that can be stored in a group (1 key)* <sup>2</sup>	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>Color modes</b>	Full Color, Grayscale, 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>	Maximum: 8-1/2" x 13" (A4)

## 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>	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" AB sizes: A4, B5, A5, 216 mm x 330 mm, 216 mm x 340 mm, 216 mm x 343 mm, 16K Long originals (max. width 8-1/2" (216 mm) x max. length 19-5/8" (500 mm) can be transmitted using the automatic document feeder. Scanning one side is possible.)
<b>Paper sizes</b>	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" (A4, B5, A5)
<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>	7-9/16" (W) x 2-3/64" (D) x 8-15/32" (H) (192 mm (W) x 52 mm (D) x 215 mm (H))
<b>Weight</b>	Approx. 2.2 lbs. (1.0 kg)

## 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 8-1/2" x 11" or A4 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)

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

<b>Factory default setting: admin</b>
---------------------------------------

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 dialing using the speaker cannot be used.



## For the users of the fax function

### ABOUT THE TELEPHONE CONSUMER PROTECTION ACT OF 1991

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including FAX machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual.

(The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

In order to program this information into your FAX machine, you should complete the following steps:

See "Own Name and Destination Set" on page 7-75 of Operation Guide.

### 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 jacks in wet locations unless the jack 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.

### FCC Notice to users:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA.

On this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX.

If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line.

Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call.

In most but not all areas, the sum of RENs should not exceed five (5.0).

To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX.

The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

If this equipment causes harm to the telephone network, your telephone company may disconnect your service temporarily. If possible, They will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will also be advised of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service. If the equipment is causing harm to the telephone network, your telephone company may ask you to disconnect the equipment until the problem is resolved.

If you have any questions or problems which cannot be solved by reading this manual, please contact.

#### **Sharp Electronics Corporation**

1 Sharp Plaza,  
Mahwah, NJ 07495  
Telephone: 1-800-BE-SHARP

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.

A compliant telephone cord and modular plug is provided with this product.

It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

This equipment connects to the telephone network through a standard USOC RJ-11C network interface jack.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment.

If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines service is subject to state tariffs.

Contact your state's public utility commission, public service commission or corporation commission for more information.

## **NOTICE for users in the USA**

BE SURE TO ASK YOUR AUTHORIZED SHARP DEALER ABOUT THE WARRANTY THAT YOUR SELLING DEALER EXTENDS TO YOU. In order to assure you, the end-user, of warranty protection, Sharp extends a limited warranty to each of its authorized dealers and, in turn, requires each of its authorized dealers to extend its own warranty to you on terms that are no less favorable than those given to the dealer by Sharp. You should be aware, however, that Sharp does not itself extend any warranties, either express or implied, directly to you, the end-user, and no one is authorized to make any representations or warranties on behalf of Sharp. Specifically, SHARP DOES NOT EXTEND TO YOU, THE END-USER, ANY EXPRESS WARRANTY OR ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR USE OR FITNESS FOR ANY PARTICULAR PURPOSE IN CONNECTION WITH THE HARDWARE, SOFTWARE OR FIRMWARE EMBODIED IN, OR USED IN CONJUNCTION WITH THIS PRODUCT. Sharp is not responsible for any damages or loss, either direct, incidental or consequential, which you, the end-user, may experience as a result of your purchase or use of the hardware, software or firmware embodied in or used in conjunction with this Product. Your sole remedy, in the event that you encounter any difficulties with this Product, is against the authorized dealer from which you purchased the Product.

MX-C311 Digital Full Color Multifunctional System

MX-C401 Digital Full Color Multifunctional System

In the event that this authorized dealer does not honor its warranty commitments, please contact the General Manager, Business Products Group, Sharp Electronics Corporation, 1 Sharp Plaza, Mahwah, NJ 07495-1163, so that Sharp can try to help assure complete satisfaction of all the warranty rights to which you are entitled from the authorized dealer.

## NOTICE FOR USERS IN CANADA

**"NOTICE :** This product meets the applicable Industry Canada technical specifications."

**"NOTICE :** The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five."

The REN of this equipment is indicated on the facsimile expansion kit.

## AVIS POUR NOS UTILISATEURS AU CANADA

**AVIS :** Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

**Remarque :** L'indice d'équivalence de la sonnerie (IES) sert à indiquer le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

L'indice d'équivalence de la sonnerie (IES) de cet équipement est indiqué sur le kit d'extension télécopieur.

**Sharp Electronics of Canada Ltd.**  
335 Britannia Road East,  
Mississauga, Ontario, L4Z 1W9  
Canada

## 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®

## SHARP ELECTRONICS CORPORATION

1 Sharp Plaza, Mahwah, New Jersey 07495-1163.

[www.sharppusa.com](http://www.sharppusa.com)

## SHARP ELECTRONICS OF CANADA LTD.

335 Britannia Road East, Mississauga, Ontario, L4Z 1W9

## SHARP CORPORATION



This manual has been printed using a vegetable-based  
soy oil ink to help protect the environment.

PRINTED IN CHINA  
2008K KS1  
TINSE4106FCZ1