INTRODUCTION

This manual contains detailed instructions on the operation and maintenance of this copier. To get maximum versatility from this copier, all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the next section before using this copier. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

SAFETY INFORMATION

When using your copier, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

	This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the machine.
	This symbol is attached to some components to alert the user not to touch them, because they may be very hot.

In addition, all safety messages are identified by the words "WARNING" and "CAUTION". These words mean the following:

⚠ ***WARNING:*** ***Important information to alert you to a situation that might cause serious injury and damage to your property if instructions are not followed.***

⚠ *CAUTION:* *Important information that tells how to prevent damage to equipment, or how to avoid a situation that might cause minor injury.*

⚠ ***WARNINGS:***

Since some parts of the copier are supplied with high electrical voltage, touch only the parts specified in this manual.

Do not modify or replace any parts other than the ones specified in this manual.

Do not incinerate toner or toner containers. Toner dust might ignite when exposed to open flames.

Do not store toner where it will be exposed to heat.

Do not eat or swallow toner, and keep it out of reach of children.

The fusing section can be very hot. Be careful when handling it.

⚠ *CAUTIONS:*

While copying, do not turn off the main switch.

While copying, do not open the front cover.

While copying, do not lift the platen cover, or the optional document feeder.

While copying, do not unplug the power cord.

Do not lay anything weighing more than 10 kg, 22 lb on the exposure glass.

Do not place tools or other hard objects on the exposure glass.

Keep corrosive liquids, such as acid, off the machine.

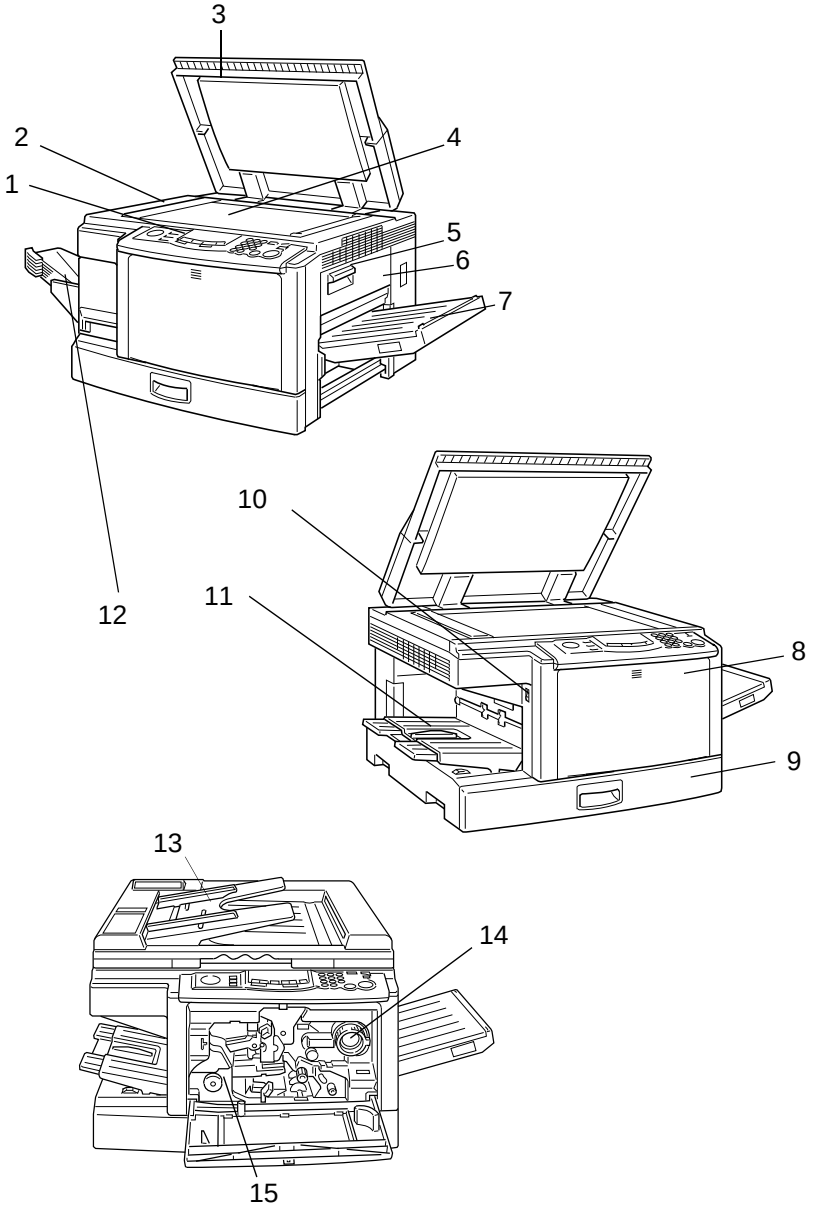
Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.

General Safety Information

- ❒ Always turn the copier off when you have finished copying for the day, but leave it plugged in.
- ❒ When the copier will not be used for a long period, disconnect the power cord.
- ❒ If the copier must be transported by vehicle, please contact your service representative.
- ❒ When the main switch is in the Stand-by position, the optional anticondensation heater is on. In case of emergency, unplug the machine's power cord.
- ❒ To disconnect the power source, the main plug must be pulled.

WHERE IS IT & WHAT IS IT

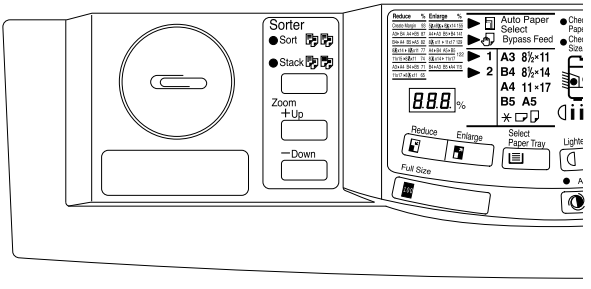
COPIER EXTERIOR AND INTERIOR



1.	**Operation panel**	Operator controls and indicators are located here.
2.	**Left scale**	Use to align originals on the exposure glass.
3.	**Platen cover**	Lower this cover over originals for copying.
4.	**Exposure glass**	Position originals here face down for copying.
5.	**Bypass feed table**	Use to copy onto paper of unusual size or weight, or color paper.
6.	**Key counter holder**	Insert the optional key counter here.
7.	**Cassette**	This cassette can hold 250 sheets of copy paper.
8.	**Front cover**	Open to access the inside of the copier.
9.	**Paper Tray**	This tray can hold 250 sheets of copy paper.
10.	**Main switch**	Switches the copier between on and stand-by conditions. ("stand-by" means that the anticondensation heater is on.)
11.	**Copy tray**	Completed copies are delivered here.
12.	**10-bin sorter (Option)**	Completed copies are sorted or stacked here.
13.	**Document feeder (Option)**	Insert a stack of originals here. The originals are individually fed onto and removed from the exposure glass.
14.	**Toner Cartridge**	Replace the toner cartridge when the **Add Toner** indicator is lit or blinking.
15.	**Fusing Unit**	Fuses the copy image to the paper. When accessing the inside of the copier, use caution. This unit may be very hot.

OPERATION PANEL

Keys



16 15 14 13 12 11

1. **Function key**
   Press in combination with the Number keys to make one-sided copies from various originals and to erase parts of the copy image. ☛ See pages 38 ~ 42, 43 ~ 44.

2. **Interrupt key** ☛ See pages 33 ~ 35.

3. **Clear Modes/Energy Saver key**
   Press to clear the copier of previously entered settings. Press this key for more than 1 second to enter/exit the Energy Saver mode. ☛ See pages 17 and 24.

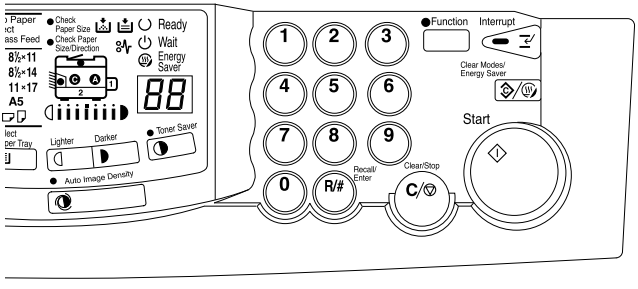
4. **Start key**
   Press to start copying.
   Use to set the Auto Start.
   ☛ See page 37.

5. **Clear/Stop key**
   Press to cancel the copy number entered. While copying, press to stop copying. This key is also used to clear data.

6. **Recall/Enter key**
   Use to enter data.

7. **Number keys**
   Use to enter the desired number of copies. They are also used to enter data.

1



2

3

4

10 9 8 7 6 5

8. Toner Saver key
☛ See pages 25 and 30.

9. Lighter and Darker keys
☛ See page 30.

10. Auto Image Density key
☛ See page 30.

11. Select Paper Tray key
☛ See page 28.

12. Reduce and Enlarge keys
☛ See page 36.

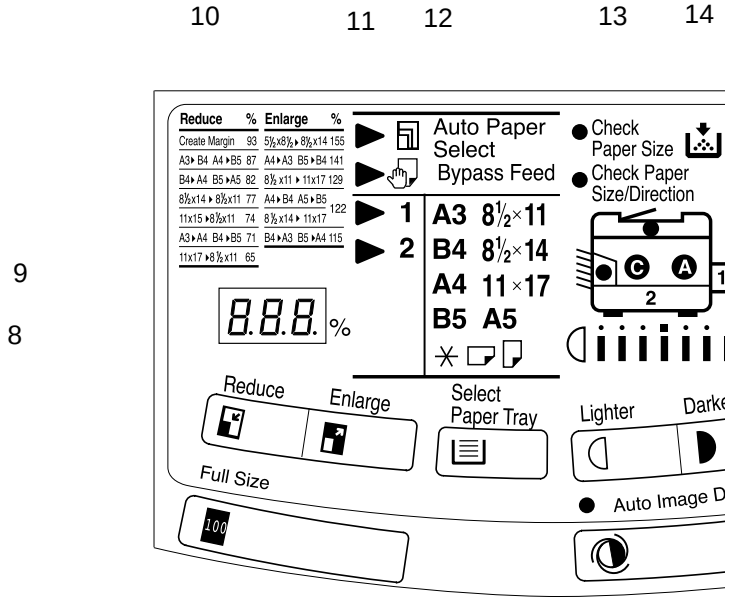
13. Full Size key
☛ See page 28.

14. Zoom Up key
Enlarges in 1% steps.
☛ See page 37.

15. Zoom Down key
Reduces in 1% steps.
☛ See page 37.

16. Sorter key (option)
☛ See pages 48 ~ 51.

Indicators



1. **Ready indicator**
   ☛ See page 16.

2. **Wait indicator**
   ☛ See page 16.

3. **Energy Saver indicator**
   ☛ See pages 17 and 24.

4. **Copy Counter**
   Indicates the number of copies.
   Data display.

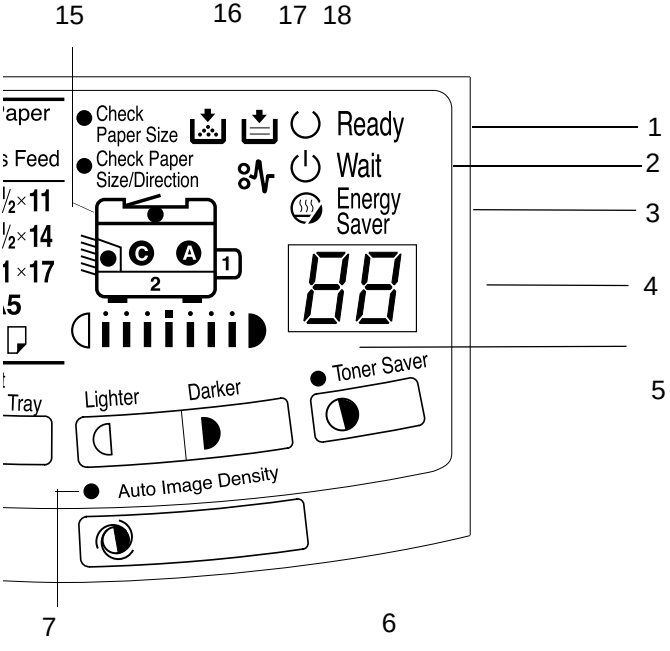
5. **Toner Saver indicator**
   ☛ See pages 25 and 30.

6. **Manual Image Density indicator**
   ☛ See page 30.

7. **Auto Image density indicator**
   ☛ See page 30.

8. **Three Digit indicator**
   Data display.

9. **Paper Size indicators**
   Show the selected feed station, copy paper size, and direction.



10. Reduce and Enlarge indicators
☛ See page 36.

11. Auto Paper Select indicator (option)
☛ See pages 45 ~ 47.

12. Bypass Feed indicator
☛ See page 32.

13. Check Paper Size indicator
☛ See page 57.

14. Check Paper Size/Direction indicator
☛ See page 57.

15. Misfeed Location display
☛ See pages 64 ~ 66.

16. Add Toner indicator
☛ See page 63.

17. Load Paper indicator
☛ See pages 59 ~ 62.

18. Check Paper Path indicator
☛ See pages 64 ~ 66.

WHAT YOU CAN DO WITH THIS COPIER

FUNCTIONS

Auto image density

☛ See page 30.

Manual image density

☛ See page 30.

Copying from the bypass feed table

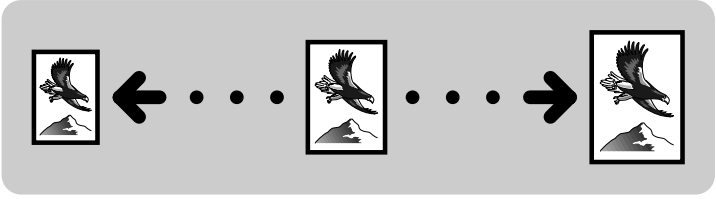
☛ See page 31.

Temporarily stopping one job to copy something else

☛ See page 33.

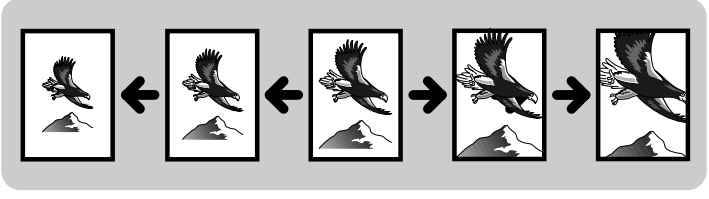
Reducing and enlarging

Reducing and enlarging using preset ratios



☛ See page 36.

Reducing and enlarging with the Zoom Up (+) and Zoom Down (-) keys



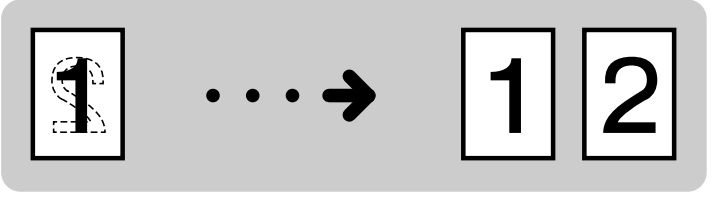
☛ See page 37.

Entering copy job settings during the warm-up period

☛ See page 37.

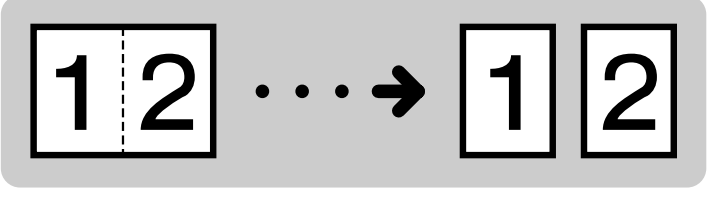
Making one-sided copies from various originals

From 1 two-sided original to 2 one-sided copies



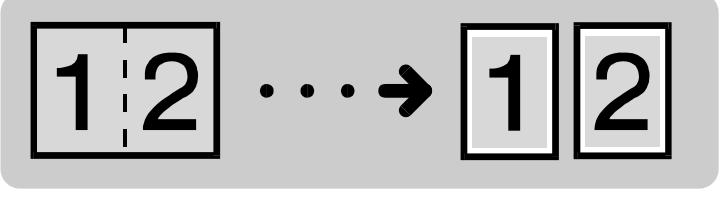
☛ See page 38.

From 2 facing pages to 2 one-sided copies



☛ See page 39.

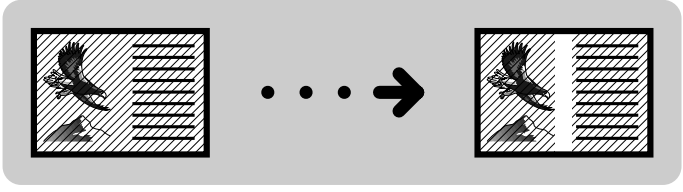
From 2 facing pages to 2 one-sided copies and erasing the surrounding area of the original image



☛ See page 41.

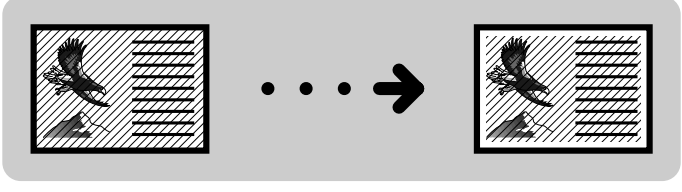
Erasing parts of copy image

Erasing the center margin of the original image



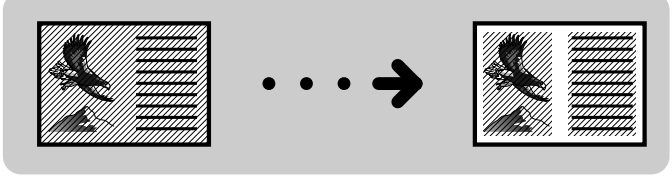
☛ See page 43.

Erasing the surrounding area of the original image



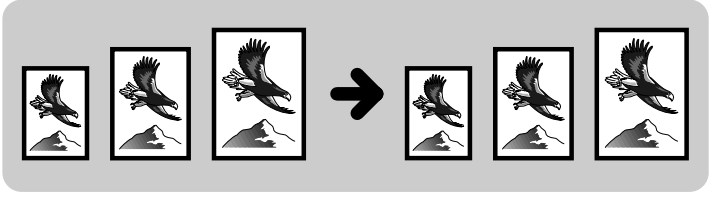
☛ See page 43.

Erasing the center margin and surrounding area of the original image



☛ See page 43.

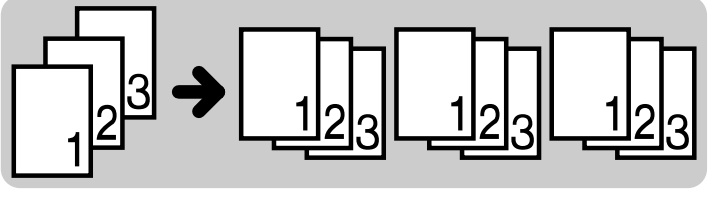
Having the copier choose the paper size (Option)



☛ See page 45.

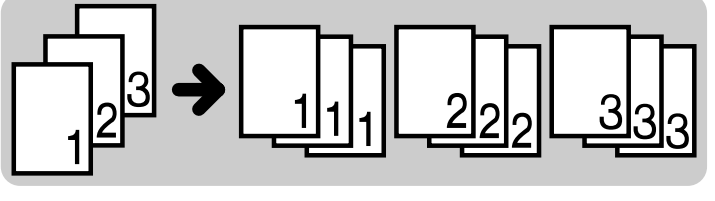
Finishing (Option)

Sorting into sets (123,123,123)



☛ See page 48.

Stacking together all copies of a page (111, 222, 333)



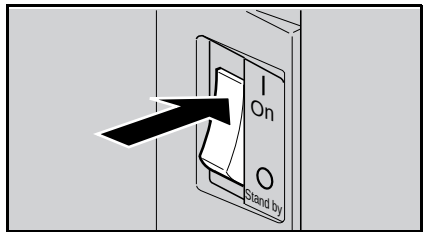
☛ See page 50.

BASICS

STARTING THE COPIER

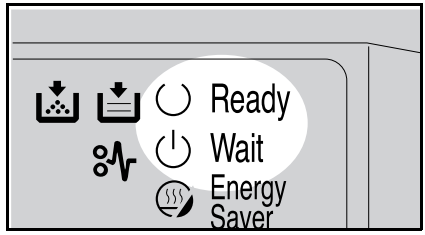
When The Main Switch Is In The Stand-by Position

1 Turn on the main switch.



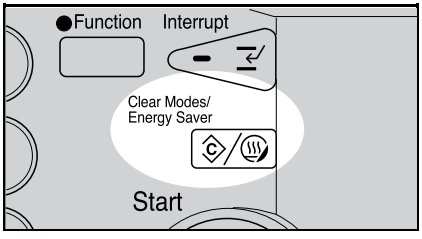
2 Wait for the copier to warm-up. During the warm-up period (less than 1 minute), the U **Wait** indicator is on.

3 After warm-up, the V **Ready** indicator lights.



When The Energy Saver Indicator Is On

The copier is in the Energy Saver mode.
Press the **Clear Modes/Energy Saver** key to return to the ready condition.

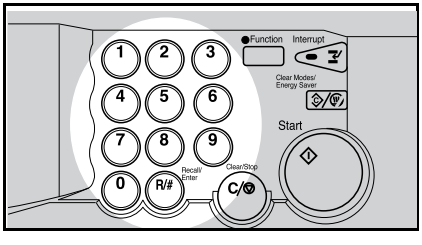


❒ For details about the Energy Saver, ☛ see page 24.

❒ The following actions will also return the copier to the ready condition:
- Opening or closing the optional document feeder.
- Setting originals in the optional document feeder.
- Opening or closing the bypass feed table.
- Setting copy paper in the bypass feed table.
- Pressing any key except the **Start** key.

When The Copier Is Set For User Codes

When **U2** is indicated in the copy counter, the copier is set for user codes.
Input your user code (4 digits) using the **Number** keys. Then press the **Recall/Enter** key.



❒ To prevent others from making copies using your user code, press the **Clear/Stop** and **Clear Modes/Energy Saver** key simultaneously after copying.

❒ Regarding user codes, ☛ see page 84.

❒ To set your copier for user codes, contact your service representative. ☛ See page 88.

ORIGINALS

Recommended Originals

❒ Regarding originals that the optional document feeder can handle, ☛ see page 105.

Non-recommended Originals For The Optional Document Feeder

R *Caution: The following types of originals are not recommended for use with the document feeder. Place them directly on the exposure glass.*

❒ Originals thicker than 128 g/m^2, 34 lb

❒ Originals thicker than 105 g/m^2, 28 lb when using two-sided originals

❒ Originals thinner than 41 g/m^2, 11 lb.

❒ Originals larger than A3, 11" x 17"

❒ Originals smaller than B6 ; , 5 1/2" x 8 1/2" ;

❒ Paper with any kind of coating (such as carbon) on the back

❒ Folded, curled, creased, or damaged originals

❒ Mailing labels, or perforated originals

❒ Bound, stapled, or clipped originals

❒ OHP transparencies

❒ Translucent paper

❒ Pasted originals

❒ Damp originals

❒ Sticky originals

❒ Wavy originals

❒ Originals that are not made from paper

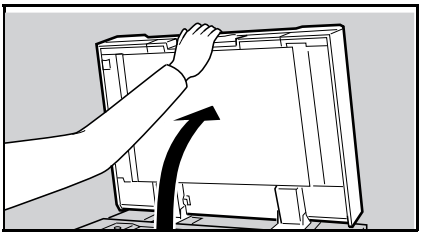
❒ Originals written in pencil on both sides, or two-sided carbon originals

❒ Thermal fax paper

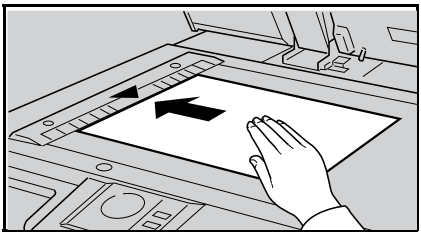
SETTING ORIGINALS ON THE EXPOSURE GLASS

1. Lift the platen cover or the optional document feeder.

❒ When lifting the platen cover, hold it in the center.



2. Set the original *face down* on the exposure glass. The original should be centered according to the size marks on the left scale.

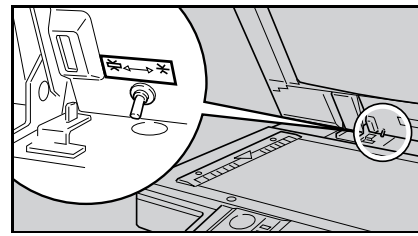


3. Lower the platen cover or the optional document feeder.

SETTING A STACK OF ORIGINALS IN THE OPTIONAL DOCUMENT FEEDER

You can insert a stack of originals (one-sided or two-sided) of the same size into the document feeder. These originals are individually fed onto and removed from the exposure glass.

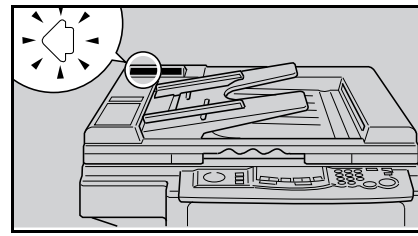
❒ If the originals are heavier than 52 g/m^2, 14 lb, set the Original Select switch of the document feeder to the Thick Original position.



❒ If you want to set originals of different sizes at the same time, use the user tools. ☛ See page 81.

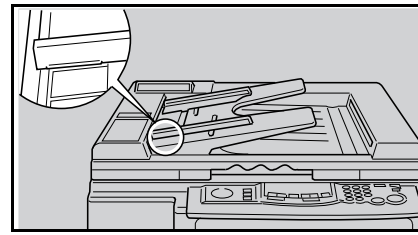
1. Correct any curl, fold, or crease in the originals before setting.

2. Confirm that the **Insert Original** indicator is lit before setting the originals.

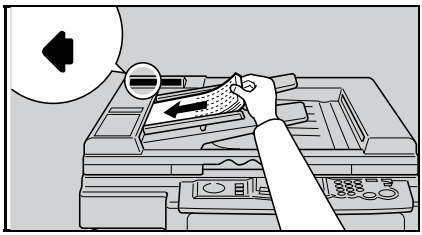


3. Confirm that no previous originals remain on the exposure glass.

4. Adjust the guides to the original size.

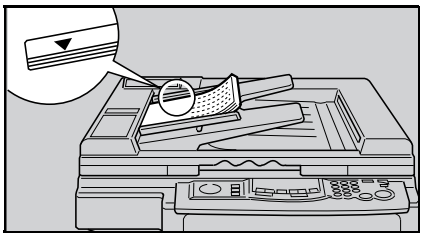


5. Set the originals *face up* into the document feeder until the **Insert Original** indicator goes off.



- ❒ The last page should be on the bottom.
- ❒ The guides must touch both sides of the originals.

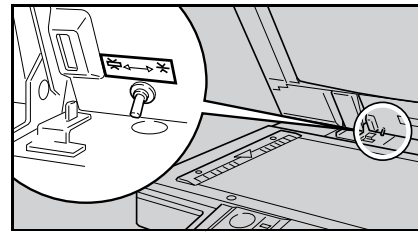
- ❒ Do not stack originals above the limit mark.



SETTING ONE ORIGINAL AT A TIME IN THE OPTIONAL DOCUMENT FEEDER

You can insert one original at a time into the document feeder. The original is automatically fed onto and removed from the exposure glass.

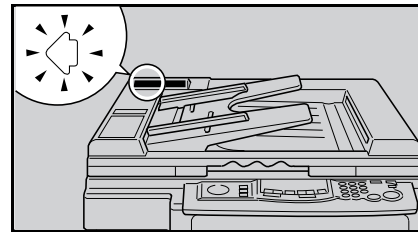
❒ If the originals are heavier than 52 g/m^2, 14 lb, set the Original Select switch of the document feeder to the Thick Original position.



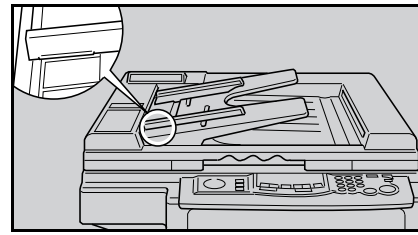
1 ▪ Correct any curl, fold, or crease in the originals before setting.

2 ▪ Confirm that the **Insert Original** indicator is lit before setting the originals.

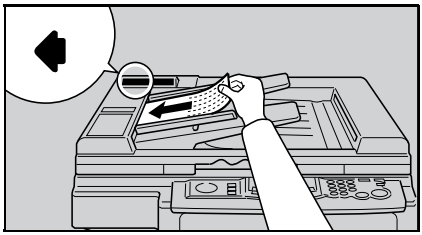
3 ▪ Confirm that no previous originals remain on the exposure glass.



4 ▪ Adjust the guides to the original size.



5 ▪ Set the original *face up* into the document feeder until the **Insert Original** indicator goes off.

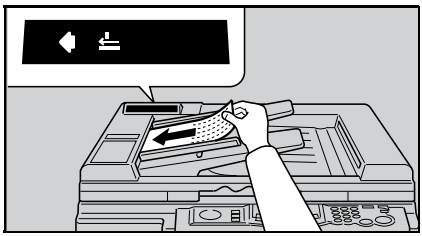


❒ If you are copying a stack of originals one sheet at a time and you want to keep them in order, start with the last page of the originals.

❒ The original guides must touch both sides of the original.

6 Press the **Start** key.

7 ▪ While the **Auto Feed** indicator is lit after an original is fed, set the next original. The original is automatically fed and copied.



❒ If you have set more than two originals, the **Auto Feed** indicator is not lit after the last original is fed. In this case, press the **Start** key again after setting an original.

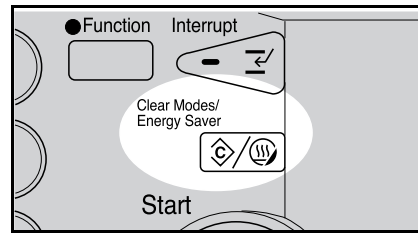
SAVING ENERGY

With the Energy Saver, the copier is reset and uses less electricity.

- ❒ To have the Energy Saver automatically activated when the copier is auto reset, set the user tools. ☛ See page 82.
- ❒ Your service representative can select one of four levels for the saving ratio.(☛ See page 83.) The higher the saving ratio, the more time the copier will need to return to the ready condition.
- ❒ The following actions will cancel the Energy Saver mode:
  - Opening or closing the optional document feeder.
  - Setting originals in the optional document feeder.
  - Opening or closing the bypass feed table.
  - Setting copy paper in the bypass feed table.
  - Pressing any key except the **Start** key.

1 Press the **Clear Modes/Energy Saver** key more than one second to enter the Energy Saver condition.

- ❒ All indicators except the r **Energy Saver** indicator turn off.

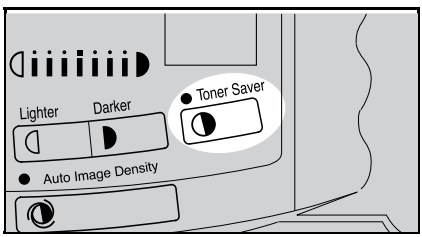


SAVING TONER

With the Toner Saver, the toner cartridge lasts longer. However, the copy image density will be lower.

- Depending on images on a original, toner saving ratio might be changed.
- If the copy image density with this function is too low, cancel it.
- The auto and manual image density modes cannot be selected with this function.
- To set the Toner Saver function as default, set the user tools. ☛ See page 77.
- Your service representative can select one of three toner saving ratio. ☛ See page 87.

1 Press the **Toner Saver** key.



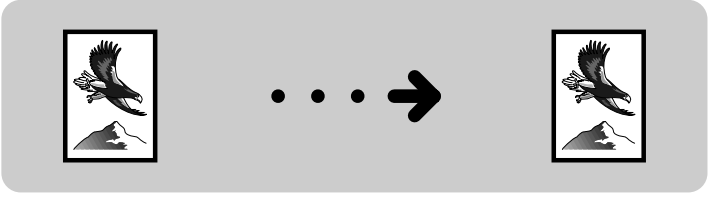
- If you want to cancel this function, press the **Toner Saver** key again, the **Lighter** and **Darker** keys, or the **Auto Image Density** key.

2 Make your copies.

COPYING

BASIC OPERATION

One-to-one Copying

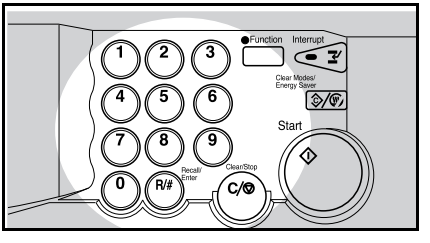


You can make copies that are the same size as your originals.

1 Set your original on the exposure glass or in the optional document feeder. ☛ See page 19, 20, or 22.

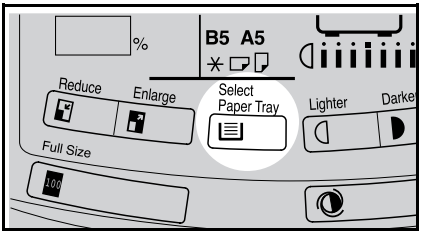
2 Enter the number of copies required using the **Number** keys.

❒ To change the number entered, press the **Clear/Stop** key, then enter the new number.

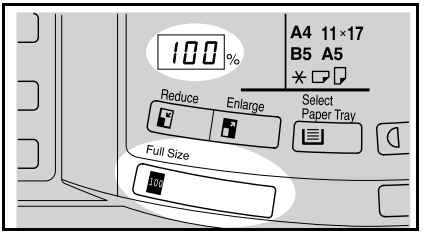


3 Select the copy paper using the **Select Paper Tray** key.

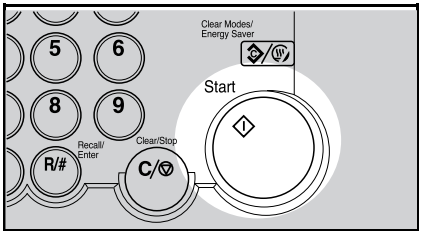
❒ When you set the original in the optional document feeder, you can use the Auto Paper Select function. ☛ See page 45.



4 Make sure that the magnification ratio is set to 100%. If not, press the **Full Size** key.

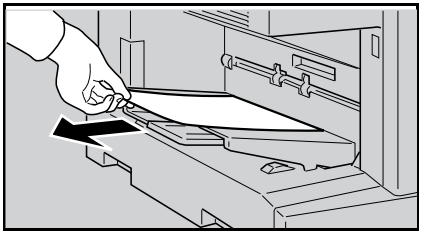


5 Press the **Start** key.



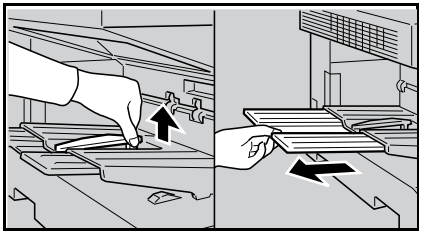
- ❒ To confirm the number of copies that you entered, press the **Recall/Enter** key.
- ❒ To stop the copier during a multicopy run, press the **Clear/Stop** key.
- ❒ Press the **Start** key to resume copying, or press the **Clear/Stop** key again to clear the entered copy number.

6 Remove the copies from the copy tray.



- ❒ The copy tray holds approximately 250 sheets (B4, 8 1/2" x 14" and smaller) or 100 sheets (A3, 11" x 17").

- ❒ If you make B4, 8 1/2" x 14" or larger size copies, raise the center rib and extend the copy tray to stack them properly.

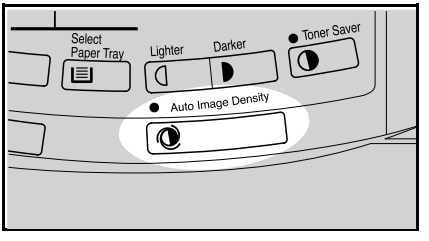


Adjusting Copy Image Density

To match the type of originals, adjust the image density.

Auto image density

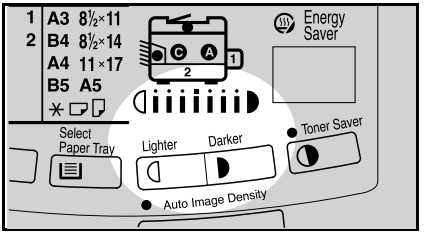
If the **Auto Image Density** indicator is lit, the copier automatically controls the image density. If the indicator is not lit, press the **Auto Image Density** key.



Manual image density

If you require darker or lighter copies, adjust the image density yourself.

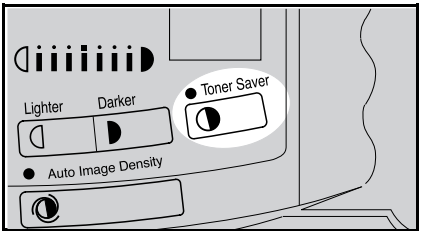
Press the **Lighter** (left) key to lower the image density. Press the **Darker** (right) key to increase the image density.



Toner Saver mode

Using this mode, the copy density will be lighter and the toner cartridge will last longer.

Press the **Toner Saver** key before making copies.



- ❒ The auto and manual image density modes cannot be selected simultaneously with the Toner Saver mode and vice versa.
- ❒ Regarding the Toner Saver function, ☛ see page 25.

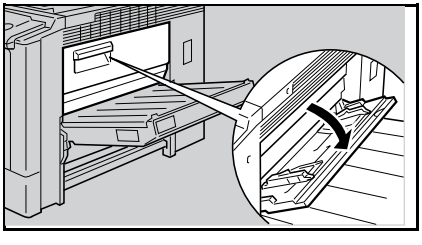
Copying From The Bypass Feed Table

Use the bypass feed table to copy onto paper of unusual size or weight, or color paper.

- ❒ When using the bypass feed table, set one sheet at a time.
- ❒ When using the bypass feed table, set the cassette correctly.
- ❒ When you use the bypass feed table while placing the original directly on the exposure glass, lower the platen cover or optional document feeder before pressing the **Start** key.
- ❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

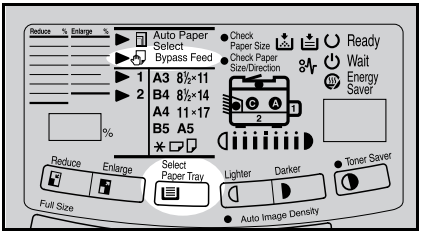
1 Set your original on the exposure glass or in the optional document feeder. ☛ See page 19, 20, or 22.

2 Open the bypass feed table.

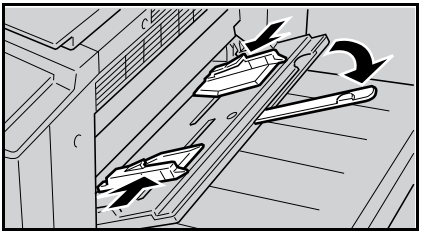


3 Make sure that the **Bypass Feed** indicator is lit. If it is not lit, press the **Select Paper Tray** key to select the bypass feed table.

❒ If the cassette is not set correctly, the **Bypass Feed** indicator blinks and you cannot select the bypass feed table. In this case, set the cassette correctly.

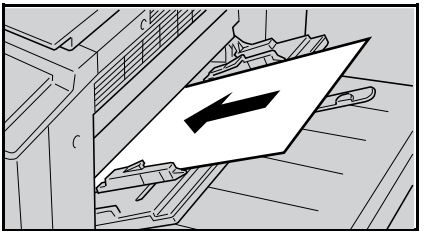


4 Slide the paper guides to the paper width and, if necessary, swing out the extender to support large size copy paper.



5 Lay the copy paper on the bypass feed table and Insert it until the paper lightly touches the feed roller inside.

❒ Do not shove paper into the bypass feed table.



6 Press the **Start** key.

7 Repeat step **5** until your copying is completed.

While the **Bypass Feed** indicator is lit, the copier is ready for the next copy paper.

Temporarily Stopping One Job To Copy Something Else (Interrupt Copying)

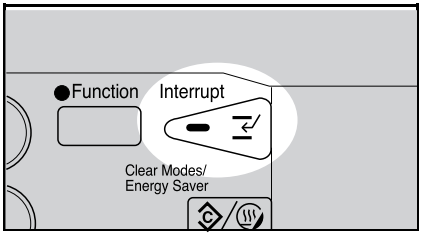
Use the **Interrupt** key to interrupt a multicopy run to make urgently needed copies.

❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

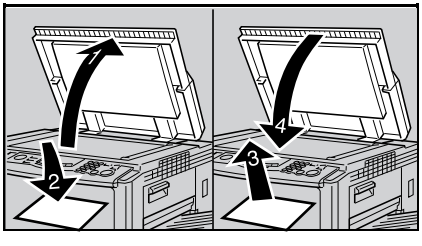
Without the optional document feeder

1 Press the **Interrupt** key. The copier will stop the copy run and store the present settings in the memory. The copier will return to the ready condition.

❒ The reproduction ratio will not be reset.

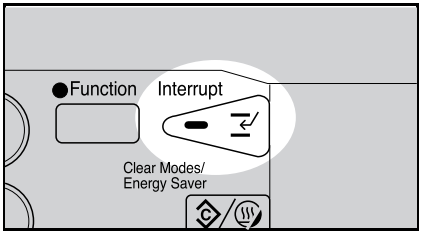


2 Remove the previous original. Set your original for interrupt copying on the exposure glass. ☛ See page 19.

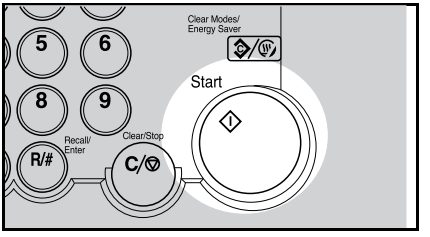


3 Make your copies.

4 After interrupt copying is completed, press the **Interrupt** key again. The copier will recall the previous copy settings.

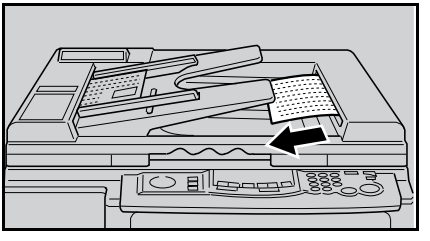


5 Reset the previous original and press the **Start** key to resume the previous run.



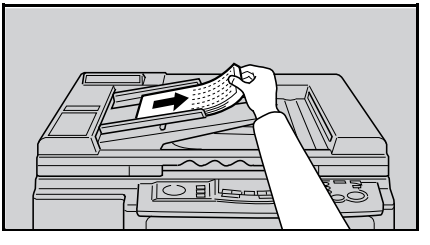
With the optional document feeder

1 Press the **Interrupt** key. The copier will stop the copy run and store the present settings in the memory. The original on the exposure glass will exit from the document feeder. The copier will return to the ready condition.



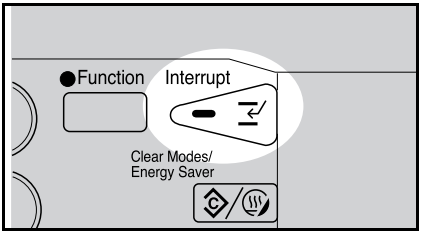
2 Take the originals from the exit stack.

3 Separately take the remaining originals off the original table.

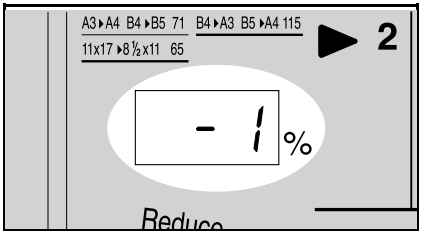


4 Make your copies.

5 After interrupt copying is completed, press the **Interrupt** key. The copier will recall the previous copy settings.

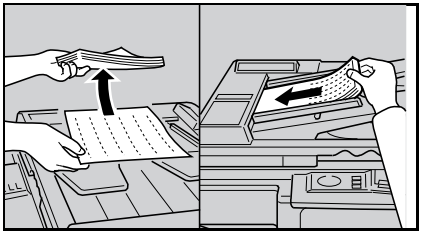


6 Some originals in the exit stack (step 2) weren't completely copied. Read the number in the **Three Digit** indicator and take that number of pages from the *top* of the exit stack.



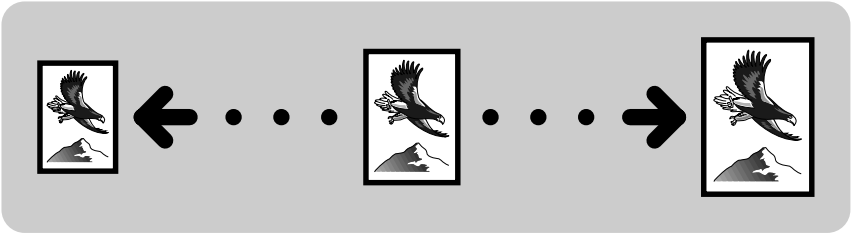
7 Place the sheets you just took on the bottom of the stack you took from the original table (step 3).

8 Place the stack you just made in the original table.



9 Press the **Start** key.

Reducing And Enlarging



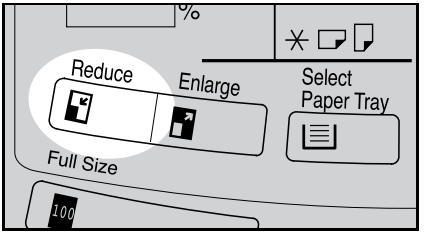
- ❒ You can change the number of fixed reproduction ratios with the user tools. ☛ see page 75.
- ❒ You can set new preset ratios with the user tools. ☛ See page 76.
- ❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

Reducing and enlarging using preset ratios

Reducing

Press the **Reduce** key to select the preset reduction ratios. The reduction ratio will change as follows:

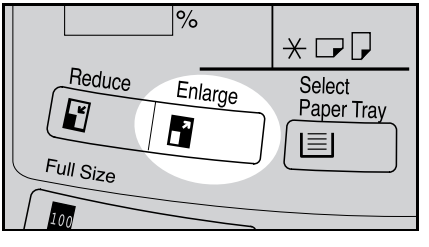
93%→87%→82%→77%→74%→71%→65%



Enlarging

Press the **Enlarge** key to select the preset enlargement ratios. The enlargement ratio will change as follows:

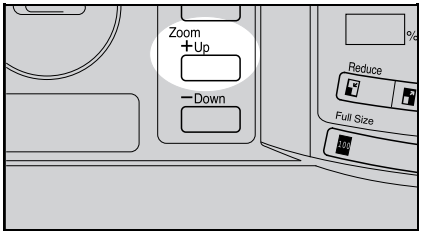
115%→122%→129%→141%→155%



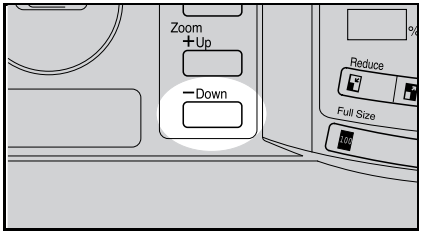
Reducing and enlarging with the Zoom Up (+) and Zoom Down (-) keys (+- Zoom)

You can change the reproduction ratio from 61% to 156% in 1% steps.

Press the **Zoom Up (+)** key repeatedly, or hold down the key continuously, to increase the ratio in 1% steps.

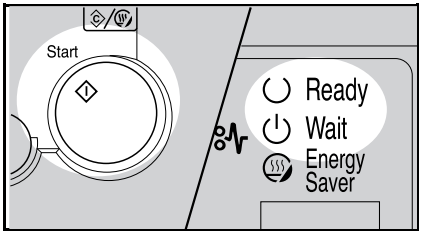


Press the **Zoom Down (-)** key repeatedly, or hold down the key continuously, to reduce the ratio in 1% steps.



Entering Copy Job Settings During The Warm-up Period (Auto Start)

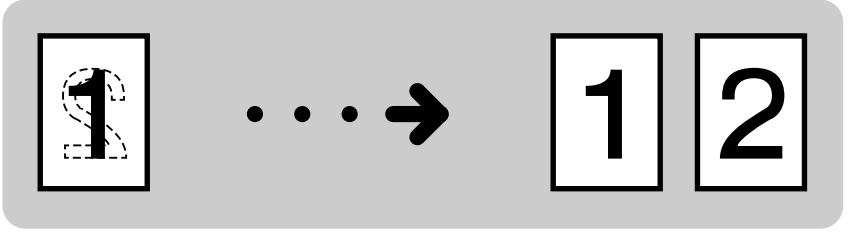
If you press the **Start** key during the warm-up period, the ○ **Ready** indicator will blink, then the copier will start copying after the warm-up period. Set your copy settings during warm-up period, then press the **Start** key.



❒ To cancel Auto Start, press the **Clear/Stop** key.

MAKING ONE-SIDED COPIES FROM VARIOUS ORIGINALS

From 1 Two-sided Original To 2 One-sided Copies

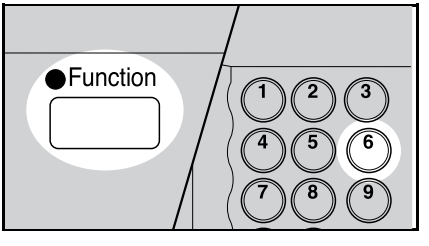


Note : This function can be used only when your copier is equipped with the optional document feeder.

❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

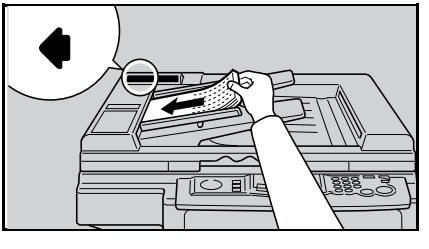
1 Press the **Function** key. Then press **6** on the **Number** keys.

❒ To cancel this function, press the **Function** key again.



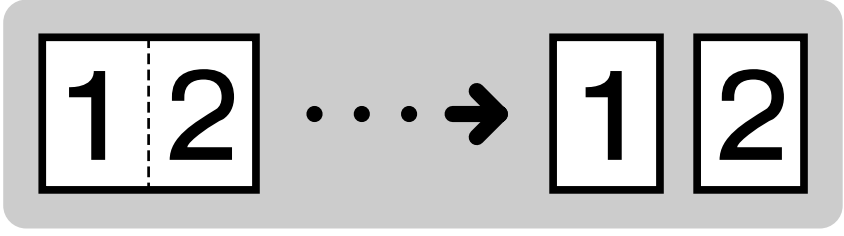
2 Set your originals in the optional document feeder. ☛ See page 20 or 22.

❒ Start with the last page of the originals to be copied.



3 Press the **Start** key.

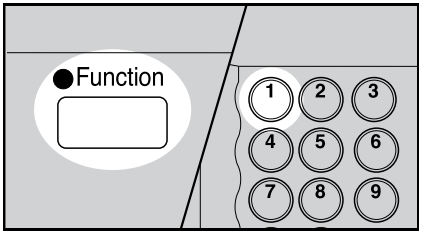
From 2 Facing Pages To 2 One-sided Copies



- ❒ The maximum paper size that can be used in this mode is as follows:
  A4 ▯, 8 1/2" x 11" ▯
- ❒ The Auto Paper Select cannot be selected with this function.
- ❒ The bypass feed table cannot be used with this function.
- ❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

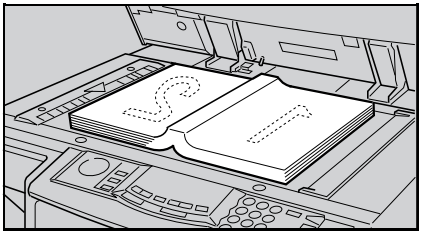
1 Press the **Function** key. Then press **1** on the **Number** keys.

- ❒ To cancel this function, press the **Function** key again.

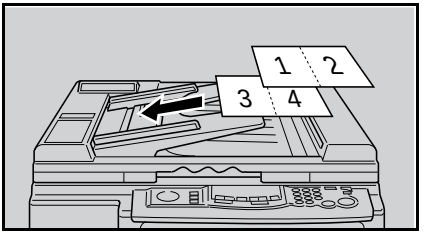


2 Start with the last page of your book original and work your way to the beginning.
Place the original *face down* on the exposure glass.

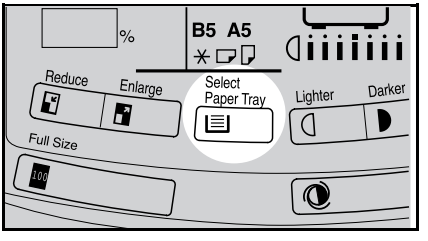
- ❒ The original must be centered according to the size marks on the left scale.



Or, set the facing original in the optional document feeder. ☛ See page 20 or 22.

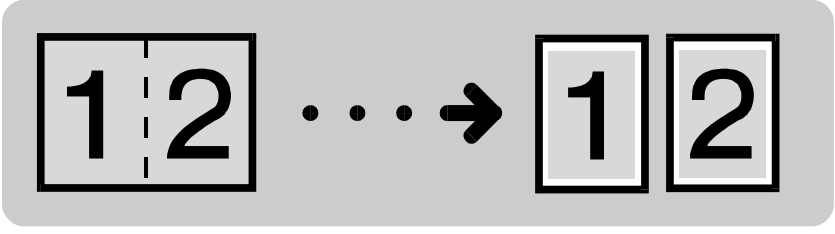


3 Select the copy paper size using the **Select Paper Tray** key.



4 Press the **Start** key.

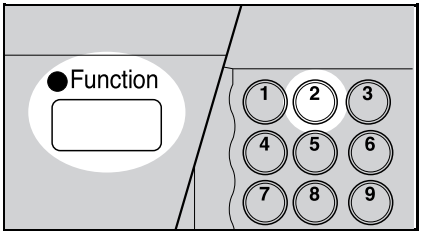
From 2 Facing Pages to 2 One-sided Copies And Erasing The Surrounding Area Of The Original Image



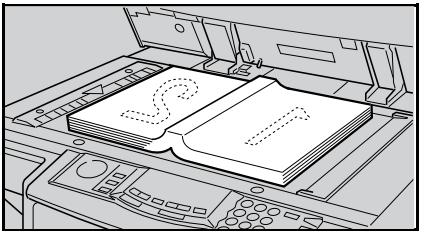
- The maximum paper size that can be used in this mode is as follows:
  A4 ▯, 8 1/2" x 11" ▯
- The position of the margin to be erased is determined according to the selected copy paper and reproduction ratio. Make sure to select copy paper suitable for your original.
- The width of the margin to be erased can be changed with the user tools.
  ☛ see page 77 or 79.
- The Auto Paper Select cannot be selected with this function.
- The bypass feed table cannot be used with this function.
- Regarding functions that cannot be used together with this function, ☛ see page 53.

1 Press the **Function** key. Then press **2** on the **Number** keys.

- To cancel this function, press the **Function** key again.

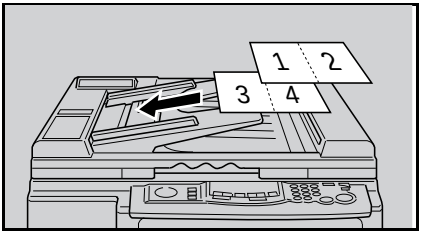


2 Start with the last page of your book original and work your way to the beginning.
Place the original *face down* on the exposure glass.

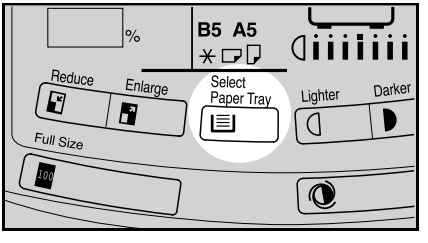


❒ The original must be centered according to the size marks on the left scale.

Or, set the facing original in the optional document feeder. ☛ See page 20 or 22.



3 Select the copy paper size using the **Select Paper Tray** key.

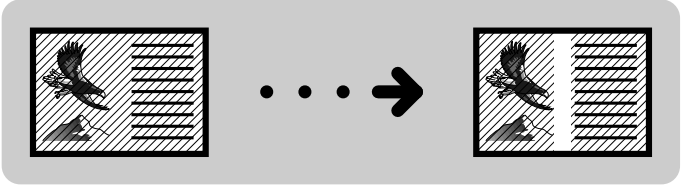


4 Press the **Start** key.

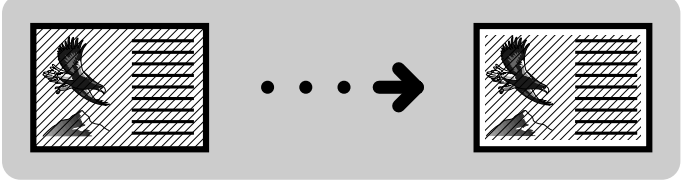
ERASING PARTS OF THE COPY IMAGE

Note: If the copy paper is A5 ▭ , B6 ▭ , 5 1/2" x 8 1/2" ▯, or 5 1/2" x 8 1/2" ▭, the horizontal edges of surrounding area will not be erased.

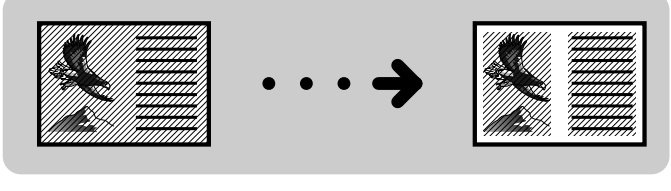
Erasing The Center Margin Of The Original Image



Erasing The Surrounding Area Of The Original Image

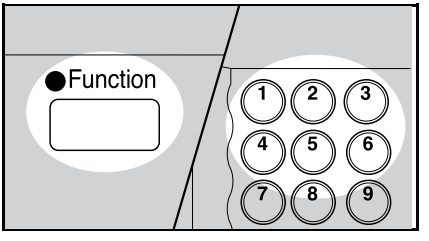


Erasing The Center Margin And Surrounding Area Of The Original Image



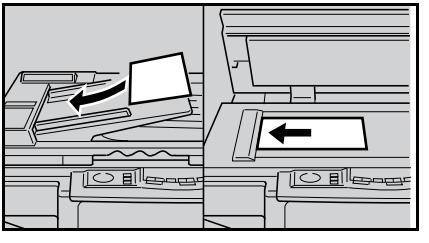
- ❒ The position of the margin to be erased is determined according to the selected copy paper and reproduction ratio. Make sure to select copy paper suitable for your original.
- ❒ The width of the margin to be erased can be changed with the user tools. ☛ See page 77, 79, or 81.
- ❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

1 Press the **Function** key. Then press **4** on the **Number** keys to select the Erase Center, **3** to select the Erase Border, or **5** to select both of them.



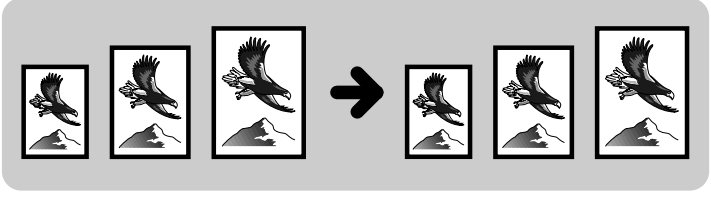
2 Set your original on the exposure glass or in the optional document feeder. ☛ See page 19, 20, or 22.

- ❒ If you place a book original on the exposure glass, the original must be centered according to the size marks on the left scale.



3 Press the **Start** key.

HAVING THE COPIER CHOOSE THE PAPER SIZE (Auto Paper Select, OPTION)



The copier selects a suitable size of copy paper based on the original size and the reproduction ratio.

Note:This function can be selected only when originals are inserted in the optional document feeder.

Note:There are two measurement versions with this copier; metric and inch. If your copier is a metric version, Auto Paper Select function cannot be used for inch size originals. If your copier is an inch version, Auto Paper Select function cannot be used for metric size originals. To confirm which version you have, contact your service representative.

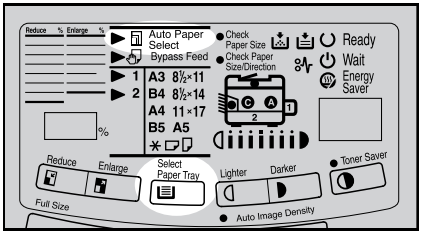
❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

Example 1: When making full size copies

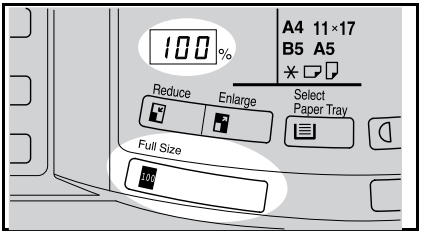
1 Set your original in the optional document feeder. ☛ See page 20 or 22.

2 Make sure that the **Auto Paper Select** indicator is lit. If not, press the **Select Paper Tray** key to select the **Auto Paper Select**.

❒ To cancel Auto Paper Select, Press the **Select Paper Tray** key and select the desired paper size manually.



3 Make sure that the magnification ratio is set to 100%. If not, press the **Full Size** key.



4 Press the **Start** key.
The copier selects paper of the same format and orientation as the original.

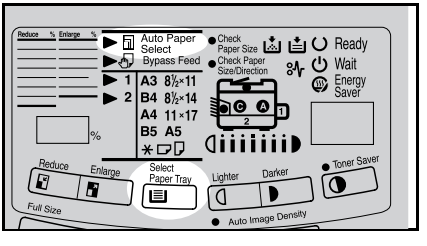
Example 2: When making reduced copies

Example: Original: A3 ▭ , 11" x 17" ▭
Reproduction ratio: 71% (for A3), 65% (for 11" x 17")

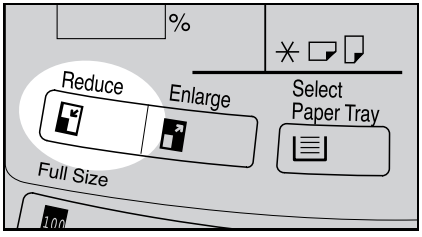
1 Set your original in the optional document feeder. ☛ See page 20 or 22.

2 Make sure that the **Auto Paper Select** indicator is lit. If not, press the **Select Paper Tray** key to select the **Auto Paper Select**.

❒ To cancel Auto Paper Select, Press the **Select Paper Tray** key and select the desired paper size manually.



3 Select 71% (for A3) or 65% (for 11" x 17") using the **Reduce** key.

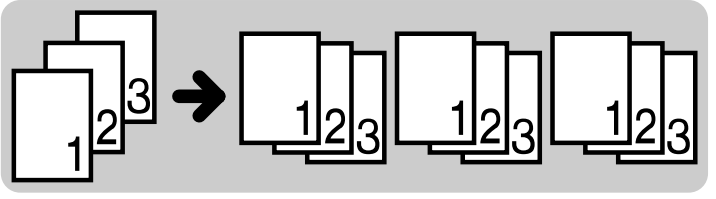


4 Press the **Start** key.

A4 ▱ , 8 1/2" x 11" ▱ copy paper will be selected.

FINISHING (OPTION)

Sorting Into Sets (123, 123, 123) (Sort)



One copy of each originals is delivered to each bin and copies are collated into sets.

Note: This function can be used only when your copier is equipped with the optional 10-bin sorter.

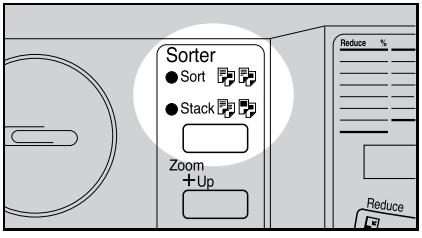
❒ For Sorting, the following limitations apply:

Maximum paper size	Lengthwise ▭ : A3, 11" x 17" Sideways ▯ : A4, 8 1/2" x 11"
Minimum paper size	Lengthwise ▭ : A4, 8 1/2" x 11" Sideways ▯ : A5, 5 1/2" x 8 1/2"
Maximum paper weight	90 g/m^2, 24 lb
Minimum paper weight	64 g/m^2, 17 lb
Maximum capacity of bins	A4, 8 1/2" x 11" or smaller: 20 copies B4, 8 1/2" x 14": 15 copies A3, 11" x 17": 10 copies
Paper that cannot be used	post cards, translucent paper, OHP transparencies, and adhesive labels

❒ To avoid problems caused by curled copies, try turning over the paper stack in the cassette or tray. If there is no improvement, change to copy paper with less curl.

❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

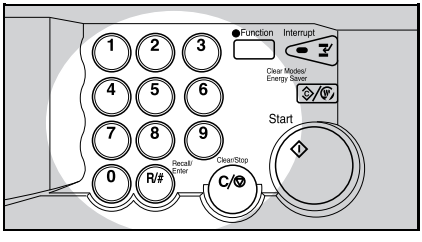
1 Press the **Sorter** key to light the **Sort** indicator.



2 Set your original on the exposure glass or in the optional document feeder. ☞ See page 19, 20, or 22.

3 Enter the number of copies required using the **Number** keys.

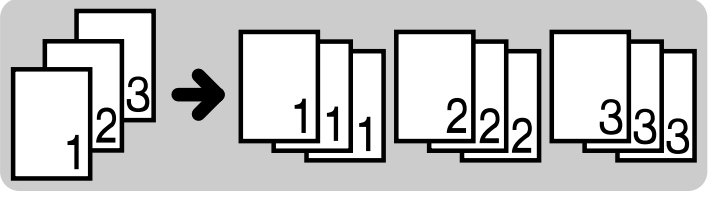
❒ The maximum number of copies that can be entered is 10.



4 Set other settings and press the **Start** key.

❒ If you set your originals on the exposure glass in step **2**, repeat steps **2** and **4** until your copying is completed.

Stacking Together All Copies Of A Page (111, 222, 333) (Stack)



All copies of each original are delivered to the same bin.

Note: This function can be used only when your copier is equipped with the optional 10-bin sorter.

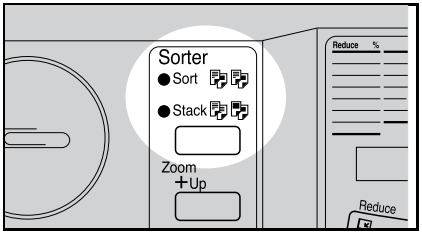
❒ For Stacking, the following limitations apply:

Maximum paper size	Lengthwise ▭ : A3, 11" x 17" Sideways ▯ : A4, 8 1/2" x 11"
Minimum paper size	Lengthwise ▭ : A4, 8 1/2" x 11" Sideways ▯ : A5, 5 1/2" x 8 1/2"
Maximum paper weight	90 g/m^2, 24 lb
Minimum paper weight	64 g/m^2, 17 lb
Maximum capacity of bins	A4, 8 1/2" x 11" or smaller: 20 copies B4, 8 1/2" x 14": 15 copies A3, 11" x 17": 10 copies
Paper that cannot be used	post cards, translucent paper, OHP transparencies, and adhesive labels

❒ To avoid problems caused by curled copies, try turning over the paper stack in the cassette or tray. If there is no improvement, change to copy paper with less curl.

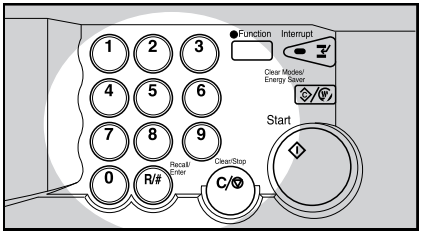
❒ Regarding functions that cannot be used together with this function, ☛ see page 53.

1 Press the **Sorter** key to light the **Stack** indicator.



2 Set your original on the exposure glass or in the optional document feeder. ☛ See page 19, 20, or 22.

3 Enter the number of copies required using the **Number** keys.

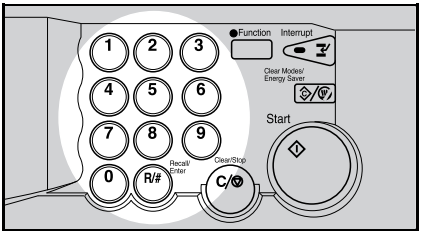


4 Set other settings and press the **Start** key.

❒ If you set your originals on the exposure glass in step **2**, repeat steps **2** and **4** until your copying is completed.

COPYING WITH USER CODES

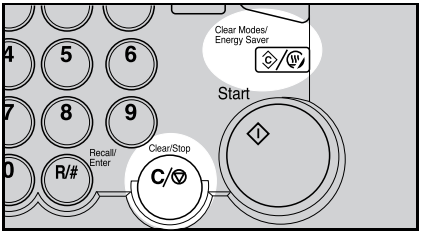
1 Input your user code (4 digits) using the **Number** keys. Press the **Recall/Enter** key.



2 Make your copies.

3 To prevent others from making copies using your user code, press the **Clear/Stop** and **Clear Modes/Energy Saver** key simultaneously after copying.

- ❒ Regarding user codes, ☛ see page 84.
- ❒ To set your copier for user codes, contact your service representative. ☛ See page 88.



COMBINATION CHART

This combination chart shows which modes can be used together.

☆ means that these modes can be used together.

★ means that the mode after you select will be the mode you're working in.

✗ means that these modes cannot be used together.

Mode before you select \ Mode after you select			Special Function						Reduce/ Enlarge		Finish-ing		Others		
			1	2	3	4	5	6	7	8	9	10	11	12	13
Special Function	1	From Book Original		✗	✗	✗	✗	✗	☆	☆	☆	☆	✗	✗	★
	2	From Book Original and Erase Edge	✗		✗	✗	✗	✗	☆	☆	☆	☆	✗	✗	★
	3	Erase Edge	✗	✗		✗	✗	✗	☆	☆	☆	☆	☆	✗	★
	4	Erase Center	✗	✗	✗		✗	✗	☆	☆	☆	☆	☆	✗	★
	5	Erase Center and Edge	✗	✗	✗	✗		✗	☆	☆	☆	☆	☆	✗	★
	6	From Two-sided Original	✗	✗	✗	✗	✗		☆	☆	☆	☆	☆	☆	★
Reduce/ Enlarge	7	Preset Reduce/Enlarge	☆	☆	☆	☆	☆	☆		★	☆	☆	☆	☆	☆
	8	+-Zoom	☆	☆	☆	☆	☆	☆	★		☆	☆	☆	☆	☆
Finish-ing	9	Sorting	☆	☆	☆	☆	☆	☆	☆	☆		★	☆	✗	★
	10	Stacking	☆	☆	☆	☆	☆	☆	☆	☆	★		☆	✗	★
Others	11	Auto Paper Select	✗	✗	☆	☆	☆	☆	☆	☆	☆	☆		★	☆
	12	Bypass Feed Copying	✗	✗	✗	✗	✗	☆	☆	☆	✗	✗	★		☆
	13	Interrupt Copying	☆	☆	☆	☆	☆	☆	☆	☆	✗	✗	☆	☆	

WHAT TO DO IF SOMETHING GOES WRONG

IF YOUR COPIER DOES NOT OPERATE AS YOU WANT

Check the followings:

Copier's condition		Action
Nothing happens when the main switch is turned on.		Check the power cord. Is it properly plugged into the outlet? ➠ Plug it in firmly.
is lit.		Load paper. ☛ See page 59.
is blinking or lit.		Add toner. ☛ See page 63.
is lit.		Remove misfed paper. ☛ See page 64.
Energy Saver is lit.		Your machine is in the Energy Saver condition. ➠ Press any key except the **Start** key to return to the ready condition.
U code is displayed on the copy counter.	**U1**	Close the right cover that is under the cassette.
	U2	The copier is set for user codes. Enter your user code (4 digits).
		Insert the optional key counter correctly.
	U4	Reset the optional sorter correctly.
	U6	Call your service representative.
E code is displayed on the copy counter or three digit indicator.		Turn the main switch off, wait a few seconds, and then turn it on. If the E code appears again, call your service representative and tell which code is on. Check the code as follows: ex.) E 1 2 By pressing the **Recall/Enter** key, this code is displayed. This code is displayed first.

Copier's condition	Action
Check Paper Size indicator is lit.	You've selected an improper paper size. Copying is impossible. Select the proper paper size.
	You cannot use the bypass feed table in the Sort or Stack mode. Select the cassette or the paper tray.
	When making 2 one-sided copies from 2 facing pages: ➠ You cannot select the lengthwise ▭ copy paper for the book originals. Select sideways ▯ copy paper. ➠ You cannot select Auto Paper Select.
Check Paper Size/Direction indicator is blinking.	Original size or direction does not match the copy paper size or direction. ➠ Select the proper paper size or direction.
	When making copies in Auto Paper Select: ➠ There is no proper copy paper size or direction. (copying is possible.) Select the proper paper size, or press the **Start** key to continue copying. ➠ If you use translucent or transparent originals, or originals with tags, the original size might not be correctly detected. Do not use such originals.
The indicator of the **Auto Image Density** indicator blinks.	Turn the main switch off and on. If this condition re-occurs, call your service representative and explain the problem.
The **Manual Image Density** indicator blinks.	
The **Toner Saver** indicator blinks.	
Misfeeds occur frequently.	Is the right kind of paper in the paper tray or cassette? ➠ Paper size and weight must be within the specifications for this copier.
	Is folded, wrinkled, damp, or curled paper in the paper tray? ➠ Always use dry, undamaged paper.
	Is the paper properly set in the cassette or the tray? ➠ Always load paper correctly.
	Are there any pieces of misfed paper or other materials in the machine? ➠ Make sure that the paper path is completely cleared of paper and other material after a misfeed.

❒ If you cannot correct the problem by taking the above actions, please contact your service representative.

IF YOU CANNOT MAKE COPIES AS YOU WANT

Problem	Cause	Action
Copies appear dirty.	The original has a gray or colored background.	Adjust the image density. ☛ See page 30.
	The image density is too dark.	
	The platen cover, exposure glass, or document feeder belt is dirty.	Clean them. ☛ See pages 90 and 91.
The reverse side of an original image is copied.	The image density is too dark.	Adjust the image density. ☛ See page 30.
Copies are too light.	The original has a low contrast image.	Adjust the image density. ☛ See page 30.
	The image density is too light.	
	The Toner Saver mode is selected.	Cancel the Toner Saver mode. ☛ See page 25.
	Damp or rough grain paper is used.	Use dry paper without rough grain.
The same copy area is dirty whenever making copies.	The platen cover, exposure glass, or document feeder belt is dirty.	Clean them. ☛ See pages 90 and 91.
Copies are blank or parts of the image are not copied.	The original is not set correctly.	Set originals correctly. ☛ See page 19, 20, or 22.
	An improper paper size is selected.	Select the proper paper size.
Copies have white streaks.	The corona wire is dirty.	Clean the corona wire. ☛ See page 90.

❒ If you cannot correct the problem by taking the above actions, please contact your service representative.

IS LIT: LOADING PAPER

NOTE: The paper sizes that can be set are as follows:
Paper tray: See page 68.
Cassette and Bypass feed table:
Maximum: A3 ▭, 11" x 17" ▭
Minimum: A6 ▭, 5 1/2 x 8 1/2" ▭

NOTE: If you want to change the paper size, ☛ see page 68.

Non-recommended Paper For Paper Tray

- ❒ Folded, curled, creased, or damaged paper
- ❒ Torn paper
- ❒ Perforated paper
- ❒ Paper with conductive or low electrical resistance coating such as carbon or silver coating
- ❒ Thermal paper, art paper
- ❒ Thin paper that has low stiffness

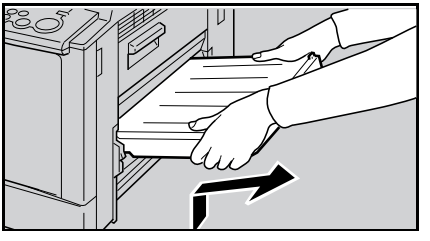
Notes For Paper

- ❒ Load paper with the copy side *down* in the trays, and with the copy side *up* in the cassette. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
- ❒ Correct curls in copy paper before loading.
- ❒ Fan copy paper to get air between the sheets before loading.
- ❒ When making two-sided copies, do not load paper in the paper tray for copying the reverse side. Use the cassette or the bypass feed table.

Loading Paper In The Cassette

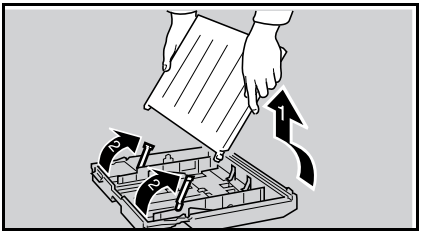
- ❒ If you want to change the paper size, contact your service representative.
- ❒ When you load paper in the cassette, remove the cassette completely, then reinsert it.

1 Lift and take out the cassette.

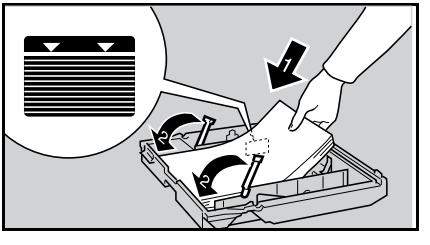


- ❒ After removing cassette, remove any paper that remains in the cassette entrance.

2 Lift and remove the cover, then raise the guide arms.

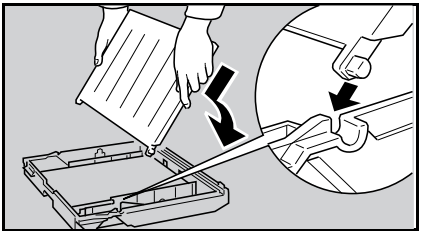


3 Load paper in the cassette, then lower the guide arms.



- ❒ Do not stack paper above the limit marks inside the cassette.

4 Replace and lower the cover.



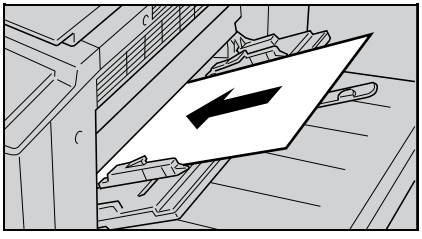
- ❒ Make sure that the cover is replaced to its original position before reinserting the cassette.

5 Reinsert the cassette.

Loading Paper In The Bypass Feed Table

- ❒ Set one sheet at a time.
- ❒ Regarding the Bypass Feed Table, ☛ see page 31.

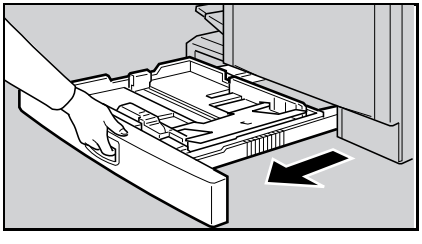
Lay the copy paper on the bypass feed table and insert it until the paper lightly touches the feed roller inside.



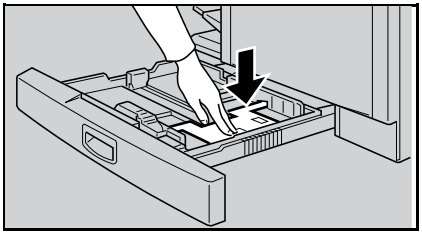
- ❒ Do not shove paper into the bypass feed table.
- ❒ If you use the large size copy paper, swing out the extender.

Loading Paper In The Paper Tray

1 Pull out the paper tray until it stops.

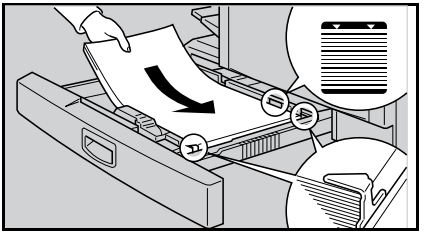


2 Push the bottom plate down until it locks.



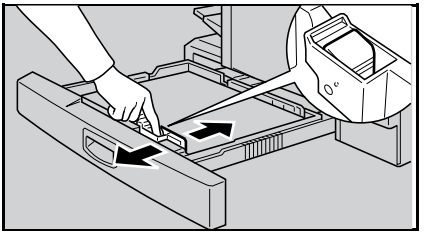
3 Load paper in the paper tray.

- ❒ Do not stack paper above the limit mark inside the paper tray.
- ❒ Make sure that the leading corners of the paper are under the corners as shown in the illustration.

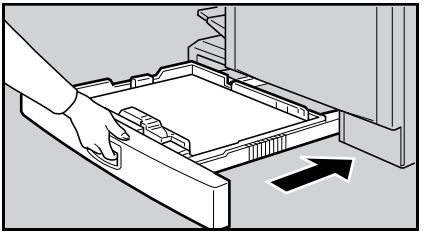


4 While pressing the release lever on the front side guide, push the guide until the front and rear guides securely hold the paper.

- ❒ Do not press the front and rear guides strongly against the paper.



5 Reinsert the tray gently until it stops.



IS LIT OR BLINKING: ADDING TONER

When the **Add Toner** indicator blinks, it is time to supply toner (copying is still possible). When the **Add Toner** indicator is continuously on, copies cannot be made until the toner cartridge is replaced.

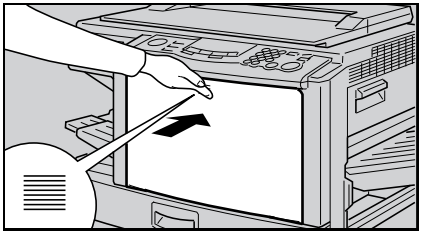
⚠ ***WARNING:*** ***Do not incinerate the used toner cartridge. Toner dust might ignite when exposed to open flames.***

⚠ ***WARNING:*** ***Dispose of the used toner cartridge according to local regulations.***

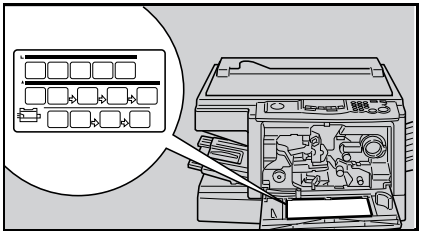
NOTE: When adding toner, do not turn off the main switch. If you do, your copy settings are cleared.

NOTE: Before setting the new toner cartridge, shake it well at least 5 or 6 times.

1 Open the copier's front cover.



2 You can find the sticker explaining how to add toner inside the front cover, as shown in the illustration.



3 Load the new toner cartridge following the instructions on the sticker.

IS LIT: CLEARING MISFEEDS

WARNING: ***Since some parts of the copier are supplied with high electrical voltage, touch only the parts specified in the instructions on the sticker inside the machine's cover.***

WARNING: ***When removing misfed paper from sections C, use caution. The fusing unit may be very hot. See page 2 for the position of the fusing unit.***

⚠ *CAUTION: Do not leave any torn scraps of paper within the machine.*

NOTE: When clearing misfeeds, do not turn off the main switch. If you do, your copy settings are cleared.

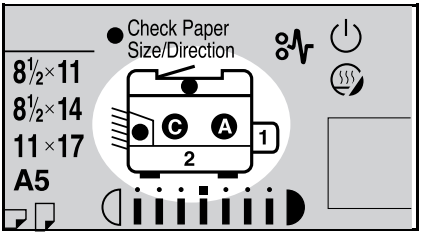
NOTE: After clearing misfeeds, make sure that all units and levers are returned to their original positions and all covers are closed.

NOTE: Do not touch originals in the optional document feeder when a paper misfeed occurs in the copier. If you do, the copier cannot know which originals have been copied, and which should be copied.

NOTE: If a paper misfeed occurs when paper is fed from the tray, do not pull out the tray before clearing misfeeds.

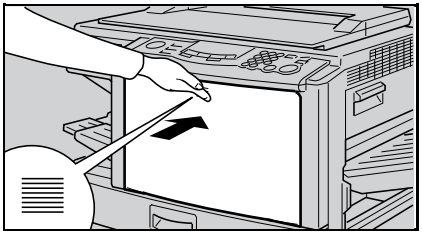
Check The Misfeed Location Display

The display shows the location of misfed paper.

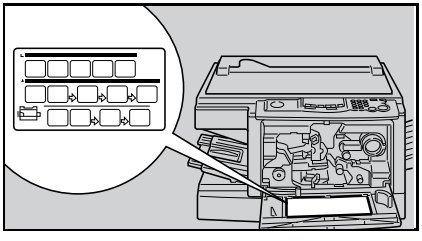


When A Or C Is Lit:

1. Open the front cover of the copier.

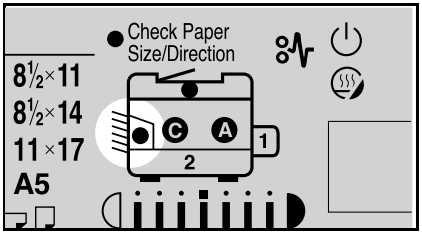


2. You will see a sticker (with ⚠ at the top) explaining how to remove misfed paper, inside the front cover, as shown in the illustration.



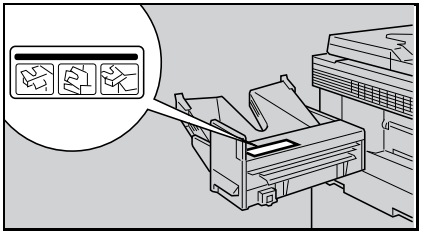
3. Remove misfed paper following the instructions on the sticker.

When The Sorter Misfeed Indicator Is Lit:



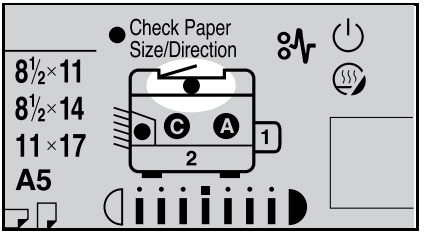
1. Open the sorter.

2. You will see a sticker (with ⚠ at the top), explaining how to remove the misfed paper, on the cover of the sorter, as shown in the illustration.

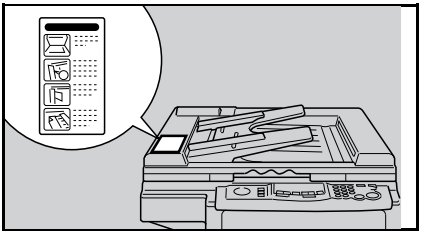


3. Remove the misfed paper following the instructions on the sticker.

When The Original Misfeed Indicator Is Lit:

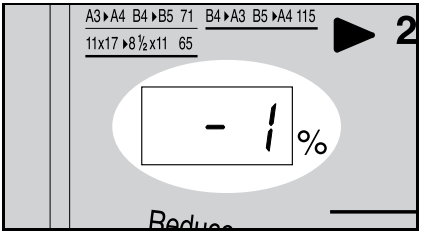


1 There is a sticker, explaining how to remove the misfed paper, on the optional document feeder, as shown in the illustration.



2 Remove the misfed original referring to the sticker.

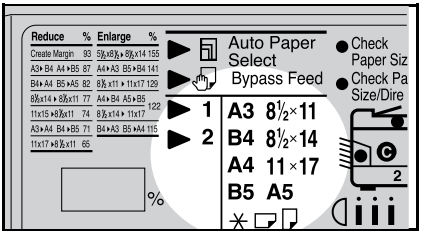
3 The number of originals that should be reset is displayed in the **Three Digit** indicator. Reset the originals in the optional document feeder.



CHANGING THE COPIER'S SETTINGS

CHANGING PAPER SIZE

❒ To check the paper size of the cassette or paper tray, see the **Paper Size** indicators. **1** is the cassette, **2** is the paper tray.



❒ When you want to change the paper size of the cassette, contact your service representative.

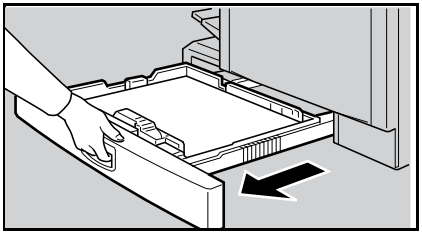
How To Change The Paper Size Of The Paper Tray

When you change the paper size of the tray, change the size code.

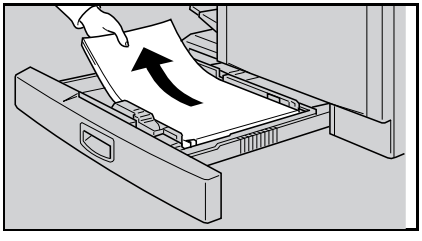
❒ The size codes are as follows:

Size code	Paper size	Size code	Paper size
10	A3 ▭	20	8 1/2" x 11" ▭
11	B4 ▭	21	8" x 13" ▭ 8 1/2" x 13" ▭ 8 1/4" x 13" ▭
12	A4 ▯		
13	A4 ▭		
14	B5 ▯	22	8" x 10 1/2" ▭
15	B5 ▭	23	10" x 14" ▭
16	A5 ▯	24	11" x 15" ▭
17	11" x 17" ▭	25	Ba-Kai (267 x 390 mm) ▭
18	8 1/2" x 14" ▭	26	Shi-Liu-Kai (267 x 195 mm) ▯
19	8 1/2" x 11" ▯	27	Shi-Liu-Kai (195 x 267 mm) ▭

1 Pull the paper tray out until it stops.

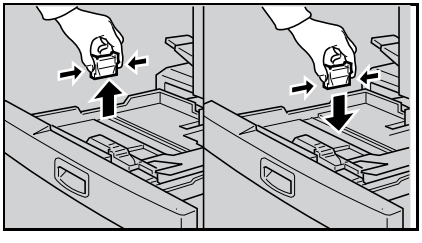


2 Remove the copy paper.

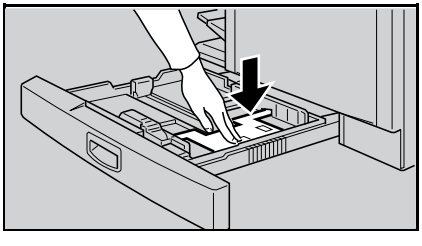


3 Pick the end plate up and insert it in the slot matching the paper size you want to use.

❒ Make sure the end plate matches the paper size.



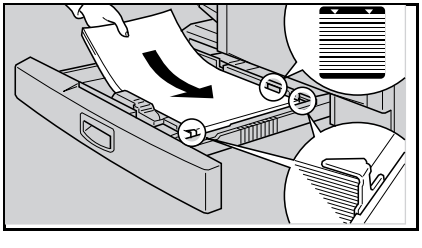
4 Push the bottom plate down until it locks.



5 Load paper in the tray.

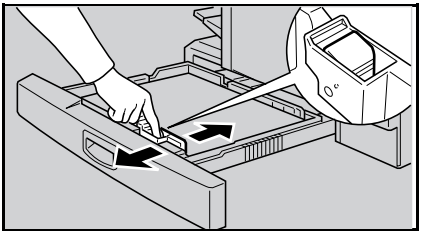
❒ Do not stack paper over the limit mark.

❒ Make sure that the leading corners of the paper are under the corners, as shown in the illustration.

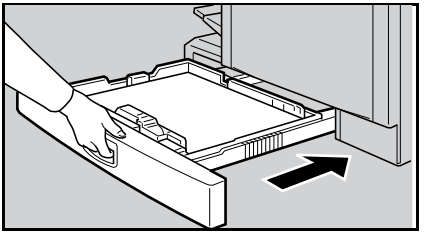


6 While pressing the release lever on the front side guide, push the guide until the front and rear guides securely hold the paper.

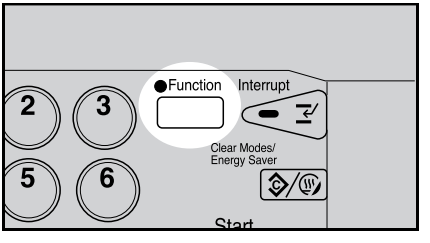
❒ Do not press the front and rear guides strongly against the paper.



7 Reinsert the tray gently until it stops.

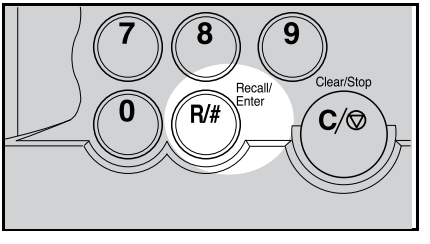


8 Press the **Function** key.



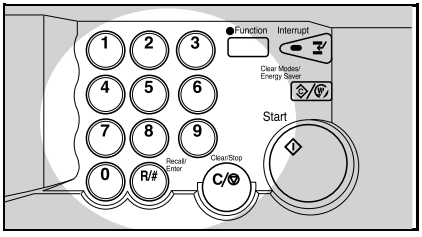
9 Press the **Recall/Enter** key.

❒ The preset size code blinks on the copy counter.

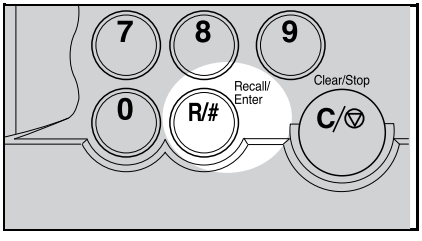


10 Enter the size code using the **Number** keys.

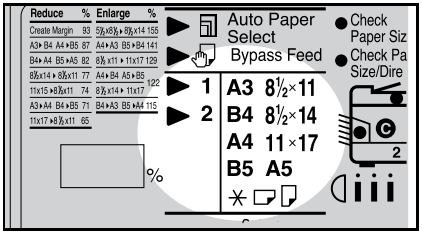
❒ To change the size code entered, enter the new number.



11 Press the **Recall/Enter** key.



12 Confirm that the entered paper size is displayed.

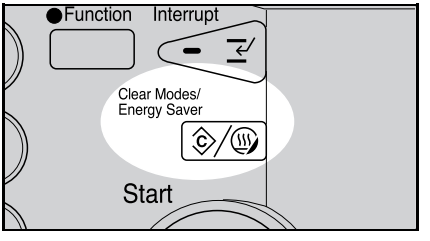


USER TOOLS

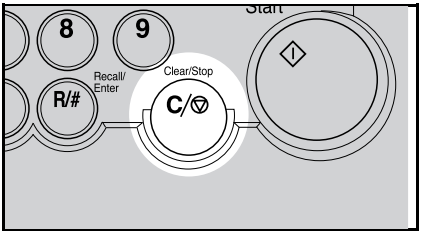
You can change or set the copier's settings using the following user tools.

How To Access User Tools

1 Press the **Clear Modes/Energy Saver** key.

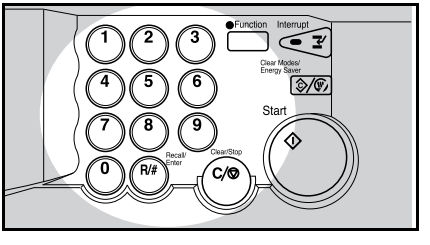


2 Press the **Clear/Stop** key for more than three seconds until the copy counter blinks.

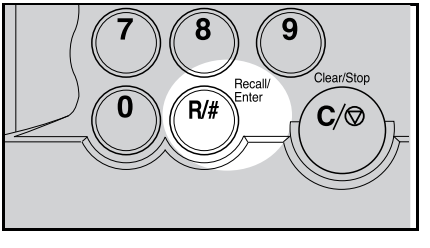


3 Enter the required user tool number using the **Number** keys.

- ❒ For the user tool number, refer to pages 75 ~ 86.
- ❒ If you input the wrong number, press the **Clear/Stop** key. Then, input the correct number.



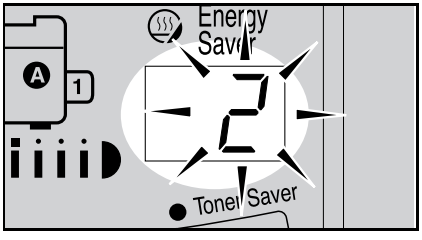
4 Press the **Recall/Enter** key.



How To Change Adjustment Values Or Modes

❒ The following user tools *cannot* be adjusted by the procedures below.
- For No. 91, ☛ see page 84.
- For No. 92, ☛ see page 86.

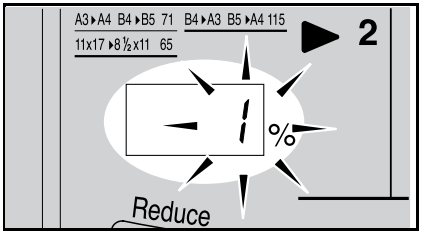
1 Access the user tool you want to adjust. (☛ See page 72.) The number of the user tool you select will be displayed in the copy counter.



2 The default setting will blink in the **Three Digit** indicator. Enter the required setting using the **Number** keys.

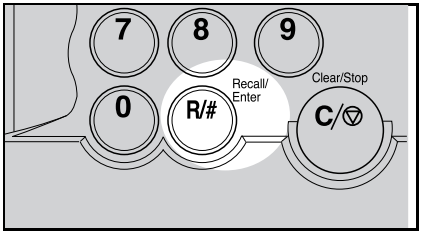
❒ For the settings, refer to pages 75 ~ 86.

❒ If you input a wrong number, press the **Clear/Stop** key. Then, enter the correct number.

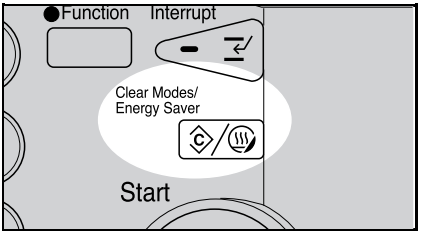


3 Press the **Recall/Enter** key to store the required setting.

❒ If you would like to adjust another user tool, enter the user tool number.



4 To exit the user tools, press the **Clear Modes/Energy Saver** key twice.



User Tool Menu

Change fixed R/E ratios (User tool number: 2)

As a default setting, this copier has 12 fixed ratios (7 enlargements and 5 reductions). You can change the number of fixed reproduction ratios as shown in the table below.

- If the fixed R/E ratios is changed, user reproduction ratios are canceled. Regarding the user reproduction ratios, ☛ see page 76.
- For how to change modes, ☛ see page 73.

Default: Mode 0 (Setting:0)

Setting	Mode
0	Mode 0
1	Mode 1
2	Mode 2

Each mode has following ratios:

Mode 0	Mode 1	Mode 2
65 %	–	65 %
71 %	71 %	–
74 %	–	74 %
77 %	–	77 %
82 %	82 %	–
87 %	87 %	–
93 %	93 %	93 %
(100 %)	(100 %)	(100 %)
115 %	115 %	–
122 %	122 %	122 %
129 %	–	129 %
141 %	141 %	–
155 %	–	155 %

User reproduction ratio (Reduction) (User tool number: 3)

You can set a new preset reproduction ratio.

❒ For how to change setting, ☛ see page 73.

Default: None (Setting: 0)

Setting	Definition
0	None
61	61%
~	~
99	99%

User reproduction ratio (Enlargement) (User tool number: 4)

You can set a new preset reproduction ratio.

❒ For how to change setting, ☛ see page 73.

Default: None (Setting: 0)

Setting	Definition
0	None
101	101%
~	~
156	156%

Horizontal edge erase margin adjustment (User tool number: 13)

You can adjust the horizontal edge margin width in Erase Edge mode.

- The erased horizontal edges margin changes a little depending on paper size you use.
- If the copy papers are A5 ▭, B6 ▭, 5 1/2" x 8 1/2" ▯, or 5 1/2" x 8 1/2" ▭, the horizontal edges are not erased.
- For how to change settings, ☛ see page 73.

Default: Normal (Setting: 0)

Setting	Definition
0	Normal
1	Narrow

Toner Saver priority selection (User tool number: 14)

As a default setting, Toner Saver mode is not selected. If you want to have Toner Saver mode selected as default, you can change this setting.

- For how to change modes, ☛ see page 73.

Default: No (Toner Saver mode is not selected.) (Setting: 0)

Setting	Mode
0	No (Toner Saver mode is not selected.)
1	Yes (Toner Saver mode is selected.)

Auto reset time set (User tool number: 15)

As a default setting, the copier can reset itself 1 minute after the final copy is made, after the last time any key is pressed, or after the copier last detects any operation. If a 1 minute reset time is not appropriate, you can change this time or cancel this function.

❒ For how to change settings, ☛ see page 73.

Default: 1 minute (Setting: 0)

Setting	Definition
0	1 minute
1	3 minutes
2	Auto reset is turned off.

❒ Auto reset is not effective when the copier is in the following conditions:
- There are originals in the optional document feeder.
- While accessing the user tools.
- When the ⏻ **Wait** indicator is lit.

Counter up/down (User tool number: 16)

The copy counter can be set to show the number of copies made (count up), or the number of copies remaining to be made (count down).

❒ For how to change settings, ☛ see page 73.

Default: Up (Setting: 0)

Setting	Definition
0	Up
1	Down

Automatic paper shift set (User tool number: 17)

If you load paper of the same size and in the same direction in both the cassette and the paper tray, the copier automatically shifts to the other when the cassette or tray in use runs out of paper.

❒ For how to change settings, ☛ see page 73.

Default: Yes (Automatic paper shift is set.) (Setting: 0)

Setting	Definition
0	Yes (Automatic paper shift is set.)
1	No (Automatic paper shift is not set.)

Vertical edge erase margin adjustment (User tool number: 18)

You can adjust the vertical edge margin width in Erase Edge mode.

❒ The erased vertical edges margin changes a little depending on paper size you use.

❒ For how to change settings, ☛ see page 73.

Default: 10 mm, 0.4" (Setting: 0)

Setting	Definition
0	10 mm, 0.4"
1	5 mm, 0.2"
2	15 mm, 0.6"
3	20 mm, 0.8"

ADS priority selection (User tool number: 19)

As a default setting, Auto Image Density is selected. You can cancel this setting.

❒ For how to change modes, ☛ see page 73.

Default: Yes (ADS priority is selected.) (Setting: 0)

Setting	Mode
0	Yes (ADS priority is selected.)
1	No (ADS priority is not selected.)

Auto APS select (DF) (User tool number: 21)

As a default setting, the Auto Paper Select is selected when you set originals in the optional document feeder. You can cancel this setting.

❒ For how to change modes, ☛ see page 73.

Default: Yes (Auto APS is selected.) (Setting: 0)

Setting	Mode
0	Yes (Auto APS is selected.)
1	No (Auto APS is not selected.)

SADF auto reset (User tool number: 22)

When you set one original at a time in the optional document feeder, the **Auto Feed** indicator lights for a selected time after an original is fed to show that the document feeder is ready for another original. You can adjust this time.

❒ For how to change settings, ☛ see page 73.

Default: 5 seconds (Setting: 0)

Setting	Mode
0	5 seconds
1	60 seconds

ADF free size (User tool number: 23)

In the default setting, you cannot use originals of different sizes when you set originals in the optional document feeder. You can cancel this setting.

- When you make one-sided copies from one-sided originals using this function, the copying speed will be reduced.
- For how to change settings, ☛ see page 73.

Default: No (Different sized originals cannot be used.) (Setting: 0)

Setting	Definition
0	No (Different sized originals cannot be used.)
1	Yes (Different sized originals can be used.)

Center erase margin adjustment (User tool number: 26)

You can adjust the center margin width in Erase Center mode.

- The erased center margin changes a little depending on paper size you use.
- For how to change settings, ☛ see page 73.

Default: 20 mm, 0.8" (Setting: 0)

Setting	Definition
0	20 mm, 0.8"
1	10 mm, 0.4"
2	15 mm, 0.6"
3	25 mm, 1.0"

Toner density selection (User tool number: 33)

You can select the toner density. If the density of solid images is low, select the mode "High".

- For how to change settings, ☛ see page 73.

Default: Normal (Setting: 0)

Setting	Modes
0	Normal
1	Low
2	High

Key counter count timing selection (User tool number: 53)

As a default setting, the optional key counter counts the number of copies when paper is fed from the cassette, tray or bypass feed table. You can change to have the counter count when the completed copies are delivered to the copy tray.

❒ For how to change settings, ☛ see page 73.

Default: When paper is fed from the cassette, tray or bypass feed table. (Setting: 0)

Setting	Modes
0	When paper is fed from the cassette, tray or bypass feed table.
1	When the completed copies are delivered to the copy tray.

Auto energy saver set (User tool number: 78)

As a default setting, when the copier is reset by the auto reset, the Energy Saver is not automatically set. You can change this setting.

❒ For how to change settings, ☛ see page 73.

Default: No (Auto energy saver is not set.) (Setting: 0)

Setting	Modes
0	No (Auto energy saver is not set.)
1	Yes (Auto energy saver is set.)

Energy saving ratio selection (User tool number: 86)

You can select one of four energy saving ratios. Note that the higher the saving ratio is, the more time the copier will need to return to the ready condition.

❒ For how to change settings, ☛ see page 73.

Default: Level 3 (Setting: 2)

Setting	Definition
0	Level 1 (The highest saving ratio)
1	Level 2
2	Level 3
3	Level 4

Maximum copy quantity set (User tool number: 93)

The maximum copy quantity can be set between 1 and 99.

❒ For how to change settings, ☛ see page 73.

Default: 99 sheets (Setting: 99)

Setting	Definition
1	1 sheet
2	2 sheets
~	~
99	99 sheets

User Tools for User Codes

If the copier is set to use the user codes, operators must input their user codes before the copier can be operated. The copier keeps count of the number of copies made under each user code. To have the copier set for user codes, contact your sales or service representative.

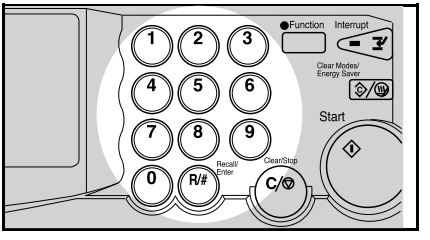
❒ To prevent others from making copies using your user code, press the **Clear/Stop** key and **Clear Modes/Energy Saver** key simultaneously after copying.

User code counter check (User tool's number: 91)

You can check the number of copies made using each user code.

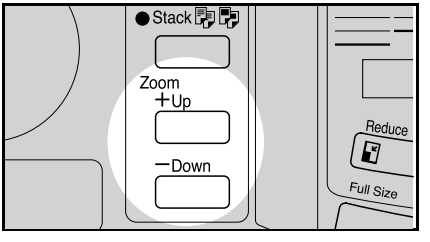
How to check the copy count

1 Access user tool 91. ☛ See page 72.

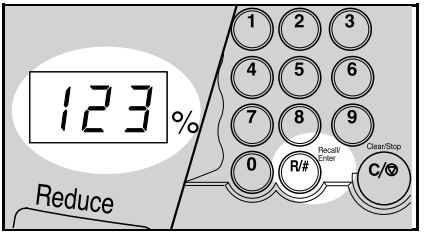


2 The last 2 digit of lowest user code appears on the copy counter. Press the **Zoom Up (+)** key until you reach the required user code.

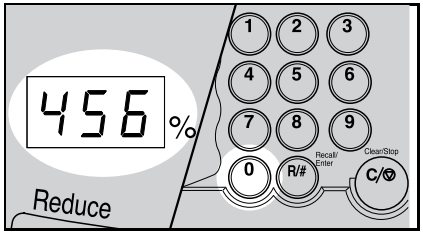
❒ To display the previous user code, press the **Zoom Down (-)** key.



❒ The first 3 digits of the total copy quantity made under this user code are displayed in the **Three Digit** indicator.
Example: when 123456 copies are made under one user code, "123" is displayed in the **Three Digit** indicator.



3 Hold down **0** on the **Number** keys.



❒ The last 3 digits of the total copy quantity made under this user code are displayed in the **Three Digit** indicator.
Example: when 123456 copies are made under one user code, "456" is displayed in the **Three Digit** indicator while you hold the **0** of the **Number** keys.

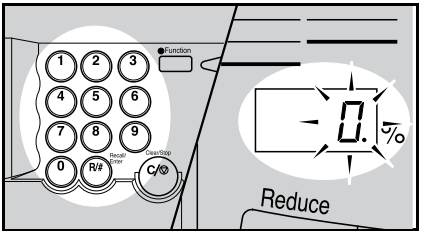
4 To exit from the user tools, press the **Recall/Enter** key once, and the **Clear Modes/Energy Saver** key twice.

User code counter clear (User tool's number: 92)

You can clear all the user code counters.

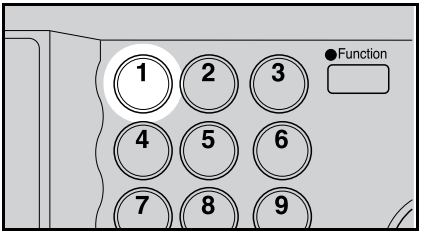
1 Access user tool 92. ☞ See page 72.

❒ "0" will blink on the **Three Digit** indicator.



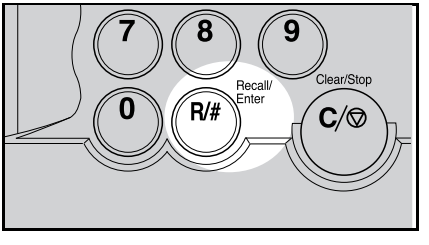
2 Press **1** on the **Number** keys .

❒ If you enter a wrong number, press the **Clear/Stop** key.



3 Press the **Recall/Enter** key.

❒ All user code counters are cleared.



4 To exit from the user tools, press the **Clear Modes/Energy Saver** key twice.

SERVICE REPRESENTATIVE SETTING

Some features can be adjusted by your service representative to suit your needs. This section gives a brief description of these features. For more information, contact your service representative.

Zoom range selection

As a default setting, you can select reproduction ratios from 61 to 156 % in the zoom function. Your service representative can change the zoom range to 50 ~ 200 %.
If the zoom range is enlarged to 50 ~ 200 %, it is possible that the resolution may become low and uneven copy density may appear.

Auto sort selection

When you insert 2 or more originals in the optional document feeder and make from 2 to 10 sets of copies from each original, the copier selects Sort mode.

Auto Image Density level selection

Your service representative can adjust the Auto Image Density levels to lighter or darker.

Toner saving ratio selection

Your service representative can adjust the density in the Toner Saver mode to lighter or darker.

User code mode

Your service representative can set the copier for user codes. If the copier is set for user codes, operators must input a user code before the copier will operate. The copier keeps a count of the number of copies made under each user code. Also, your service representative can check how many user codes are stored in the copier.

❒ For setting user codes and other functions relating to them, ☛ see page 84.

MAINTAINING YOUR COPIER

DO'S AND DON'TS

WHERE TO PUT YOUR COPIER

REMARKS

USE AND STORAGE OF SUPPLIES

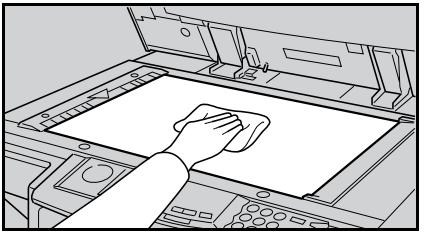
MAINTAINING YOUR COPIER

To maintain high copy quality, clean the following parts and units regularly.

Copier

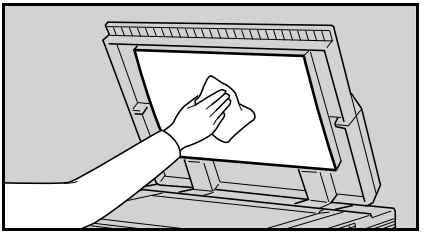
Exposure glass

Clean the exposure glass with a damp cloth and wipe it with a dry cloth.



Platen cover

Clean the platen cover with a damp cloth and wipe it with a dry cloth.



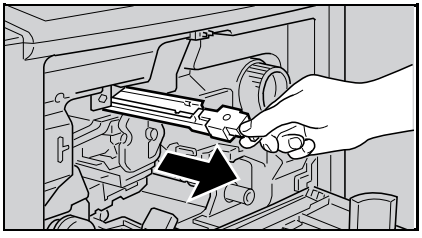
Corona wire

Do the following when white streaks appear on the copy, or when image density becomes uneven.

1. Open the front cover.

2 Slide out the corona unit until it is fully extended.

3 Push the corona unit back in. Make sure it locks into place.



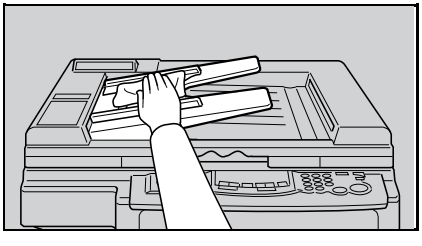
4 Repeat steps 2 and 3 several times.

5 Close the front cover.

Document Feeder (Option)

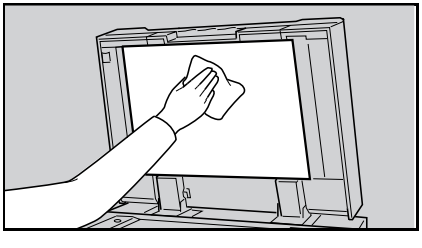
Feed-in unit

Clean the original table and original guide with a damp cloth and wipe it with a dry cloth.



Belt

Lift the document feeder. Clean the belt with a damp cloth and wipe it with a dry cloth.



DO'S AND DON'TS

Copier

General operation

- When you use the bypass feed table while placing the original directly on the exposure glass, lower the platen cover or optional document feeder before pressing the **Start** key.
- After removing a cassette, remove any paper that remains in the cassette entrance.
- When using the bypass feed table, set the cassette correctly.
- If multifeeding occurs from the paper tray, fan the sheets of copy paper or use the cassette instead of the tray.
- When making two-sided copies, do not load paper in the paper tray for copying the reverse side. Use the cassette or the bypass feed table.
- While opening the front cover, do not press it down, and do not place any heavy object on it.
- After you've opened the front cover and you close it, make sure that it clicks into place.

When adding toner

- Do not incinerate toner or toner containers. Toner dust might ignite when exposed to open flames.
- Dispose of the used toner cartridge according to local regulations.
- When adding toner, do not turn off the main switch. If you do, your copy settings are cleared.
- Before setting the new toner cartridge, shake it well, at least 5 or 6 times.

When removing misfed paper

- Since some parts of the copier are supplied with high electrical voltage, touch only the parts specified in the instructions on the stickers inside the machine's cover.
- When removing misfed paper from sections C, use caution. The fusing unit may be very hot. See page 2 for the position of the fusing unit.
- Do not leave any torn scraps of paper within the machine.

- ❒ When clearing misfeeds, do not turn off the main switch. If you do, your copy settings are cleared.
- ❒ After clearing misfeeds, make sure that all units and levers are returned to their original positions and all covers are closed.
- ❒ If a paper misfeed occurs when paper is fed from the tray, do not pull out the tray before clearing misfeeds.

Document Feeder (Option)

- ❒ While originals are fed from the original table to the exposure glass, do not pull out the originals.
- ❒ Do not lift the document feeder until the last original has been completely fed out.
- ❒ Do not press down or hold originals after inserting them.
- ❒ Do not press any parts of the document feeder strongly.

10-bin Sorter (Option)

- ❒ Do not touch moving bins.
- ❒ Do not place objects on the sorter when it is open.
- ❒ Do not press the sorter when it is open.

WHERE TO PUT YOUR COPIER

Copier Environment

Your copier's location should be carefully chosen because environmental conditions greatly affect its performance.

Optimum environmental conditions

- Temperature: 10 - 30°C (50 - 86°F)
- Humidity: 15 - 90%
- A strong and level base.
- The copier must be level within 5 mm, 0.2" both front to rear and left to right.
- To avoid possible build-up of ozone, make sure to locate the copier in a large well ventilated room that has an air turnover of more than 30 m^3/hr/person.

Environments to avoid

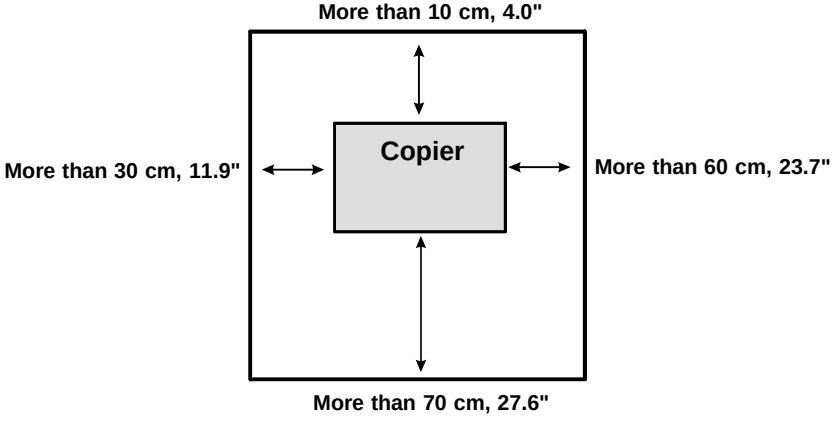
- Locations exposed to direct sunlight or strong light (more than 1,500 lux.)
- Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes might cause condensation within the copier.)
- Places where the copier might be subjected to frequent strong vibration.
- Dusty areas.
- Areas with corrosive gases.
- Places higher than 6,500 ft above sea level.

Power Connection

- ❒ Connect the copier to a power source meeting the specifications given on the inside front cover of this manual.
- ❒ Avoid multiwiring.
- ❒ Make sure that the wall outlet is near the copier and easily accessible.
- ❒ Make sure the plug is firmly inserted in the outlet.
- ❒ Voltage must not fluctuate more than 10%.
- ❒ Do not set anything on the power cord.
- ❒ Always turn the copier off when you have finished copying for the day, but leave it plugged in.

Access To Copier

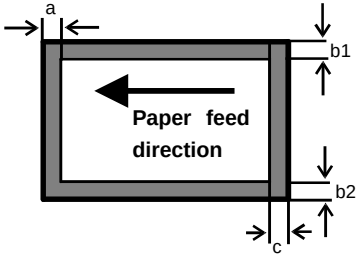
Place the copier near the power source, providing clearance as shown.



REMARKS

Copier

- To avoid problems caused by curled copies, try turning over the paper stack in the cassette or tray. If there is no improvement, change to copy paper with less curl.
- Load paper with the copy side *down* in the tray, and with the copy side *up* in the cassette. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.
- Margins on all four sides of the original image are not copied, as shown in the illustration.



	When the original is set on the exposure glass.	When the original is set into the optional document feeder.
Full Size magnification	a = 3.5 ± 1.5 mm b1 = b2 = 2 ± 2 mm c ≤ 4 mm	a = 3.5 ± 1.5 mm b1 = b2 = 2 ± 2 mm c ≤ 4 mm
Reducing and enlarging using preset ratios	a = 3.5 ± 1.5 mm b1 + b2 ≤ 4 mm c ≤ 4 mm	a = 3.5 ± 1.5 mm b1 + b2 ≤ 8 mm c ≤ 4 mm
Reducing and enlarging using the zoom key	a = 3.5 ± 1.5 mm b1 + b2 ≤ 8 mm c ≤ 4 mm	a = 3.5 ± 1.5 mm b1 + b2 ≤ 15 mm c ≤ 4 mm

10-bin Sorter (Option)

- To avoid problems caused by curled copies, try turning over the paper stack in the cassette or tray. If there is no improvement, change to copy paper with less curl.
- If copies smaller than A4 ▱, 8 1/2" x 11" ▱ are not stacked well, arrange them after taking them from the bins.

USE AND STORAGE OF SUPPLIES

Copy Paper

- ❒ Copy paper of the types or in the conditions listed below are not recommended for this copier.
  - Folded, curled, creased, or damaged paper
  - Torn paper
  - Damp paper
  - Perforated paper
  - Paper with conductive or low electrical resistance such as carbon or sliver coating.
  - Wavy paper
  - Thermal paper, art paper
  - Thin paper that has low stiffness
- ❒ Do not touch copy paper if your fingers are wet or oily; finger prints may appear on the copy.
- ❒ Load paper with the copy side *down* in the tray, and with the copy side *up* in the cassette. If copies are curled, try turning the copy paper over in the tray. If there is no improvement, change to copy paper with less curl.

Paper Storage

Paper should always be stored properly. Improperly stored paper might result in poor image reproduction, creased copies, and paper misfeeds. Generally, avoid curling and absorption of moisture.

- ❒ Avoid storing paper in humid areas. Under high temperature and high humidity, or low temperature and low humidity conditions, store paper in a vinyl bag.
- ❒ Do not store paper where it will be exposed to heat.
- ❒ Store on a flat surface.
- ❒ Use older stock first.
- ❒ Do not lay heavy objects on paper.
- ❒ Keep open reams of paper in the package, and store as you would unopened paper.

Toner Storage

- ❒ Store horizontally in a cool, dark place.
- ❒ Store toner cartridges vertically.
- ❒ Never store toner where it will be exposed to heat.
- ❒ Do not lay heavy objects on toner cartridges.

SPECIFICATIONS

COPIER

Configuration:	Desktop
Process:	Dry electrostatic transfer system
Originals:	Sheet, book
Original size:	Maximum: A3 ⊐, 11" x 17" ⊐
Copy paper size:	Paper tray: See page 68. Cassette and Bypass feed table: Maximum:A3 ⊐, 11" x 17" ⊐ Minimum: A6 ⊐, 5 1/2" x 8 1/2" ⊐
Copy paper weight:	Cassette: 58 ~ 128 g/m^2, 16 ~ 34 lb Tray: 64 ~ 81 g/m^2, 17 ~ 22 lb Bypass feed table: 52 ~ 157 g/m^2, 14 ~ 42 lb
Copy paper capacity:	Cassette: 250 sheets Tray: 250 sheets Bypass feed table: 1 sheet
Copying speed:	22 copies/minute (A4 ⊐, 8 1/2" x 11" ⊐) 11 copies/minute (A3, 11" x 17")
First copy time:	less than 5.9 seconds (A4 ⊐, 8 1/2" x 11" ⊐, feeding from the cassette)
Toner replenishment:	Cartridge exchange (380 g)
Copy tray capacity:	250 sheets (B4, 8 1/2" x 14" and smaller) 100 sheets (A3, 11" x 17")
Power source:	See the inside front cover of this manual.
Warm-up time:	less than 60 seconds (20°C, 68°F)

Reproduction ratio: 5 enlargement and 7 reduction

Enlargement	155 %
	141 %
	129 %
	122 %
	115 %
Full size	100 %
Reduction	93 %
	87 %
	82 %
	77 %
	74 %
	71 %
	65 %

Power consumption:

	Copier only	Full system*
Warm up	0.73 kW	0.74 kW
Stand-by	0.20 kW	0.21 kW
Copying	0.83 kW	0.84 kW
Maximum	less than 1.2 kW	less than 1.5 kW

* Full system: Copier with document feeder, 10-bin sorter

Noise Emission:

Sound pressure level (The measurements are made according to ISO 7779 at the operator position.)

	Copier only	Full system*
Copying	less than 62 dB (A)	less than 66 dB (A)

* Full system: Copier with document feeder, 10-bin sorter

Sound power level (The measurements are made according to ISO 7779.)

	Copier only	Full system*
Stand-by	less than 40 dB (A)	less than 40 dB (A)
Copying	less than 68 dB (A)	less than 72 dB (A)

* Full system: Copier with document feeder, 10-bin sorter

Dimensions:

	Width	Depth	Height
Copier only (without platen cover)	672 mm, 26.5"	608 mm, 24.0"	410 mm, 16.2"
With the cassette, platen cover and the copy tray extended	1130 mm, 44.5"	608 mm, 24.0"	464 mm, 18.3"
Full system (with the cassette, document feeder and 10-bin sorter)	1149 mm, 45.3"	608 mm, 24.0"	513 mm, 20.2"

Weight: Copier only: 47 kg, 103.7 lb
(Without the cassette, copy tray and toner cartridge)
Full system: 70 kg, 154.4 lb
(With the document feeder and 10-bin sorter)

Optional equipment: Document feeder
10-bin sorter
Key counter / Key switch

❒ Specifications are subject to change without notice.

DOCUMENT FEEDER (OPTION)

Original Feed:	Automatic document feed - ADF mode Semi-automatic document feed - SADF mode
Original size:	Maximum: A3 ⊐, 11" x 17" ⊐ Minimum: B6 ⊐, 5 1/2" x 8 1/2" ⊐
Original weight:	41 to 128 g/m^2, 11 to 34 lb
Original select switch:	Thin original mode (standard mode): 41 to 128 g/m^2, 11 to 34 lb Thick original mode: 52 to 128 g/m^2, 14 to 34 lb
Two-sided original mode:	Maximum: A3, 11" x 17" Minimum: B6 ⊐, 5 1/2" x 8 1/2" ⊐ Weight: 53 to 105 g/m^2, 14 to 28 lb
Original tray capacity:	35 sheets (64 g/m^2, 17 lb)
Original set:	Face up, First sheet on top
Original transport:	One flat belt
Copying speed:	20 copies/minute (A4 ⊐, 8 1/2" x 11" ⊐, full size copying) 10 copies/minute (A3, 11" x 17", full size copying)
Power consumption:	20 W
Weight:	Approximately 9.0 kg, 19.9 lb
Dimensions (W x D x H):	670 x 460 x 103 mm, 26.4" x 18.2" x 4.1"

❒ Specifications are subject to change without notice.

10-BIN SORTER (OPTION)

Paper size for bins:	Sorting:	See page 48.
	Stacking:	See page 50.
Paper weight for bins:	Sorting:	See page 48.
	Stacking:	See page 50.
Bin capacity:	Sorting:	See page 48.
	Stacking:	See page 50.
Number of bins:	10 bins	
Power consumption:	7.7 W	
Weight:	approximately 7.5 kg, 16.5 lb	
Dimensions (W x D x H):	402 x 443 x 217 mm, 15.9" x 17.5" x 8.6"	

❒ Specifications are subject to change without notice.

SUPPLEMENT TO SAFETY INFORMATION

There is a supplement to safety information on page i as follows:

In this manual, the following important symbols are used:

	This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the machine.
	These symbols are attached to some components to alert the user not to touch them, because they may be very hot.

We apologize for the inconvenience.

Errata

There is a mistake on page 81 and it should be corrected as follows:

The following user tool is added after "Center erase margin adjustment (User tool number: 26)".

Toner density selection (User tool number: 33)

You can select the toner density. If the density of solid images is low, select the mode "High".

❒ For how to change settings, ☛ see page 73.

Default: Normal (Setting: 0)

Setting	Modes
0	Normal
1	Low
2	High

We apologize for the incovenience.

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