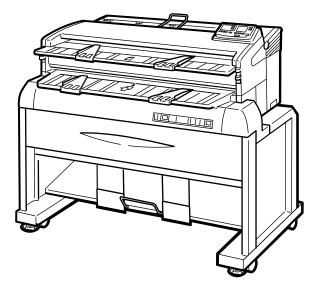


FW780

Operating Instructions



ZFAH010E

Read this manual carefully before you use this product and keep it handy for future reference.

For safety, please follow the instructions in this manual.

RICOH COMPANY, LTD.

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FW780 Operating Instructions

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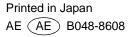
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Introduction

This manual contains detailed instructions on the operation and maintenance of this machine. To get maximum versatility from this machine 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 Safety Information before using this machine. It contains important information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

Notes:

Some illustrations might be slightly different from your machine.

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

Warning:

Use of controls or adjustment or performance of procedures other than those specified in this manual might result in hazardous radiation exposure.

Two kinds of size notation are employed in this manual. With this machine refer to the metric version.

For good copy quality, Ricoh recommends that you use genuine Ricoh toner.

Ricoh shall not be responsible for any damage or expense that might result from the use of parts other than genuine Ricoh parts in your Ricoh office product.

Power Source

220V - 240V, 50/60Hz, 7A

Please be sure to connect the power cord to a power source as above. For details about power source, \Rightarrow P.76 *"Power connection"*

Where symbols are used on or near switches, they mean an under in accordance with IEC 60417:

means POWER ON.

() means STAND BY.

Safety Information

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

Safety During Operation

In this manual, the following important symbols are used:

A WARNING:

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

▲ CAUTION:

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

A WARNING:

- Connect the power cord directly into a wall outlet and never use an extension cord.
- Only connect the machine to the power source described on the inside front cover of this manual.
- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.
- Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.
- Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.
- Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:
 - You spill something into the equipment.
 - You suspect that your equipment needs service or repair.
 - Your equipment's cover has been damaged.
- Do not take apart or attempt any modifications to this machine. There is a risk of fire, electric shock, explosion or loss of sight. If the machine has laser systems, there is a risk of serious eye damage.
- To avoid hazardous electric shock or laser radiation exposure, do not remove any covers or screws other than those specified in this manual.
- Some parts of the machine are at a high voltage and could give you an electric shock. Also, if
 the machine has laser systems, direct (or indirect) reflected eye contact with the laser beam
 may cause serious eye damage. When the machine needs to be checked, adjusted, or repaired,
 contact your service representative.
- Do not keep using the machine with a fault or defect. Contact your service representative.
- If the machine looks damaged or breaks down, smoke is coming out, there is a strange smell or anything looks unusual, immediately turn off the operation and main power switches then unplug the power cord from the wall. Do not continue using the machine in this condition. Contact your service representative.
- Do not put any metal objects or containers holding water (e.g. vases, flowerpots, glasses) on the machine. If the contents fall inside the machine, a fire or electric shock could occur.
- Do not incinerate spilled toner or used toner. Toner dust might ignite when exposed to an open flame.
- Disposal can take place at our authorized dealer or at appropriate collection sites.
- Dispose of the used toner cartridge in accordance with the local regulation.

A CAUTION:

- When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.
- Unplug the power cord from the wall outlet before you move the equipment. While moving the equipment, you should take care that the power cord will not be damaged under the equipment.
- When the machine will not be used for a long time, unplug the power cord.
- If you use the machine in a confined space, make sure there is a continuous air turnover.
- Keep the machine away from humidity and dust. A fire or an electric shock might occur.
- Do not place the machine on an unstable or tilted surface. If it topples over, it could cause injury.
- After you move the machine, fix it with the caster fixture. Otherwise, the machine might move or come down to cause a personal injury.
- Protect the equipment from dampness or wet weather, such as rain, snow, and so on.
- Do not allow paper clips, staples, or other small metallic objects to fall inside the equipment.
- Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.
- Do not eat or swallow toner.
- Keep toner (used or unused) and toner bottle out of the reach of children.
- For environmental reasons, do not dispose of the equipment or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer or at appropriate collection sites.
- When removing misfed paper, do not touch the fusing section because it could be very hot.
- Do not touch the anti-humidity switch from inside the machine because it could be very hot.
- The inside of the machine could be very hot. Do not touch the parts with a label indicating the "hot surface". Otherwise it could cause a personal burn.
- Rolls of paper can be heavy, so you should be careful when loading one.
- This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.
- Our products are engineered to meet high standards of quality and functionality, and we recommend that you only use the expendable supplies available at an authorized dealer.
- This equipment is only to be installed by a qualified service personnel.

ENERGY STAR Program



As an ENERGY STAR Partner, we have determined that this machine model meets the ENERGY STAR Guidelines for energy efficiency.

The ENERGY STAR Guidelines intend to establish an international energy-saving system for developing and introducing energy-efficient office equipment to deal with environmental issues, such as global warming.

When a product meets the ENERGY STAR Guidelines for energy efficiency, the Partner shall place the ENERGY STAR logo onto the machine model.

This product was designed to reduce the environmental impact associated with office equipment by means of energy-saving features, such as Low-power mode.

Auto Off Mode

To conserve energy, this product automatically turns off 1 minute after the last copying or printing job has been completed. Printing is available in this mode, but if you use the copier, press the main switch.

For how to change the default interval before entering Auto Off mode, see Auto Off Time in "User Tools" \Rightarrow P.40

Specification

		FW780
Auto Off mode	Power consump- tion	1.0 W
	Default interval	30 minute

.

Recycled Paper

Please contact your sales or service representative for recommended recycled paper types that may be used in this machine.

How to Read this Manual

Symbols

In this manual, the following symbols are used:

A WARNING:

This symbol indicates a potentially hazardous situation that might result in death or serious injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

A CAUTION:

This symbol indicates a potentially hazardous situation that might result in minor or moderate injury or property damage that does not involve personal injury when you misuse the machine without following the instructions under this symbol. Be sure to read the instructions, all of which are described in the Safety Information section.

* The statements above are notes for your safety.

∰Important

If this instruction is not followed, paper might be misfed, originals might be damaged, or data might be lost. Be sure to read this.

Preparation

This symbol indicates the prior knowledge or preparations required before operating.

Note

This symbol indicates precautions for operation, or actions to take after misoperation.

Limitation

This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

PReference

1

This symbol indicates a reference.

[

Keys that appear on the machine's panel display.

[]

Keys built into the machine's operation panel.

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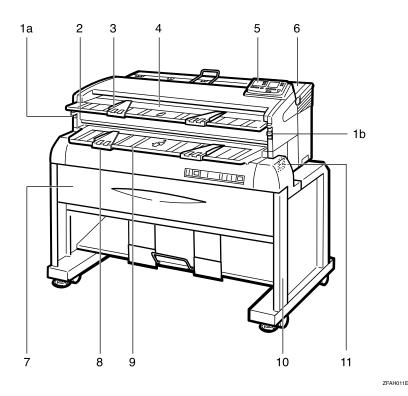
If Something Goes Wrong If Indicator Lights Up	
If Jams Occur If the Original is Jammed at the exit If Sheet Paper is Jammed in the Feed-in Slot If Sheet Paper is Jammed at the Paper Exit If Roll Paper Jams If You Cannot See the Roll Paper Jam	63 64 65 66
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Guide to Components

Copier Exterior



1. Locks

Squeeze both locks (1a&1b) to open the unit. Open the unit to empty the used toner bottle and to remove jammed paper.

2. Front Cover

Open the cover (and the unit) to access the toner cartridge.

3. Original Guides

Use the guides to keep the original straight as you feed the original into the copier.

4. Original Table

Place your original face up here. If you want to copy a stiff original that can't be bent, use the rear table (see 6).

5. Operation Panel

 \Rightarrow P.3 "Operation Panel".

6. Rear Table

Place stiff originals face down here.

7. Roll Feeder

Feeds paper from a roll to the copier.

8. Paper Guides

Use the guides to keep the copy paper straight as you feed it into the copier.

9. Bypass Table

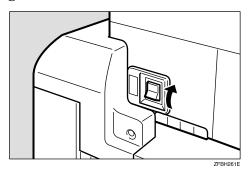
Use this table when you want to make copy one by one.

10. Table

Holds your copier and the Roll Feeder.

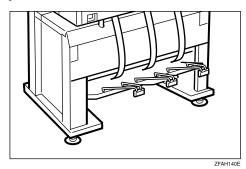
11. Main switch

Use this switch to turn the copier on and off. The copier will need about 3 minutes to warm up, if it's been turned off for a long time.



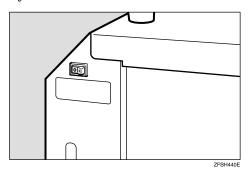
12. Copy Exit Guide

Makes sure that copies don't fall off as they come out.

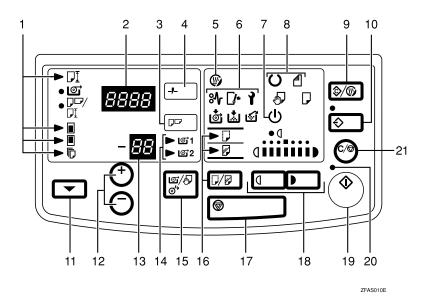


13. Anti-humidity Heater Switch

When humidity is high, the paper in the paper roll tray may absorb moisture, which can effect the image quality of your copies. The anti-humidity heater prevents this. Turn on this switch, which is located rear left corner of the machine, when humidity is high. \Rightarrow P.9 "Anti-humidity Heater"



Operation Panel



1. Function indicators

These indicators show which setting you are currently editing. Press the Function Select key to cycle through them.

- The top indicator (Paper Length indicator) lights when the paper length is being set.
- The second indicator (Leading Edge indicator) lights when the leading margin is being set.
- The third indicator (Trailing Edge indicator) lights when the trailing margin is being set.
- The fourth indicator (Copy Counter indicator) lights when the number of copies is being set.

2. Paper Length display

Shows the length of paper the Roll Feeder will send.

3. [Preset Cut] key

Press to scroll through the preset paper lengths for the Roll Feeder.

4. [Cut Select] key

Turns Synchro Cut or Preset/Variable Cut on and off.

5. Energy Saver indicator

Shows that the machine is in a state of wait (Energy Saver). Press key 9.

6. Troubleshooting indicators

 \Rightarrow P.61 *"Troubleshooting"* for details.

7. Wait indicator

Shows that the copier is not yet ready to copy.

8. Ready (○), Set Original((□), Set Paper (□), Bypass Select (□) indicator

Ready and Set Original lights up when the copier is ready to receive an original.The **Set Paper** indicator and the **Bypass Select** indicator go on when you select Bypass table.

9. [Clear Modes/Energy Saver] key

Cancels all current settings. When you hold down this key for three seconds or more, the copier enters the Energy Saver mode power.

To exit Energy Saver mode, press this key again.

10. [Program] key

Allows you to recall or set a program.

The program indicator(LED) lights after you store the setting.

11. [Function Select] key

Press to change which setting you are editing. The current selection is shown by the indicators above the key:

- Paper Length
- Leading Edge
- Trailing Edge
- Copy Counter

Also used for copying a selected portion of the original.

12. [+] and [–] key

Press to increase the value being edited. Press to decrease the value being edited.

13. Leading Edge/Trailing Edge/ Copy Counter indicator

Displays the margin settings and the number of copies made.

14. Roll Feeder indicator

Light up when you select Roll Feeder 1 or 2.

15. [Paper Select/Cut] key

Use to select the paper feed type such as Roll feeder 1, 2 and Bypass Tray. Also press to stop a copy job.

16. [Copy Media] key

Press to select the type of copy paper you are using.

The copier will apply more or less heat accordingly.

- The top indicator-Translucent paper indicator
- The bottom indicator-Film indicator

17. [Emergency Stop] key

Press to stop the copying process immediately.

Use if your original is getting stuck in the copier.

If you stop operation by pressing this key, remove the original.

18. Density indicator and [**1**], { **)**]keys

Shows the density level the copies will have.

Press the left key to make copies lighter. Press the right key to make copies darker.

19. [Start] key

Press to start copying when you select manual feed mode. Otherwise, the copy job automatically start after you place both paper and original. For details about manual feed mode, \Rightarrow P.16 *"Manual Feed Mode"*

20. Green indicator

Lights up when you select the manual feed mode.

21. [Clear/Stop] key

When entering numbers, press to cancel. While copying, press to stop copying.

1. Basics

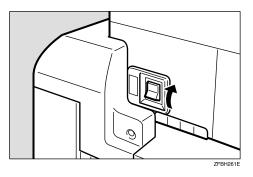
Turning on the Power

To turn the machine on, press the main switch.

Turn on the Main Power

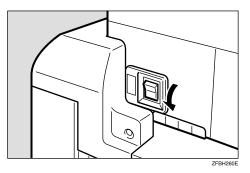
1 Make sure that the power cord is firmly plugged into the wall outlet.

2 Turn on the main switch.



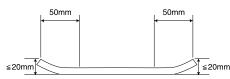
Turn off the Main Power

1 Turn off the main switch.

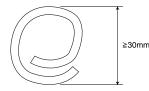


Recommended Originals

- You can set originals with weight in the range 21g/m² of (6 lb) to 157 g/m²(41 lb).
- You can set original with sizes between 914×3,000mm (W×L), 36"×118" and 210×297mm (W×L), 8.5"×11". (The maximum width that can be fed is 960mm, 38.4")
- You can not use the Repeated Copying function in the following cases: When using the Carrier Sheet. When setting an original longer than 1,200mm (48").
- Fix the curl of originals to within the following range:
 - For the curl of the leading edge and the trailing edge: R50mm (2.0") or more, H20mm (0.8") or less.



• For the curl of the whole paper: ϕ 30mm (1.2") or more



- When you copy the following originals, set them in the rear table: ⇒ P.19 *"Using the Rear Table"*
 - Thick originals (0.19mm ~1mm)
 - Originals less than 297mm (11") in width and more than 1,200mm (48") in length.
- When you copy the following originals, use the carrier sheet to set them:
 - Piled originals
 - Folded originals
 - Taped or pasted originals
 - Originals which have a hole near the leading edge 40mm (1.6") to the right or left of the center
 - Dog-eared originals
 - Creased, torn, or clipped-out originals
 - Wavy originals
 - Pasted originals
 - Originals whose leading edge is not straight

• Curled originals

Non-recommended Originals

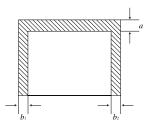
The following types of originals are not recommended.

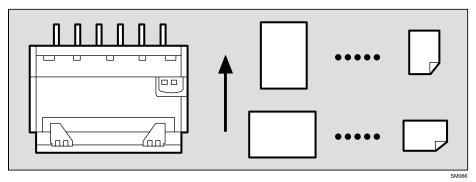
- Wet originals
- Originals with cardboard stuck on the leading edge
- Originals with clips or staples
- Originals with wet ink or white-out
- Carbon paper
- Originals made of materials other than paper or film (thermosensitive paper, aluminum foil, etc.)

Note for Leading and Side Edges of the Originals

Margins on the leading and side edges of originals are not copied as shown in the illustration.

- a=0±3mm (0.12")
- b1+b2<0±2mm (0.08") (A1□)





Recommended Paper

Standard paper sizes that can be used in this copier are shown below.

Metric ver- sion	Inch ver- sion	Bypass	Roll Feeder
A0	E (36"×48")	₽	₽
A1	D (24"×36")	₽₽	₽₽
A2	C (18"×24")	₽₽	₽₽
A3	B (12"×18")	₽₽	₽₽
A4	A (9"×12")	D	D

🖉 Note

- □ When you make a copy on a non-standard size of paper, set the paper in the bypass tray.
- \Box Weight of paper suitable for this copier: 51g/m², 14lb to 134g/m², 36lb.
- Do not use the following kinds of paper or a paper jam might occur.
 - Bent, folded, or creased paper
 - Torn paper
 - Perforated paper
 - Non-smooth paper
 - Slippery paper
 - Thin paper that has low stiffness
- □ Do not make a copy on paper with any kind of coating, such as thermosensitive paper, art paper, aluminum foil, and carbon paper. A fault might occur.
- □ Do not use paper with strong curls at the edges or corners. (Curls rising more than 5mm (1/4") or falling more than 20mm (3/4") over a 40mm (1.5") radius.)
- □ When you make copies on film, take out the copies delivered to the copy exit guide one sheet at a time and place them on a flat surface.
- □ If copying to natural tracing paper (all pulp, translucent paper) at a relative humidity of 35% or less
 - ① If the paper was left out of its package for 5 minutes or more, remove the first 1000mm (39.3") before copying.
 - 2 If copies come out wavy or with white spots, use translucent paper instead of natural tracing paper.
 - ③ Always keep the paper in a bag when not using it.
 - Store the paper in a sealed polyvinyl bag if not used for a long period. If it gets humid, paper will curl or wave which can cause a paper jam or part of the image not to be copied.

• When you use paper in high humidity under hot conditions, take out only the necessary amount of paper from the bag. Do not take all the paper out of the bag.

Anti-humidity Heater

• When humidity is high, the paper in the paper roll tray may absorb moisture, which can effect the image quality of your copies. The anti-humidity heater prevents this. Set this switch to "On" when the humidity reaches more than 45%.

Toner

Handling Toner

A WARNING:

- Do not incinerate used toner, toner bottles or toner cartridges.
- Toner dust might ignite when exposed to an open flame.
- Dispose of toner bottles and the used toner cartridges according to local regulations.

A CAUTION:

- **** :
- Do not eat or swallow toner.
 - Keep toner (used or unused), toner bottles, and toner cartridges out of reach of children.

A CAUTION:



This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.

- If you use toner other than the recommended, a fault might occur.
- If you want to add toner, \Rightarrow P.50 "Adding Toner"

Toner Storage

- Store toner cartridges horizontally in a cool, dark place.
- Do not leave toner cartridges in your car on a hot day for a long period of time or anywhere that they could be subjected to temperatures of over 95°F (35°C).
- Never store toner where it will be exposed to heat.
- Do not lay heavy objects on toner bottles.

Used Toner

- Toner cannot be re-used.
- Put the used toner in the plastic bag and dispose of it according to local regulations.

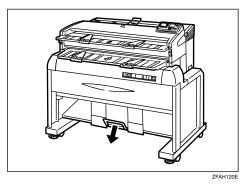
2. Copying

Basic Copying (Copying to sheets)

Use bypass table or roll feeder to copy onto paper.

🖉 Note

- □ For acceptable types of original and paper, \Rightarrow P.6 "*Recommended Originals*" \Rightarrow P.8 "*Recommended Paper*".
- □ If you use bypass teble, place one sheet of paper and never insert more than one sheet of paper.
- □ If the copy paper is curled, place it with the curl facing downwards.
- □ When you set A0 size (36"×48") paper, to make sure the ends do not touch the floor and get dirty, lay a wide piece of paper or some other covering on the floor.
- When setting an original or paper longer than 1,200mm (48"), pull down the Original stopper (option, a part of the copy stacker) and put the edge of your original or paper on.

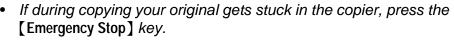


□ Do not use paper which is cut obliquely. When the difference between the right side and the left side of the paper is more than 5mm(1/5"), creasing or a paper jam might occur.



- \square You cannot copy to both sides of the paper at the same time.
- The machine needs about 3 minutes to warm up after being turned on before copies can be made. The machine is warming up when the wait indicator is lit, but you can still edit settings, insert copy paper or insert your original.
- □ You can set either the paper or an original (from bypass tray or roll feeder) first. When you have set both of them, the copier starts copying automatically. If you want to feed manually, manual feed mode is available. For details about manual feed mode, \Rightarrow P.16 "*Manual Feed Mode*"

- $\hfill\square$ Do not lean on the copy table or lay heavy objects on it.
- $\hfill\square$ Pick up a sheet of copy, every time you finish copying.
- <u>∧ CAUTION:</u>

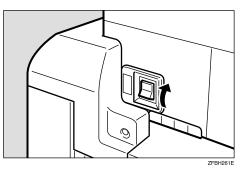




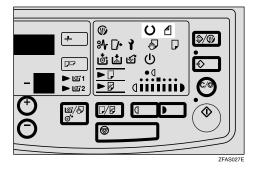
If you stop operation by pressing this key, remove the original.

1 Turn on the main switch.

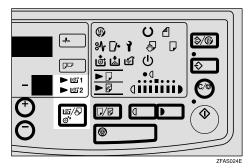
•



2 When the Wait indicator goes off and the Ready and the Set Original indicator go on, the copier enters the ready condition.

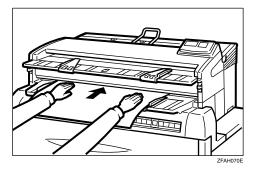


Select any copy settings you require, such as the media type or copy density. Press the [Paper Select/Cut] key to select either the Roll Feeder or Bypass Tray.

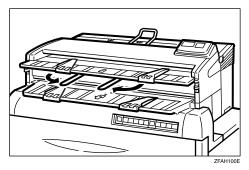


🖉 Note

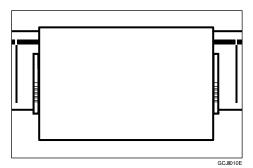
- \Box If you select two roll feeder, select one of the roll.
- □ If you select the Bypass table, center the paper **face up** on the bypass table and slide the paper straight into the copier.



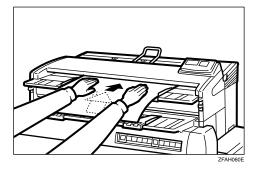
Open the guides to keep the edge of the original from slipping into the paper entrance.



5 Set the original guide to match the width of the original.

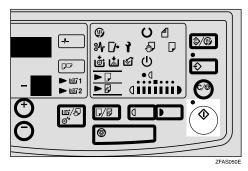


Center your original face down on the original table. Slide the original straight into the copier until the copier pulls it in.

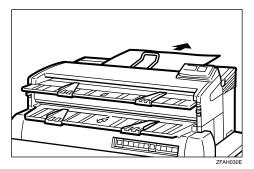


🖉 Note

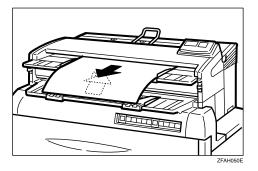
□ If you want to feed manually, use the manual feed mode. Press the **[Start]** key for more than 3 seconds to enter the mode. For details about the manual feed mode, \Rightarrow P.16 "Manual Feed Mode".



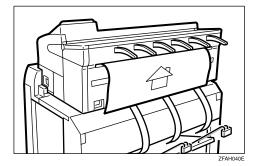
7 The original is fed through to the rear table.



2 When the original is being sent back, the machine scans the original and starts copying.



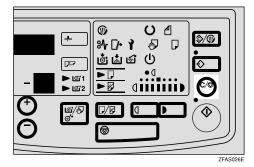
Description: The copy is delivered at the back of the copier.



🖉 Note

□ You must always pick up copies everytime, otherwise copy paper will pile up without rule.

After copying has finished, hold the original with one hand, press the Clear/Stop key, and remove the original.



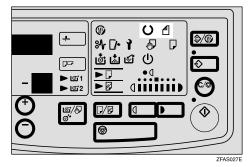
🖉 Note

- □ Do not hold down or pull out the original during copying. Do not put heavy object on the original table.
- □ If you do not insert the original in a certain interval after inserting the paper, the paper will be ejected automatically.
- □ If you do not insert the paper in a certain interval after the original, the original will be ejected automatically.
- □ If the copier is idle for a certain interval after you have used it, the machine resets itself to the initial settings (Auto Reset). If the copier is not used for a long time, it will turn itself off (Auto Off).
- □ You can preset the initial settings of the copier ⇒ P.38 *"B) Changing the Default Setting"*

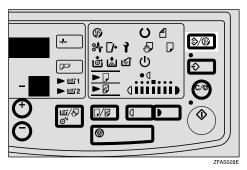
Manual Feed Mode

When you need to make larger sized paper, you can feed paper manually by using this function. If you want to feed manually, use the manual feed mode. This function helps you to make larger sized copy and protect from the paper skew.

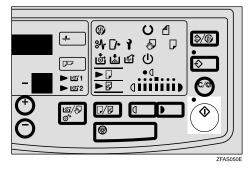
When the Wait indicator goes off and the Ready and the Set Original indicator go on, the copier enters the ready condition.



2 If any previous settings remain, press the [Clear Modes/Energy Saver] key.



B Press the [Start] key for more than 3 seconds.



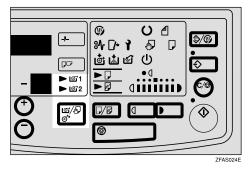
The green indicator, which is next to the start key, goes on.

🖉 Note

□ If you want to use this setting as a default, \Rightarrow P.42 "Settings You Can Change with User Tools"

Select any copy settings you require, such as the media type or copy density.

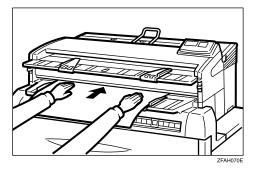
Press the **[Paper Select/Cut]** key to select either one of the Roll Feeder or Bypass Tray.



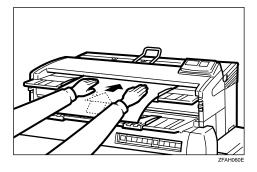
🖉 Note

 \Box If you select two roll feeder, select one of the roll.

□ If you select the Bypass table, Center the paper **face up** on the bypass table and slide the paper straight into the copier.

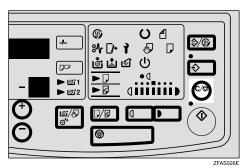


• Set the original guides to match the original size mark. Place the original face down and slide it straight into the copier along the original guides.



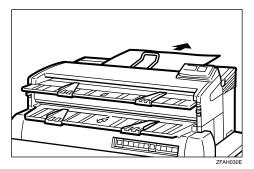
🖉 Note

□ Do not force to remove the original once you set it and if you want to change the position of your original or set another original. In this case, press the [Clear/Stop] key to eject the original.

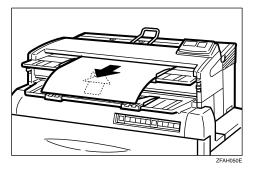


1 If you are ready to make copy, press the [Start] key.

2 The original is fed through to the rear table.

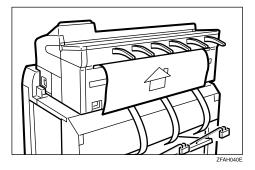


E When the original is being sent back, the machine reads the original and starts copying.



With Repeated Copying, the original is repeatedly fed through and sent back until all copies have been made.

Copies are delivered at the rear of the machine.



Using the Rear Table

Set thick originals or originals less than 297(11")mm in width and more than 1,200(48")mm in length on the rear table.

🖉 Note

 \square You cannot use the following functions when using the rear table.

Repeated Copying

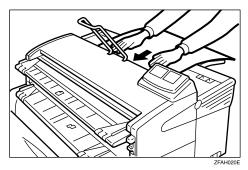
- Synchro Cut with roll paper (The machine beeps.)
- Partial Copying

Choose any copy settings you require.

2 For manual copying, set the paper.

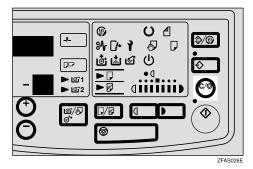
1 Pull up the guide to avoid paper misfeeds.

Insert the original face down from the rear table.



• When the machine scans the original and starts copying, support the original with your hands at the front of the machine.

O Press the [Clear/Stop] key and remove the original.



If the paper is hardly to remove, \Rightarrow P.65 *"If Sheet Paper is Jammed at the Paper Exit"*

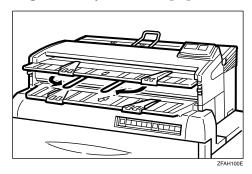
Copying onto Roll Paper

The paper will be fed to the copier from the Roll Feeder. You can copy onto roll paper using the following functions:

- Synchro cutting
- Preset cutting
- Variable cutting

🖉 Note

- □ If unused roll paper is left in the copier, cut 1000mm (39.3") from the edge of the paper before you start copying.
- □ When you want to copy a long original, curled original, or the thin original (less than 0.1mm) which can be easily bent down, open the guides to keep the original away from the paper entrance.



A CAUTION:

If during copying your original gets stuck in the copier, press the [Emergency Stop] key.
If you stop operation by pressing this key, remove the original.

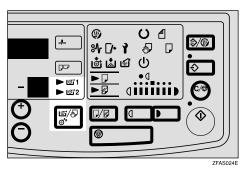
Synchro Cutting

This function cuts roll paper automatically according to the original length.

🖉 Note

□ This feature can cut length of paper in the range of 280mm to 3,000mm, 11" to 118".



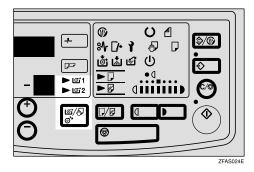


The **Paper Select** indicator lights up.

2 Press the [Cut Select] key (1). (2 <u>|</u>[-F 84 D+ 1 ம்ப்லி ▶ ©া 1 딦 ► @ 2 ്_ ര് 0/0 • \bigcirc ZFAS041E

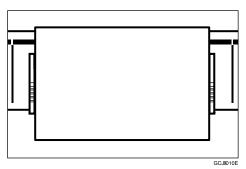
The Synchro indicator (2) lights up.

B Press the [Paper Select/Cut] key to turn on the RF Select indicator.

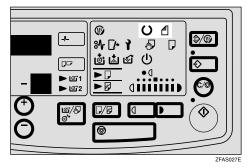


Select any copy settings you require.

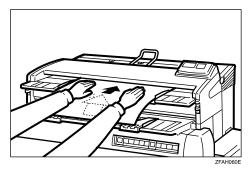
5 Set the original guides to match the width of the original.



1 Make sure that the wait indicator goes off and the ready and the set original indicator go on.



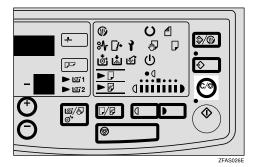
2 Center your original face down on the original table. Slide the original straight into the copier until the copier pulls it in.



Solution Note

□ Press the **[Start]**key if you select the manual feed mode. For details about the manual feed mode, \Rightarrow P.16 "*Manual Feed Mode*".

After copying has finished, hold the original with one hand, press the [Clear/Stop] key, and then remove the original.



🖉 Note

- □ To cancel copying, press the [Clear/Stop] key. The copier finishes the operation in progress, and delivers the copy and the original. Press the [Clear/ Stop]key to remove the original.
- To call off on-going copying, for example, when you have inserted a wrong blueprint, press the [Paper Select/Cut] key. The machine interrupts the operation in progress, and delivers the copy and the original. Press the [Clear/ Stop] key to remove the original.

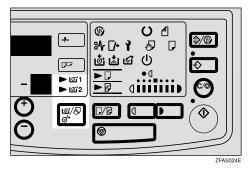
Preset Cutting

This function cuts roll paper to a selected length. The paper is cut to this length regardless of the size.

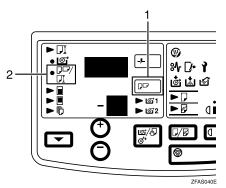
🖉 Note

□ The default preset cut lengths are as follows. Metric Version: 1189mm, 841mm, 594mm, 420mm, 297mm Inch Version: 48.0", 42.0", 36.0", 24.0", 18.0", 11.0" To change the preset cut length pattern, please contact your service representative.

Press the [Paper Select/Cut] key to turn on the Paper Select indicator.



2 Press the [Preset Cut] key (1).



The **Preset/Variable** indicator lights up (2) and the Paper Length display shows the default Preset Cut length. (1189mm or 48").

Press the [Preset Cut] key several times until the indicator shows the value you want.

Choose any copy settings you require.

5 Continue from step **5** \Rightarrow P.23

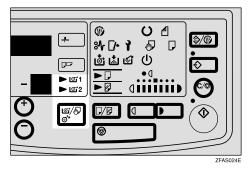
Variable Cutting

This function cuts roll paper in a length you specify.

🖉 Note

□ Length can be cut from 280mm to 3,000mm, 11" to 118".

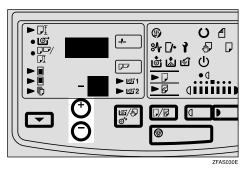
Press the [Paper Select/Cut] key.



The **Preset/Variable** indicator lights up and the paper length display shows the default Preset Cut length. (1189mm or 48.0").

2 Press the [Preset Cut] key to display the nearest value to the one you want.

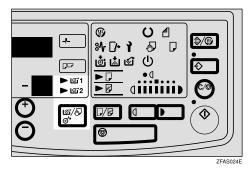
B Press the [+] key or the [-] key to specify the most appropriate length.



You can change the settings by 1 mm (0.1") steps.

Choose any copy settings you require.

5 Press the [Paper Select/Cut] key to turn on the Paper Select indicator.



6 Continue from step **5** \Rightarrow P.23

3. Copy Settings

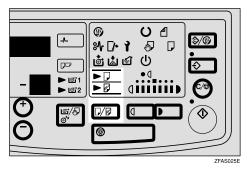
Copying onto Other Media

To copy onto translucent paper, film, use the **[Copy Media]** key to match the paper type refer to the following table.

Type of pa- per	Media set- ting
Plain paper	Both indi- cators off
Film	Film indi- cator on
Translu- cent paper	Translu- cent paper indicator on
Heavy pa- per	Translu- cent paper indicator on
Thin paper	No indica- tor or the film indica- tor if nec- essary.

If you are not sure of what type of paper you have, check the label on the paper package to confirm it.

Press the [Copy Media] key.



The Translucent paper or Film indicator lights up.

The **Wait** indicator goes on and either the **Translucent paper** or **Film** indicator lights.

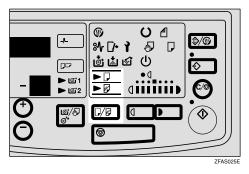
2 When the wait indicator goes off and the ready and the set original indicator go on, the copier enters the ready condition.

🖉 Note

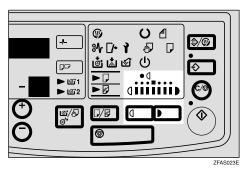
Even if you select the media type correctly, creasing might occur depending on the temperature or humidity. If this happens, adjust the fusing temperature manually. See the next page.

Adjusting the Fusing Temperature Manually

Press the [Copy Media] key to turn on the Translucent or Film indicator that you want.



- **2** Hold down the [Copy Media] key for 3 seconds until beep. The indicator show the current fusing temperature. The unlit indicator shows the current temperature settings.
- E Press the [()] key to decrease the temperature, and press the [) key to increase the temperature. The number of temperature levels (7 levels) available depends on the paper type:



- Plain paper : 1234567
- Translucent paper: 1234
- Film : 1234

After you have finished setting the temperature, press the [Copy Media] key.

5 Choose any copy settings you require, and then start copying.

🖉 Note

□ The new fusing temperature for the selected paper type is cleared when you press the [Clear Modes/Energy Saver] key or turn off the main switch.

Adjusting Copy Image Density

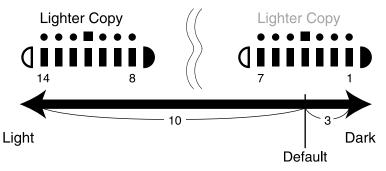
To make copies darker or lighter, change the density setting. There are 14 density levels (=7 notches \times 2).

- Standard density level (Default)
- 3 darker levels •
- 10 lighter levels

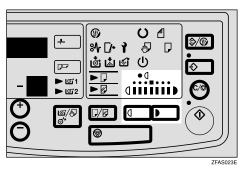
Set the density with the [**1**] and [**1**] keys under the **density** indicator.

Note Note

- □ The indicator shows seven levels at a time. When you start from the standard image density, the middle notch corresponds to the standard image density, and the three right notches correspond to darker densities, and the three left notches to lighter densities.
- □ The brighter notch shows which level is now set. If you go lower than the leftmost notch, the Lighter Copy indicator light up. The notches on the indicator correspond to the seven lightest levels.



- □ If you change the copy image density while repeat copying, the next copy job will come out with new setting.
- Press the [(]] or [] key to adjust copy density.



2 Each time you press the [**1**] key, the indicator moves one step to the left. When the indicator reaches the left edge, it returns to the right edge and the Lighter Copy indicator lights.

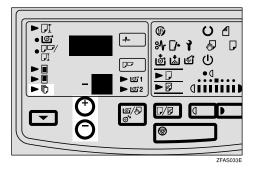
Setting the Number of Copies (Repeated Copying)

You can preset the number of copies (1 to 10) you want to make. Repeated copying means making two or more copies of an original.

🖉 Note

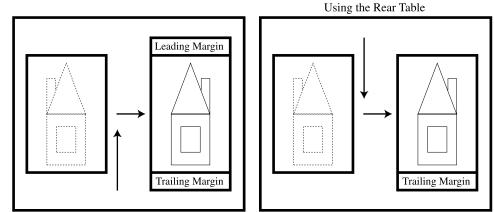
- □ With this feature, the image might be copied at a slant. Whether this happens depends on the original size, type, and condition (e.g., curled, wavy). In such a case, make one copy at a time.
- □ You cannot use the repeated copy function in the following cases:
 - When using the Carrier Sheet.
 - When setting an original in the rear table.
 - When setting an original longer than 1,200mm(48").

Press the [+] and [-] keys to specify the number of copies.



Setting a Leading/Trailing Edge Margin

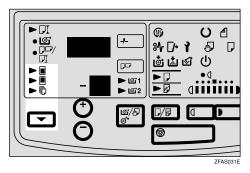
You can set a margin on the leading or trailing edge of the copy when you use Roll Feeder in the Synchro Cut mode. When using the bypass table, and Preset/ Variable Cut mode you can only set the trailing edge margin.



Using the Original Table

🖉 Note

- □ You can set up to a ±99mm, ±4.0" margin in 1mm, 0.1" steps on either the leading or trailing edge.
- □ When you set a leading margin, the copy image is shifted to the trailing edge. The copy image is shifted to the trailing edge, when you make a copy using the bypass table, or in the Preset Cut mode, Variable Cut mode.
- Press the [Function Select] key until the Leading Edge or Trailing Edge indicator is lit.



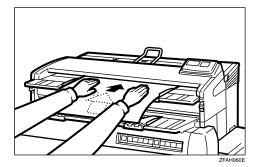
2 Press the [+] key and [-] key to specify an edge margin.

🖉 Note

□ To clear the value, press the [Clear/Stop] key.

E If you want to set both margins, press the Function select key and specify the other margin.

Using the original table, insert the leading edge of the original first.



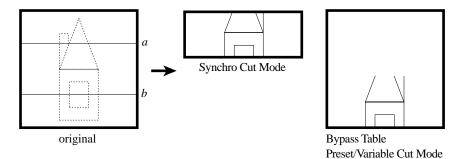
🖉 Note

 $\hfill\square$ If you use the rear table, insert the original trailing edge first.

Partial Copying

The Partial Copy function copies only a part of an original.

You need to enter start and end points in the feed direction of the original.

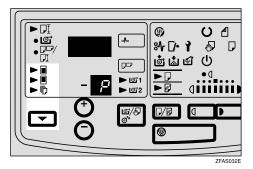


🖉 Note

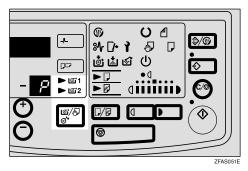
- □ You cannot use the Partial Copying function when using the Rear Table.
- □ You cannot use the Partial Copying function for originals shorter than 255mm.
- □ If you set the start point within 155 mm of the leading edge of the original, the copier will regard the leading edge as the start point.
- □ The minimum available space between the start point and the end point is 30 mm.
- □ If you do not set the end point after setting the start point (a), the copier will regard the trailing edge of the original as the end point (b).
- □ If you set the start point within 40mm of the trailing edge of the original, the copier will cancel the copying and eject the original.
- □ If you set the end point within 40mm of the trailing edge of the original, the copier will regard the trailing edge as the end point.
- □ In the Synchro Cutting function, the copier will cut the paper in a length from the start point to the end point.
- □ When the Partial Copying function is selected, the copier will reset the settings for the trailing edge margin, the leading edge margin in the Synchro Cutting function, and the Repeated Copying function.

Hold down the [Function Select] key for 3 seconds or more.

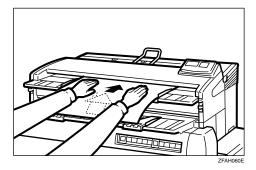
A "P" will blink in the copy counter display.



2 Slide the paper straight into the copier until it stops, or press the [Paper Select/Cut] key to turn on the Paper Select indicator.



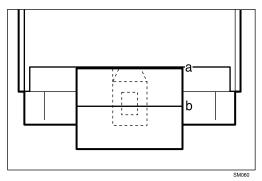
B Set the original.



Press the [Function Select] key when the leading edge of the area to be copied reaches the edge of the original table cover.

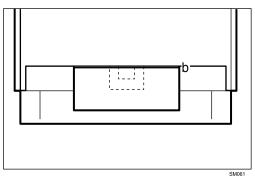
The "P" will stay on, not blinking.

The copier starts copying.



E Press the [Function Select] key when the trailing edge of the area to be copied reaches the edge of the original table cover.

The "P" will start blinking again.



After the paper has been delivered, press the [Clear/Stop] key and remove the original.

1 Hold down the [Function Select] key for three seconds to turn the function off.

The "P" will disappear.

Programming Settings You Often Use

There are two ways of programming settings you often use.

A) Store the settings in the **[Program]** key. When you press this key, the settings will be recalled instantly.

B) Change the default settings to those you use most frequently. Whenever you turn on the machine or press the [Clear Modes/Energy Saver] key, these settings will be ready to use.

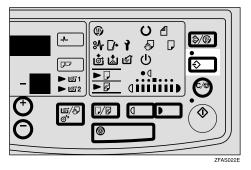
A) Program key

Storing Settings in the Program Key

🖉 Note

□ You can store one setting for frequently use.

Press the [Program] key.



2 Input the settings you want to store.

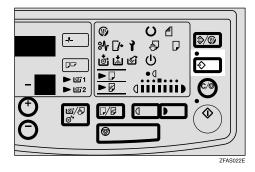
3 Make a copy.

The machine memorizes the types of job setting.

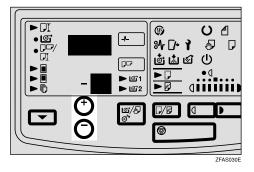
Press the [Program] key.

Recalling Settings Stored in the Program key

Press the [Program] key before copying.



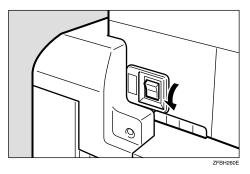
2 Enter the number of copies required with the [+] and [-] key.



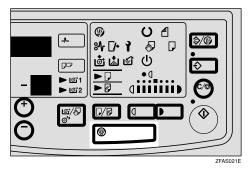
B Make a copy.

B) Changing the Default Setting

1 Turn off the main switch.



2 While holding down the [Emergency Stop] key, turn the copier back on.



The **jam** and **service** indicators will blink.



5

4 Turn off the main switch.

🖉 Note

The next time you turn the copier on, the settings you programmed in step
 will take effect.

User Tools

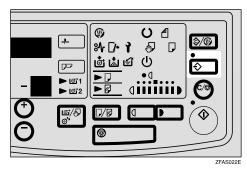
Access the User Tools to make the following adjustments:

A1) Magnification Adjustment: allows you to adjust the vertical degree.

A2) Cut Length: allows you to adjust the cut length.

-25mm ~ +25mm (-1.0" ~ -1.0") (by 1mm or 0.1")

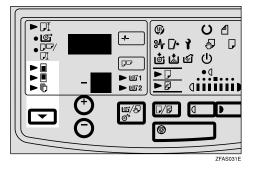
Hold down the [Program] key for 3 seconds or more.



"A1" blinks on the "Copy Counter" display.

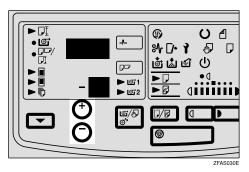
2 If you wish to adjust the Cut Length (A2), press the [+] key, "A2" blinks on the display

Press the [Function Select] key.

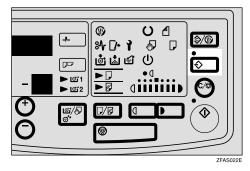


The Paper Length display shows the current value.

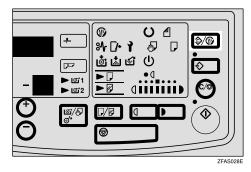
Use the [+] and [-] key to change the value



5 Press the [Program] key to return to step **2**.



6 Press the [Clear Modes/Energy Saver] key to exit this mode.

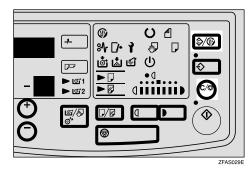


Settings You Can Change with User Tools

This section is for the key operators in charge of this machine. You can change or set the machine's default settings.

🖉 Note

□ For how to enter the User Tools program, press the [Clear Modes/Energy Saver] key, and then press the [Clear/Stop] key for more than 3 seconds.



• **Fusing Temperature 1–Normal(+01)**: Selects the fusing temperature for plain paper.

🖉 Note

- 🗇 0: Mode 1, 1: Mode 2, 2: Mode 3, 3: Mode 4, 4: Mode 5, 5: Mode 6, 6: Mode 7
- 🗇 Default: 2
- □ For details about each mode, contact your service representative.
- **Fusing Temperature 2–High (+02)**: Selects the fusing temperature for translucent paper.

🖉 Note

- 🗇 0: Mode 5, 1: Mode 6, 2: Mode 7, 3: Mode 8
- 🗇 Default: 0
- □ For details about each mode, contact your service representative.
- **Fusing Temperature 3–Low(+03)**: Selects the fusing temperature for translucent film.

🖉 Note

- □ 0: Mode 2, 1: Mode 3, 2: Mode 4, 3: Mode 5
- 🗇 Default: 1
- □ For details about each mode, contact your service representative.
- **Count Up/Down(+04)**: The copy counter can be made to count up or count down.

🖉 Note

□ 0: Count up, 1: Count down

Default: 0

• **Beeper On/Off(+05)**: The beeper can be turned off completely; turned off for setting the margin, multiple copies, and paper length; or left on to emit a tone whenever a key is pressed.

🖉 Note

□ 0: On, 1: All Off, 2: Partially Off

Default: 2(The beeper does not work if you use leading edge margin.)

• **Paper Feed Out Waiting Time Setting(+06)**: When the copier is ready to receive the original, it will wait for a preset length of time. If no original is set within this time, the copier will process the copy paper without copying. The time can be set to 1, 2, 3, 4, or 5 minutes.

🖉 Note

🗇 0: 2min, 1: 1min, 2: 3min, 3: 4min, 4: 5 min

□ Default: 0

• **Manual Feed Start Time Setting(+07)**: After copy paper is set, the copier waits for a preset number of seconds before starting the rollers that will pull the paper in. This pause gives you a chance to align the paper. The time can be set to 0.7, 1, 2, 3, 4, or 5 seconds.

🖉 Note

□ 0: 2.0sec, 1: 0.7sec, 2: 1.0sec, 3: 3.0sec, 4: 4.0sec, 5: 5.0sec

Default: 0

• Lead Edge Increase/Decrease Speed Setting(+08): The speed at which the lead edge setting scrolls up or down can be changed. The time for one increment (or decrement) can be set to 0.02, 0.05, 0.10, 0.25, or 0.5 seconds.

🖉 Note

□ 0: 0.10 sec, 1: 0.50 sec, 2: 0.25 sec, 3: 0.05 sec, 4: 0.02 sec

Default: 0

• Auto Reset Time Setting(+09): If the copier is idle for a while, it will clear itself. The time needed can be set to 1, 2, 3, 4, or 5 minutes. This function can also be turned off.

- □ 0: 2 min, 1: 1min, 2: 3 min, 3: 4 min, 4: 5 min, 5: None
- Default: 0
- □ The machine cannot enter the Auto reset mode if the roll end indicator lights while copying repeatedly.
- □ The machine cannot enter the Auto clear if the toner end indicator lights.

• Auto Energy Saver Mode(+10): The fusing unit needs to be hot for copying. When the copier is idle, the fusing unit can be kept hot to save time or it can be allowed to cool to save energy. This feature can be set to start automatically, but you can also turn it on yourself by pressing and holding the [Clear Modes/Energy Saver] key for three seconds.

🖉 Note

- □ 0: None, 1: Yes
- 🗇 Default: 0
- □ The machine can not enter the energy saving mode if toner end indicator lights.
- Screen Message Setting(+11): When the copier is idle, the copy counter can be made to display a message. There are five possible messages: "Pre_heat", "Sleeping", "0123456789", Have a good day", and "Hello I love you". This feature can also be turned off.

🖉 Note

□ 0: None, 1: "Pre_heat", 2: "Hello I love you", 3: "0123456789", 4: "Sleeping", 5: Have a good day".

Default: 0

• Leading Edge Increase/Decrease Adjustment Preliminary Interval(+12): When changing a function setting (margin, multiple copies, or paper length) by holding down the [+] or [-] key, the setting will change by a preset value. This value can be changed to 1, 2, 3, or 10 intervals.

🖉 Note

- □ 0: 3 intervals, 1: 1 interval, 2: 2 intervals, 3: 10 intervals
- Default: 0
- **Original Feed Out Waiting Time Setting(+13)**: When the copier is ready to receive the paper, it will wait a preset length of time. If no paper is received within this time, the copier ejects the original. The time can be set to 1, 2, 3, 4, or 5 minutes. This function can also be turned off.

🖉 Note

🗇 0: 2mins, 1: 1min, 2: 3mins, 3: 4mins, 4: 5mins, 5: None

□ Default: 0

• **Original Feed Start Time Setting(+14)**: You can set the number of seconds before the rollers start to pull the original in. If the original is often fed obliquely, you can solve the problem by setting a longer pause. The time can be set to 1, 2, 3, 4, 5, 6, or 7 seconds.

- □ 0: 1 sec, 1: 2 sec, 2: 3 sec, 3: 4 sec, 4: 5 sec, 5: 6 sec, 6: 7 sec
- 🗇 Default: 3

• Auto Off Time(+15): You can set the time the machine waits after the last operation before switching itself off automatically. The time can be set by minute from 1 to 240 minutes.

🔗 Note

- Default: 30min
- □ Auto Off cannot be used in the following cases.
 - When the Wait indicator goes on
 - When the toner end indicator goes on
 - When the front door is open
 - While copying
 - When a paper misfeed occurs or SC call appears
 - The machine cannot enter the Auto Off mode if the roll end indicator lights while copying repeatedly.
- **Original Hold Mode(+16)**: After original scanning is finished, the original exit roller stops before completely feeding out the original. This is to prevent the original from dropping onto the floor after scanning. The original is fed out when the X key is pressed or when the next original is inserted.

🖉 Note

```
□ 0: No, 1: Original Hold Mode
```

🗇 Default: 1

• **Length Size Magnification(+17)**: Adjust the speed of the original feed motor. The setting can be changed from -1.0 to 1.0 by 0.05% steps.

🖉 Note

□ Default: 0.0

• Synchro-cut Length Adjustment(+19): Adjust the cut length in the synchro cut, preset cut, and variable cut modes . The setting can be changed from — 25 to 25 by 1mm steps.

🖉 Note

Default: 0

• **Paper Length Up/Down Setting(+20)**: Select if the paper length is count down or up when the preset cut key is pressed.

- □ 0: Down count, 1: Up count
- Default: 0
- **Paper Length Up/Down Speed Setting(+21)** :The copier can scroll through the preset lengths forward or backward, and at different speeds. There are many sets of sizes from which to choose.

🖉 Note

□ 0: 0.10 seconds, 1: 0.5 seconds, 2: 0.25 seconds, 3: 0.05 seconds, 4: 0.02 seconds, 5: 0.01 seconds

🗇 Default: 0

- **Fixed Paper Size Pattern Setting(+22)**: Select the fixed paper size pattern chosen when the "Preset Cut" key is press. For details about this setting, contact your service representative.
- **Optional Paper Size Setting(+23** ~ +**32)**: Up to 10 different paper size can be stored from 23 to 32. For details about this setting, contact your service representative.
- **Auto Off Function setting(+33)**: This setting allows you to enable or disable the Auto Off function.

🖉 Note

D 0: Disable, 1: Enable

Default: 1

• Start Key Mode(+34): You can select whether you use [Start]key when you clear modes or turn on/off the machine.

Note 🖉

```
🗇 0: Off, 1: On
```

Default: 0

- **Darker Image Density(+37)**: Sets the range of the ID density control to give finer control over darker images.
 - ID level 1 to 7-Darker image density and low contrast settings
 - —ID level 8 to 14-cannot be shifted

- □ 0: Standard Density 1: Darker Image Density
- □ Default: 0

4. Maintaining Your Copier

Changing The Used Toner Bottle

When "11" is displayed, it is time to change the toner bottle.

A WARNING:

- Do not incinerate used toner, toner bottle or toner cartridge.
- Toner dust might ignite when exposed to an open flame.
- Dispose of the used toner and the used toner cartridge according to local regulations.

A CAUTION:

- Do not eat or swallow toner.
- Keep toner (used or unused), toner bottle, and toner cartridge out of reach of children.

A CAUTION:

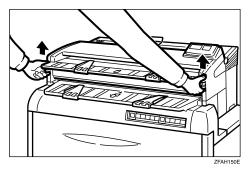
 \wedge

This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.

🖉 Note

- □ If the toner bottle overflows, toner particles could get inside the copier and cause damage. When you install a new bottle, make sure it is perfectly set in its holder.
- □ Do not use used toner. This will damage the machine.

1 Open the upper unit of the copier.



2 Unplug the code from the mainframe.



Open the door on the right side of the copier ,and then carefully remove the plastic bottle.



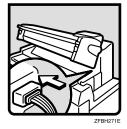
🖉 Note

□ Put the used toner to the plastic bag and dispose of it according to local regulations. Do not throw away the bottle.

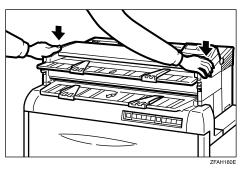
Place the bottle in the copier again, and then close the door.



5 Plug in the code to the mainframe.



6 Close the upper unit.



Adding Toner

When 🚵 is displayed, it is time to add toner.

When the indicator starts blinking, you can still copy about 53 feet of paper (16 m, 27 $8^{1}/_{2}$ "×11" size copies). When the indicator stays on, you can't copy until a new cartridge is installed.

A WARNING:

- Do not incinerate used toner, toner bottle or toner cartridge.
- Toner dust might ignite when exposed to an open flame.
 - Dispose of the used toner and the used toner cartridge according to local regulations.

A CAUTION:

- Do not eat or swallow toner.
- Keep toner (used or unused), toner bottle, and toner cartridge out of reach of children.

<u>∧ CAUTION:</u>

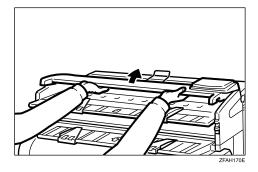
 \triangle

This machine has been tested for safety using this supplier's parts and consumables. We recommend you only use these specified supplies.

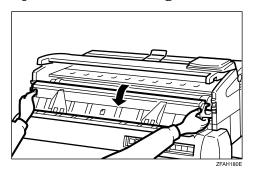
🔗 Note

- \square If you use toner other than that recommended, a fault might occur.
- □ When adding toner, do not turn off the main switch. If you do, your settings will be cleared.
- □ Always add toner after the machine instructs you to add toner.
- **D** Do not use used toner. This will damage the machine.

1 Lift the original table until it locks in place.

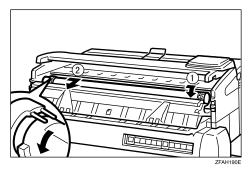


2 Open the toner cartridge cover.



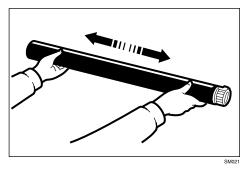
1 Turn the old cartridge towards you.

Then, while pressing the cartridge to the right (1), lift the left end and remove the cartridge (2).



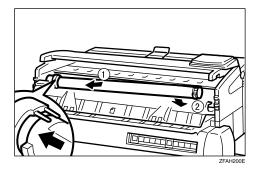
Put the old toner cartridge in a plastic bag and dispose of it according to local regulations.

E Shake the new toner cartridge lightly 5 to 6 times to remove lumps.

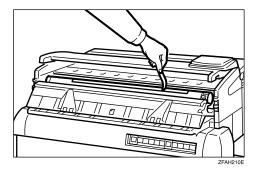


1 Install the new cartridge. Make sure that the white circle labeled 1 on the cartridge faces up.

Make sure the cartridge is set well but don't push it in yet.

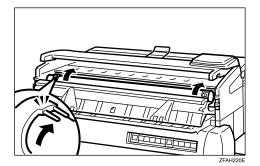


2 Take the right edge of the seal and slowly remove it.



② Push the toner cartridge all the way to the left.

Then turn the toner cartridge all the way in, as shown.

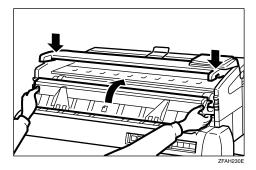


🖉 Note

□ If you can't close the toner cartridge cover, there might be problem setting the toner cartridge. In this case, set the toner cartridge again.

2 Close the toner cartridge cover and the original table.

The copier will need a few moments to warm up before it is ready to copy.



Changing the Roll Paper Size

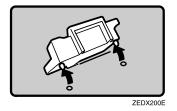
Change the size guides on the left and right of the roll paper holder when you load different sized paper rolls.

∰Important

Always follow the instructions below when adjusting the roll paper holder. Do not force the roll paper holder by pulling or sliding it strongly. This could damage the holder.

Removing the Roll Paper Holder

Push the paper holder inwards, and then pull it upwards to remove it.

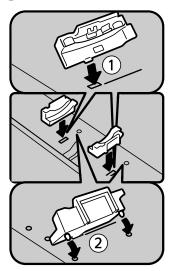


🖉 Note

- □ The paper holder is attached with magnet and a hook.
- □ The paper holder is on the right in this illustration.

Setting the Roll Paper Holder

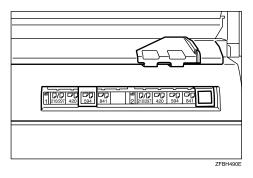
1 Insert the hook on the paper holder into (①), and then insert the protrusion into (②).



🖉 Note

- □ Make sure the protrusions are firmly in the hole.
- \Box Lock the lever until it clicks.

2 Match the paper size as same as one shown in the windows .



Standard paper sizes that can be used in this copier are shown below.

Metric ver- sion	Roll Feeder
A0	₽
A1	₽₽
A2	₽₽
A3	₽₽
A4	D

Loading A Roll Of Paper

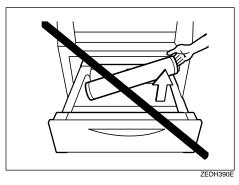
When 📩 is displayed, it is time to install a new roll of paper.

A CAUTION:

- Rolls of paper can be heavy, so you should be careful when loading one.
- Be careful when replacing the roll paper or removing misfed paper by following the operating instructions properly. Otherwise, an injury may result from the paper cutter inside.
- Do not touch the anti-humidity switch from inside the machine because it could be very hot.

∰Important

□ When removing paper rolls, lift the roll holders on both sides of the paper roll before removing it. Do not lift one side only. This could damage the machine.



1 Pull out the Roll Feeder.

2 Hold both sides of the empty paper roll and remove it from the unit.



E Raise the lever on the paper holder (1), and then pull out the roll holder from the empty core(2).



Set the paper holder to the roll core (①), and then lower the lever (②).



🖉 Note

 $\hfill\square$ Insert the paper roll as far as it will go.

• Hold both sides of the paper roll and install it securely in the paper holder.

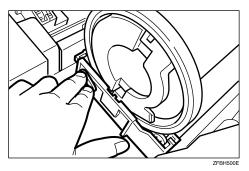


🖉 Note

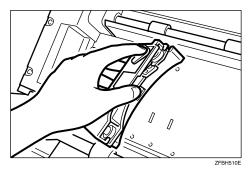
 \square The flap of the paper roll should be on the buttom. See below.



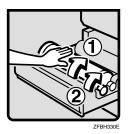
□ If applicable, adjust the roll paper position and lock the lever.



You may hardly to adjust the roll paper position when you set 914mm ("36). In this case, take out the paper holder, and then release the lock lever. After you adjust it, put it back to the roll feeder.



- □ Do not force to remove the paper holder when you need to change the paper size. For how to remove and set the paper holder, see "Changing the Roll Paper Size" ⇒ P.54
- **6** Rotate the paper roll slowly until the flap is almost fed into the rubber part of the roller (1). While feeding the flap of the paper roll into the rubber part of the roller, turn the paper knob clockwise(2).

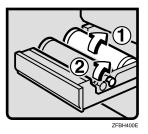


🔗 Note

Do not hold the paper knob from side. It may cause you touching a sticky oil. For how to turn the knob without any harm, see the illustration below:



- □ Make sure that the paper is not loose. Insert it straight into the roller.
- □ Watch carefully to make sure that the flap of the paper is inserted between the feeder and the roller.
- □ For how to change the Roll 2, refer to the following illustration:



1 Hold the paper (②), and then slide the cutter (①).



🖉 Note

□ Slide the cutter one way only, otherwise paper waste may pile up inside the machine.

Turn the knob anticlockwise about 1/4 to adjust the paper position.



9 Close the Roll Feeder.

5. Troubleshooting

If Something Goes Wrong

If you have problems with your copier, consult the following pages. If a service indicator lights up, read the following section. If the original or copy is stuck in the copier; \Rightarrow P.63; if the copier won't start, or if copies don't look right, \Rightarrow P.71.

If Indicator Lights Up

If one of the indicators shown appears on the operation panel, turn to the appropriate page and follow the instructions described there.

What ap- pears	What it means	What to do
8∕∤-	The origi- nal or copy paper is jammed some- where.	See the fol- lowing sec- tion.
7	The copier needs a technician.	Call your service rep- resentative.
_ *	A cover ,unit, or the fusing unit cover was left open.	Close it. Press firm- ly.
•	The paper roll is fin- ished.	Put in a new roll of paper. \Rightarrow P.56.
1Å	The toner cartridge is empty, or almost empty.	Replace the toner cartridge. \Rightarrow P.50.
Ċ	Wait until the ready indicator lights.	Wait. If it stays on for an unusu- ally long time, call your serv- ice repre- sentative.

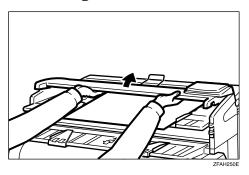
Ś	The used	Empty the
	toner bottle	used toner
	is full.	bottle. \Rightarrow
		P.47.

If Jams Occur

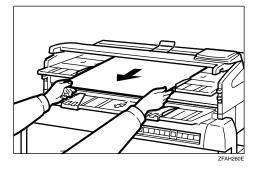
If the Original is Jammed at the exit

🖉 Note

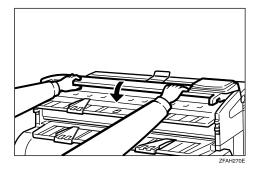
- □ If the paper or original gets stuck in the copier, remove both original and paper.
- **1** Lift the original table.



2 Very gently pull the original out of the feed-out slot. Be careful not to tear it.



E Close the original table. Press firmly on both sides until it clicks into place.



5

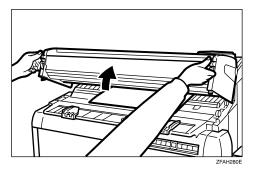
If Sheet Paper is Jammed in the Feed-in Slot

A CAUTION:

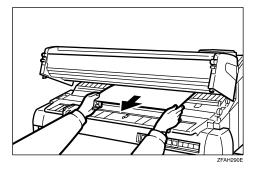


The fusing unit can be very hot. Do not touch any parts under the fusing cover. If necessary, wait until the fusing unit has cooled down.

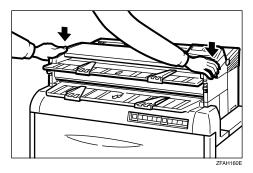
1 Squeeze the locks on each side of the copier and lift the unit.



2 Pull out the copy paper. Do not leave any scraps of paper in the copier.



2 Close the unit. Press firmly on both sides until it clicks into place.



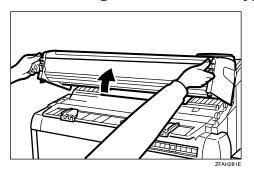
If Sheet Paper is Jammed at the Paper Exit

A CAUTION:

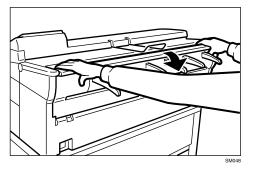


The fusing unit can be very hot. Do not touch any parts under the fusing cover. If necessary, wait until the fusing unit has cooled down.

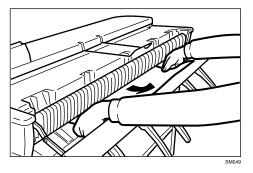
1 Squeeze the locks on each side of the copier and lift the moddle unit between the original table and the bypass table.



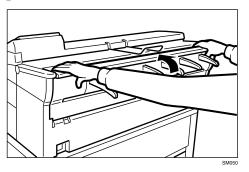
2 Open the fusing unit cover.



Slowly pull the paper out. If there are scraps left inside, open the inner cover, wait for the copier to cool, and remove the scraps.



Close the unit and all covers. Press firmly on both sides until it clicks into place.



If Roll Paper Jams

If roll paper jams inside the roll feeder, you still might need to check everywhere to remove the entire length of paper.

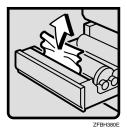
A CAUTION:



- Be careful when replacing the roll paper or removing misfed paper by following the operating instructions properly. Otherwise, an injury may result from the paper cutter inside.
- Do not touch the anti-humidity switch from inside the machine because it could be very hot.

Open the Roll Feeder.

2 Slowly pull up the edge of the paper.



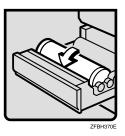
Slide the cutter knob((1)) to cut the edge of the roll paper, and then remove the jammed paper((2)).



🔗 Note

□ Slide the cutter one way only, otherwise paper waste may pile up inside the machine.

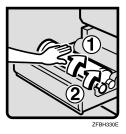
Rotate the paper roll in the direction of the arrow until you can see the edge of the paper.



5 Turn the knob anticlockwise about 1/4 to adjust the paper position.



6 Slowly rotate the paper roll until the edge of the paper is fed into the rubber part of the roller (①). While feeding the flap of the paper roll into the rubber part of the roller, turn the paper knob clockwise(②).



🖉 Note

Do not hold the paper knob from side. It may cause you touching a sticky oil. For how to turn the knob without any harm, see the illustration below:



- \square Make sure that the paper is not loose. Insert it straight into the roller.
- □ Watch carefully to make sure that the flap of the paper is inserted between the feeder and the roller.

2 Close the Roll Feeder.

If You Cannot See the Roll Paper Jam

If roll paper jams inside the roll feeder, you still might need to check everywhere to remove the entire length of paper.

A CAUTION:

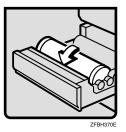


 The fusing unit can be very hot. Do not touch any parts under the fusing cover. If necessary, wait until the fusing unit has cooled down.

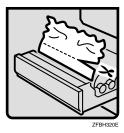
- Be careful when replacing the roll paper or removing misfed paper by following the operating instructions properly. Otherwise, an injury may result from the paper cutter inside.
- Do not touch the anti-humidity switch from inside the machine because it could be very hot.

Open the Roll Feeder.

2 Rotate the paper roll in the direction of the arrow until you can see the edge of the paper.



1 Cut the edge of the paper with the cutter or scissors.



Hold the paper (②), and then slide the cutter (①).



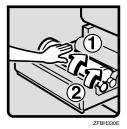
🖉 Note

□ Slide the cutter one way only, otherwise paper waste may pile up inside the machine.

5 Turn the knob anticlockwise about 1/4 to adjust the paper position.



6 Slowly rotate the paper roll until the edge of the paper is fed into the rubber part of the roller (①). While feeding the flap of the paper roll into the rubber part of the roller, turn the paper knob clockwise(②).



🖉 Note

Do not hold the paper knob from side. It may cause you touching a sticky oil. For how to turn the knob without any harm, see the illustration below:



□ Make sure that the paper is not loose. Insert it straight into the roller.

□ Watch carefully to make sure that the flap of the paper is inserted between the feeder and the roller.

2 Close the Roll Feeder.

Others

If a puzzling or recurring problem occurs, check the following before calling a service representative. It's also a good idea to check the \Rightarrow P.74 "*Do's & Don'ts*" to make sure the paper and originals match what the copier can handle.

Absolutely Nothing Happens

- Is the main switch on?
- Is the power cord plugged in?
- Did a breaker or a fuse blow out?

Something Happens, but Set Paper or Paper Select Never Appear

• Check the indicators on the control panel. If any of them are lit, turn to \Rightarrow P.61. Check that all covers and units are closed.

If Jams Occur Frequently

- Is your paper creased, damp, or otherwise damaged? \Rightarrow P.8.
- Are there visible bits of paper or other objects stuck in the machine? If there are, remove them.
- Are you inserting the paper and original in straight? Always feed paper in straight.

If Copies Look Wrong

- Are copies too dark or too light? Adjust the density (\Rightarrow P.30).
- Is the background dirty no matter what kind of original you are copying? Make sure the exposure glass and platen are clean (\Rightarrow P.73).
- Is the image skewed? Make sure to insert the paper and the original straight into the machine. If you have the original and Copy Guides (option), use them.

White Spots Appear

- On the copy: try placing your copy paper with the other side facing up.
- At the leading edge: try placing your copy paper sideways.
- At the trailing edge: try giving a rising curl to the trailing edge. The curl should go up, not down.

Creases

- Try setting your copy paper sideways.
- If long creases appear on copies, try setting your copy paper sideways, or try changing the copy media setting.
- If creases appear on copies made to transparent film, try setting your film sheets sideways.

Copies Come Out Dog eared

- Try setting your copy paper with the other side facing up.
- Make sure your copy paper is undamaged.

Black Streaks Appear on Copies

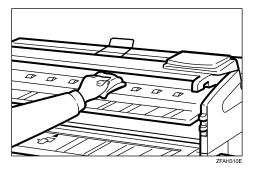
• Check that the exposure glass is clean.

Daily Maintenance

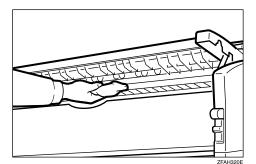
Clean the Exposure Glass & the Platen Plate

You should clean the copy and original tables with a damp cloth, and then wipe them with a dry cloth.

Clean the exposure glass and the original drive roller with a damp cloth, and then wipe them with a dry cloth.



Clean the platen plate with a damp cloth, then wipe it with a dry cloth.



Do's & Don'ts

A CAUTION:



- When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.
- When the machine will not be used for a long time, unplug the power cord.
- Do not touch areas on or around the fusing unit. These areas get hot.
- After copies are made continuously, the exposure glass may feel warm. This is not a malfunction.
- The area around the ventilation hole may feel warm. This is caused by exhaust air and is not a malfunction.
- Do not turn off the main switch while copying. Before turning off the main switch, make sure that copying is completed.
- The machine might fail to produce good copy images if there is condensation inside caused by a temperature change.
- Do not open the covers of the machine while copying. If you do, misfeeds might occur.
- Do not move the machine while copying.
- The supplier shall not be liable for any loss or damage resulting from a failure of the machine, a loss of machine settings, or use of the machine.
- Do not place more than one sheet of paper at a time on the bypass table.
- Center your paper on the copy table using the size marks. Then slide the paper straight into the copier until it stops.
- When copying to a long sheet of paper, lightly hold the sheet as the copier pulls it in so that it goes in well.
- Do not make two sided copies.
- If you open the unit, make sure you close it within 5 minutes to keep light from damaging the copy drum.
- When copying to sheets 35" $\times45$ " (90 cm $\times115$ cm) or larger, make sure the paper does not drag directly on the floor as the copier pulls it in. (You can spread paper on the floor for this.)
- If your paper has an uneven or slanted edge, do not insert this edge in first.
- Do not make copies longer than 118 inches (3 m).
- Do not insert originals made of paper less the 52.3 g/m^2 (13.9 lb or 0.07 mm thick). For such originals, please use the Carrier Sheet.

Where to Put Your Copier

Your copier should be installed by a qualified technician. If you need to transport your copier to a distant location, call your service center before the move.

You can of course move your copier around your office without calling the service center. If you do, remember that the temperature, humidity, and cleanliness of the area around the copier may affect its performance. Choose the new location with care and follow the guidelines below.

Machine Environment

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

Optimal Environmental Conditions

A CAUTION:



- Keep the machine away from humidity and dust. A fire or an electric shock might occur.
- Do not place the machine on an unstable or tilted surface. If it topples over, it could cause injury.

A CAUTION:



- If you use the machine in a confined space, make sure there is a continuous air turnover.
- Temperature: 50° to 86°F (15° to 30°C)
- Humidity: 20 to 80% RH
- To avoid possible ozone build-up make sure to install this copier in a large well ventilated room ensuring an air turnover of at least 1000 ft³/hour/person (30 m³). When you use this machine for a long time in a confined space without good ventilation, you may notice an odd smell. To keep the workspace comfortable, we recommend that you keep it well ventilated.
- Set your copier on a strong and level base. The copier must be level within less than a quarter of an inch (5 mm) left to right and less than half an inch (10 mm) front to rear.

Environments to Avoid

- Locations exposed to direct sunlight or strong light (more than 1500 lux)
- Dusty areas
- Areas with corrosive gasses

- Altitudes of over 6500 feet (2000 m)
- Areas prone to strong vibrations
- Locations directly exposed to cool air from an air conditioner or heat from a nearby heater (Sudden temperature changes may lead to condensation within the copier.)
- Locations near a diazo copy machine

Power connection

A WARNING:



Only connect the machine to the power source described on the inside front cover of this manual.

A WARNING:

- Avoid multi-wiring.
- Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it, pull it hard or bend it more than necessary. These actions could cause an electric shock or fire.
- Do not plug or unplug the power cord with your hands wet. Otherwise, an electric shock might occur.

A WARNING:



Make sure the wall outlet is near the machine and freely accessible so that in event of an emergency it can be unplugged easily.

<u>∧ CAUTION:</u>

- When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.
- When the machine will not be used for a long time, unplug the power cord.

<u>∧ CAUTION:</u>



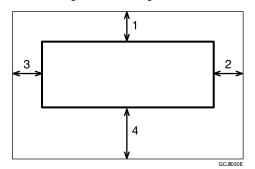
When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.

- Connect the copier to a power source meeting the specifications on the inside front cover of this manual.
- Do not set anything on the power cord.
- Voltage must not fluctuate more than 10%.
- Make sure the copier is grounded.

- Make sure the plug is firmly inserted into the power outlet.
- Make sure the power outlet is close to the copier and easily accessible at all times.

Access To Machine

Place the copier near a power source and provide clearance as shown.



- 1. Rear: more than 60cm, 23.7"
- 2. Right: more than 60cm, 23.7"
- 3. Left: more than 60cm, 23.7"
- 4. Front: more than 100cm, 40.0"

6. Specifications

Copier

Configura- tion	Console with roll feeder
Process	Dry elec- trostatic transfer system
Scanning	Original moving over a fixed fiber optics array
Originals	Sheet
Original Reference Position	Center
Original Size	Maximum: 914 (W) × 3,000mm (L) (36" × 118") Minimum: A4 □ (210 (W) × 297mm (L)) (8.5" × 11")
Copy Size	Maximum: 914 (W) × 3,000mm (L) (36" × 118") Minimum: A4 □ (210 (W) × 297mm (L)) (8.5" × 11")
Warm-up Time	Within 3 minutes at a room tempera- ture of 74°F (23°C)

First Copy	Within 25 seconds $(A1 \square, 23" \times 35",)$
Copying Speed	3600mm (141.7") per minute
Auto Reset Time	2 minutes (can also be turned off or set to 1,3,4 or 5 minutes)
Reproduc- tion Ratio	Fixed: 1 to 1
Paper Feed	manual feed/roll feeder
Toner re- plenish- ment	Cartridge system
Self-diag- nostic codes	LED indi- cators
Power Source	North America: 120V, 60Hz, 12A Europe: 220-240V, 50/60Hz, 7A
Power con- sumption	Maximum 1.4kW
Noise emission	Stand by: less than 57dB
	Copy cycle: less than 75dB (copi- er only)
Measure- ments made fol- lowing ISO7779	

Dimension ($W \times D \times H$)	1,080mm × 623mm × 480mm (42.5" × 24.5" × 18.9")
Weight	80kg (176lb)

Roll Feeder

Number of load- ed pa- per rolls	1 roll (Type780A)	2 roll (Type78 0B)
Accept- able Roll Size	 Width: 210, 257, 297, 364, 420, 515, 594, 660, 728, 800, 841, 880, 914mm Roll length: less than 150mm ✓ Note Maximum: 914mm (36") Minimum: 210mm (8.5") 	Width: 210, 257, 297, 364, 420, 515, 594, 660, 728, 800, 841, 880, 914mm Roll length: less than 150mm % Note
		 Maxi-mu mu 914 mm (36") Mini- mu m: 210 mm (8.5")
Roll Di- ameter	Within 170mm (6.7")	Within 170mm (6.7")
Roll Core	75.7mm – 77mm(2.98" - 3.03")	75.7mm - 77mm(2 .98" - 3.03")

Dimen-	1,200mm× 720mm × 775mm (48 × 28.3 × 30.5")	1,200m
sion (W		$m \times$
$\times \mathrm{D} \times \mathrm{H}$)		720mm
		×
		775mm
		$(48 \times$
		28.3 imes
		30.5")
Weight	78kg (172lb)	86kg (189lb)

Options

• Copy Tray Type 780

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