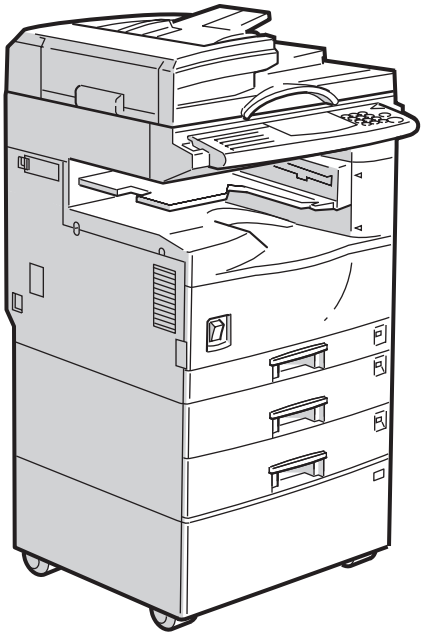
RICOH

Aficio 180

OPERATING INSTRUCTIONS
COPY REFERENCE



THYH010E

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.
15-5, 1 chome, Minami-Aoyama, Minato-ku, Tokyo
Telephone: Tokyo 3479-3111

Aficio 180 OPERATING INSTRUCTIONS

Overseas Affiliates

U.S.A.
RICOH CORPORATION
5 Dedrick Place
West Caldwell, New Jersey 07006
Phone: +1-973-882-2000

The Netherlands
RICOH EUROPE B.V.
Groenelaan 3, 1186 AA, Amstelveen
Phone: +31-(0)20-5474111

United Kingdom
RICOH UK LTD.
Ricoh House,
1 Plane Tree Crescent, Feltham,
Middlesex, TW13 7HG
Phone: +44-(0)181-261-4000

Germany
RICOH DEUTSCHLAND GmbH
Mergenthaler Allee 38-40,
65760 Eschborn
Phone: +49-(0)6196-9060

France
RICOH FRANCE S.A.
383, Avenue du Général de Gaulle
BP 307-92143 Clamart Cedex
Phone: +33-(0)1-40-94-38-38

Spain
RICOH ESPAÑA S.A.
Av.Litoral Mar, 12-14,
08005 Barcelona
Phone: +34-(0)93-295-7600

Italy
RICOH ITALIA SpA
Via della Metallurgia 12,
37139 Verona
Phone: +39-(0)45-8181500

Hong Kong
RICOH HONG KONG LTD.
23/F., China Overseas Building,
139, Hennessy Road,
Wan Chai, Hong Kong
Phone: +852-2862-2888

Singapore
RICOH ASIA PACIFIC PTE.LTD.
260 Orchard Road,
#15-01/02 The Heeren,
Singapore 238855
Phone: +65-830-5888

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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 may be slightly different from your machine.

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

Operator Safety:

This machine is considered a CDRH class I laser device, safe for office/ EDP use. The machine contains a 5-milliwat, 760 - 800 nanometer wavelength, GaAIAs laser diode. Direct (or indirect reflected) eye contact with the laser beam might cause serious eye damage. Safety precautions and interlock mechanisms have been designed to prevent any possible laser beam exposure to the operator.

Laser Safety:

The Center for Devices and Radiological Health (CDRH) prohibits the repair of laser-based optical unit in the field. The optical housing unit can only be repaired in a factory or at a location with the requisite equipment. The laser subsystem is replaceable in the field by a qualified Customer Engineer. The laser chassis is not repairable in the field. Customer engineers are therefore directed to return all chassis and laser subsystems to the factory or service depot when replacement or the optical subsystem is required.

Warning:

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

Notes:

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

120V, 60Hz, 10A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see ⇒ P.87 *"Power Connection"*.

USA (This information is for facsimile option users only.)

❖ FCC Requirements

1. This equipment complies with Part 68 of the FCC rules. On the cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
2. This equipment uses the following USOC jack: RJ11C
3. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). Contact the telephone company to determine the maximum REN for the calling area.
4. If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
5. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications in order to maintain uninterrupted service.
6. In the event of operation problems (document jam, copy jam, communication error indication), refer to the solving problems section in this manual.
7. If you cannot correct the problem, please contact the RICOH CORP. CUSTOMER SUPPORT DEPT. at 1-800-FASTFIX for repair and warranty information. If it is causing harm to the telephone network, the telephone company may request you to disconnect the equipment from the network until the problem is resolved.
8. This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

❖ WHEN PROGRAMMING EMERGENCY NUMBERS AND/OR MAKING TEST CALLS TO EMERGENCY NUMBERS:

1. Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up.
2. Perform such activities in the off-peak hours, such as early morning hours or late evenings.

CANADA (This information is for facsimile option users only.)

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

In accordance with IEC 60417, this machine uses the following symbols for the main power switch:

| means POWER ON.

⏻ means STAND BY.

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Safety Information

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

Safety During Operation

In this manual, the following important symbols are used:

⚠ ***WARNING:***
Ignoring this warning could cause serious injury or even death.

⚠ ***CAUTION:***
Ignoring this caution could cause injury or damage to property.

Examples Of Indications



Symbols ⚠ mean a situation that requires you take care.



Symbols ⚠ mean "Hot surface".



Do NOT carry out the operation represented by this symbol ⃠.
This example means "Do not take apart".



Symbols ● mean you MUST perform this operation.
This example means "You must remove the wall plug".

⚠ *WARNING:*



- ***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.***



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



- ***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 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.***



- ***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.***
- ***If metal, liquid or foreign matter falls into the machine, turn off the operation and main power switches, and unplug the main power cord. Contact your service representative. Do not keep using the machine with a fault or defect.***



- ***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 used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.***

⚠ *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.*



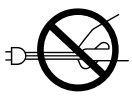
- *After you move the machine, fix it with the caster fixture. Otherwise, the machine might move or come down to cause a personal injury.*



- *Before moving the machine, be sure to pull all four handles fully out. Not doing this may result in an injury, such as getting your fingers pinched. After moving the machine, return the four handles to their original positions.*
- *When the optional paper tray unit is installed, do not push the upper part of the main unit horizontally. If the paper tray unit becomes detached from the main unit, this could cause an injury.*



- *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.*



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



- *If you use the machine in a confined space, make sure there is a continuous air turnover.*



- *Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.*



- *When removing misfed paper, do not touch the fusing section because it could be very hot.*



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



- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner containers out of reach of children.*



- *This equipment is only to be installed by a qualified service personnel.*



- *Deliver to collection point for waste products. Do not be disposed of via domestic refuse collection.*

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

- Low-power Mode

This product automatically lowers its power consumption 15 minutes after the last copying or printing. To exit Low-power mode, press the【**Energy Saver**】key.
For how to change the default interval before entering Low-power mode, see"Energy Saver Timer"of the"System Settings".

- Sleep Mode (Machines with fax or printer option.)

This product automatically lowers its power consumption 15 minutes after the last copying or printing even further. Printing a received fax and printing are available in this mode, but If you use the copier, press the operation switch.
For how to change the default interval before entering Sleep mode, see"Auto Off Timer"of the "System Settings".

- Auto Off Mode (Machines with copier feature only.)

To conserve energy, this copier automatically turns off 30 minutes after the last copying job has been completed. To exit the Auto Off Mode, turn on the main switch. For how to change the default interval before entering Auto Off mode, see"Auto Off Timer"of the "System Settings".

Specification

<table>
<tr><td rowspan="2"></td><td rowspan="2"></td><td colspan="2">Copier only</td><td colspan="2">Fax or Printer is installed.</td></tr>
<tr><td>Level 1</td><td>Level 2</td><td>Level 1</td><td>Level 2</td></tr>
<tr><td rowspan="3">Low-power Mode</td><td>Power consumption</td><td>about 60W</td><td>about 30W</td><td>about 74W</td><td>about 50W</td></tr>
<tr><td>Default interval</td><td colspan="4">15min.</td></tr>
<tr><td>Recovery time</td><td>10 sec.</td><td>20 sec.</td><td>10 sec.</td><td>20 sec.</td></tr>
<tr><td rowspan="2">Sleep Mode*1</td><td>Power consumption</td><td colspan="2" rowspan="2">Not Available</td><td colspan="2">less than 36W *3</td></tr>
<tr><td>Default interval</td><td colspan="2">30 min.</td></tr>
<tr><td rowspan="2">Auto Off Mode*2</td><td>Power consumption</td><td colspan="2">0W*3</td><td colspan="2" rowspan="2">Not Available</td></tr>
<tr><td>Default interval</td><td colspan="2">30 min.</td></tr>
</table>

*1 Fax or Printer function in addition to standard Copier function.
*2 Only for Copier function.
*3 Based on Energy Star measurements.

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:

⚠ ***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.

⚠ ***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.

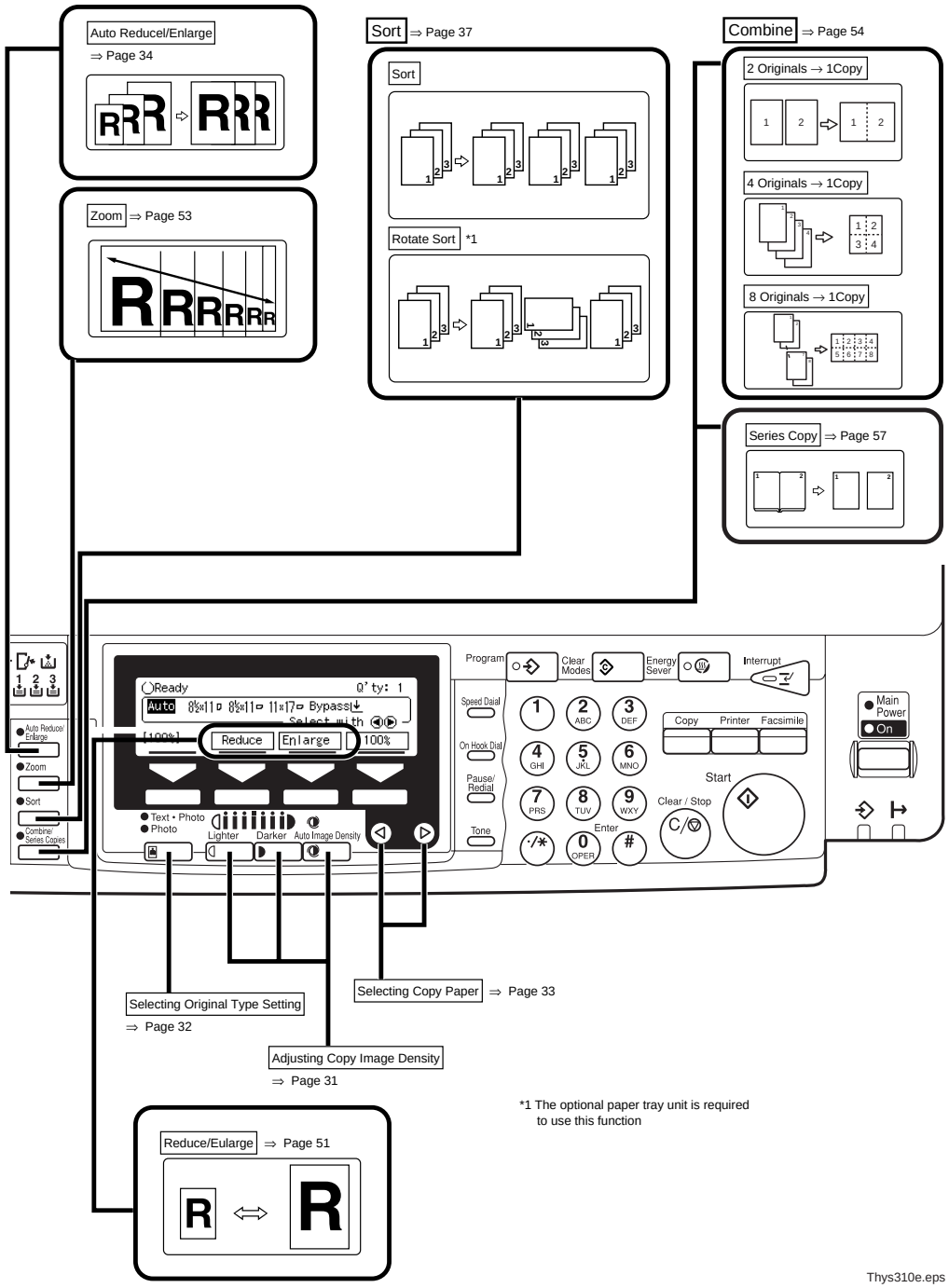
Limitation
This symbol indicates numerical limits, functions that cannot be used together, or conditions in which a particular function cannot be used.

Reference
This symbol indicates a reference.

[ ]
Keys that appear on the machine's panel display.

【 】
Keys built into the machine's operation panel.

What You Can Do with this Machine (Copy Mode)



*1 The optional paper tray unit is required to use this function

Thys310e.eps

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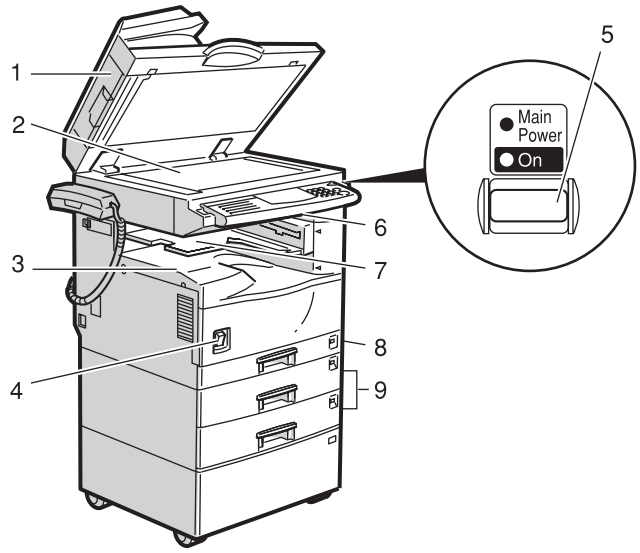
Guide to Components



1. **Platen cover (option) or Document Feeder (ADF) (option)**
Lower the platen cover over originals placed on the exposure glass for copying. If you have the document feeder, insert a stack of originals here. They will be fed automatically.
(The illustration shows the document feeder.)

2. **Exposure glass**
Position originals here face down for copying. See ⇒ P.14 *"Originals"*.

3. **Internal tray**
Copied paper is delivered here face down.

4. **Main power switch**
The Machine with copy feature only:
Turn on this switch to activate the machine. Turn off this switch to shut off.
The Machine with fax or printer option:
Do not touch this switch. This switch is used only by a service representative when the optional fax unit is installed.

Note

❒ If the machine does not operate after turning on the operation switch, check if the main power switch is turned on. If it is off, turn it on.

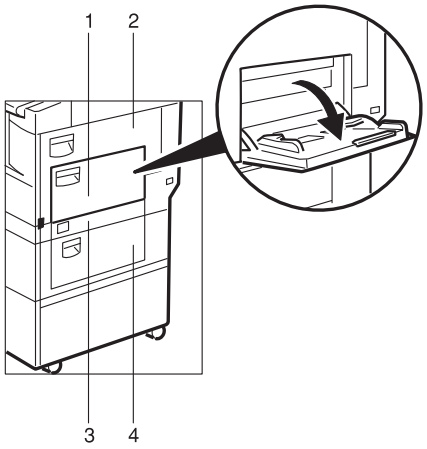
5. **Operation switch**
The Machine with fax or priner option:
Press this switch to turn the power on (the **On** indicator lights up). To turn the power off, press this switch again (the **On** indicator goes off).

6. **Operation panel**
See ⇒ P.4 *"Operation Panel"*.

7. **Internal tray 2 (option)**
You can specify a tray to which documents are delivered for each mode (copy, facsimile, and printer.)

8. **Paper tray (Tray 1)**
Set paper here. See ⇒ P.66 *"Loading Paper"*.

9. **Paper tray unit (Tray 2, 3) (option)**



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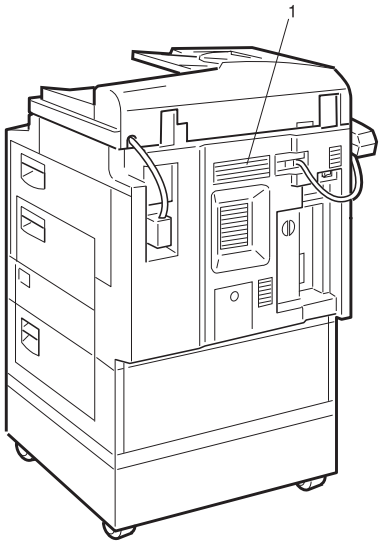
1. Bypass tray
Use to copy onto OHP transparencies, adhesive labels, translucent paper, post cards, envelopes and non-standard size paper. See ⇒ P.39 *"Copying from the Bypass Tray"*.

2. Side cover
Open to remove jammed paper fed from the paper tray, or to replace the toner cartridge.

3. Paper tray side cover
Open this cover to remove jammed paper which fed from the paper tray unit.

4. Optional paper tray side cover
Open this cover to remove jammed paper which fed from the optional paper tray unit.



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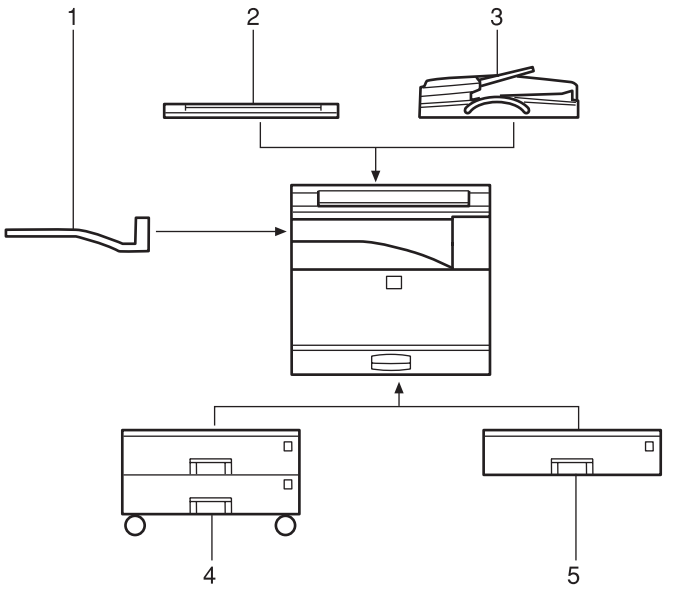
1. Ventilation hole
Prevents overheating. Do not obstruct the ventilation hole by placing or leaning an object near it. If the machine overheats, a fault might occur.

Options



THYH070E

1. Internal tray 2 (1 bin tray)

If you selected this as the output tray, copied paper is delivered here face down. See "14. Output Tray Prio." in the "System Settings".

2. Platen cover

Lower this cover over originals for copying.

3. Document feeder (ADF)

Insert a stack of originals here.

They will be fed automatically.

4. Paper tray unit

Consists of two paper trays.

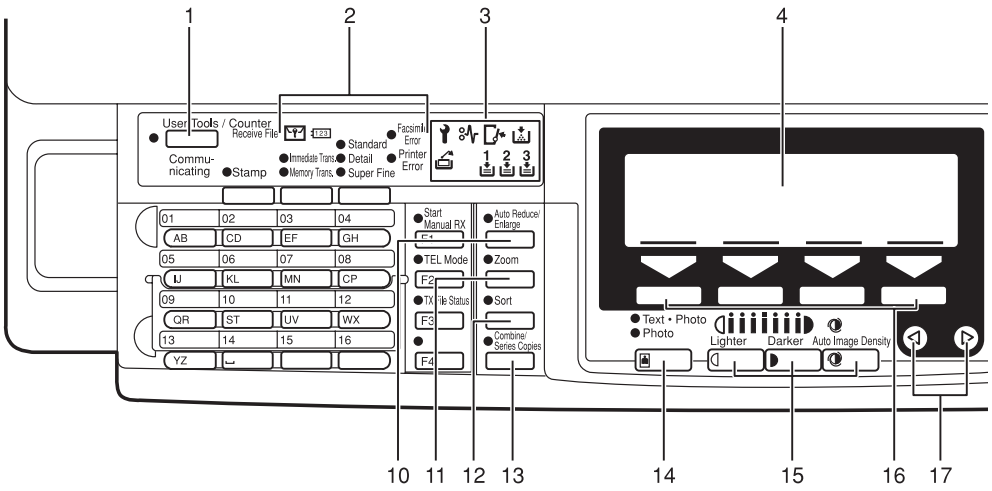
5. Paper tray unit

Consist of one paper tray.

Other options:

- 48MB copier memory unit

Operation Panel



1. 【User Tools/Counter】 key

- User Tools
  Press to change the default settings and conditions to meet your requirements.
- Counter
  Press to check or print the total number of copies made.
  See ⇒ P.75 *"User Tools (Copy Features)"*.

2. Operation panel for facsimile mode (for machine with optional fax function)

See the "Facsimile Reference".

3. Indicators

These indicators show errors or the status of the machine.

See ⇒ P.61 *"What to do If Something Goes Wrong"*.

4. Panel display

Shows operation status, error messages, and function menus. See ⇒ P.6 *"Panel Display"*.

5. 【Program】 key

Press to select the program mode. See ⇒ P.47 *"Program—Storing Your Copy Settings in Memory"*.

6. 【Clear Modes】 key

Press to clear the previously entered copy job settings.

7. 【Energy Saver】 key

Use to switch to and from Energy Saver mode. See ⇒ P.49 *"Energy Saver Mode—Saving Energy"*.

8. 【Interrupt】 key

Press to make interrupt copies during a copy run. See ⇒ P.49 *"Interrupt—Temporarily Stopping One Job to Copy Something Else"*.

9. Operation switch

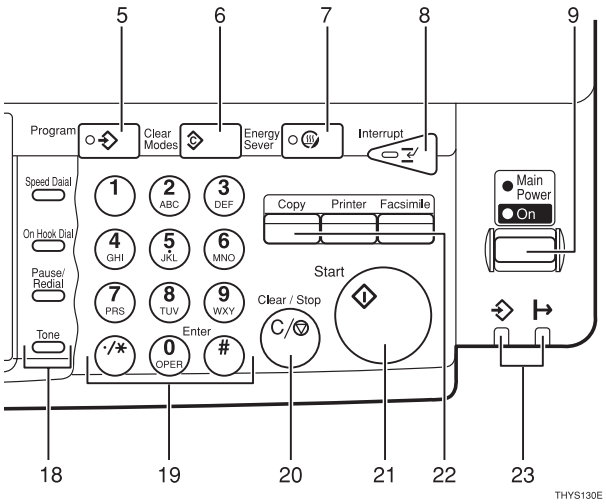
Press this switch to turn the power on (the **On** indicator lights up). To turn the power off, press this switch again (the **On** indicator goes off).

10. 【Auto Reduce/Enlarge】 key

Enlarges or reduces the image automatically according to the specified paper size.

11. 【Zoom】 key

Changes the reproduction ratio in 1% steps.



12. 【Sort】 key

Sort/Rotate Sort: automatically sorts copies.

13. 【Combine/Series Copy】 key

Press to select "Combine" or "Series Copy".

14. 【Original Type】 key

Press to select the type of your originals.

15. 【Lighter】 and 【Darker】 keys and 【Auto Image Density】 key

Adjusts the copy image density.

16. Selection keys

Press the key under the item you wish to select.

17. ◁▷ keys (Cursor keys)

Press to select an item on the panel display.

18. Operation panel for facsimile mode (for machines with optional fax function)

See the "Facsimile Reference".

19. 【Number】 keys

Use to enter the desired number of copies and data for selected modes.

Use the 【#】 key to enter data in selected modes.

20. 【Clear/Stop】 key

While entering numbers, press to cancel a number to have entered. While copying, press to stop copying.

21. 【Start】 key

Press to start copying. Use to set the Auto Start. See ⇒ P.50 *"Auto Start—Entering Copy Job Settings During the Warm-up Period"*.

22. Function keys

Press to change modes. To use copy functions, press the 【Copy】 key.

23. Indicators (with the printer option)

These indicators shows the status of the printer.

See the "Printer Reference".

Panel Display

The panel display shows operational status, error messages, and function menus.

Important

❒ Do not apply a strong shock or force of about 30N (about 3kgf) or more to the panel display. Otherwise, the display might be damaged.

Note

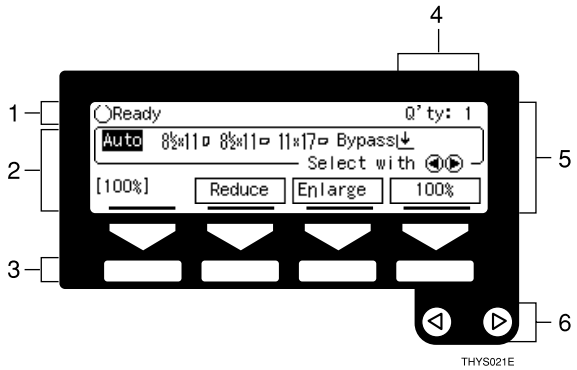
❒ When you select or specify an item on the panel display, it is highlighted like Auto.

❒ Keys appearing as OK cannot be used.

❒ By default, the machine is in Copy mode when you switch on. This can be changed. See "Settings You Can Change With The User Tools" of the System Settings.

Displays and Key Operations

❖ Copy initial display



1. **The machine status and messages appear here.**

2. **Items which can be selected or specified.**

3. **These four keys correspond to the keys that are in the bottom line of the display (e.g.[Reduce], [Enlarge], and [100%] in the above display).**
Press the relevant key to select a key in the display.

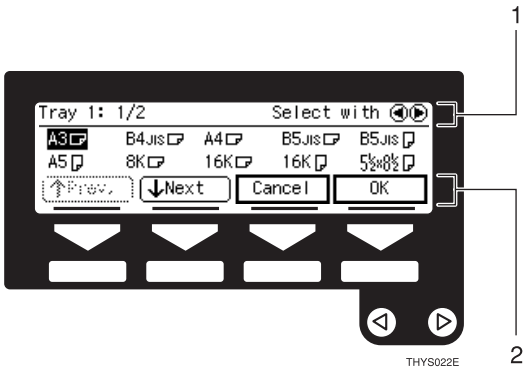
4. **Number of copies set.**

5. **Setting for this function.**

6. **Press these keys to select an item on the display.**

- To move the selection to the left, press the ◁ key.
- To move the selection to the right, press the ▷ key.

❖ Function menu display



1. **Displays operational status or message.**

2. **Displays items which can be selected or specified.**

❖ Common keys

[OK]	Sets a selected function or entered value and returns to the previous display.
[Cancel]	Cancels a selected function or entered value and returns to the previous display.
[↑Prev.][↓Next]	When there are too many items fit on the display, use these keys to move between pages.
◁▷	Press to highlight the selection you wish to select.
[Prev Menu]	Press to return to the previous menu.
[Exit]	Sets a selected function or entered value and returns to the initial display.

Starting the Machine

To start the machine, turn on the operation switch.

Note

❒ This machine automatically enters Energy Saver mode or turns itself off if you do not use the machine for a while. See "08. Energy Saver Timer", "09. Auto Off Timer" of the System Settings.

Power switches

This machine has two power switches: See ⇒ P.1 *"Guide to Components"*.

❖ **Operation switch (right side of the operation panel)**

The Machine only with Fax or Printer option:
Turn on this switch to activate the machine. When the machine has warmed up, you can make copies or send faxes.

❖ **Main power switch (left side of the front panel)**

The machine only with copy feature:
Turn on this switch to activate the machine. Turn off this switch to shut off.
The machine with Fax or Printer option:
Do not touch the main power switch. It should be used only by a service representative when the optional fax unit is installed.

Important

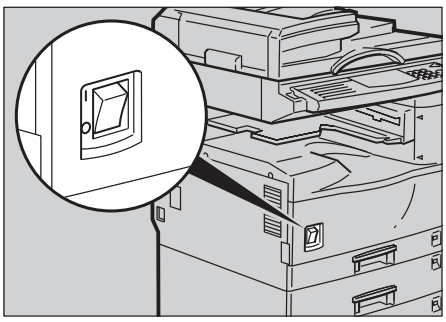
❒ If you leave the main power switch off for more than about one hour, all fax files in memory will be lost. See "Turning Off The Power" of the Facsimile Reference.

When the Machine Only with Copy Feature

Turning on the power

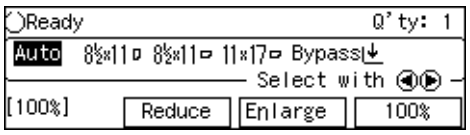
1 Make sure that the power cord is plugged into the wall outlet firmly.

2 Turn the main switch on.



THYH240E

The panel display will come on.



Note

❒ During the warm-up period (less than 30 seconds.), you can use the Auto Start function. See ⇒ P.50 *"Auto Start—Entering Copy Job Settings During the Warm-up Period"*.

When the machine is set for user codes

1 **Enter your user code using the 【Number】 keys. Then press the 【#】 key.**

Note

❒ To prevent others from making copies with your user code, press the 【Clear Modes】 key and the 【Clear/Stop】 key simultaneously after copying.

Reference

For setting user codes, see ⇒ P.81 *"1. General Features4/4"*.

When the 【Energy Saver】 indicator is lit

The machine is in Energy Saver mode.

1 **Press the 【Energy Saver】 key.**

The machine will return to the ready condition.

Note

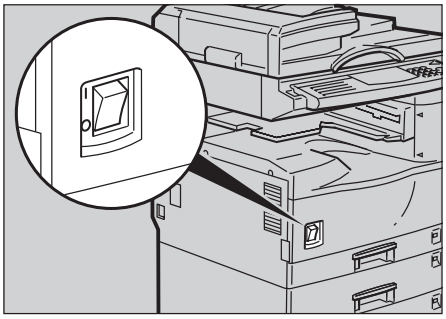
❒ The machine will also return to the ready condition when an original is set in the document feeder, or when the platen cover or document feeder is opened.

Reference

See "08. Energy Saver Timer" of the System Settings.

Turning off the power

1 **Turn the main switch off.**



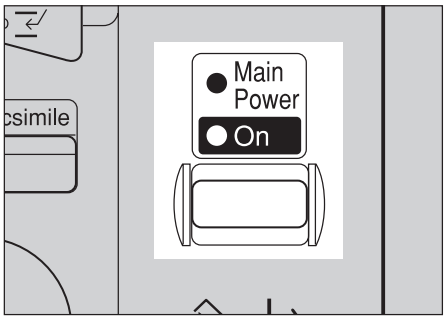
THYH240E

When the Machine with Fax or Printer Option

Turning on the power

1 **Make sure that the power cord is plugged into the wall outlet firmly and the Main Power indicator is lit.**

2 **Press the operation switch to make the On indicator light up.**



The panel display will come on.



Note

❒ During the warm-up period (less than 30 seconds.), you can use the Auto Start function. See ⇒ P.50 *"Auto Start—Entering Copy Job Settings During the Warm-up Period"*.

When the machine is set for user codes

1 **Enter your user code using the 【Number】 keys. Then press the 【#】 key.**

Note

❒ To prevent others from making copies with your user code, press the 【Clear Modes】 key and the 【Clear/Stop】 key simultaneously after copying.

Reference

For setting user codes, see ⇒ P.81 *"1. General Features4/4"*.

When the 【Energy Saver】 indicator is lit

The machine is in Energy Saver mode.

1 **Press the 【Energy Saver】 key.**

The machine will return to the ready condition.

Note

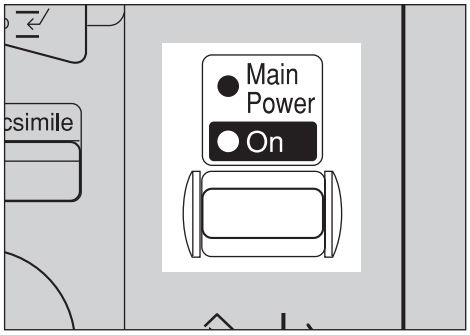
❒ The machine will also return to the ready condition when an original is set in the document feeder, or when the platen cover or document feeder is opened.

Reference

See "08. Energy Saver Timer" of the System Settings.

Turning off The power

1 **Turn the operation switch off.**

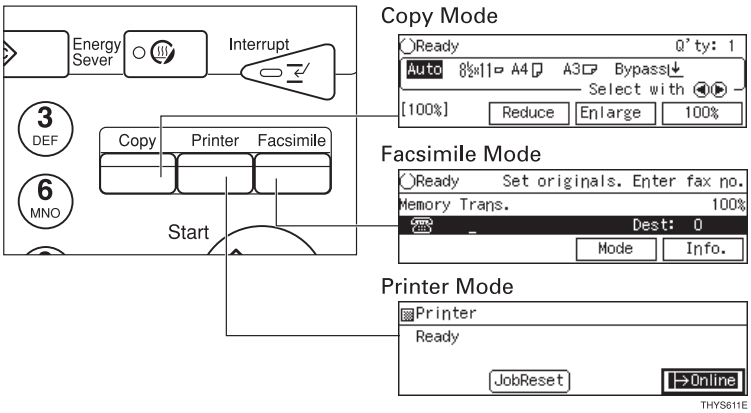


Important

- If you want to unplug the power cord or turn off the main power switch, make sure that the remaining memory space indicates 100% on the display for facsimile mode.
- Fax files stored in memory will be lost an hour after you turn the main power switch off or you unplug the power cord. See "Turning Off The Power" of the Facsimile Referencre.

Changing Modes

You can use this machine not only as a copier, but optionally as a fax or printer machine as well. Press the【**Copy**】key to use copy functions, press the【**Fax**】key to use facsimile functions, or press the【**Printer**】key to use printer functions.



Limitation

❒ You cannot switch modes in any of the following cases:

- When scanning in a fax message for transmission.
- During immediate transmission.
- When accessing the user tools.
- During interrupt copying.

Originals

Sizes and Weights of Recommended Originals

❖ Metric version

Where original is set	Original Size	Original Weight
Exposure glass	Up to A3	--
Document feeder	A3 – A5	40 – 128g/m^2

❖ Inch version

Where original is set	Original Size	Original Weight
Exposure glass	Up to 11" × 17"	--
Document feeder	11" × 17" – $5^1/_2$" × $8^1/_2$"	11 – 34 lb

Non-recommended originals for the document feeder

Setting the following originals in the document feeder might cause paper misfeeds or damage to the originals. Set these originals on the exposure glass.

- Originals other than those specified in ⇒ P.14 *"Sizes and Weights of Recommended Originals"*
- Stapled or clipped originals
- Perforated or torn originals
- Curled, folded, or creased originals
- Pasted originals
- Originals with any kind of coating, such as thermal fax paper, art paper, aluminum foil, carbon paper, or conductive paper
- Originals with indexes, tags, or other projecting parts
- Sticky originals such as translucent paper
- Thin original that has low stiffness
- Originals of inappropriate weight ⇒ P.14 *"Sizes and Weights of Recommended Originals"*
- Bound originals such as books
- Transparent originals such as OHP transparencies or translucent paper

Sizes Difficult to Detect

It is difficult for the machine to detect the sizes of the following originals, so select the paper size manually.

- Originals with indexes, tags, or other projecting parts
- Transparent originals such as OHP transparencies or translucent paper
- Dark originals with many letters and drawings
- Originals which partially contain solid image
- Originals which have solid image at their edges
- Originals other than those (with ❍) in the table below. See ⇒ P.15 *"Sizes detectable by the Auto Paper Select"*.

Sizes detectable by the Auto Paper Select

❖ **Metric version**

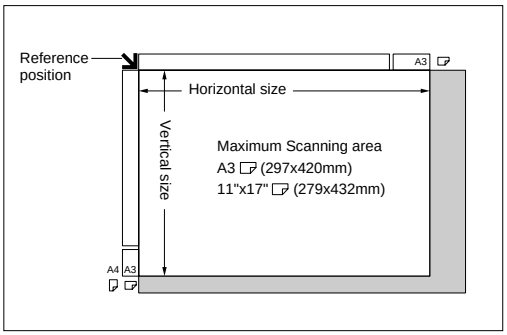
Size / Place of original	A3 ▭	B4 ▭	A4 ▯▭	B5 ▯▭	A5 ▯▭	11" × 17"▭	8 1/2" × 14"▭	8 1/2"× 11" ▯ ▭	5 1/2" × 8 1/2" ▯▭	8 1/2" × 13"▭
Exposure glass	❍	❍	❍	❍	×	×	×	×	×	❍
Document feeder	❍	❍	❍	❍	❍	×	×	×	×	❍

❖ **Inch version**

Size / Place of original	A3 ▭	B4 ▭	A4 ▯ ▭	B5 ▯ ▭	A5 ▯ ▭	11" ×17 ▭	8 1/2" ×14" ▭	8 1/2" ×11" ▯▭	10" ×8"▭	8 1/2" ×13" ▭	10" ×14" ▭	5 1/2" ×8 1/2" ▯▭
Exposure glass	×	×	×	×	×	❍	❍	❍	❍	❍	❍	×
Document feeder	×	×	×	×	×	❍	❍	❍	×	×	❍	❍

Original Sizes and Scanning Area/Missing Image Area

❖ Exposure glass



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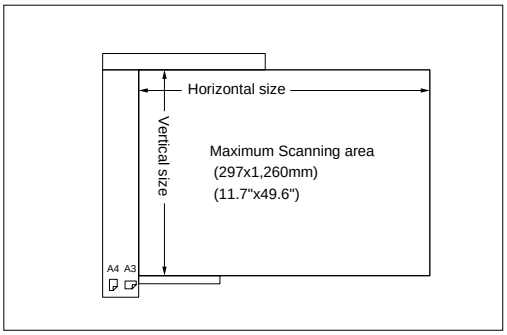
❖ Document feeder



CP02AEE

❗ Limitation

❒ Even if you correctly set originals in the document feeder or on the exposure glass, 0.5mm – 3.5mm margins on top and left sides or 0.5mm margins on botton and right sides might not be copied.

Copy Paper

Recommended Paper Sizes and Types

The following limitations apply to each tray:

	Metric version	Inch version	Paper weight	Paper capacity
Paper tray (Tray 1) (Adjust the paper size selector)	A3, A4, A5, $8^1/_2$" × 11", $8^1/_2$" × 13"	A4, 11" × 17", $8^1/_2$" × 14", $8^1/_2$" × 11", $8^1/_2$" × 13"	60 – 90 g/m², 16 – 24 lb	250 sheets
Paper tray (Tray 1) (Specify the size with "11.Special Pap." of the System settings.)	B4, B5, 8K*1, 16K*2, 11" × 17", $8^1/_2$" × 14", $8^1/_2$" × 11", $8^1/_2$" × $5^1/_2$", $7^1/_4$" × $10^1/_2$", 8" × 13", $8^1/_4$" × 13", 8" × 10", $8^1/_4$" × 14"	A3, B4, A4, B5, A5, 8K*1, 16K*2, 11" × 17", $8^1/_2$" × $5^1/_2$", $7^1/_4$" × $10^1/_2$", 8" × 13", $8^1/_4$" × 13", 8" × 10", $8^1/_4$" × 14"		
Paper tray unit*3 (Tray 2, 3) (Adjust the paper size selector)	A3, A4, 11" × 17", $8^1/_2$" × 14", $8^1/_2$" × 11",			500 sheets
Paper tray unit*3 (Tray 2, 3) (Specify the size with "11.Special Pap." of the System settings.)	B4, B5, A5, 8K*1, 16K*2, $8^1/_2$" × $5^1/_2$", $7^1/_4$" × $10^1/_2$", 8" × 13", $8^1/_2$" × 13", $8^1/_4$" × 13", 8" × 10", 8" × $10^1/_2$", $8^1/_4$" × 14", 10" × 15", 11" × 15", 10" × 14", 11" × 14"			

*1 8K(Ba-Kai) = 267 × 340mm (10.6" × 15.4")

*2 16K(Shi-Lui-Kai) = 195 × 267mm (7.7" × 10.6")

*3 Paper tray unit is option.

Bypass tray	Metric version	Inch version	Paper weight	Paper capacity
Standard size (Plain paper)	A4⬓, A5⬓	$8^1/_2$" × 11"⬓	60 – 104 g/m², 16 – 27 lb	100 sheets
	A3⬓, 8" × 13"⬓	11" × 17"⬓		10 sheets
Standard size (Thick paper)*5	A3⬓, A4⬓, A5⬓, 8" × 13"⬓	11" × 17"⬓, $8^1/_2$" × 11"⬓	105 – 162 g/m², 28 – 43 lb	10 sheet
Standard size (Plain paper)*6	A4⬓, B5⬓⬓, A5⬓, B6⬓, 16K*2⬓⬓, $8^1/_2$" × 11"⬓⬓, $8^1/_2$" × $5^1/_2$"⬓, $7^1/_4$" × $10^1/_2$"⬓	A4⬓⬓, B5⬓⬓, A5⬓⬓, B6⬓, 16K*2⬓⬓, $8^1/_2$" × 11"⬓, $8^1/_2$" × $5^1/_2$"⬓, $7^1/_4$" × $10^1/_2$"⬓⬓	60 – 104 g/m², 16 – 27 lb	100 sheets
	B4⬓, 8K*1⬓, 11" × 17"⬓, $8^1/_2$" × 14"⬓, $8^1/_2$" × 13"⬓, $8^1/_4$" × 13"⬓	A3⬓, B4⬓, 8K*1⬓, $8^1/_2$" × 14"⬓, 8" × 13"⬓, $8^1/_2$" × 13"⬓, $8^1/_4$" × 13"⬓		10 sheets
Standard size (Thick paper)*5*6	B4⬓, A4⬓, B5⬓⬓, A5⬓, B6⬓, 8K*1⬓, 16K*2⬓⬓, 11" × 17"⬓, $8^1/_2$" × 14"⬓, $8^1/_2$" × 13"⬓, $8^1/_2$" × 11"⬓⬓, $8^1/_2$" × $5^1/_2$"⬓, $7^1/_4$" × $10^1/_2$"⬓, $8^1/_4$" × 13"⬓	A3⬓, B4⬓, A4⬓⬓, B5⬓⬓, A5⬓⬓, B6⬓, 8K*1⬓, 16K*2⬓⬓, $8^1/_2$" × 14"⬓, $8^1/_2$" × 11"⬓, $8^1/_2$" × $5^1/_2$"⬓, $7^1/_4$" × $10^1/_2$"⬓⬓, 8" × 13"⬓, $8^1/_2$" × 13"⬓, $8^1/_4$" × 13"⬓	105-162 g/m², 28 – 43 lb	10 sheets

*1 8K(Ba-Kai) = 267 × 340mm (10.6" × 15.4")

*2 16K(Shi-Lui-Kai) = 195 × 267mm (7.7" × 10.6")

*5 When you set thick paper in the bypass tray, you have to specify the paper type **[Thick]**. See ⇒ P.39 *"Copying from the Bypass Tray"*

*6 When you set these standard size paper in the bypass tray, you have to specify the standard size. See ⇒ P.39 *"Copying from the Bypass Tray"*

Bypass tray	Metric version	Inch version	Paper weight	Paper capacity
Custom size*7	Vertical: 90–305 mm Horizontal: 148–1,260 mm	Vertical: 3.5" – 12.0" mm Horizontal: 5.8"–49.6" mm	52–157 g/m², 16 – 42 lb	10 sheet
	Postcards, adhesive labels, translucent paper, OHP transparencies			
Custom size*7 Envelopes	Com#10 Env 241.3 × 104.8 mm, 9.5" × 4.2"		72–90 g/m², 19 – 24 lb	
	C6 Env 162 × 114 mm, 6.4" × 4.5"			
	DL Env 220 × 110 mm, 8.7" × 4.4"			
	Monarch Env 190.5 × 98.4 mm, 7.5" × 3.9"			

*7 When you set these custom size paper in the bypass tray, you have to specify the size. See ⇒ P.39 *"Copying from the Bypass Tray"*.

Important

❒ If you use damp or curled paper, a misfeed might occur. In such a case, try turning over the paper stack in the paper tray. If there is no improvement, change to copy paper with less curl.

Note

❒ Post cards should be fed from the bypass tray.

❒ If OHP transparencies and translucent paper gets double-fed, set pages one sheet at a time.

❒ If you load paper of the same size and in the same direction in two or more trays, the machine automatically shifts to another tray when the tray in use runs out of paper. This function is called Auto Tray Switch. This saves interrupting a copy run to replenish paper even when you make a large number of copies. You can cancel this setting. See "13. Auto Tray Switch" of the System Settings.

Reference

If you want to add paper, see ⇒ P.66 *"Loading Paper"*.

If you want to change the paper size, see ⇒ P.72 *"Changing the Paper Size"*.

Envelopes

Note

1

❒ When copying on envelopes, use the bypass tray and specify the size. See⇒ P.43 *"When Copying onto Envelopes"*.

❒ Specification of envelopes are follows:

	Metric version	Inch version
Weight	72 - 90 g/m^2	19 - 24 lb
Recommended weight and size	72 g/m^2, 114 × 162 mm (C6 Env)	24 lb, $3^7/_8$" × $7^1/_2$" (Monarch)

❒ You can load up to 10 envelopes (72 - 90 g/m^2, 19 - 24 lb) onto the bypass tray at a time, without forcibly preassign them. However, make sure that the envelopes are not damp, and that the top of the stack is not higher than the limit mark on the side guide ⇒ P.43 *"When Copying onto Envelopes"*.

❒ Load the envelopes with the flaps aligned to the right side fence. The flaps should be securely folded down.

❒ Make sure that there is no air in the envelopes before setting.

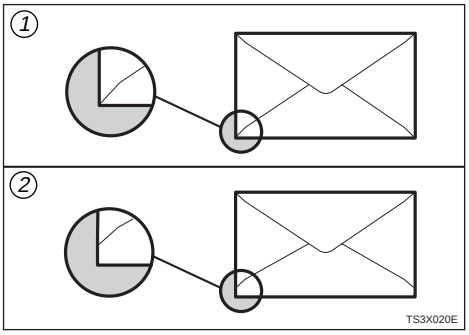
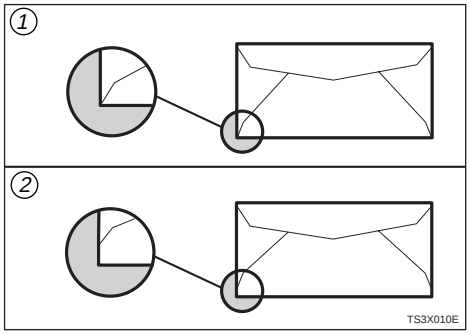
❒ To get the better copy quality, it is recommended that you set the right, left, top, and bottom margin, to at least 15 mm (0.6") each.

❒ Do not copy on both sides of envelopes.

❒ Load only one size and type of envelope at a time.

❒ Before loading envelopes, flatten the leading edges (side being fed into the printer) of them by running a pencil or ruler across them.

❒ Before setting envelopes, make sure that they are rectangular in shape. Refer to the following illustrations.

Metric version	Inch version
	
①Good construction for envelopes ②Poor construction for envelopes	①Good construction for envelopes ②Poor construction for envelopes

❒ Avoid using the non-supported envelopes listed on P.21 *"Non-recommended Paper"*

Limitation

❒ Even if you use the reccommended types of envelope as notes above, copied envelopes may come out wrinkled or smudged.

Non-recommended Paper

⚠ CAUTION:

- *Do not reuse stapled paper. Do not use aluminum foil, carbon-containing paper or other conductive paper. Otherwise, a fire might occur.*

Important

❒ Do not use paper with any kind of coating such as:

- Thermal fax paper
- Art paper
- Aluminum foil
- Carbon paper
- Conductive paper

❒ Otherwise, a fault might occur.

❒ Do not use copy paper that has been already copied on. Otherwise, a fault might occur.

Note

❒ Do not use the following type of paper because a paper misfeed might occur.
- Bent, folded, or creased paper
- Torn paper
- Slippery paper
- Perforated paper
- Rough paper
- Thin paper that has low stiffness
- Paper with much paper dust on its surface

❒ Do not use envelopes in the following conditions.
- damp
- excessively curled or twisted
- stuck together
- damaged in any way
- with stamps attached
- with windows, holes, perforations, cutouts, or embossing
- with metal clasps, string ties, or metal folding bars
- designed to be interlocked
- with nicked edges of bent corners
- with rough, cockle, or laid finishes
- with any exposed adhesive, when the flap is in the sealed or closed position.

❒ If you make a copy on rough grain paper, the copy image might be blurred.

❒ Do not use paper which has been copied or printed on.

Paper Storage

Note

❒ When storing paper, the following precautions should always be followed:
- Do not store paper where it will be exposed to direct sunlight.
- Avoid storing paper in humid areas (humidity: 70% or less).
- Store on a flat surface.

❒ Keep open reams of papers in the package, and store as you would unopened paper.

❒ Under high temperature and high humidity, or low temperature and low humidity conditions, store papers in a vinyl bag.

Toner Cartridge

Handling Toner

⚠ ***WARNING:***



- ***Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.***

⚠ ***CAUTION:***



- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner containers out of reach of children.*

⚠ ***CAUTION:***



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

Important

❒ If you use toner cartridge other than that recommended, a fault might occur.

Reference

If you want to replace the toner cartridge, see ⇒ P.67 "*Replacing the Toner Cartridge*".

Toner Storage

Note

❒ When storing the toner cartridge, the following precautions should always be followed:

- Store the toner cartridge containers in a cool, dry place free from direct sunlight.
- Do not store the toner cartridge where it will be exposed to heat.
- Do not eat or swallow toner, and keep it out of reach of children.
- Store on a flat surface.

Basic Procedure

1 **When the machine is set for user code, enter the user code with the 【Number】 keys and then press the 【#】 key.**

Reference

See ⇒ P.49 *"User Codes"*.

2 **Make sure that the machine is in Copy mode.**



Note

❒ If not, press the 【Copy】 key.

3 **Make sure that there are no previous settings remaining.**

Note

❒ To clear settings, press the 【Clear Modes】 key.

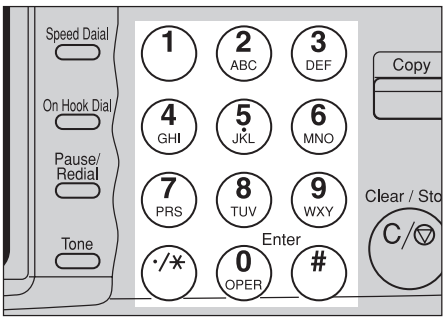
4 **Set your originals.**

Reference

See ⇒ P.27 *"Setting Originals"*.

5 **Set your desired settings.**

6 **Enter the number of copies required with the 【Number】 keys.**



Note

❒ The maximum copy quantity can be set between 1 and 99 (default: *99*). See "05. Max. Copy Q'ty" in ⇒ P.78 *"1. General Features 1/4"*.

❒ To change the number entered, press the 【Clear/Stop】 key and enter the new number.

7 **Press the 【Start】 key.**

The machine starts copying.

Note

❒ To stop the machine during the multi-copy run, press the 【Clear/Stop】 key.

❒ To return the machine to the initial condition after copying, press the 【Clear Modes】 key.

Auto Reset

The machine returns to its initial condition automatically after your job is finished, after a certain period of time. This function is called "Auto Reset".

Note

❒ You can change the Auto Reset time. See "09. Copy Auto Reset" in ⇒ P.80 *"1. General Features $^{3}/_{4}$"*.

Auto Off

The machine turns itself off automatically after your job is finished, after a certain period of time. This function is called "Auto Off".

Note

❒ You can change the Auto Off time. See "09. Auto Off Timer" in the System Settings.

❒ You can change the default settings for basic functions. See ⇒ P.78 *"Settings You Can Change with the User Tools"* and "USER TOOLS (SYSTEM SETTINGS)" in the System Settings.

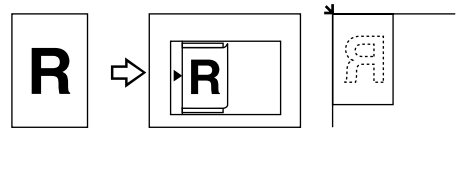
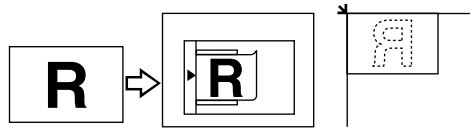
Setting Originals

Limitation

❒ Set the original after correction fluid and ink has completely dried. Not taking this precaution could mark the exposure glass and cause marks to be copied.

Note

❒ Basically the originals should be aligned to the rear left corner. However, some copy functions may produce different results depending on the direction of the originals. For details, see explanations of each function.

Originals	Set in the document feeder	Set on the exposure glass
 set11EE		
 set22EE		

Reference

See ⇒ P.14 *"Originals"*.

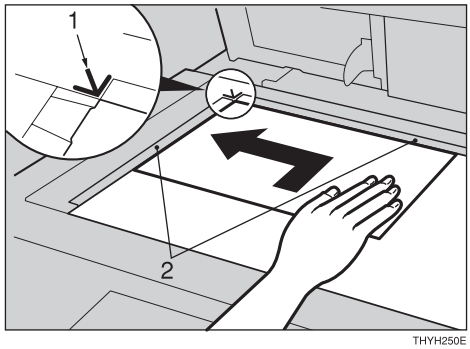
Setting Originals on the Exposure Glass

1 Lift the platen cover or the document feeder.

Note

❒ Be sure to open the platen cover or the document feeder by more than 30°, otherwise the original size might not be detected correctly.

2 Set the original face down on the exposure glass. Slide your original up to the blue scale, then into the left corner of the exposure glass as shown.



THYH250E

1: Reference mark

2: Scale

3 Lower the platen cover or the document feeder.

Setting Originals in the Document Feeder

Important

❒ When copying onto translucent paper, set your originals one at a time in the document feeder to avoid multiple feeds and damage to originals. See⇒ P.29 *"Setting one original at a time (SADF) mode"*

Note

❒ Do not stack originals above the limit mark.

❒ The original might become dirty if it is written with a pencil or similar tools.

❒ If your original contains pages of different sizes, set the pages one at a time in the ADF. See⇒ P.29 *"Setting one original at a time (SADF) mode"*.

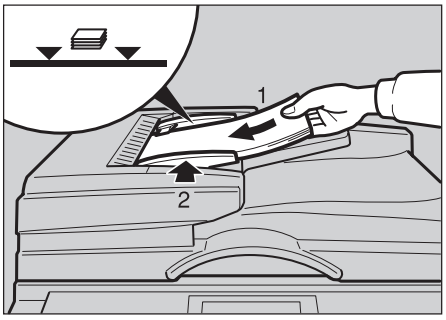
❒ When setting documents whose sizes cannot be scanned from the ADF, select Custom Size. See ⇒ P.29 *"Setting Originals When Auto Paper Select Cannot Recognize the Size"*.

Reference

Regarding originals that the document feeder can handle, see ⇒ P.14 *"Originals"*.

Setting a stack of originals in the document feeder

1 Set the aligned originals face up into the document feeder.



Note

❒ To avoid a multi-sheet feed, shuffle the originals before setting them in the document feeder.

2 Adjust the guide to the original size.

Setting one original at a time (SADF) mode

Important

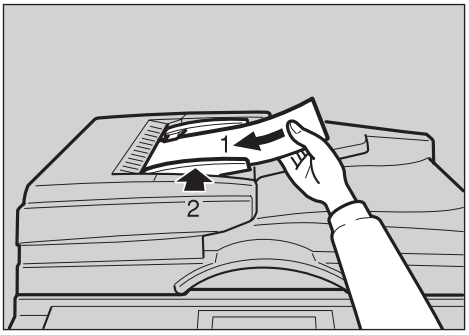
- ❒ Hold the document from the front when setting it. If your hand covers the internal sensor, it will not operate correctly and the original could be damaged.
- ❒ When setting pages of documents 1 page at a time in the ADF using Auto Paper Select and Auto Reduce/Enlarge, these features adapt to the size of the scanned original.

1 Set one original face up into the document feeder. Then, press the 【Start】 key.

The Auto Feed indicator is lit.

2 Set the next original while the Auto Feed indicator is lit.

The second and subsequent originals can be fed automatically without pressing the 【Start】 key.



THYH260E

Note

- ❒ You can adjust the time the machine waits before being ready for the next original. See "SADF Auto Reset" in ⇒ P.82 *"2. Input/Output"*.

Setting Originals When Auto Paper Select Cannot Recognize the Size

When you wish to use Auto Reduce/Enlarge when setting non-standard size documents in the ADF, specify the size of your original using the following procedure.

Important

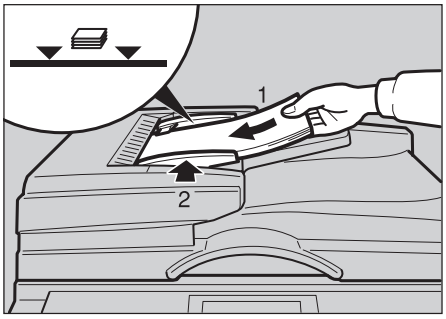
- ❒ Be sure to press the 【Clear Modes】 key after copying non-standard size originals to clear any settings. Not taking this precaution could result in damage to originals set in the ADF.

Limitation

- ❒ You cannot specify the original size when using Auto Paper Select.
- ❒ Acceptable Document Sizes
  Vertical:105 - 297mm
  (4.1″-11.7″)
  Horizontal: 128 - 1,260mm
  (5.0″-17.0″)

1 Set the aligned originals face up into the document feeder.

2 Adjust the guide to the original size.



THYH080E

Note

❒ To avoid a multi-sheet feed, shuffle the originals before settings them in the document feeder.

❒ You can set one original at a time. See ⇒ P.29 *"Setting one original at a time (SADF) mode"*

2

3 Press the ◁▷ key to choose the tray from the paper tray, paper tray unit (option), or the bypass tray.

4 Press the【#】key.

When you select tray1-3

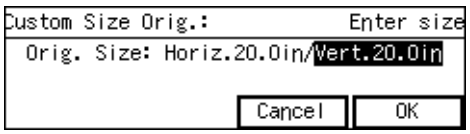
❶ Enter the Horizontal size with the【Number】keys. Then press the【#】key.



Note

❒ To change the number enterd, press the【Clear/Stop】key and enter the new number.

❷ Enter the Vertical size with the【Number】keys. Then press the [OK] key.



<⎙✳> appeared in exchange for [Auto] after the sizes setted.



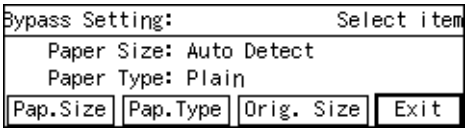
Note

❒ To change the number enterd, press the【Clear/Stop】key and enter the new number.

When you select the bypass tray

❶ Press the【#】key.

❷ Press the [Orig. Size] key.



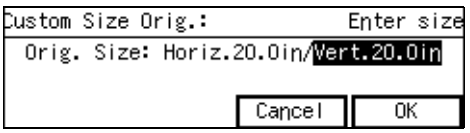
❸ Enter the Horizontal size with the【Number】keys. Then press the【#】key.



Note

❒ To change the number enterd, press the【Clear/Stop】key and enter the new number.

❹ Enter the Vertical size with the【Number】keys. Then press the [OK] key.



<⎙✳> appeared in exchange for [Auto] after the size setted.



Note

❒ To change the number enterd, press the【Clear/Stop】key and enter the new number.

Basic Functions

The following basic functions are explained in this section.

❖ **Adjusting Copy Image Density**
Auto and Manual Image Density

❖ **Selecting Original Type Setting**
Text, Text·Photo, Photo

❖ **Selecting Copy Paper**
Auto Paper Select and Manual Paper Select

❖ **Auto Reduce/Enlarge**
The machine can choose an appropriate reproduction ratio based on the paper and original sizes you select.

Note

❒ You can select functions to be activated when Auto Reset is turned on, when Energy Saver is turned off, or after the machine is powered on. See ⇒ P.78 *"1. General Features 1/4"*.

❒ You can change default settings for basic functions. See ⇒ P.78 *"Settings You Can Change with the User Tools"*.

❒ You can have the settings stored in program 10 used as the initial settings (when the initial display is shown). See ⇒ P.47 *"Program"*, P.80 *"10.Initial Mode set"*

Adjusting Copy Image Density

You can adjust the copy image density to match your originals.

There are three types in this function:

❖ **Auto Image Density**
The machine automatically adjusts the image density.

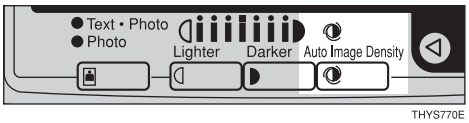
❖ **Manual Image Density**
If you require darker or lighter copies, adjust the image density yourself.

❖ **Combined Auto and Manual Image Density**
Use when copying originals with a dirty background (such as newspapers). You can adjust the foreground density while leaving the background unchanged.

1 Select one of Image Density modes.

Auto image density

❶ Make sure that the Auto Image Density indicator is lit.



THYS770E

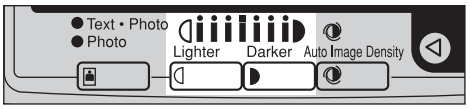
Note

❒ If not, press the 【**Auto Image Density**】 key.

Manual image density

❶ **Press the 【Auto Image Density】 key to cancel it.**

❷ **Press the 【Lighter】 or 【Darker】 key to adjust the image density.**

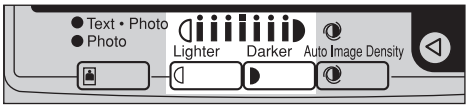


THYS780E

Combined auto and manual image density

❶ **Make sure that the Auto Image Density indicator is lit.**

❷ **Press the 【Lighter】 or 【Darker】 key to adjust the density.**



THYS780E

Selecting Original Type Setting

Select one of the following types to match your originals:

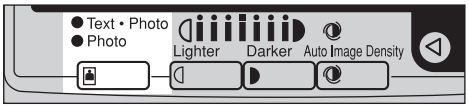
❖ **Text**
Select this mode when your originals contain only letters (no pictures).

❖ **Text·Photo**
Select Text·Photo when your originals contain photographs or pictures with letters.

❖ **Photo**
Delicate tones of photographs and pictures can be reproduced with this mode.

If you do not select any mode, your originals will be scanned with the settings suitable for text originals (Text mode).

1 **Press the 【Original Type】 key and select the original type.**



THYS640E

Note

❒ Press the 【Original Type】 key to step through the following types:

No indicator lit	Text
Text·Photo indicator lit	Text·Photo
Photo indicator lit	Photo

❒ You can specify whether or not the Toner Saving feature is enabled. See *"08. Image Adjustment"* in ⇒ P.79 *"1.Generral Features 2/4"*.

❒ When the Toner Saving mode is specified , the whole image gets lighter.

❒ When you cannot make clear copies, you can adjust the quality level of copies for each of the original types (Text, Text·Photo, Photo). See ⇒ P.63 *"If You Cannot Make Clear Copies"*.

Selecting Copy Paper

There are two ways to select copy paper:

❖ **Auto Paper Select**

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

Note

❒ When the original is set at a different direction from the copy paper in the paper tray with Auto Tray Switch mode ON, the machine automatically rotates the original image by 90° to match the copy paper direction (the paper tray unit (option) is required.). This applies to the following paper sizes:

Metric version	A4 ▯▭, B5 ▯▭
Inch version	$8^1/_2$" × 11" ▯▭

Reference

For Auto Tray Switch, see "13. Auto Tray Switch" in the System Settings.

❖ **Manual Paper Select**

You can select the desired copy paper size manually. You can also select the bypass tray.

Reference

See ⇒ P.39 *"Copying from the Bypass Tray"*.

Note

❒ When you use Auto Paper Select, refer to the following table for possible copy paper sizes and directions. (if the ratio is 100%)

❖ **Metric version**

Where original is set	Original size and direction
Exposure glass	A3 ⧉, B4 ⧉, A4 ⧉⧉, B5 ⧉⧉, 8 1/2" × 13" ⧉
Document feeder	A3 ⧉, B4 ⧉, A4 ⧉⧉, B5 ⧉⧉, A5 ⧉⧉, 8 1/2" × 13" ⧉

❖ **Inch version**

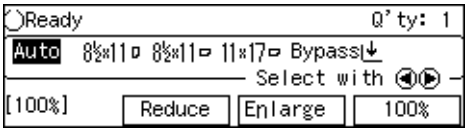
Where original is set	Original size and direction
Exposure glass	11" × 17" ⧉, 8 1/2" × 14" ⧉, 8 1/2" × 11" ⧉⧉, 10" × 8" ⧉, 8 1/2" × 13" ⧉, 10" × 14" ⧉
Document feeder	11" × 17" ⧉, 8 1/2" × 14" ⧉, 8 1/2" × 11" ⧉⧉, 5 1/2" × 8 1/2" ⧉⧉, 10" × 14" ⧉

❒ For some originals, the original size might not be detected correctly. See ⇒ P.15 *"Sizes Difficult to Detect"*.

1 Select the copy paper.

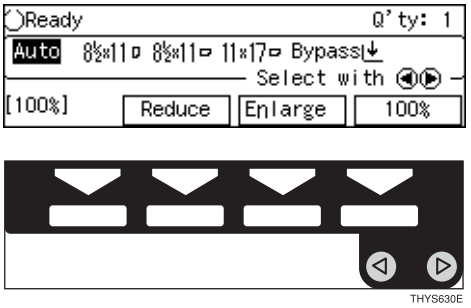
Auto paper select

❶ Make sure that the Auto (Auto Paper Select) is selected.



Manual paper select

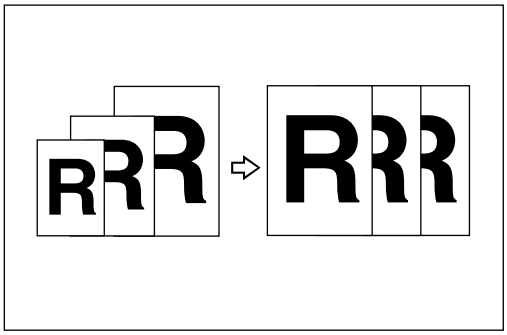
❶ Select the paper tray or bypass tray by pressing ◁▷key.



THYS630E

Auto Reduce/Enlarge—Having the Machine Choose the Reproduction Ratios

The machine can choose an appropriate reproduction ratio based on the paper and original sizes you select.



Note

❒ When you use Auto Reduce/Enlarge, refer to the following table for possible original sizes and directions:

❖ **Metric version**

Where original is set	Original size and direction
Exposure glass	A3 ⬓, B4 ⬓, A4 ⬒⬓, B5 ⬒⬓, 8 1/2" × 13" ⬓
Document feeder	A3 ⬓, B4 ⬓, A4 ⬒⬓, B5 ⬒⬓, A5 ⬒⬓, 8 1/2" × 13" ⬓

❖ **Inch version**

Where original is set	Original size and direction
Exposure glass	11" × 17" ⬓, 8 1/2" × 14" ⬓, 8 1/2" × 11" ⬒⬓, 10" × 8" ⬓, 8 1/2" × 13" ⬓, 10" × 14" ⬓
Document feeder	11" × 17" ⬓, 8 1/2" × 14" ⬓, 8 1/2" × 11" ⬒⬓, 5 1/2" × 8 1/2" ⬒⬓, 10" × 14" ⬓

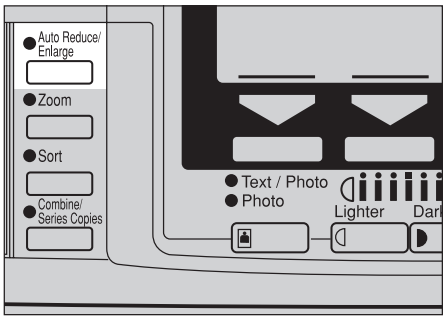
❒ The reproduction ratios the machine will select are 50-200%.

❒ For some originals, the original size might not be detected correctly. See ⇒ P.15 *"Sizes Difficult to Detect"*.

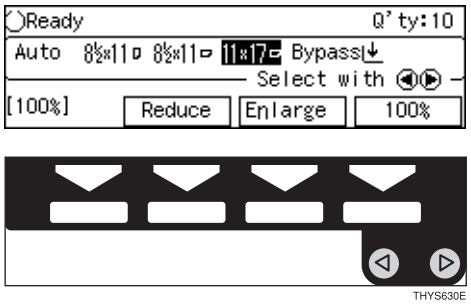
❒ When you set original of two different size at a time, you must set one original at a time. See ⇒ P.29 *"Setting one original at a time (SADF) mode"*.

❒ Image Rotation is not available when copying onto A3 (11"×17") paper with the Enlarge feature. Set your original lengthwise when copying onto A3 (11"×17") paper with the Enlarge feature.

1 Press the 【Auto Reduce/Enlarge】 key.



2 **Select the paper tray by pressing ◁▷.**



Note

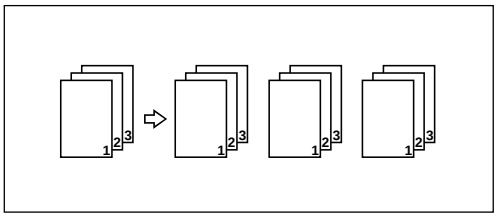
❒ The enlargment/reduction ratio automatically calculated to match the size of copy paper you have chosen is displayed.

Sort

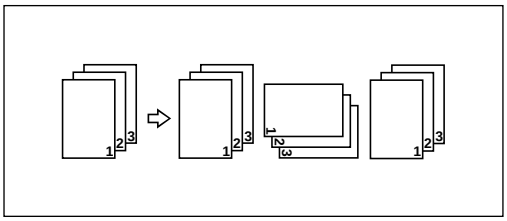
The machine can scan your originals into memory and automatically sort the copies.

There are two types in the Sort function:

❖ **Sort**
Copies can be assembled as sets in sequential order.



❖ **Rotate Sort**
Every other copy set is rotated by 90° and delivered to the copy tray.



Limitation

❒ You cannot use the bypass tray with this function.

Note

❒ To switch among Sort and Rotate Sort modes, access the user tools. See "5. Sort" in ⇒ P.82 *"2. Input/ Output"*.

❒ The maximum tray capacity is as follows. When the number of copies exceeds the tray capacity, remove copies from the tray.

Internal tray 1	250 sheets (80g/m^2,20lb)
	When Internal tray 2 installed: 125 sheets (80g/m^2 ,20lb)
Internal tray 2	125 sheets (80g/m^2 ,20lb)

❒ The maximum tray capacity might be less than the above when you use the Rotate Sort.

❒ The maximum tray capacity might also be reduced when copy paper is considerably curled.

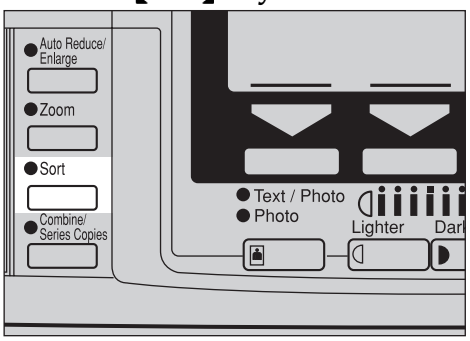
❒ The paper sizes that can be used in Sort function are as same as the sizes applied to Tray 1, 2, or 3. See ⇒ P.17 *"Copy Paper"*.

❒ The paper sizes that can be used in Rotate Sort function are as follows:

Metric version	A4 B5
Inch version	$8^1/_2$" × 11"

❒ To use the Rotate Sort function, two paper trays identical in size and different in direction ( ) are required (the paper tray unit (option) is required).

1 **Press the 【Sort】 key.**



2 **Enter the number of copy sets with the 【Number】 keys.**

Limitation

❒ The maximum number of sets is 99.

3 **Set your originals.**

When setting a stack of originals in the document feeder

❶ **Set a stack of originals in the document feeder, then press the 【Start】 key.**

After all the originals are scanned, the copies are delivered to the tray.

Note

❒ The last page should be on the bottom.

❒ If an original is misfed while copying with the Sort feature, reset the remaining originals in the ADF starting with the jammed page.

When setting an original on the exposure glass or in the document feeder

Reference

⇒ P.29 *"Setting one original at a time (SADF) mode"*

❶ **Set the original, then press the 【Start】 key.**

Note

❒ Start with the first page to be copied.

❷ **Set the next original, then press the 【Start】 key.**

Note

❒ Set the original in the same direction as the first one.

❒ When you set an original in the document feeder, the second and subsequent originals can be fed automatically without pressing the 【Start】 key

❸ **After all originals are scanned, press the 【#】 key.**

The copies are delivered to the tray.

Copying from the Bypass Tray

Use the bypass tray to copy onto OHP transparencies, adhesive labels, translucent paper, post cards, envelopes and copy paper that cannot be set in the paper tray.

Note

❒ The machine can automatically detect the following sizes as standard size copy papers:

Metric version	A3□, A4□, A5□, 8" × 13"□
Inch version	11" × 17"□, $8^1/_2$" × 11"□

❒ When you set the standard size paper except the sizes as above, you have to specify the standard size. See ⇒ P.41 *"When copying onto standard size copy paper"*.

❒ If you do not use the standard size copy paper, you should input vertical and horizontal dimensions. The sizes that you can input are as follows:

Metric version	• Vertical: 90 – 305mm • Horizontal: 148 – 1,260mm
Inch version	• Vertical: 3.5" – 12.0" • Horizontal: 5.8" – 49.6"

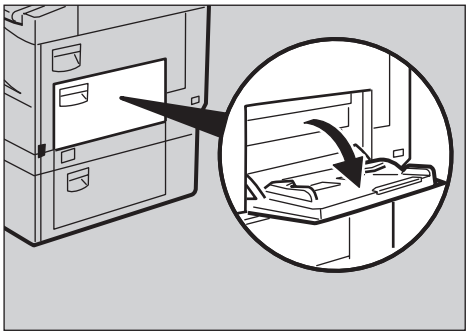
❒ To make copies onto OHP transparencies or thick paper (105 – 162g/m^2, 28 – 43lb), be sure to specity the paper type **[thick].** See P.42 *"When copying onto OHP transparencies or thick paper"*.

❒ To make copies onto envelopes, See P.43 *"When Copying onto Envelopes"*.

Reference

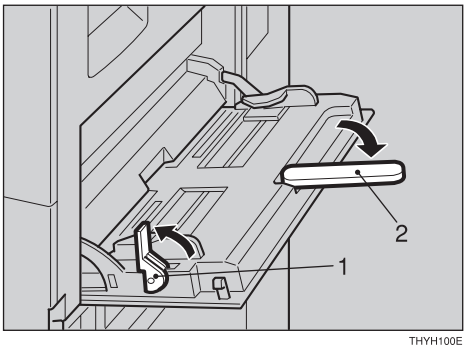
For details about paper capacity of the bypass tray, see ⇒ P.17 *"Copy Paper"*.

1 **Open the bypass tray.**



THYH090E

2 **Lift the paper hold lever.**



THYH100E

1: Paper hold lever

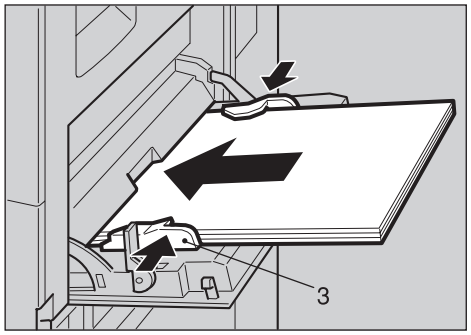
2: Extender

Note

❒ Swing out the extender to support larger size copy paper.

3 Lightly insert the copy paper face down until the it stops. Adjust the guides to copy paper size.

The ≡ indicator on the display is automatically selected.



THYH110E

3: Paper guide

Important

❒ If the guides are not flush with the copy paper, a skew image or paper misfeeds might occur.

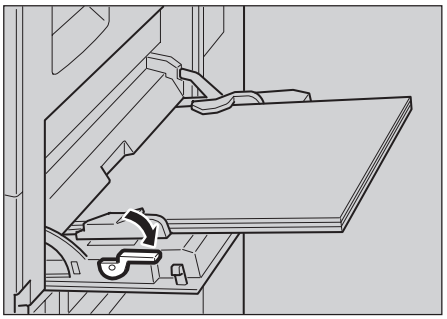
Note

❒ Do not stack paper over the limit mark; otherwise a skew image or paper misfeeds might occur.

❒ Fan paper to get air between the sheets and avoid a multi-sheet feed.

❒ When you set a OHP transparencies, make sure that its front and back faces are properly positioned.

4 Lower the paper hold lever.



THYH120E

When copying onto custom size copy paper

Important

❒ You should specify the size of copy paper to avoid paper misfeeds.

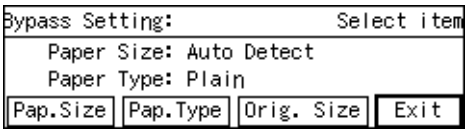
❒ If you select Standard or Custom as the Paper Size setting, these functions will remain in effect even after Auto Clear or pressing the 【Clear Modes】 key. You can alter this behavior by changing *"12. Reset Bypass Set"*. See ⇒ P.80 *"1. General Features 3/4"*.

❶ Make sure the [Bypass] is selected.



❷ Press the 【#】 key.

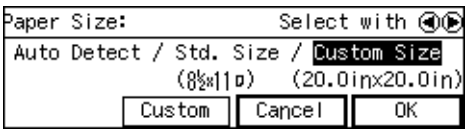
❸ Press the [Pap. Size] key.





THYS670E

❹ Select [Custom Size] with the ◀▶ keys. Then press the [Custom] key.





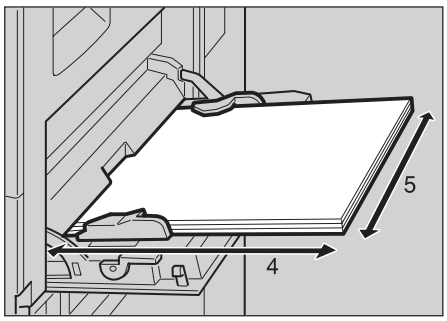
THYS760E

❺ **Enter the horizontal size of the paper with the 【Number】 keys, then press the 【#】 key.**



Note

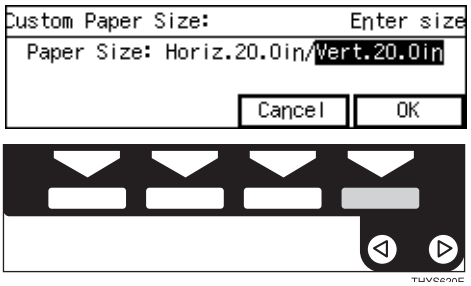
❒ To change the number entered, press the 【Clear/Stop】 key and enter the new number.



4: Horizontal

5: Vertical

❻ **Enter the vertical size of the paper with the 【Number】 keys, then press the [OK] key.**

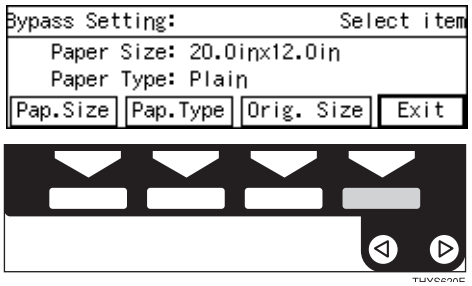


Note

❒ To change the number entered, press the 【Clear/Stop】 key and enter the new number.

❒ When you specify the paper size, ⊬ appears on the display to indicate bypass tray copying.

❼ **Press the [Exit] key.**



When copying onto standard size copy paper

Important

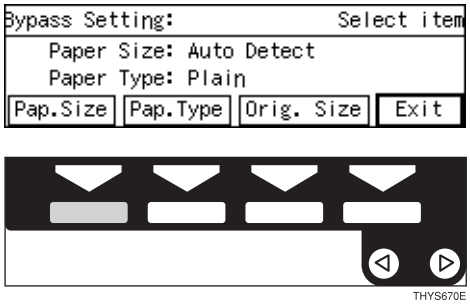
❒ If you select Standard or Custom as the Paper Size setting, these functions will remain in effect even after Auto Clear or pressing the 【Clear Modes】 key. You can alter this behavior by changing *"12. Reset Bypass Set"*. See ⇒ P.80 *"1. General Features 3/4"*.

❶ **Make sure the [Bypass] is selected.**

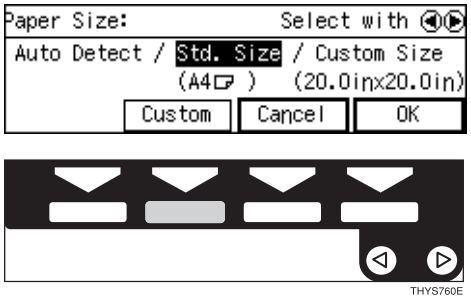


❷ **Press the 【#】 key.**

❸ **Press the [Pap. Size] key.**

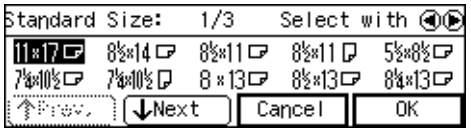


❹ **Select [Std. size] with the ◁▷ keys. Then press the [Custom] key.**



THYS760E

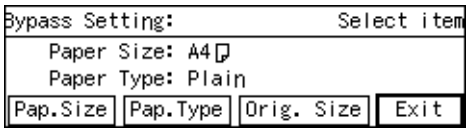
❺ **Select the desired size with the [NEXT] , [Prev.] or the ◁▷ keys, then press the [OK] key.**





THYS760E

❻ **Press the [Exit] key.**





THYS820E

When copying onto OHP transparencies or thick paper

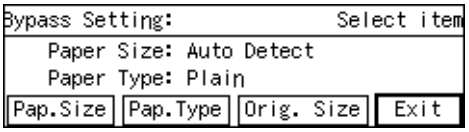
Important

❒ If you select Thick Paper/Special Paper as the Paper Type setting, these functions will remain in effect even after Auto Clear or pressing the 【Clear Modes】 key. You can alter this behavior by changing *"12. Reset Bypass Set"*. See⇒P.80 *"1. General Features* $^{3}/_{4}$*"*.

❶ **Make sure the 【Bypass】 is selected.**

❷ **Press the 【#】 key.**

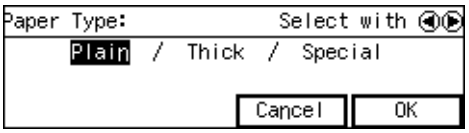
❸ **Press the [Pap. Type] key.**





THYS760E

❹ **Select [Thick] with the ◁▷ keys. Then, press the [OK] key.**



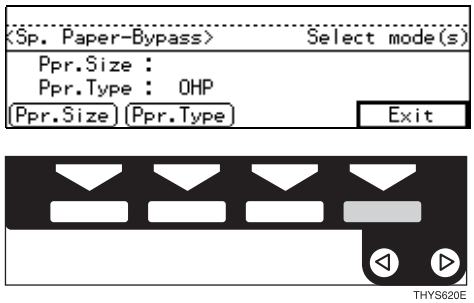


THYS860E

Note

❒ Only select Special Paper when you cannot make clean copies. See⇒P.63 *"If You Cannot Make Clear Copies"*

❺ **Press the [Exit] key.**



THYS620E

Reference

To go on to specify a paper size, press the **[Pap. Size]** key.

See ⇒ P.37 *"When copying onto custom size copy paper"*.

See ⇒ P.38 *"When copying onto standard size copy paper"*.

5 **Set your originals and press the 【Start】 key.**

Important

❒ When copying onto OHP transparencies, remove copied sheets one by one.

Note

❒ Push on the center of the bypass tray to close it.

When Copying onto Envelopes

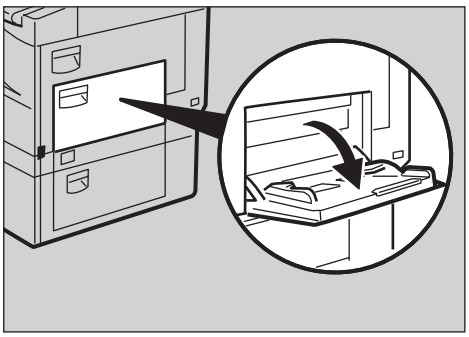
Important

❒ If you select Thick Paper as the Paper Type setting and select Standard or Custom as the Paper Size setting, these functions will remain in effect even after Auto Clear or pressing the 【Clear Modes】 key. You can alter this behavior by changing "12. Reset Bypass Set". See⇒P.80 *"1. General Features $^{3}/_{4}$"*.

Reference

For detail about the recommended envelopes, see ⇒P.17 *"Copy Paper"*

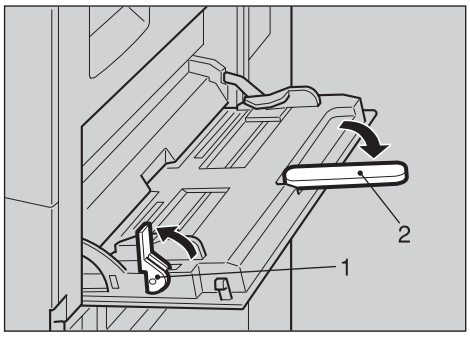
1 **Open the bypass tray.**



THYH090E

2

2 **Lift the paper hold lever. Then swing out the extender.**

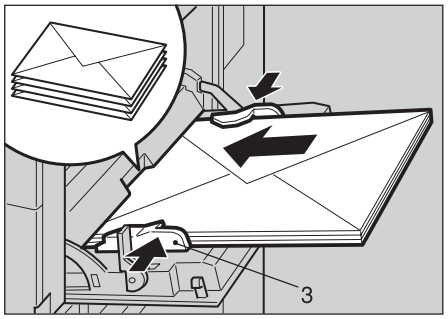


THYH100E

1: Paper hold lever

2: Extender

3 **Lightly insert the envelopes face down and the sides of the flaps on the right as shown below.**

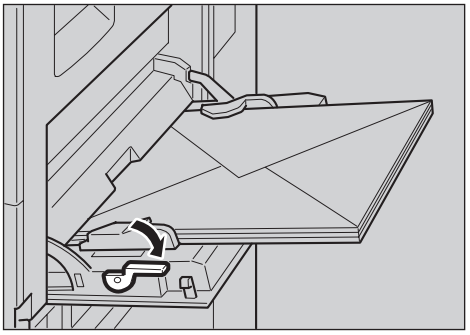


THYH370E

Important

- Make sure that the envelope flap are securely folded down, and that there is no air inside the envelopes.
- You can load up to 10 envelopes (72-90g/m^2, 19-24 lb). Do not stack envelope over the limit mark, otherwise a skew image or paper misfeeds might occur.

4 **Lower the paper hold lever.**



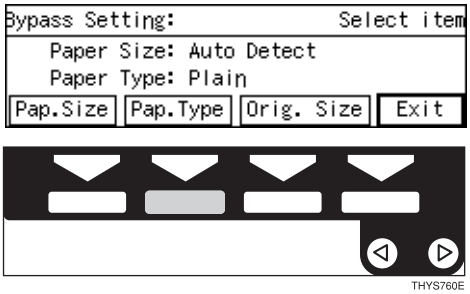
THYH380E

5 **Make sure the [Bypass] is selected.**



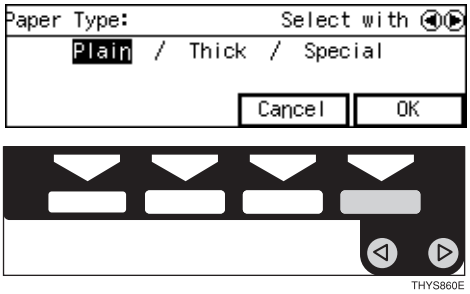
6 **Press the [#] key.**

7 **Press the [Pap.Type] key.**



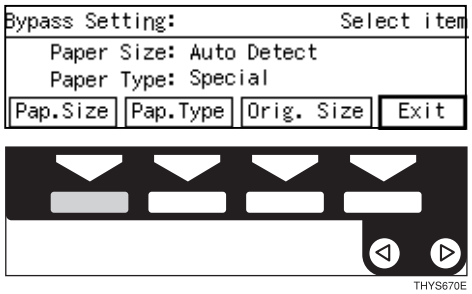
THYS760E

8 **Select [Thick] with the ◁▷ keys. Then press the [OK] key.**

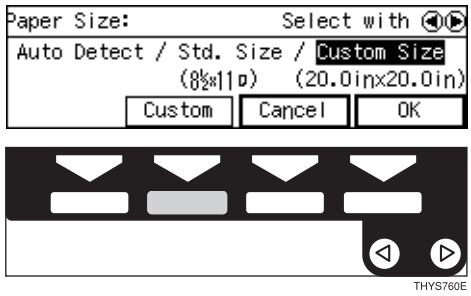


THYS860E

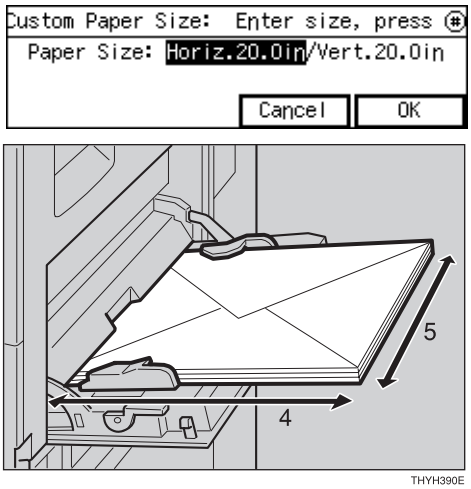
9 **Press the [Pap.Size] key.**



10 **Select [Custom Size] with the ◁▷ keys. Then press the [Custom] key.**



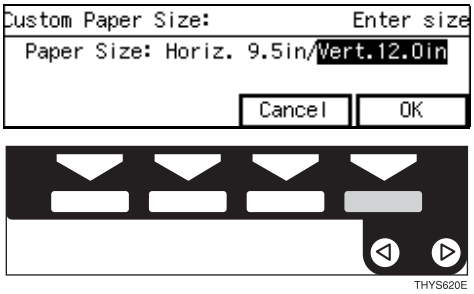
11 **Enter the horizontal size of the envelope with the 【Number】 keys, then press the 【#】 key.**



4: Horizontal

5: Vertical

12 **Enter the vertical size of the envelope with the 【Number】 keys, then press the [OK] key.**



Note

❒ You have to enter the size as follows:

❖ **Metric version**

	Horizontal × Vertical
Com #10 Env	241.3 × 104.8mm
C6 Env	162 × 114mm
DL Env	220 × 110mm
Monarch Env	190.5 × 98.4mm

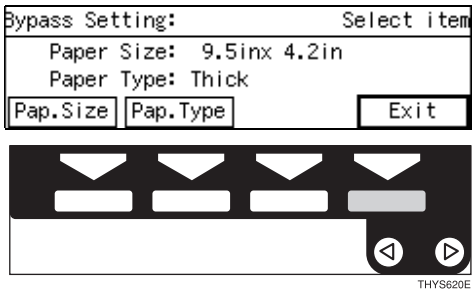
❖ **Inch version**

	Horizontal × Vertical
Com #10 Env	9.5" × 4.2"
C6 Env	6.4" × 4.5"
DL Env	8.7" × 4.4"
Monarch Env	7.5" × 3.9"

❒ To change the number entered, press the 【Clear/Stop】 key and enter the new number.

❒ When you specify the paper size, ⊻ appears on the display to indicate bypass tray copying.

⓭ Press the [EXIT] key.



⓮ Set your originals and press the 【Start】 key.

Note

❒ Push on the center of the bypass tray to close it.

Program—Storing Your Copy Settings in Memory

You can store frequently used copy job settings in machine memory, and recall them for future use.

❖ **Storing Your Settings**
You can store your settings you frequently use.

❖ **Deleting A Program**
You can delete a stored program.

❖ **Recalling A Program**
You can recall a stored program.

Note

❒ You can store up to ten programs.

❒ Paper settings are stored based on paper size. So if you place more than one paper tray of a same size, the paper tray prioritized with the user tools will be selected first. See "12. Pap.Tray Priority" of the System Settings.

❒ Programs are not cleared by turning the power off or by pressing the【Clear Modes】or【Energy Saver】key. They are canceled only when you delete or overwrite them with another program.

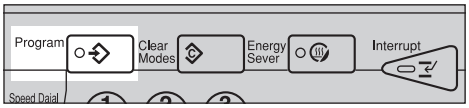
Limitation

❒ You cannot store the number of copies in a program.

Storing Your Settings

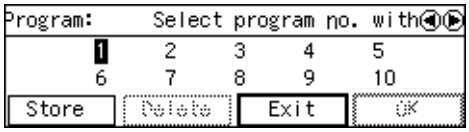
1 **Edit the copy settings so that all functions you want to store in this program are selected in a program.**

2 **Press the【Program】key.**



THYS090E

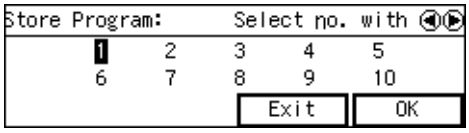
3 **Press the [Store] key.**




THYS670E

4 **Select the program number you want to store these settings in with the ◁▷ keys. Then, press the [OK] key.**

When the settings are successfully stored, the ➔ indicator appears.




THYS860E

Note

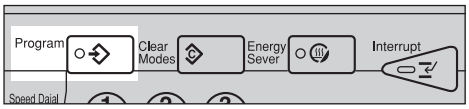
❒ Program numbers with ➔ already have settings in them.

❒ If this program number is already being used, the machine will ask you if you wish to overwrite it - press the **[Yes]** or **[No]** key.

Deleting a Program

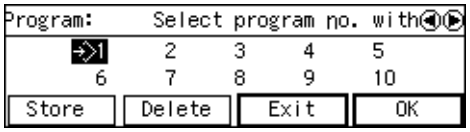
You can delete a stored program.

1 **Press the 【Program】 key.**



THYS090E

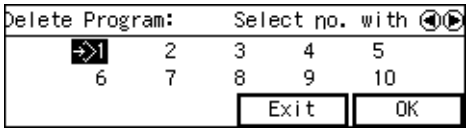
2 **Press the [Delete] key.**





THYS760E

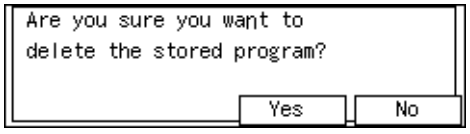
3 **Select the program number you want to delete with the ◁▷ keys. Then press the [OK] key.**





THYS860E

4 **Press the [Yes] key.**





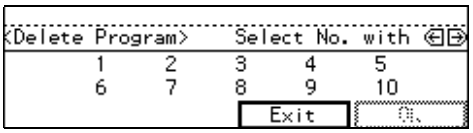
THYS800E

Note

❒ To cancel the deletion, press the **[No]** key.

5 **To delete another program, repeat steps 3 and 4.**

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



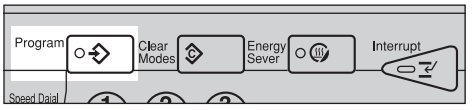


THYS800E

Recalling a Program

You can recall a stored program.

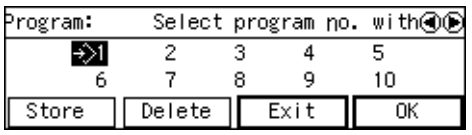
1 **Press the 【Program】 key.**



THYS090E

2 **Select the program number you want to recall with the ◁▷ keys. Then, press the [OK] key.**

The stored settings are displayed.





THYS860E

Note

❒ Only programs with ⇨ contain a program.

3 **Set your originals, enter the number of copies required with the 【Number】 keys, then press the 【Start】 key.**

Other Functions

Energy Saver Mode—Saving Energy

If you do not operate the machine for a certain period after copying, or when you press and hold the 【Energy Saver】 key for more than one second, the display disappears and the machine enters Energy Saver mode. When you press the 【Energy Saver】 key again, the machine returns to the ready condition. In Energy Saver mode, the machine uses less electricity.

The Energy Saver mode makes a two-step reduction in electricity: one for the period up to the time set for Low Power mode, the other for the period after that time.
You can select the Energy Saver Mode power level.

Note

❒ The period for which the machine remains in Energy Saver mode (i.e. the period until the mode is turned off to return to the ready condition) varies with the effectiveness of energy saving.

❒ If you press the 【Energy Saver】 key during the operation, the current settings will be cleared.

Reference

See "07. Energy Saver Level" and "08. Energy Saver Timer" of the System Settings.

Interrupt—Temporarily Stopping One Job to Copy Something Else

You can make urgently needed copies during a multi-copy run.

1. **Press the 【Interrupt】 key.**
   The key indicator lights.
2. **Remove the originals currently set for copying, and set your originals for interrupt copying. Make your copies.**
3. **After interrupt copying, remove the originals for interrupt copying and the copies.**
4. **Press the 【Interrupt】 key again.**
   The key indicator goes off.
5. **Reset the previous originals. Then, press the 【Start】 key.**

Note

❒ The previous copy settings are recalled and the previous copy job can be resumed by pressing the 【Start】 key.

Limitation

❒ You cannot choose the sort or combine copy function in interrupt copying

User Codes

If the machine is set to use the User Code function, operators must input their user codes before the machine can be operated. The machine keeps

count of the number of copies made under each user code.

Note

❒ When the machine is set for user codes, the machine will prompt you for your user codes after the power switch is on or the Auto Reset comes into effect.

❒ To prevent others from making copies using your user code, press the【Clear Modes】and【Clear/Stop】keys simultaneously after copying.

Reference

For setting user codes, see ⇒ P.81 *"1. General Features 4/4"*.

Auto Start—Entering Copy Job Settings During the Warm-up Period

If you press the【Start】key during the warm-up period, the【Start】key will blink, and your copies will be made as soon as warm-up finishes.

1 Make any adjustments to copy settings during the warm-up period.

2 Set your originals.

3 Press the【Start】key.

The【Start】key indicator alternately flashes red and green.

Note

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

Original Tone

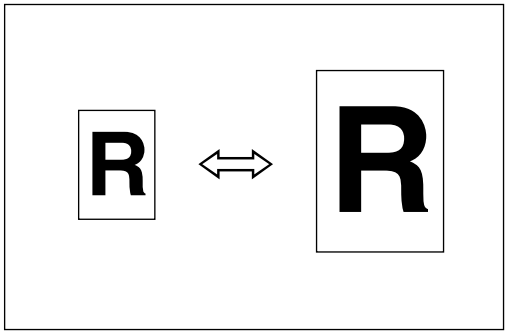
The key tone sounds and an error message is displayed when you leave your originals on the exposure glass for about two seconds after copying.

Note

❒ To cancel this function, see "11. Original Tone" in ⇒ P.80 *"1. General Features 3/4"*.

Preset Reduce/Enlarge—Reducing and Enlarging Using Preset Ratios

You can select a preset ratio for copying.



Note

- ❒ You can select one of 7 present ratios (4 enlargement ratios, 3 reduction ratios in inch version or 3 enlagement ratios, 4 reduction rations in Metric version).
- ❒ You can change the preset ratios to other ratios you frequently use. See "05. Set Ratio" in⇒ P.79 *"1. General Features $^{2}/_{4}$"*.
- ❒ You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.
- ❒ Copies can be reduced or enlarged as follows:

❖ Metric version

Ratio (%)	Original → Copy paper size
200 (enlarge area by 4)*	A5→A3
141 (enlarge area by 2)*	A4→A3, A5→A4
122*	F→A3, A4→B4
115	B4→A3
93*	Create Margin.
87	A3→B4
82	F→A4, B4→F
71 (reduce area by $^{1}/_{2}$)*	A3→A4, A4→A5
65	A3→F
50 (reduce area by $^{1}/_{4}$)*	A3→A5, F→A5

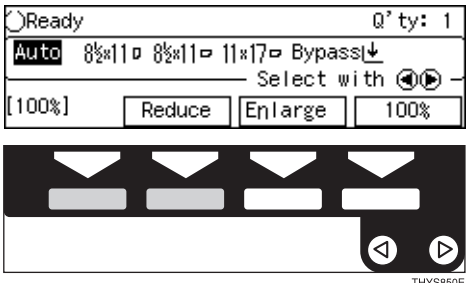
* Default

❖ Inch version

Ratio(%)	Original → Copy paper size
200 (enlarge area by 4)	$5^{1}/_{2}" \times 8^{1}/_{2}" \rightarrow 11" \times 17"$
155 (enlarge area by 2)*	$5^{1}/_{2}" \times 8^{1}/_{2}" \rightarrow 8^{1}/_{2}" \times 14"$
129*	$8^{1}/_{2}" \times 11" \rightarrow 11" \times 17"$
121*	$8^{1}/_{2}" \times 14" \rightarrow 11" \times 17"$
93*	Create Margin
85	$F \rightarrow 8^{1}/_{2}" \times 11"$
78*	$8^{1}/_{2}" \times 14" \rightarrow 8^{1}/_{2}" \times 11"$
74	$11" \times 14" \rightarrow 8^{1}/_{2}" \times 11"$
65*	$11" \times 17" \rightarrow 8^{1}/_{2}" \times 11"$
50 (reduce area by $^{1}/_{4}$)	$11" \times 17" \rightarrow 5^{1}/_{2}" \times 8^{1}/_{2}"$

* Default

1 **Press the [Enlarge] or [Reduce] key to select a ratio.**



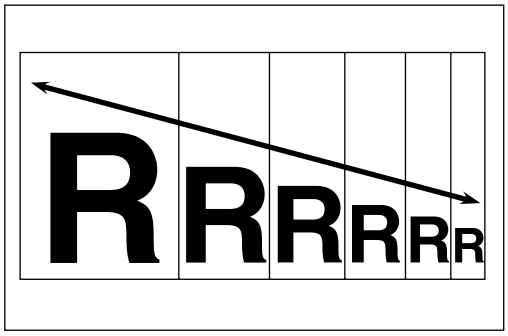
Note

❒ Another preset ratio is displayed every time you press the key.

2 **Set your originals, then press the 【Start】 key.**

Zoom—Reducing and Enlarging in 1% Steps

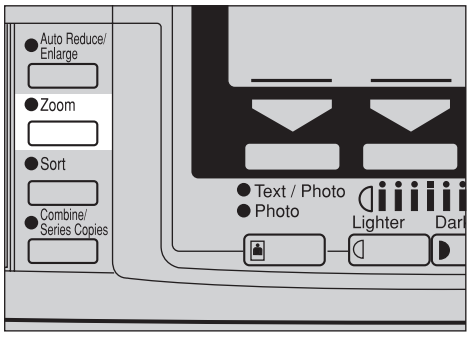
You can change the reproduction ratio in 1% steps.



Note

- ❒ You can specify the reproduction ratio within between 50% and 200%.
- ❒ You can select a ratio regardless of the size of an original or copy paper. With some ratios, parts of the image might not be copied or margins will appear on copies.
- ❒ You can select a preset ratio which is near the desired ratio, then press the 【Zoom】 key and adjust the ratio with the [+] or [−] key.

1 Press the 【Zoom】 key.

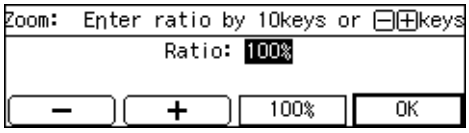


THYS080E

2 Enter the ratio.

When using the [+] or [−] key

❶ Enter the desired reproduction ratios with the [−] or [+] key.





THYS850E

Note

- ❒ To change the ratio in 1% steps, just press the [+] or [−] key. To change the ratio in 10% steps, press and hold down the [+] or [−] key.

When using the 【Number】 keys

❶ Enter the desired ratio with the 【Number】 keys.

Note

- ❒ To change the ratio entered, press the 【Clear/Stop】 key and enter the new ratio.

❷ Press the [OK] key.

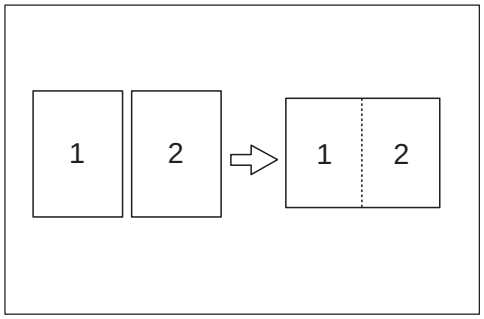
3 Set your originals, then press the 【Start】 key.

Combine—Combining Originals into One Copy

You can make 1 sheet of copies from 2 or more one sided originals.

❖ **2 pages→1-sheet**

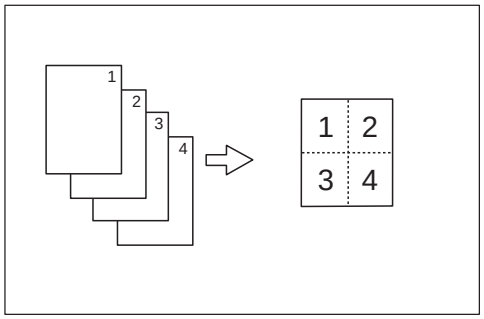
This mode makes two facing pages on one-sided copy.



GC SHVY 7J

❖ **4 pages→1-sheet**

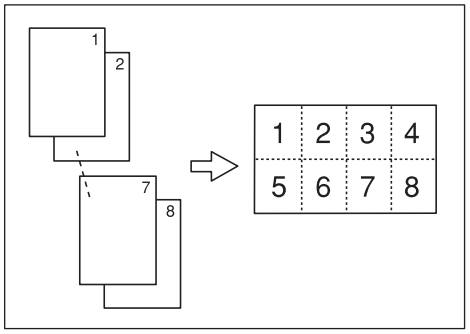
4 one-sided pages are copied onto 1 one-sided sheet.



GC SHVY 8J

❖ **8 pages→1-sheet**

8 one-sided paper are copied onto 1 one-sided sheet.



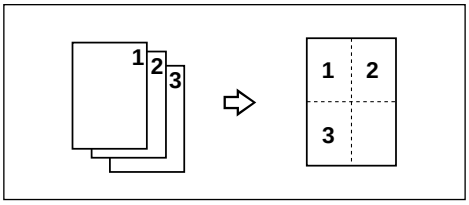
THYH410E

Limitation

- ❒ You cannot use the bypass tray with this function.
- ❒ The machine cannot copy originals different in size and direction.

Note

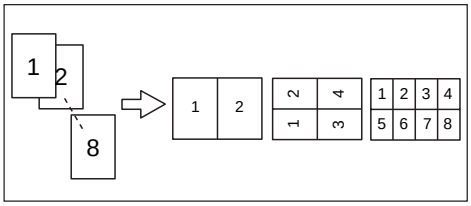
- ❒ The number of originals copied (combined) can be 2, 4 or 8.
- ❒ In this mode, the machine selects the reproduction ratio automatically. This reproduction ratio depends on the copy paper sizes and the number of originals.
- ❒ The machine uses ratios within the range of 50 to 200%.
- ❒ If the calculated ratio is under the minimum ratio, it is corrected within the range of the ratio automatically. However, with some ratios, parts of the image might not be copied or blank margins appear on copies.
- ❒ When the number of originals placed is less than the number specified for combining, the last page(s) will be copied blank as shown in the illustration. See "1. Comb. Auto Eject" in⇒ P.77 *"Input/Output"*.



- ❒ Even if the direction of originals is different from that of the copy paper, the machine will automatically rotate the image by 90° to make copies properly.

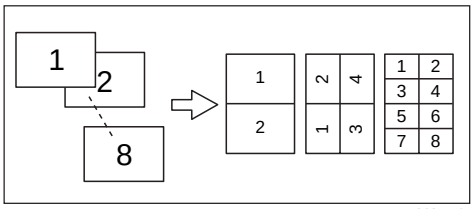
❒ Direction of the originals and arrangement of combined images.

❖ **Portait ( ) originals**



GCSHUY1E

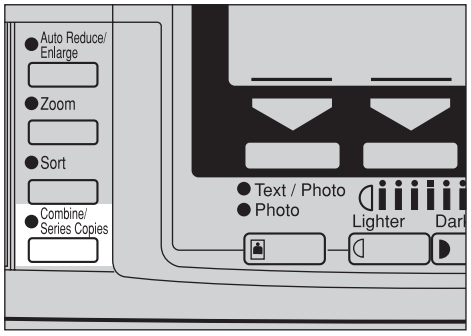
❖ **Landscape ( ) originals**



GCSHUY2E

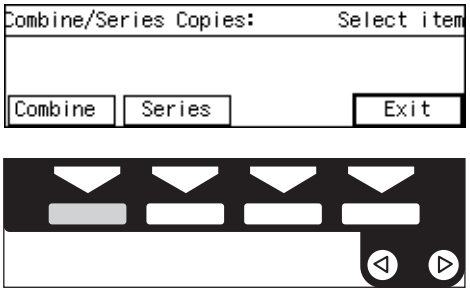
❒ Separation line between originals cannot be printed.

1 **Press the 【Combine/Series Copies】 key.**



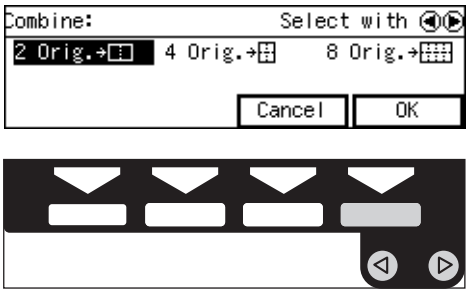
THYS100E

2 **Press the [Combine] key.**



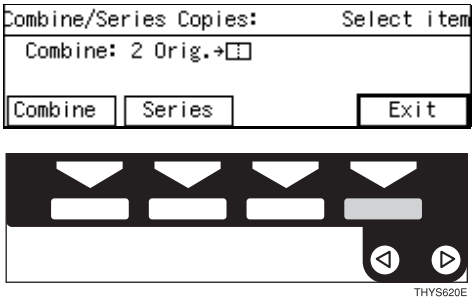
THYS670E

3 **Select the desired combine modes with the ◁▷ keys. Then, press the [OK] key.**



THYS860E

4 **Press the [Exit] key.**



THYS620E

5 **Press the ◁▷ keys to select the copy paper.**

When setting a stack of originals in the document feeder

❶ **Set your originals, then press the 【Start】 key.**

Note

❒ The last page should be on the bottom.

When setting an original on the exposure glass or in the document feeder

❶ **Set the original, then press the【Start】key.**

Note

❒ Start with the first page to be copied.

❷ **Set the next original, then press the【Start】key.**

Note

❒ When you set an original in the document feeder, the second and subsequent originals can be fed automatically without pressing the【Start】key.

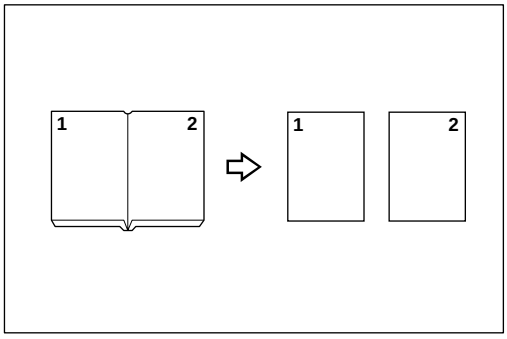
❸ **After all originals are scanned, press the【#】key.**

Series Copies—Making Two-sheets Copies from Book Originals

You can make one-sided copies from two facing pages of bound (book) originals.

❖ **Book → 2-sheets**

You can make two-sheets copies from two facing pages of a bound original (book).



Note

❒ Refer to the following table when you select original and copy paper sizes with 100% ratio:

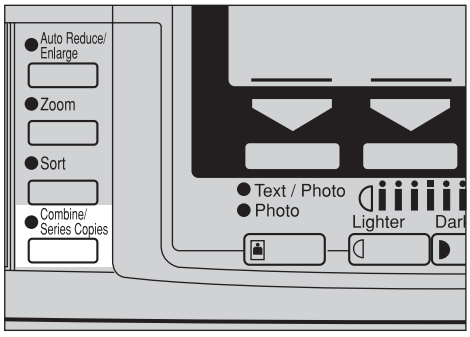
❖ **Metric version**

Original	Copy paper
A3	A4 × 2 sheets
B4	B5 × 2 sheets
A4	A5 × 2 sheets

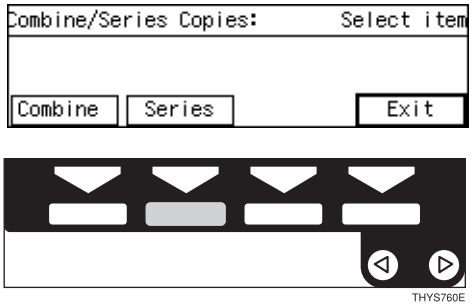
❖ **Inch version**

Original	Copy paper
11" × 17"	$8^1/_2$" × 11" × 2 sheets
$8^1/_2$" × 11"	$5^1/_2$" × $8^1/_2$" × 2 sheets

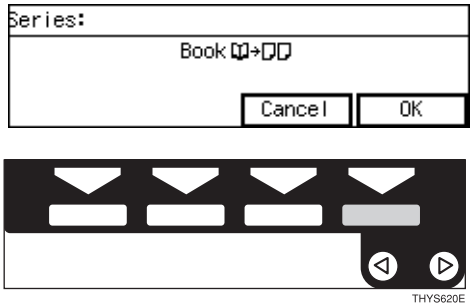
1 **Press the 【Combine/Series Copies】 key.**



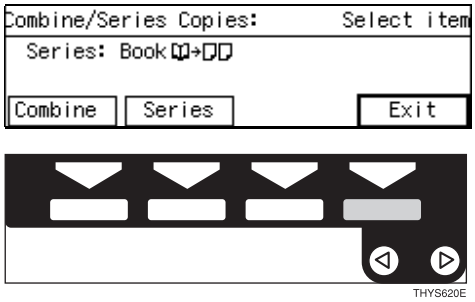
2 **Press the [Series] key.**



3 **Press the [OK] key.**



4 **Press the [Exit] key.**



5 **Set your originals, then press the 【Start】 key.**

Combination Chart

The combination chart given below shows which modes can be used together. When you read the chart, please refer to the following table.

☆	means that these modes can be used together.
→	means that these modes cannot be used together. The mode after you select will be the mode you're working in.
×	means that these modes cannot be used together. The mode before you select will be the mode you're working in.

The following shows the combinations of functions.

		Mode after you Select															
		Setting Originals on the Exposure Glass	Setting Originals in the Document Feeder	Input the Original size	Auto Image Density	Lighter/Darker	Text	Text•Photo	Photo	Auto Paper Select	Auto Reduce/Enlarge	Sort	Copying from the Bypass Tray	Reduce/Enlarge	Zoom	Combine	Series Copies
Mode before you Select	Setting Originals on the Exposure Glass	—	→	×	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Setting Originals in the Document Feeder	×	—	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
	Input the Original size	→	☆	—	☆	☆	☆	☆	☆	×	☆	☆	☆	☆	☆	☆	☆
	Auto Image Density	☆	☆	☆	—	*1	*3	*3	*3	☆	☆	☆	☆	☆	☆	☆	☆
	Lighter/Darker	☆	☆	☆	→	—	*3	*3	*3	☆	☆	☆	☆	☆	☆	☆	☆
	Text	☆	☆	☆	☆	☆	—	→	→	☆	☆	☆	☆	☆	☆	☆	☆
	Text•Photo	☆	☆	☆	☆	☆	→	—	→	☆	☆	☆	☆	☆	☆	☆	☆
	Photo	☆	☆	☆	☆	☆	→	→	—	☆	☆	☆	☆	☆	☆	☆	☆
	Auto Paper Select	☆	☆	×	☆	☆	☆	☆	☆	—	→	☆	→	☆	☆	→	→
	Auto Reduce/Enlarge	☆	☆	☆	☆	☆	☆	☆	☆	×	—	☆	*2	→	→	→	→
	Sort	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	—	*2	☆	☆	☆	☆
	Copying from the Bypass Tray	☆	☆	☆	☆	☆	☆	☆	☆	→	*2	*2	—	☆	☆	*2	*2
	Reduce/Enlarge	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	—	☆	→	☆
	Zoom	☆	☆	☆	☆	☆	☆	☆	☆	☆	→	☆	☆	☆	—	→	☆
	Combine	☆	☆	☆	☆	☆	☆	☆	☆	×	☆	☆	*2	☆	☆	—	→
	Series Copies	☆	☆	☆	☆	☆	☆	☆	☆	×	×	☆	*2	☆	☆	→	—

*1 Combined auto and manual image density.
*2 "×××cannot be selected" is displayed.
*3 Depending on "02. ADS Priority".

3. What to do If Something Goes Wrong

If Your Machine does not Operate as You Want

Message

Machine's Condition	Problem/Cause	Action
The machine instructs you to wait.	The machine is warming up.	Wait for the machine to warm-up. **Reference** You can use Auto Start mode during warm-up period. See ⇒ P.50 *"Auto Start—Entering Copy Job Settings During the Warm-up Period"*
The machine cannot detect the original size.	Improper original is set. See ⇒ P.15 *"Sizes Difficult to Detect"*.	Select paper manually, not in Auto Paper Select mode.
		Do not use Auto Reduce/ Enlarge mode.
		When you set originals in the document feeder, input the both horizontal and vertical sizes of the non-standard original. See ⇒ P.27 *"Setting Originals on the Exposure Glass"*.
	Original is not set.	Set your originals.
The machine instructs you to check the original direction.	There is no copy paper that is the same direction as the originals.	Set the original in the same direction as the copy paper.
The machine instructs you to reset the paper tray correctry.	--	Reset the paper tray correctry.
The machine instructs you to check paper size.	Improper original size is set.	Select the proper paper size.

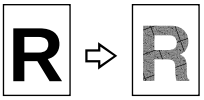
Machine's Condition	Problem/Cause	Action
You cannot enter the desired copy set number.	The number of copies exceeds the maximum copy quantity.	You can change the maximum copy quantity that you can make at a time. See "04. Max. Copy Q'ty" in ⇒ P.78 *"1. General Features 1/4"*

Display

Problem	Cause	Action
The panel display is off.	The machine is in Energy Saver mode.	Press the【**Energy Saver**】key to cancel Energy Saver mode.
	The operation switch is turned off.	Turn on the operation switch.
Nothing happens when the operation switchis turned on.	The main power switch is turned off.	Turn on the main power switch. See ⇒ P.1 *"Guide to Components"*

If You Cannot Make Clear Copies

Problem	Cause	Action
Copies appear dirty.	The image density is too dark.	Adjust the image density. ⇒ P.31 *"Adjusting Copy Image Density"*.
	Auto Image Density is not selected.	Select Auto Image Density.
The reverse side of an original image is copied.	The image density is too dark.	Adjust the image density. ⇒ P.31 *"Adjusting Copy Image Density"*.
	Auto Image Density is not selected.	Select Auto Image Density.
A shadow appears on copies if you use the pasted originals.	The image density is too dark.	Adjust the image density. ⇒ P.31 *"Adjusting Copy Image Density"*.
		Change the direction of the original.
		Put mending tape on the pasted part.
The same copy area is dirty whenever making copies.	The exposure glass, platen cover, or reader of the document feeder is dirty.	Clean them. ⇒ P.89 *"Maintaining Your Machine"*.
Copies are too light.	The image density is too light.	Adjust the image density. ⇒ P.31 *"Adjusting Copy Image Density"*.
	Damp or rough grain paper is used.	Use dry paper without rough grain.
	Toner cartridge is almost empty.	Pull the toner cartridge in the copier, and shake it to side to side about 5-6 times. Then insert it into the copier, close the side cover, and make copies again. If it does not better, replace the toner cartridge. ⇒ P.67 *"Replacing the Toner Cartridge"*.

Problem	Cause	Action
Parts of the image are not copied.	The original is not set correctly.	Set originals correctly. ⇒ P.27 *"Setting Originals"*.
	An improper paper size is selected.	Select the proper paper size.
Copies are blank.	The original is not set correctly.	Set originals correctly. ⇒ P.27 *"Setting Originals"*.
Images are uneven or blurred.	Copy paper was not stored properly.	Set papers on the Bypass tray, and specify "Special" for Pap. Type. ⇒ P.42 *"When copying onto OHP transparencies or thick paper"*
Images are light.	Black and white printed originals	Press the 【Darker】 key. ⇒ P.29 *"Adjusting Copy Image Density"*
	Original with designed background.	Press the 【Darker】 key. ⇒ P.29 *"Adjusting Copy Image Density"*
	Colored text originals	Press the 【Darker】 key. ⇒ P.29 *"Adjusting Copy Image Density"*
Images are dark.	Black and white printed originals	Press the 【Lighter】 key. ⇒ P.29 *"Adjusting Copy Image Density"*
	Original with designed background.	Press the 【Lighter】 key. ⇒ P.29 *"Adjusting Copy Image Density"*
The reverse side of an original is copied.	Timetables or maps	Specify "Sharp" for Text mode in "08.Image Adjustment". Then select the Text mode. ⇒ P.79 *"08.Image Adjustment"*
A moire pattern is produced on copies. 	Your original has dot pattern image or many lines.	Place the original on the exposure glass at a sight angle.
	Printed photographs	Select the Photo mode.
	Standard photographic prints	Select the Text·Photo mode.
Tones are not reproduced properly.	Standard photographic prints	Specify "Glossy Photo" for Photo mode in "08.Image Adjustment". Then select the Photo mode. ⇒ P.79 *"08.Image Adjustment"*
	Printed photographs	Select the Photo mode and adjust the image density.

If You Cannot Make Copies as You Want

Problem	Cause	Action
Misfeeds occur frequently.	Copy paper size setting is not correct.	Set the proper paper size. See ⇒ P.72 *"Changing the Paper Size"*.
You cannot combine several functions.	Selected functions cannot be used together.	Refer to the combination chart. See ⇒ P.59 *"Combination Chart"*.

Loading Paper

Note

❒ If you want to change the paper size, see ⇒ P.72 *"Changing the Paper Size"*.

Reference

Regarding paper types and sizes that can be set, see ⇒ P.17 *"Copy Paper"*.

1 Pull out the paper tray until it stops.

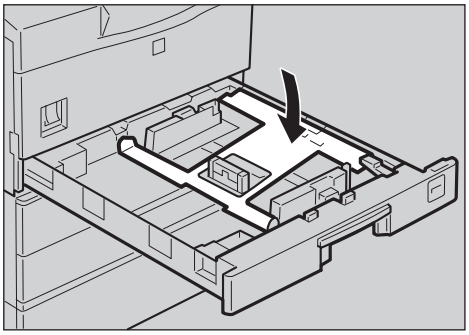
Loading paper in the paper tray (Tray 1)

Note

❒ The bottom plate lower automatically, if not, lower it.

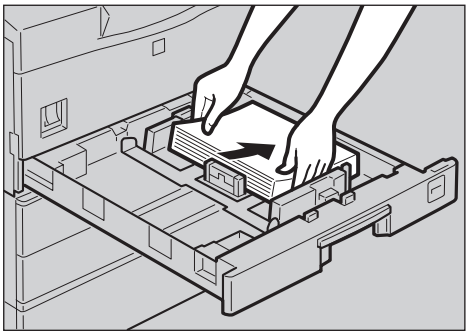
❒ When the bottom plate is up, the paper tray cannot reset.

❶ Make sure the bottom plate is down.



THYH141E

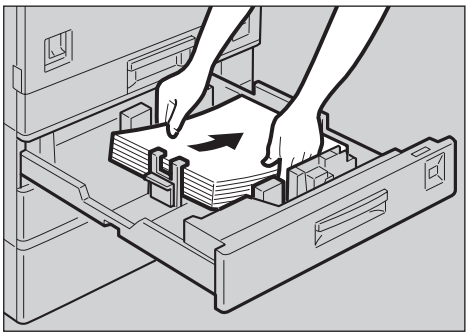
❷ Square the paper and set it in the tray.



THYH150E

Loading paper in the paper tray unit (Tray 2, 3)

❶ Square the paper and set it in the tray.



THYH160E

Important

❒ Do not stack paper over the limit mark.

Note

❒ Shuffle the paper before setting it in the tray.

2 Push the paper tray in until it stops.

Replacing the Toner Cartridge

When is displayed, it is time to replace the toner cartridge.

⚠ ***WARNING:***



- ***Do not incinerate used toner or toner containers. Toner dust might ignite when exposed to an open flame. Dispose of the used toner containers according to local regulations for plastics.***

⚠ ***CAUTION:***



- *Do not eat or swallow toner.*
- *Keep toner (used or unused) and toner containers out of reach of children.*

⚠ ***CAUTION:***



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

Important

❒ If you use the toner cartridge other than that recommended, a fault might occur.

❒ When replacing the toner cartridge, do not turn off the power switch. If you do, your settings are cleared.

❒ Always replace the toner cartridge after the machine instructs you to replace the toner cartridge.

❒ Do not use used toner. This will damage the machine.

Note

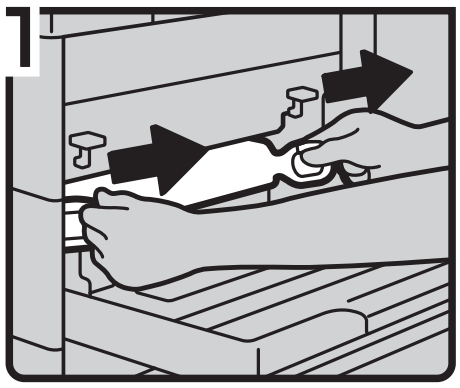
❒ You can still make about 150 copies after the appears, but replace the toner early to prevent poor copy quality.

Reference

Regarding toner storage, see ⇒ P.23 *"Toner Storage"*.

❶ Open the side cover.

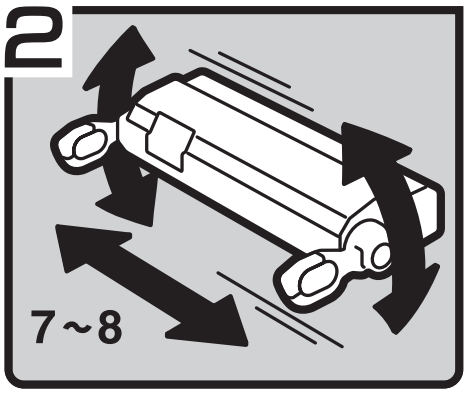
❷ Pull the used toner cartridge out of the machine by holding the grips of it.



THYH300E

❸ Take a new toner cartridge from the box.

❹ Hold the toner cartridge as shown in the illustration, and shake it side to side about 7-8 times.

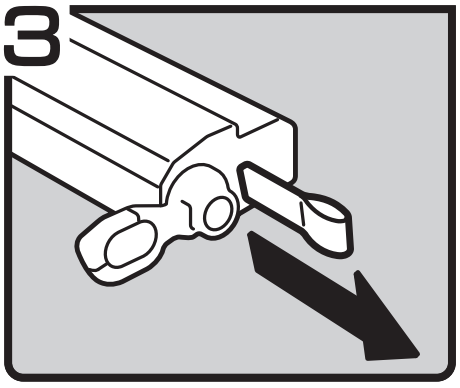


THYH310E

Note

❒ If the toner cartridge is not shaken enough, toner might not be evenly distributed in the cartridge. In this case, the print quality might be reduced.

❺ Place the toner cartridge on a flat surface. Pull out the tape inside the unit horizontally while holding the cartridge with one hand as shown in the illustration.



THYH320E

Note

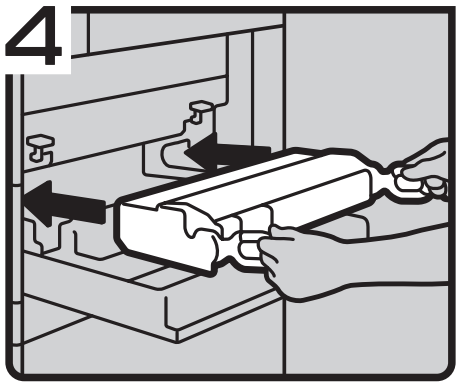
❒ Be sure to remove the tape completely before installing the new toner cartridge. Otherwise, the machine might be damaged.

❒ Be sure to pull the tape horisontally. Pulling it upward or downward causes toner scattering.

❒ Be careful not to make your cloths dirty toner.

❒ After pulling out the tape from the cartridge, toner scatters easily. Do not shake or give a shock to the cartridge.

❻ Holding the grips of the cartridge, insert it into the machine until it stops.



THYH330E

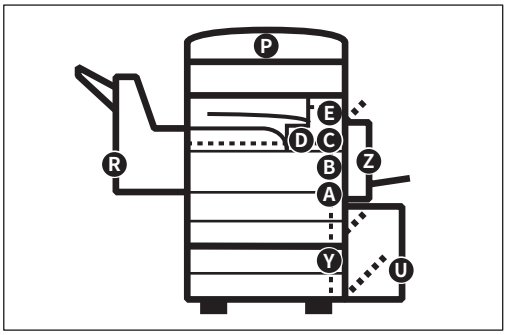
❼ Close the side cover.

Important

❒ Do not close the side cover with force. If you cannot close the cover easily, pull out the toner cartridge from the copier and insert it again. After that, close the side cover again.

❒ After installing the new toner cartridge, the first few page migth be printed with light density.

Clearing Misfeeds



ND4X0200

⚠ ***CAUTION:***

- *When removing misfed paper, do not touch the fusing section because it could be very hot.*

Important

❒ When clearing misfeeds, do not turn off the power switch. If you do, your copy settings are cleared.

❒ To prevent misfeeds, do not leave any torn scraps of paper within the machine.

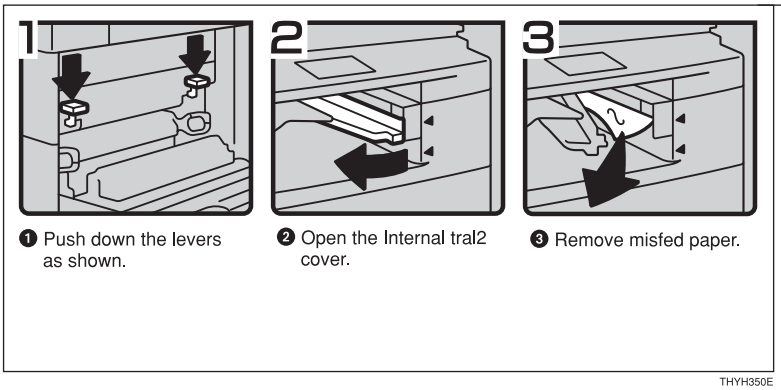
❒ If paper misfeeds occur repeatedly, contact your service representative.

Note

❒ More than one misfed areas may be indicated. In this case, check every applicable area. Refer to the following charts: A, B, C, D, R, P, Y

❒ You can find a sticker explaining how to remove misfed paper inside of the rightside cover.

When R is lit

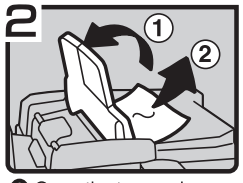


THYH350E

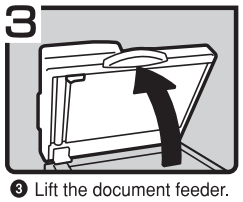
When P is lit



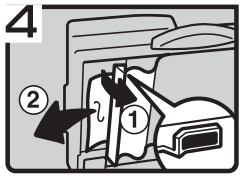
❶ Open the left cover of the document feeder and remove misfed originals.



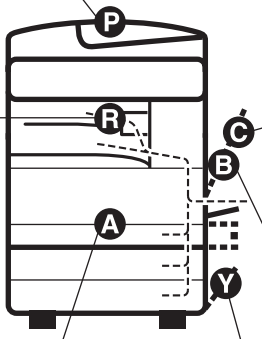
❷ Open the tray and remove misfed originals.



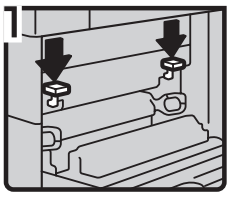
❸ Lift the document feeder.



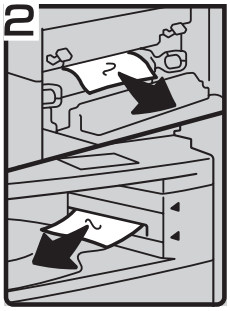
❹ Open the green tub and remove misfed originals.



When C is lit

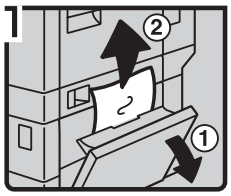


❶ Push down the levers as shown.

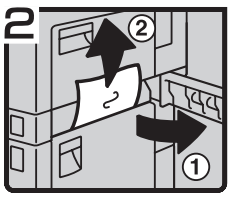


❷ Remove misfed paper.

When Y is lit

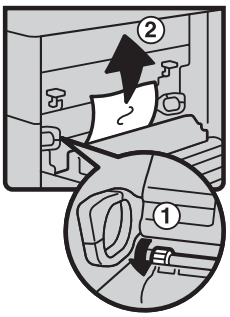


❶ Open the right-side cover in tray unit.
❷ Remove misfed paper.



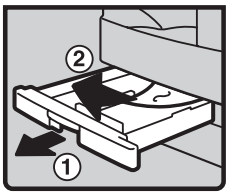
❸ Open the right-side cover in papertray.
❹ Remove misfed paper.

When B is lit



❶ Turn the knob downward.
❷ Remove misfed paper.

When A is lit



❶ Pull the paper tray and remove misfed paper.
❷ Open the right-side cover then close it.

THYH360E

Changing the Paper Size

Important

❒ Make sure to select paper size with the paper size selector or user tools. Otherwise, misfeeds might occur.

Reference

For paper sizes, weight, and capacity that can be set in each tray, see ⇒ P.17 *"Copy Paper"*.

Tray 1

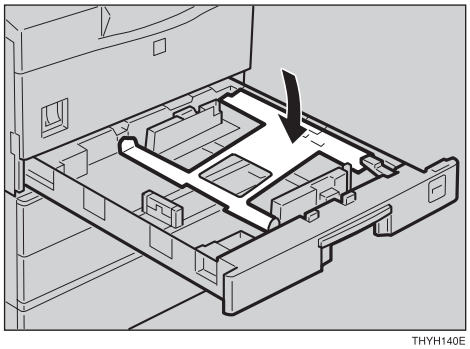
1 **Make sure that the paper tray is not being used.**

2 **Pull the paper tray, then remove papers in it.**

Note

❒ The bottom plate is down automatically, if not, lower the bottom plate.

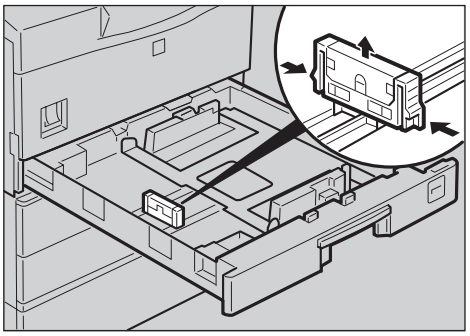
❒ When the bottom plate is up, the paper tray cannot reset.



THYH140E

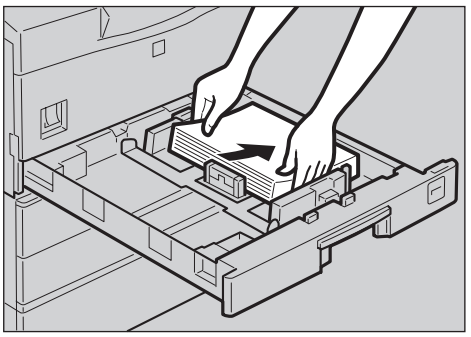
5 **While pressing the levers on the rear guides, slide the rear guides**

3 **Press the release lever and pull the left guide up. Then put it to the paper size you want to use.**



THYH180E

4 **Square the paper and set it in the tray.**



THYH150E

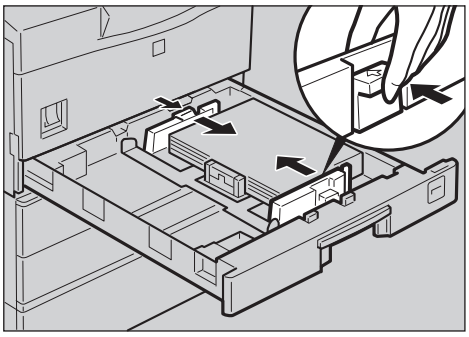
Important

❒ Do not stack paper over the limit mark.

Note

❒ Shuffle the paper before setting in the tray.

to the paper size you want to use.

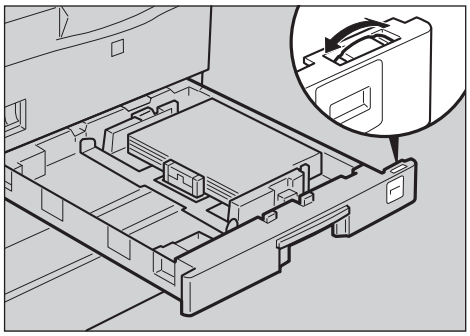


THYH170E

Note

❒ When pressing the levers, push them together.

6 **Adjust the paper size selector.**



THYH190E

Note

❒ The available paper sizes on the paper size selector are shown below. If the paper size you need is not there, see *"11.Special Pap. Size"* in the System Settings.

- Metric version: A3⊐, A4▯⊐, A5▯, $8^1/_2$" x 11"▯, 8" x 13"⊐
- Inch version: 11" x 17"⊐, $8^1/_2$" x 14"⊐ ,$8^1/_2$" x 11"▯⊐, $8^1/_2$" x 13"⊐ ,A4▯

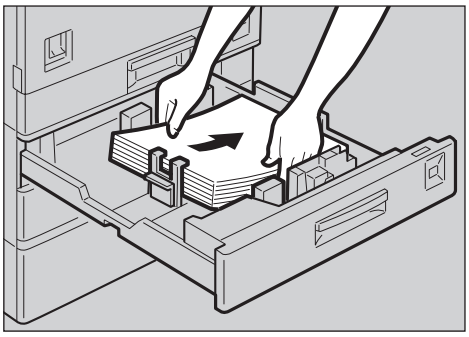
Tray 2, 3

1 **Make sure that the paper tray is not being used.**

the front and rear guides to the

2 **Pull the paper tray, then remove papers in it.**

3 **Square the paper and set it in the tray.**



THYH160E

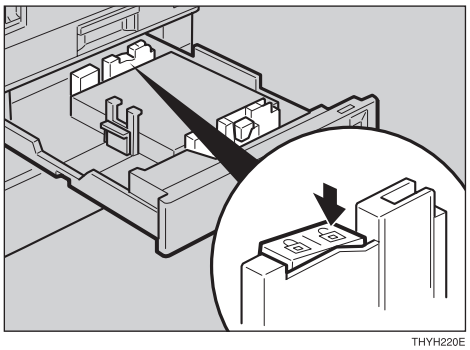
Important

❒ Do not stack paper over the limit mark.

Note

❒ Shuffle the paper before setting in the tray.

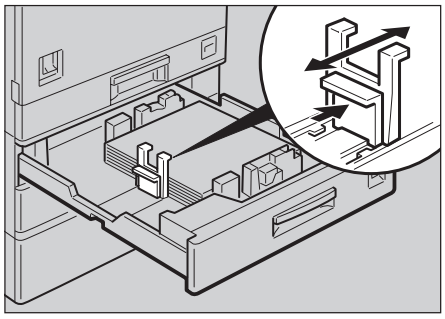
4 **Unlock the lever.**



THYH220E

5 **While pressing the release levers on the front and rear guides, slide**

paper size you want to use.

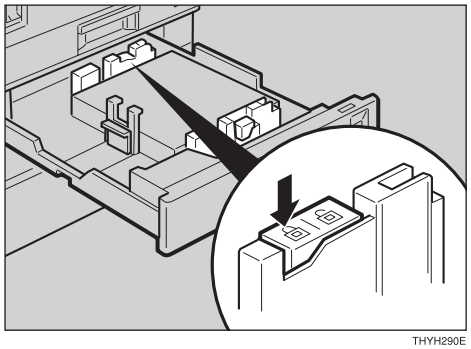


THYH210E

Note

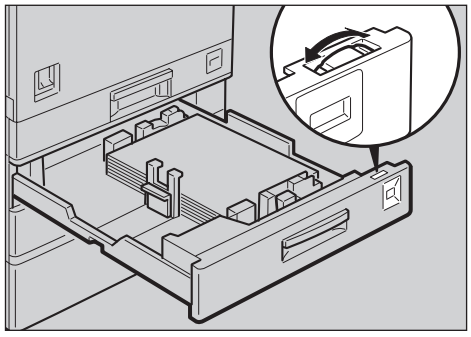
❒ When pressing the levers, push them together.

6 While pressing the release lever, slide the left guide to the paper size you want to use.



THYH290E

7 Adjust the paper size selector.



THYH270E

Note

❒ The available paper sizes on the paper size selector are shown below. If the paper size you need is not there, see "11.Special Pap. Size" in the System Settings.

- Metric version: A3⧉, A4▯⧉, 11" x 17"⧉, $8^1/_2$" x 14"⧉, $8^1/_2$" x 11"▯⧉
- Inch version: A3⧉, A4▯⧉, 11" x 17"⧉, $8^1/_2$" x 14"⧉, $8^1/_2$" x 11"▯⧉

Accessing the User Tools (Copy Features)

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

Preparation

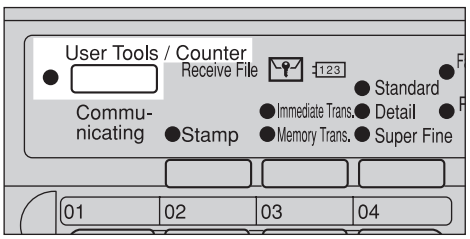
After using the user tools, be sure to exit from user tools.

Reference

Regarding about the user tools for system setting, see "Accessing The User Tools (System Settings)" in the System Settings.

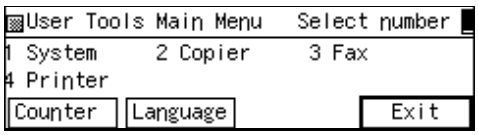
Regarding the user tools for the fax or printer mode, see each Operating Instructions.

1 Press the 【User Tools/Counter】 key.



THYS050E

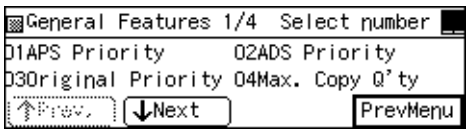
2 Enter 【2】 with the 【Number】 key.



Note

- ❒ Press the 【Counter】 key to check or print out the total number of prints made by the machine.
- ❒ Press the 【Language】 key to switch the display panel language.

3 Enter the number of the desired User Tools menu with the 【Number】 keys.



Note

- ❒ To return to the previous menu, press the **[PrevMenu]** key.

4 Search for the desired setting with the [↓Next] key. Enter its number with the 【Number】 keys.

Note

- ❒ **[↓Next]**: Press to go to the next page.
- ❒ **[↑Prev.]**: Press to go back to the previous page.

Reference

See ⇒ P.75 *"User Tools (Copy Features)"*.

5 Change the settings by following the instructions on the panel display. Then, press the [OK] key.

Reference

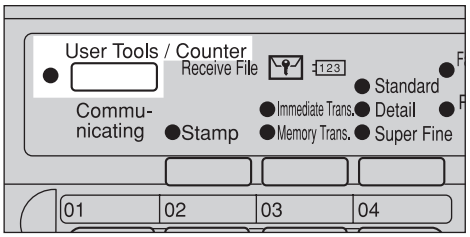
See ⇒ P.78 *"Settings You Can Change with the User Tools"*.

Note

- ❒ **[OK]** key: Press to set the new settings and return to the previous menu.
- ❒ **[Cancel]** key: Press to return to the previous menu without changing any data.

Exiting from User Tools

1 **After changing the user tools settings, press the 【User Tools/ Counter】key.**

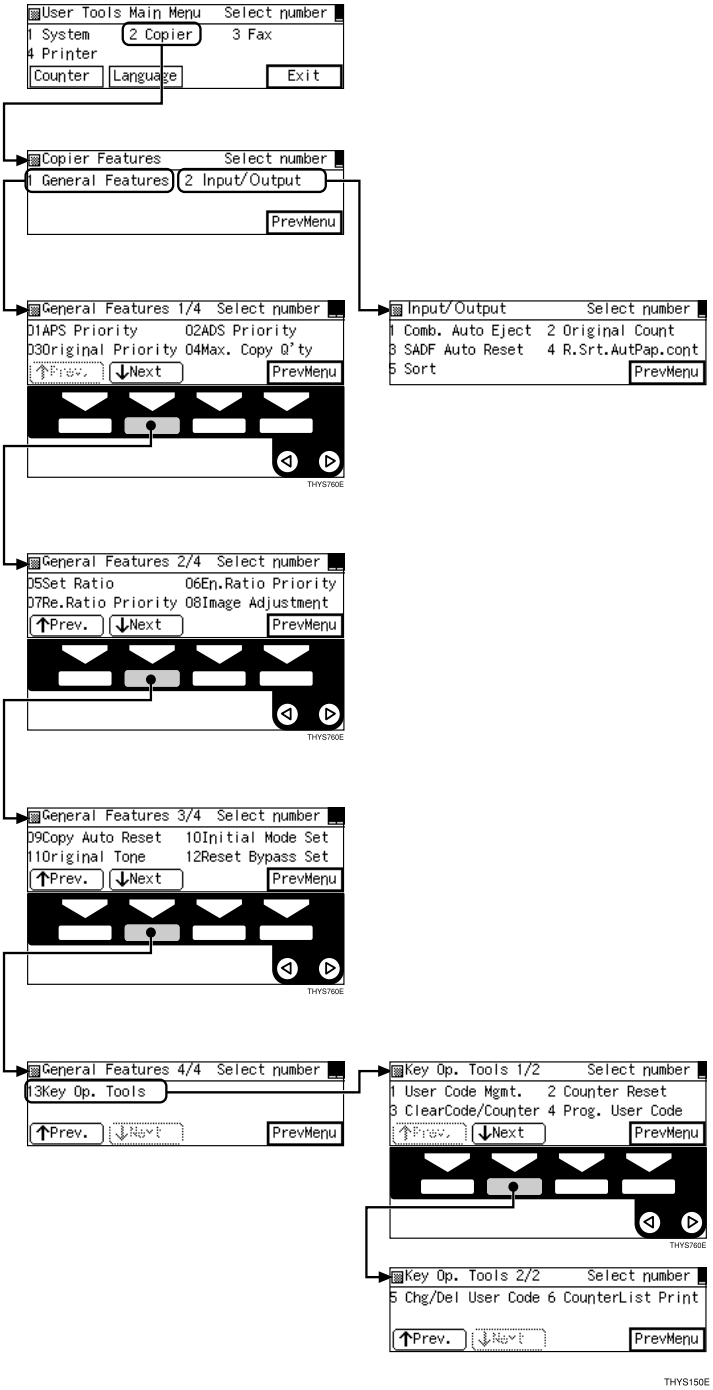


THYS050E

Note

❒ The settings are not canceled even if the power switch is turned off or the 【Clear Modes】, 【Energy Saver】key is pressed.

User Tools Menu (Copy Features)



Settings You Can Change with the User Tools

Reference

For how to access the user tools, see ⇒ P.75 *"Accessing the User Tools (Copy Features)"*.

For how to change the settings, see ⇒ P.7 *"Function menu display"*.

1. General Features 1/4

Menu	Description
01. APS Priority	As a default setting, Auto Paper Select is selected. You can cancel this setting. **Note** ❒ Default: *Yes*
02. ADS Priority	In each mode of Text, Text·Photo and Photo, you can specify whether to select Auto Image Density. **Note** ❒ Default: • Text: *Yes* • Text·Photo: *Yes* • Photo: *No*
03. Original Priority	As a default setting, Text is selected as original Type. You can change it to Text·Photo or Photo. **Note** ❒ Default: *Text*
04. Max. Copy Q'ty	The maximum copy quantity can be set between 1 and 999. **Note** ❒ Default: *99*

1. General Features 2/4

Reference

For how to change the settings, see ⇒ P.7 *"Function menu display"*.

Menu	Description
05. Set Ratio	Up to 2 reproduction ratios which you frequently use can be registered. **Reference** See ⇒ P.51 *"Preset Reduce/Enlarge—Reducing and Enlarging Using Preset Rations"*
06. En Ratio Priority	You can change the preset Eularge ratio.
07. Re. Ratio Priority	You can change the preset Reduce ratio.
08. Image Adjustment	You can adjust the quality level of copies for each of the original types (Text, Text•Photo, Photo). You can specify the toner saving feature in "Text". **Note** ❒ Default: • Text: Normal • Text•Photo: Photo Priority • Photo: Press Print **Reference** See ⇒ P.63 *"If you Cannot Make Clear Copies"*

1. General Features 3/4

Reference

For how to change the settings, see ⇒ P.7 *"Function menu display"*.

Menu	Description
09. Copy Auto Reset	The machine returns to its initial condition automatically after your job is finished. The time can be set from 10 to 180 seconds. **Note** ❒ Default: *60 seconds*
10. Initial Mode Set	You can select the Initial mode or Program No. 10 as the mode to be effective when modes are cleared. **Note** ❒ Default: *Standard*
11. Original Tone	The key tone sounds when you forgot to remove originals after copying. **Note** ❒ Default: *On* ❒ If the Panel Tone setting is set to Off, (see "System settings"), the key tone does not sound irrespective of the setting (On or Off) of this Original Tone function.
12. Reset Bypass Set	You can select whether sill set or reset the sizes input for the bypass tray setting. **Note** ❒ Default: *Off*

1. General Features 4/4

Reference

For how to change the settings, see ⇒ P.7 *"Function menu display"*.

Menu	Description
13. Key Op. Tools You can change settings for user access limitation for copier functions.	
1. User Code Mgmt.	Specify whether to employ user codes to restrict copier users and manage the number of copies made. **Note** ❒ Default: No
2. Counter Reset	You can check the number of copies made under each user code. You can also reset each user code's counter to 0. **Note** ❒ If more than one user code is registered, you can view all the counters using the **[↑Prev.]** or **[↓Next]** key.
3. Clear Code/Counter	You can delete all user codes or reset all counters to 0.
4. Prog. User Code	You can register user codes. **Note** ❒ Up to 50 user codes (8 digits or less) can be registered.
5. Chg/Del User Code	You can change or delete user codes. **Note** ❒ The number of copies made under the old code is added to that made under the new user code. ❒ The number of copies made under the deleted code is also deleted.
6. Counter List Print	You can print a list of counters shown by user code. **Note** ❒ To stop the printing, press the **[Cancel]** key.

2. Input/Output

Reference

For how to change the settings, see ⇒ P.7 *"Function menu display"*.

Menu	Description
1. Comb. Auto Eject	As a default setting, even if the number of originals in the optional document feeder is less than the number required in the selected Combine mode, the lacking number of copies are automatically made in blank. You can cancel this setting.⇒ P.54 *"Combine—Combining Originals into One Copy"* **Limitation** ❒ When you set one original at a time in the document feeder or set an original on the exposure glass, this function does not come effect. **Note** ❒ Default: *Yes*
2. Original Count	As a default setting, the display shows the copy quantity you specified and the number of copies made. You can cancel this setting, and instead view the number of originals to be fed in the document feeder and the number of copies made. **Note** ❒ Default: *No*
3. SADF Auto Reset	When you set one original at a time in the optional document feeder, the Auto Feed indicator lights for a selected time after an original is fed to show that the document feeder is ready for another original. You can adjust this time from 3 seconds to 99 seconds in 1 second steps. **Limitation** ❒ The optional document feeder (ADF) is required. **Note** ❒ Default: *4 seconds*
4. R.Srt.Aut Pap.	If you select **[No]** when the paper tray in use runs out of paper, the machine stops allowing you to add paper to the tray. So you can have all the copies rotate-sorted. **Note** ❒ Default: *No*

2. Input/Output

Menu	Description
5. Sort	You can select a Sort or Rotate Sort. ⇒ P.37 *"Sort"* **Note** ❒ Default: Sort

Do's and Don'ts

⚠ ***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.*

Important

❒ Make sure the remaining memory space is 100%, before you unplug the power cord.

❒ While the machine is unplugged, you can neither send nor receive a fax.

Reference

For details, see the Facsimile Reference.

- Do not touch areas on or around the fusing unit. These areas get hot.
- After making copies continuously, you may feel the exposure glass is heated. But this is not a malfunction.
- You may feel warm around the ventilation hole. This is caused by exhaust air, and not a malfunction.
- Do not turn off the operation switch while copying or printing. When turning off the operation switch, make sure that copying or printing is completed.
- The machine might fail to produce good copy images if there should occur condensation inside caused by temperature change.
- Do not open the covers of machine while copying or printing. If you do, misfeeds might occur.
- Do not move the machine while copying or printing.
- If you operate the machine improperly or a failure occurs on the machine, your machine settings might be lost. Be sure to take a note of your machine settings.
- Supplier shall not be liable for any loss or damages resulting from a failure on the machine, loss of machine settings, and use of the machine.

Where to Put Your Machine

Machine Environment

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

Optimum environmental conditions

⚠ ***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.*

⚠ ***CAUTION:***



- *If you use the machine in a confined space, make sure there is a continuous air turnover.*

- Temperature: 10 – 32°C (50 – 89.6°F)(humidity to be 54% at 32°C, 89.6°F)
- Humidity: 15 – 80% (temperature to be 27°C, 80.6°F at 80%)
- A strong and level base.
- The machine must be level within 5mm, 0.2" both front to rear and left to right.
- To avoid possible build-up of ozone, make sure to locate this machine in a large well ventilated room that has an air turnover of more than 30 m^3/hr/person.

Environments to avoid

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

Power Connection

⚠ ***WARNING:***



- ***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.***

⚠ ***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.***

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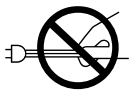
⚠ ***CAUTION:***



- *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.*

⚠ ***CAUTION:***

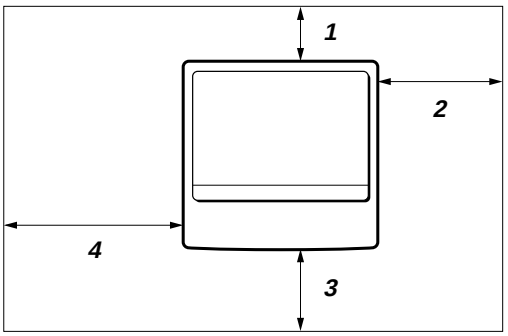


- *When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.*

- When the main switch is in the Stand-by positions, the optional anti-condensation heaters are on. In case of emergency, unplug the machine's power cord.
- When you unplug the power cord, the anti-condensation heaters turn off.
- Make sure the plug is firmly inserted in the outlet.
- Voltage must not fluctuate more than 10%.

Access to Machine

Place the machine near the power source, providing clearance as shown.
More clearance required when clearing misfeeds or replacing the toner cartridge.



1. **Rear: more than 1cm (0.4")**
2. **Right: more than 1cm (0.4")**
3. **Front: more than 75cm (29.6")**
4. **Left: more than 2cm (0.8")**

Note

❒ For the required space when options are installed, please contact your service representative.

Maintaining Your Machine

If the exposure glass, platen covers or document feeder is dirty, you might not be able to make copies as you want. Clean them if you find them dirty.

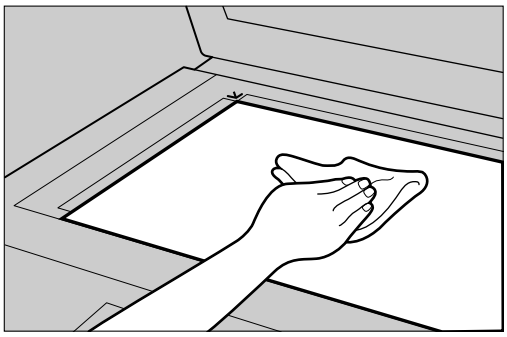
❖ **Cleaning the machine**
Wipe the machine with a soft, damp cloth. Then, wipe it with a dry cloth to remove the water.

Important

❒ Do not use chemical cleaner or organic solvent such as thinner or benzene. If they get into the machine or melt plastic parts, a failure might occur.

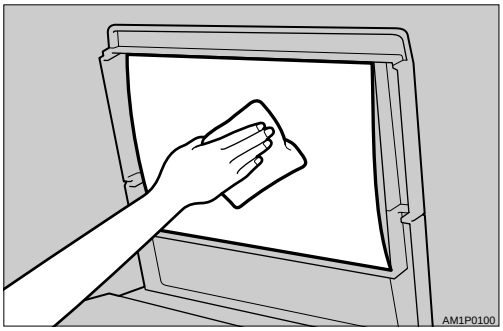
❒ Do not clean parts other than those specified in this manual. Such parts should be cleaned by your service representative.

Cleaning the Exposure Glass



ND1C0200

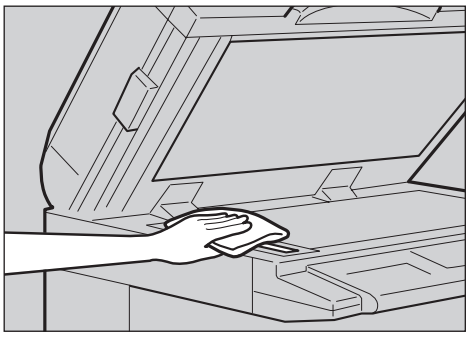
Cleaning the Platen Cover



AM1P0100

Cleaning the Document Feeder

When black lines appear on copies, please clean the reader glass left side of the exposure glass.



THYH230E

Mainframe

- **Configuration:**
  Desktop
- **Photosensitivity type:**
  OPC
- **Original scanning:**
  One-dimensional solid scanning system through CCD
- **Copy process:**
  Dry electrostatic transfer system
- **Development:**
  Dry one-component magnetic brush development system
- **Fusing:**
  Heating roll system
- **Resolution:**
  600dpi
- **Exposure glass:**
  Stationary original exposure type
- **Original reference position:**
  Rear left corner
- **Warm-up time:**
  Less than 30 seconds (30°C)
- **Originals:**
  Sheet/book/objects
- **Maximum original size:**
  A3, 11" × 17"
- **Copy paper size:**
  - Trays: A3 – A5, 11" × 17" – $5^1/_2$" × $8^1/_2$"
  - Bypass: A3 – A5, B6, 11" × 17" – $5^1/_2$" × $8^1/_2$"
  - Bypass (non-standard size):
    Vertical: 90 – 305mm, 3.5" – 12.0"
    Horizontal: 148 – 1,260mm, 5.8" – 49.6"

❖ **Copy paper weight:**

- Paper tray: 60 – 90g/m^2 (16 – 24 lb)
- Bypass tray: 60 – 162g/m^2 (16 – 43 lb)

❖ **Non-reproduction area:**

- Leading edge: 2 ± 1.5mm(0.08" ± 0.06")
- Trailing edge: more than 0.5mm(0.02")
- Left edge: 2 ± 1.5mm(0.08" ± 0.06")
- Right edge: more than 0.5mm(0.02")

❖ **First copy time:**

A4	$8^1/_2$" × 11"
6.5 seconds or less	6.5 seconds or less

(100%, feeding from 1st or 2nd paper tray, Text·Photo mode, Auto Image Density)

❖ **Copying speed:**

- 8 copies/minute (A3, 11" × 17")
- 18 copies/minute (A4, $8^1/_2$" × 11")

❖ **Reproduction ratio:**

Preset reproduction ratios:

--	Metric version	Inch version
Enlargement	200%	200%
	141%	155%
	122%	129%
	115%	121%
Full Size	100%	100%
Reduction	93%	93%
	87%	85%
	82%	78%
	71%	74%
	65%	65%
	50%	50%

Zoom:
- Metric version: 50 – 200%
- Inch version: 50 – 200%

❖ **Continuous copying count:**
1 – 99 copies

❖ **Copy paper capacity:**
- 1st paper trays: 250 sheets (80g/m^2, 20 lb)
- Bypass tray: 100 sheets (80g/m^2, 20 lb)

❖ **Power consumption:**

	Mainframe only	Complete System *1
Warm up	About 860W	About 870W
Stand-by	About 110Wh	About 130Wh
Copying	About 450Wh	About 460Wh
Maximum	Less than 1.10kW	Less than 1.20kW

*1 Mainframe with the document feeder, paper tray unit, and Internal Tray 2.

❖ **Dimensions (W × D × H up to exposure glass):**
- 550 × 575 × 460mm, 21.7" × 22.7" × 18.2"

❖ **Space for main frame (W × D):**
550 × 575mm, 21.7" × 22.7" (The bypass tray closed)
690 × 575mm, 27.2" × 22.7" (The bypass tray opened)

❖ **Noise Emission (ISO 7779 Sound Power Level)**
Based on actual measurement

	Mainframe only	Complete System *1
When copying	60dB (A) or less	66dB (A) or less
Stand-by	42dB (A) or less	44dB (A) or less

*1 Mainframe with the document feeder, Internal Tray 2 and 1000-sheet unit.

❖ **Weight:**

Approx. 38kg, 83.8 lb

Note

❒ Specifications are subject to change without notice.

Document Feeder (Option)

❖ **Mode:**
ADF mode, SADF mode

❖ **Original size:**

- A3 – A5
- 11" × 17" – $5^1/_2$" × $8^1/_2$"

❖ **Original weight:**

40 – 128g/m^2 (10 – 34 lb)

❖ **Number of originals to be set:**
50 sheets (80g/m^2, 20 lb)

❖ **Maximum power consumption:**
25W (power is supplied from the main frame.)

❖ **Dimensions (W × D × H):**
550 × 470 × 130mm, 21.7" × 18.6" × 5.2"

❖ **Weight:**
Approx. 9kg, 19.9 lb

Note

❒ Specifications are subject to change without notice.

500 – Sheet Tray Unit (Option)

❖ **Copy paper weight:**
60 – 105g/m^2 (16 – 28 lb)

❖ **Available paper size:**
A3▭, B4▭, A4▯▭, B5▯▭, A5▯▭, 8k▭, 16k▯▭, 11" × 17"▭, 8$^1/_2$" × 14"▭, 8$^1/_2$" × 11"▯▭, 5$^1/_2$" × 8$^1/_2$"▭, 7$^1/_4$" × 10$^1/_2$"▯▭, 8" × 13"▭, 8$^1/_2$" × 13"▭, 8$^1/_4$" × 13"▭, 8" × 10"▯▭, 8" × 10$^1/_2$"▯▭, 10" × 14"▭, 11" × 15"▭, 11" × 14"▭, 10" × 15"▭, 8$^1/_4$" × 14"▭

❖ **Maximum power consumption:**
20W (power is supplied from the main frame.)

❖ **Paper capacity:**
500 sheets (80g/m^2, 20 lb) × 1 tray

❖ **Dimensions (W × D × H):**
550 × 520 × 134mm, 21.7" × 20.5" × 5.3"

❖ **Weight:**
Approx. 12kg, 26.5 lb

Note

❒ Specifications are subject to change without notice.

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1000 – Sheet Tray Unit (Option)

❖ **Copy paper weight:**
60 – 105g/m^2 (16 – 28 lb)

❖ **Available paper size:**
A3▭, B4▭, A4▯▭, B5▯▭, A5▯▭, 8k▭, 16k▯▭, 11" × 17"▭, 8$^1/_2$" × 14"▭, 8$^1/_2$" × 11"▭, 5$^1/_2$" × 8$^1/_2$"▭, 7$^1/_4$" × 10$^1/_2$"▯▭, 8" × 13"▭, 8$^1/_2$" × 13"▭, 8$^1/_4$" × 13"▭, 8" × 10"▯▭, 8" × 10$^1/_2$"▯▭, 10" × 14"▭, 11" × 15"▭, 11" × 14"▭, 10" × 15"▭, 8$^1/_4$" × 14"▭

❖ **Maximum power consumption:**
30W (power is supplied from the main frame.)

❖ **Paper capacity:**
500 sheets (80g/m^2, 20 lb) × 1 tray

❖ **Dimensions (W × D × H):**
550 × 520 × 271mm, 21.7" × 20.5" × 10.7"

❖ **Weight:**
Approx. 25kg, 55.2 lb

Note

❒ Specifications are subject to change without notice.

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Internal Tray 2 (1bin tray) (Option)

❖ **Number of bins:**
1

❖ **Available paper size:**
A3, B4, A4, B5, A5, 11" × 17", 8 1/2" × 14", 8 1/2" × 11", 5 1/2" × 8 1/2"

❖ **Paper capacity:**
125 sheets (80g/m^2, 20 lb)

Note

❒ The paper capacity might be less than 125 sheets when copy paper is considerably curled.

❖ **Copy paper weight:**
60 – 105g/m^2 (16 – 28 lb)

❖ **Maximum power consumption:**
17W (power is supplied from the main frame.)

❖ **Dimensions (W × D × H):**
447 × 456 × 122mm, 17.6" × 18.0" × 4.8"

❖ **Weight:**
Approx. 1.5kg, 3.3 lb

Note

❒ Specifications are subject to change without notice.

48MB Copier Memory Unit (Option)

❖ **Memory capacity:**
48MB

❖ **Number of originals to be stored:**
Up to 99 pages (reference value based on ITU-T No.1 chart)
Up to 99 pages (reference value based on ITU-T No.4 chart)

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