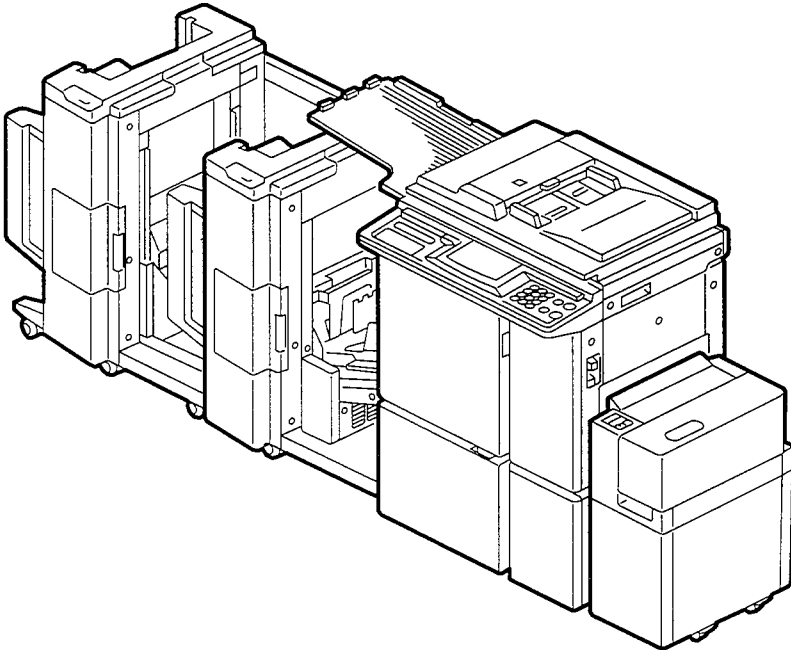


# SAVIN

*Digital Duplicator*

## **3300DNP**

### Operating Instructions



In accordance with ISO Standard 7001, this machine uses the following symbols for the main switch:



means POWER ON.



means POWER OFF.



means STAND BY.

For good print quality, Savin recommends that you use genuine Savin master and ink.

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

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

Note: Some illustrations may be slightly different from your machine.

# INTRODUCTION

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

---

## SAFETY INFORMATION

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

### Safety During Operation

In this manual, all safety messages are identified by the words “WARNING” and “Caution”. These words mean the following:

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

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

**– WARNING –**

- ❑ *Do not modify or replace any parts other than the ones specified in this manual.***
- ❑ *Since some parts of the machine are supplied with high voltage, touch only the parts specified in this manual.***
- ❑ *Do not operate the machine without covers. You might get your fingers caught in the machine, or the machine might be damaged because, for example, dust or the like might get inside it.***
- ❑ *Since some parts of the machine are sharp and might cause injury, touch only the parts specified in this manual.***

## **SAFETY INFORMATION**

---

### **– Caution –**

- While printing, do not turn off the main switch.
- While printing, do not open the door or covers.
- While printing, do not unplug the power cord.
- While printing, do not move the machine.
- Keep corrosive liquids, such as acid, off the machine.
- Do not allow paper clips, staples, or other small objects to fall inside the machine.
- Open and close the door and covers softly.
- Do not put anything except originals or command sheets on the machine.
- Do not spill liquid on the machine.
- When opening or closing the door or covers, keep hold of them so they don't full.
- If you clean rubber parts with benzine, wipe them with a dry cloth afterwards.

## **General Safety Information**

- Always turn the machine off when you have finished printing for the day.
- When the machine will not be used for long periods, disconnect the power cord.
- If the machine must be transported by vehicle, please contact your service representative.

# ***Section 1***

# TABLE OF CONTENTS

<b>INTRODUCTION .....</b>	<b>i</b>
<b>SAFETY INFORMATION .....</b>	<b>i</b>
Safety During Operation .....	i
General Safety Information .....	ii
<b>GUIDE TO COMPONENTS .....</b>	<b>1</b>
Machine Exterior .....	1
Machine Interior .....	3
Options .....	5
Operation Panel.....	6
Indicators .....	8
<b>INSTALLATION REQUIREMENTS .....</b>	<b>9</b>
Optimum Environmental Conditions .....	9
Environments To Avoid .....	9
Access To The Machine .....	9
Power Connection .....	10
<b>OPERATION .....</b>	<b>11</b>
Printing Paper .....	11
Originals .....	12
Preparation For Printing .....	13
Standard Printing .....	17
Restoring Paper Feed And Paper Delivery Tables .....	19
Adjusting The Image Position .....	21
Adjusting The Image Density .....	23
Changing The Printing Speed .....	24
Stopping The Machine During A Print Run .....	25
Reduction/Enlargement Printing .....	26
Zoom .....	30
Directional Magnification Printing .....	31
Erasing Center And Edge Margins .....	35
Erasing Margins.....	38
Printing On Thick Or Thin Paper .....	40

Photo Mode Printing .....	42
Ink Saving (Economy Mode) .....	44
Printing From Several Originals At Once .....	45
Group Printing From The Same Original (Class Mode) .....	47
Group Printing From Different Originals (Memory Mode) .....	50
Multi Copy.....	54
Skip Feed Printing (Skip Feed Mode) .....	59
User Programs .....	61
Printing Of Secret Documents (Security Mode) .....	68
<b>OPTIONAL FUNCTIONS .....</b>	<b>69</b>
Printing Using The Optional 20 Originals Or 50 Originals Document Feeder .....	69
Printing Using The Optional Sorter Stapler .....	77
Printing Using The Optional Large Capacity Tray (LCT) .....	94
Color Printing Using The Optional Color Drum .....	107
Changing The Drum Size.....	113
<b>CHANGING DEFAULT SETTINGS .....</b>	<b>114</b>
How To Access Service Programs .....	114
How To Change The Settings Of Service Programs .....	115
Service Program Menu .....	130
User codes .....	139
<b>REPLENISHING SUPPLIES .....</b>	<b>146</b>
Loading Paper On The Paper Feed Table .....	146
Supplying Ink .....	149
Master Roll Replacement .....	151
Placing A New Roll Of Tape In The Tape Dispenser (Option) .....	154
Adding Staples .....	156
<b>DAILY MAINTENANCE .....</b>	<b>158</b>
Exposure Glass .....	158
Platen Cover .....	158
Separation Roller (Optional Document Feeder) .....	159
Sheet (Optional Document Feeder) .....	159
Paper Size Detection Sensors (Paper Feed Table) .....	159
Paper End Sensor (Paper Feed Table) .....	160

**TABLE OF CONTENTS**

---

Paper Feed Roller (Paper Feed Table) ..... 160

Non-sort Tray (Optional Sorter Stapler) ..... 160

**TROUBLESHOOTING .....161**

    When The Misfeed Indicator (✚) Blinks ..... 168

    When The Open Cover/Unit Indicator (☐✚) Blinks ..... 189

    When The Supply/Exchange Indicators Blink ..... 193

    When Other Indicators Blink ..... 195

    When The Prints Are Not Delivered In A Neat Stack, Or The Prints Are  
    Thrown Over The Paper Delivery Table ..... 199

    Poor Printing ..... 200

**OPERATION NOTES .....205**

    General Cautions..... 205

    Print Paper..... 207

    Originals ..... 207

    Misfed Paper ..... 208

    Optional Sorter Stapler ..... 208

    Optional Large Capacity Tray ..... 209

**COMBINATION CHART .....210**

**SPECIFICATIONS .....211**

    Main Frame ..... 211

    20 Originals Document Feeder ..... 214

    50 Originals Document Feeder ..... 214

    Large Capacity Tray (LCT) ..... 215

    20-Bin Sorter Stapler ..... 216

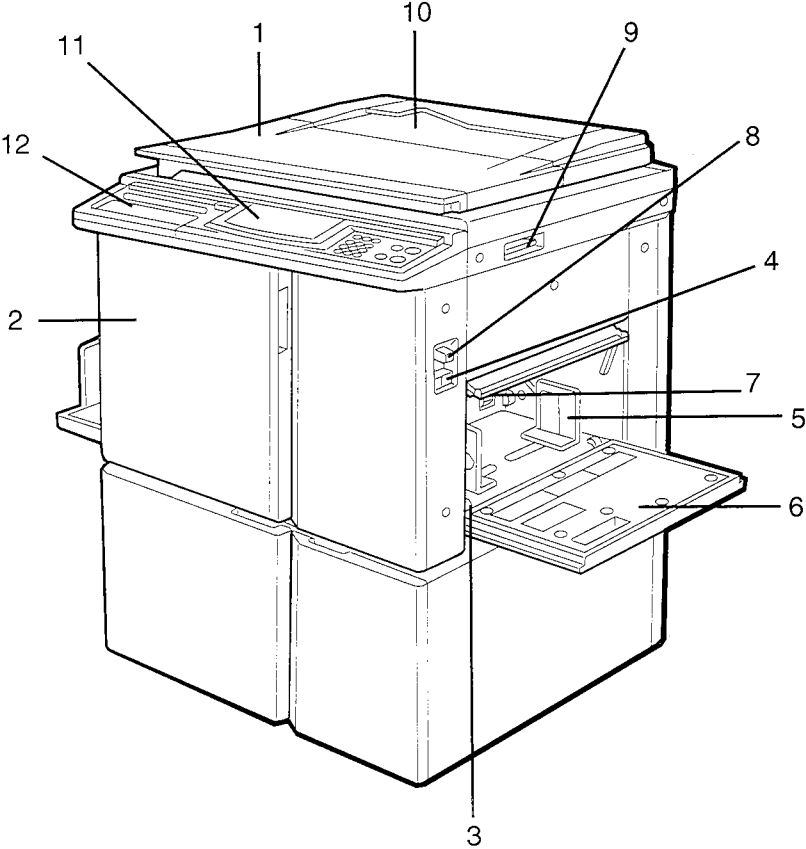
    Consumables ..... 218



# GUIDE TO COMPONENTS

GUIDE TO COMPONENTS

## Machine Exterior

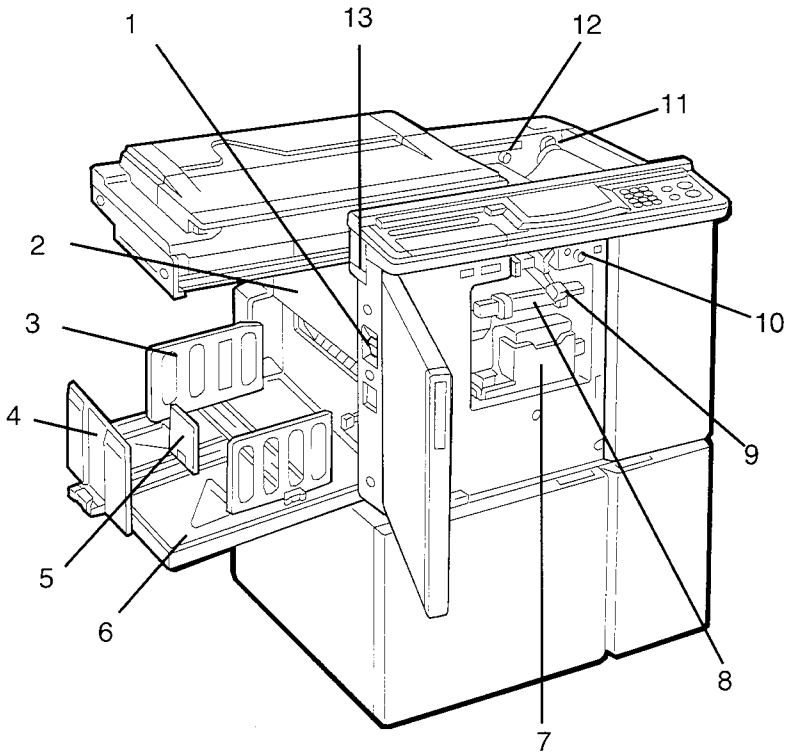


## GUIDE TO COMPONENTS

---

1. **Platen Cover** Lower this cover over an original before printing.
2. **Front Door** Open for access to the inside of the machine.
3. **Side Plate Fine Adjusting Dial** Use to shift the paper feed table sideways.
4. **Paper Feed Table Down key** Press to lower the paper feed table.  
**or**  
**Change Paper key** When you have an optional large capacity tray, this key is used to remove paper.
5. **Paper Feed Side Plates** Use to prevent paper skew.
6. **Paper Feed Table** Set paper on this table for printing.
7. **Separation Roller Pressure Levers** Use to adjust the separation roller pressure to prevent double feed.
8. **Feed Roller Pressure Lever** Use to adjust the contact pressure of the paper feed roller according to paper thickness.
9. **Original Table Release Lever** Use to open the original table unit when installing the master.
10. **Original Holder** Convenient place for holding originals while operating the machine.
11. **Operation Panel** Operator controls and indicators are located here. ➤ See page 6.
12. **Behind Cover** Open to access the **CS Mode** key and so on. ➤ See page 6.

# Machine Interior



## GUIDE TO COMPONENTS

---

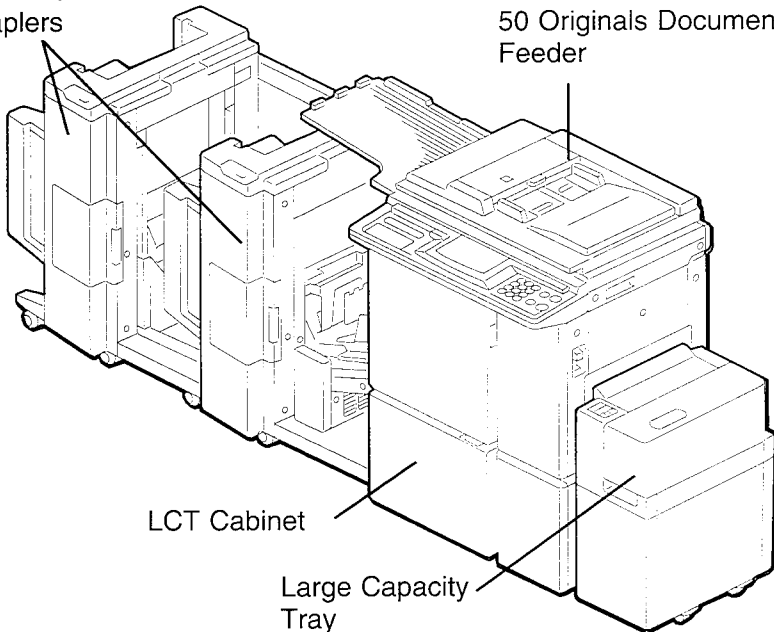
1. **Main Switch** Use to turn the power on or off.
2. **Master Eject Container Cover** Open when removing the master eject box.
3. **Paper Delivery Side Plates** Use to align the prints on the paper delivery table.
4. **Paper Delivery End Plate** Use to align the leading edge of prints larger than A4, 8 1/2" x 11".
5. **Small Size Paper Delivery End Plate** Use to align the leading edge of prints that are A4, 8 1/2" x 11" or smaller.
6. **Paper Delivery Table** Completed prints are delivered here.
7. **Ink Holder** Set the ink cartridge in this holder.
8. **Drum Unit** The master is wrapped around this unit.
9. **Drum Unit Lock Lever** Lift to unlock and pull out the drum unit.
10. **Drum Rotation Button** Press to rotate the drum unit.
11. **Pressure Release Lever** Use to install the master roll.
12. **Master Cut Button** Press this button to cut the master leading edge after installing a new master roll.
13. **Master Eject Unit Open Button** Press to remove misfed paper or a misfed master.

## Options

This machine can be provided with the following options:

20-Bin Sorter  
Staplers

50 Originals Document  
Feeder

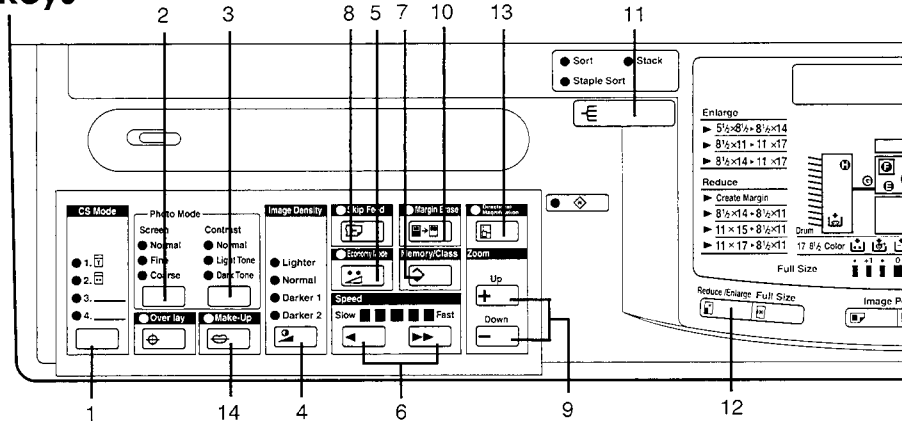


- \*Other options:
- 20 Originals Document Feeder
  - Color Drums
    - A3 drum (red, blue, green, brown, yellow, purple, navy, and maroon)
    - A4 drum (black, red, blue, green, brown, yellow, purple, navy, and maroon)
  - Tape Dispenser
  - Key Counter
  - Cabinet
  - Make-up

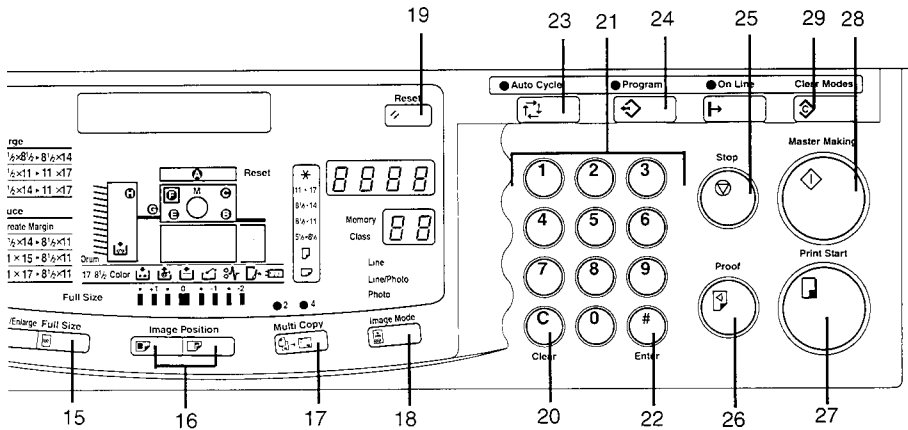
- If you have sorter staplers and you want to have a document feeder, the 50 originals document feeder should be equipped with your machine.
- Sorter staplers and a tape dispenser cannot be equipped together.

# Operation Panel

## Keys



- 1. CS Mode key**  
 See pages 68 and 117.
- 2. Screen key**  
 Press to select the screen image.  
 See page 43.
- 3. Contrast key**  
 Press to select the contrast. See page 43.
- 4. Image Density key**  
 Press to make prints darker or lighter. See page 23.
- 5. Economy Mode key**  
 Press to save ink. See page 44.
- 6. Speed keys**  
 Press to adjust the printing speed.  
 See pages 23 and 24.
- 7. Memory/Class key**  
 Press to select Memory or Class mode. See pages 47 and 50.
- 8. Skip Feed key**  
 Press to select skip feed printing.  
 See page 59.
- 9. Zoom up/down keys**  
 Press to alter the reproduction ratio in 1% increments from 50% to 200%. See page 30.
- 10. Margin Erase key**  
 Press to print book originals that have a solid image on the edges.  
 See page 38.
- 11. Sort key (for the optional sorter stapler)**  
 Press to select Sort, Staple Sort, or Class Sort mode. See page 80.
- 12. Reduce/Enlarge key**  
 Press to reduce or enlarge the image. See page 26.
- 13. Directional Magnification key**  
 Press to specify a different reproduction ratio for each direction. See page 31.
- 14. Make Up key**  
 Press to use the optional Make-up function. See section 2.

**15. Full Size key**

Press to make full size prints.

**16. Image Position keys**

Press to shift the image forwards or backwards. See page 21.

**17. Multi Copy key**

Press to combine originals onto 1 print. See page 54 and 73.

**18. Image Mode key**

Press to select Line, Photo, or Line/Photo mode. See page 42.

**19. Reset key**

Press to reset error indicators. See page 168.

**20. Clear key**

Press to change the number set in the counter.

**21. Number keys**

Press to enter the number of prints and data.

**22. Enter key**

Press to input data into memory.

**23. Auto Cycle key**

Use to process the master and make prints automatically. See page 45.

**24. Program key**

Press to input or recall user programs. See page 61.

**25. Stop key**

Press to stop the machine operation.

**26. Proof key**

Press to make proof prints.

**27. Print Start key**

Press to start printing.

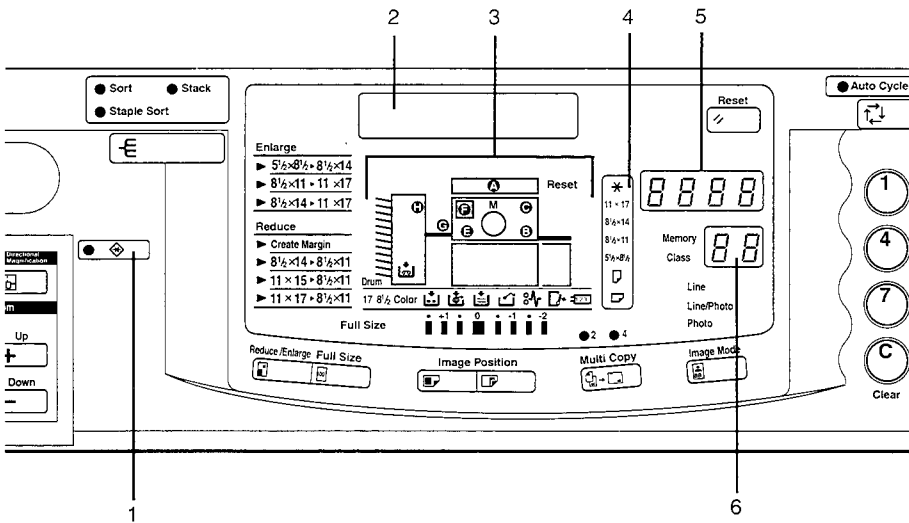
**28. Master Making key**

Press to make a master.

**29. Clear Modes key**

Press to cancel all previously entered settings.

# Indicators



## 1. Special Feature indicator

This indicator is lit when you press keys under the cover on the operation panel.

## 2. Guidance Display

Displays the machine's condition.

## 3. Monitors

The monitors light up or blink when a non-standard condition occurs within the machine. • See page 161.

## 4. Paper Size and Direction indicators

Indicates print paper size and direction.

## 5. Counter

Displays the number of prints entered. While printing, it shows the number of prints remaining.

## 6. Memory/Class indicator

Shows the number entered in Memory mode or Class mode.



# INSTALLATION REQUIREMENTS

The machine's location should be carefully chosen because environmental conditions can affect its performance.

## Optimum Environmental Conditions

- ❑ Temperature: 10 – 30°C, 50 – 86°F
- ❑ Humidity: 20 – 90% RH
- ❑ A strong and level base (a sturdy desk and cabinet etc.).
- ❑ The machine must be level within 5 mm, 13/64" both front to rear and left to right.
- ❑ Make sure to locate this machine in a large well ventilated room that has an air turnover of more than 30 m<sup>3</sup>/hr/person.

INSTALLATION REQUIREMENTS

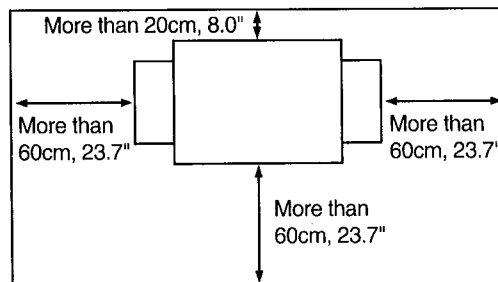
## Environments To Avoid

- ❑ Direct sunlight or strong light (more than 1500 lux).
- ❑ Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes from low to high or vice versa may cause condensation within the machine.)
- ❑ Dusty areas.

## Access To The Machine

- ❑ Place the machine near a power source, providing clearance as shown.

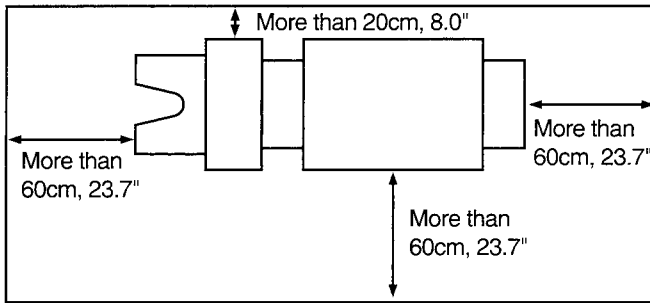
Main Frame



## INSTALLATION REQUIREMENTS

---

### Main Frame With Optional Sorter Stapler



## Power Connection

### Main Frame

- Securely connect the power cord to an dedicated 120 V, 60 Hz power source which supplies less than 4.0 A.
- Make sure the plug is firmly inserted in the outlet.
- Avoid multiwiring.
- Do not pinch the power cord.
- Make sure that the wall-outlet is near the machine and easily accessible.

### Optional Sorter Stapler

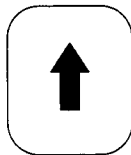
- Securely connect the power cord to an dedicated 120 V, 60 Hz power source which supplies more than 3.0 A.
- The socket out-let must be near this equipment and easily accessible.

# OPERATION

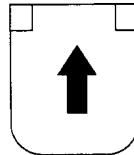
## Printing Paper

- ❑ The following types of print paper are not recommended for this machine.
  - Paper smaller than 90 mm x 148 mm, 3.6" x 5.9"
  - Paper larger than 297 mm x 432 mm, 11.6" x 17.0"
  - Paper heavier than 209.3 g/m<sup>2</sup>, 55.6 lb
  - Paper lighter than 47.1 g/m<sup>2</sup>, 12.5 lb
  - Roughly-cut paper
  - Paper of different thickness in the same stack
  - Buckled or curled paper
  - Short grain paper
  - Low stiffness paper
- ❑ A3 (297 x 420 mm), 11" x 17", originals or printing paper can be used but the maximum print area is 290 x 415 mm, 11.4" x 16.3". Select Reduce mode when you want to print the entire image of an A3, 11" x 17" original.
- ❑ Correct curls in the paper before setting it in the machine. When you cannot correct the paper curl, stack the paper with the curl face down. Otherwise the paper might wrap around the drum or stains might appear.
- ❑ Store paper where it will not curl or absorb moisture. Use paper soon after it is unpacked.
- ❑ Only use paper where the leading edge has two right angle corners, as shown below.

Not OK

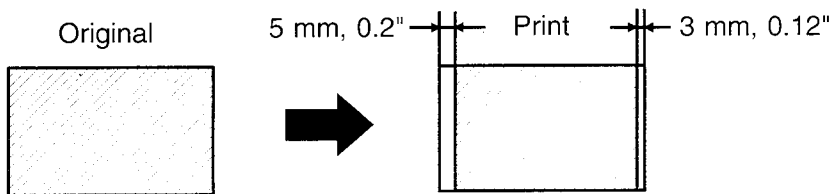


OK



## Originals

- ❑ Under the following conditions, the machine might not detect the original on the exposure glass. If you press the **Master Making** key again, the machine will start making a master anyway.
  - When you set a dark original on the exposure glass.
  - When the original is not centered according to the size marks on the left scale.
  - If you do not open the platen cover at an angle of more than 25 degrees with the exposure glass when you replace originals.
  
- ❑ The maximum original size you can set on the exposure glass is 307 x 432 mm, 12" x 17".
  
- ❑ If you use paste-up originals, make sure the pasted parts hold firmly to the base sheet. If the thickness of the paste-up original is more than 0.2 mm, 2/250" and the space between the pasted parts is less than 2 mm, 2/25", a shadow might appear on the prints.
  
- ❑ If you use originals that have bold letters or solid images at the leading edges, you might get prints with dirty edges. In this case, insert the widest margin first, or raise the printing speed.
  
- ❑ The first 5 mm, 0.2" of the leading edge and the last 3 mm, 0.12" of the trailing edge cannot be printed. Make sure the leading edge margin is at least 5 mm, 0.2" and the trailing edge margin is at least 3 mm, 0.12".

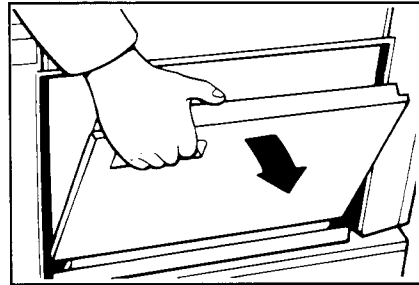


## Preparation For Printing

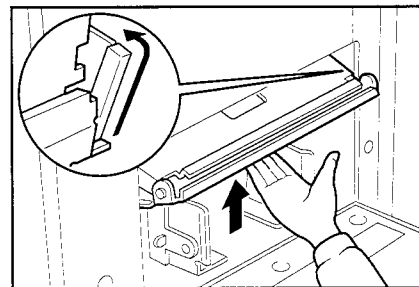
- ☐ ➤ See page 95 when you load paper in the optional large capacity tray.
- ☐ ➤ See page 101 when you load paper in the optional paper cassette for LCT.

### Loading paper

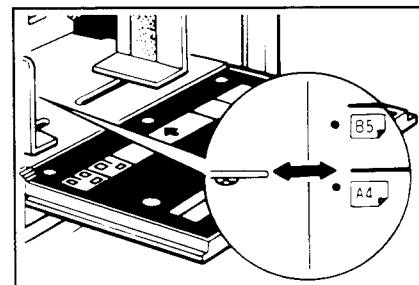
- 1** Carefully open the paper feed table.



- 2** Push the paper feed plate up.



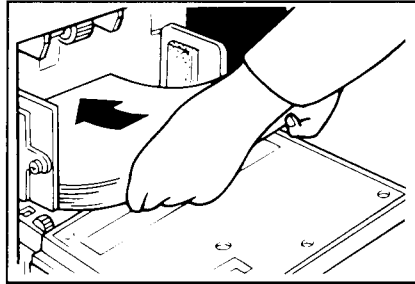
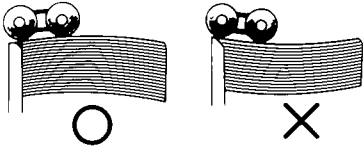
- 3** Adjust the side plates to match the paper size.



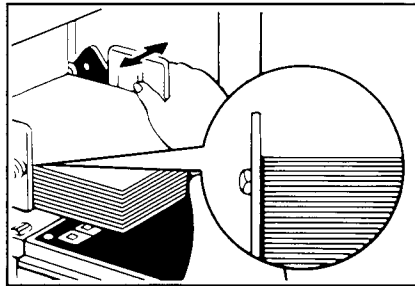
## OPERATION

**4** Place the paper on the paper feed table.

- Correct the paper curl before setting the paper. If you cannot do so, stack the paper with the curl face down as shown.

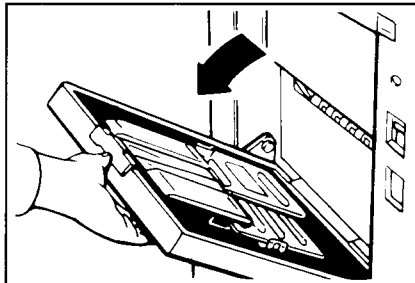


**5** Make sure that the paper feed side plates contact the paper lightly.

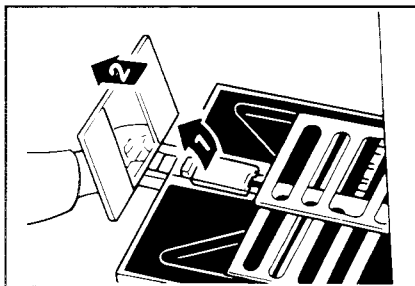


## Setting up the paper delivery table

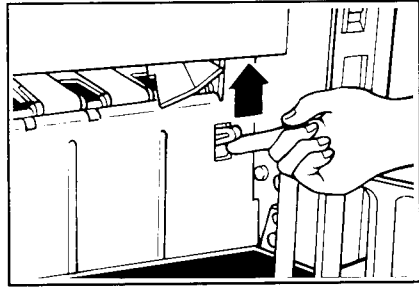
**6** Open the paper delivery table.



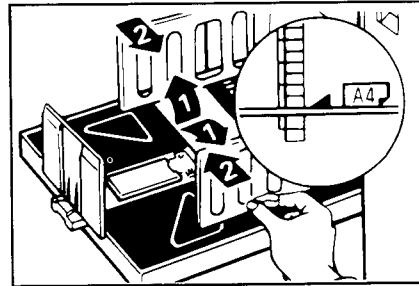
**7** Lift the paper delivery end plate and move it to match the print paper size.



- 8** If printing on A3, 11" x 17", or larger paper, push up the wing guide release lever. If you want to print on paper smaller than A3 or 11" x 17", push down the release lever.

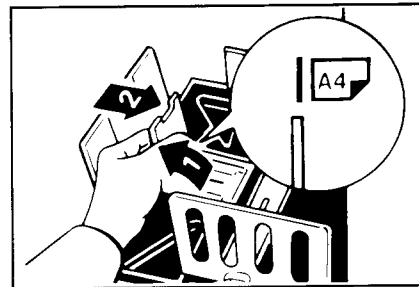


- 9** Lift the paper delivery side plates and adjust them to the paper size.

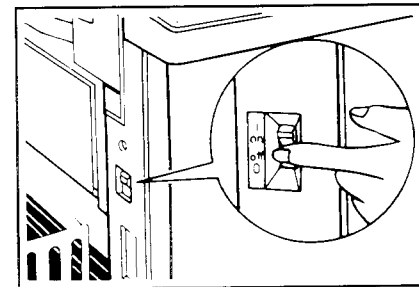


- 10** If you want to use A4, 8 1/2" x 11" or smaller paper, lift the small size paper delivery end plate and move it to match the print paper size.

- When you use B4, 8 1/2" x 14" or larger size paper, you do not need to lift the small size paper delivery end plate.



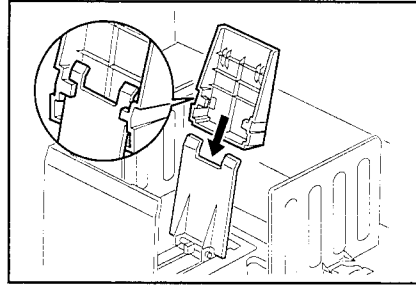
- 11** Turn on the main switch.



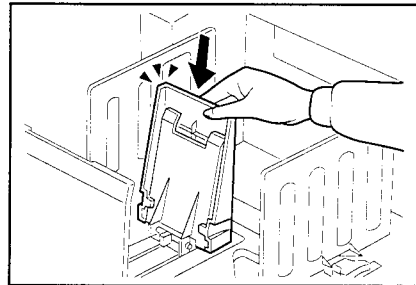
## Setting the small size end plate prop

If A4, 8 1/2" x 11" or smaller paper is not delivered to the paper delivery table properly, set the small size end plate prop to the small size paper delivery end plate.

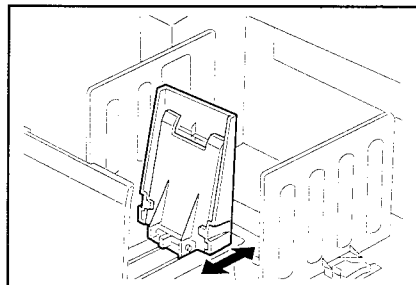
- 1** Set the small size end plate prop to the small size paper delivery end plate as shown in the illustration.



- 2** Slide the prop until it locks in position.



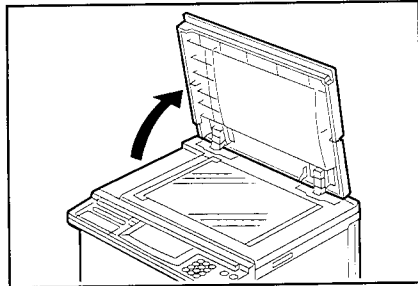
- 3** Adjust the main frame side of the prop to match the paper size.



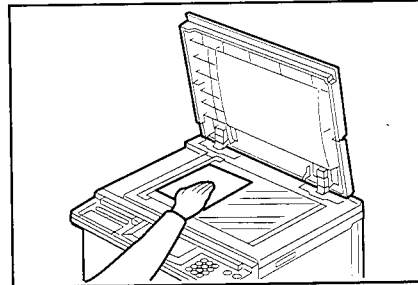


## Standard Printing

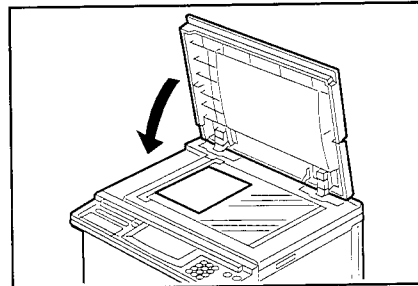
- 1** Open the platen cover.



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

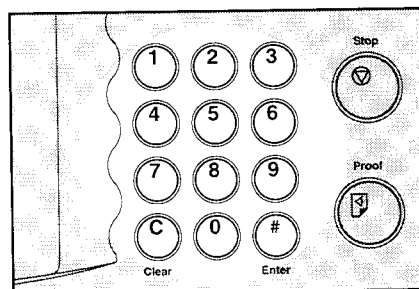


- 3** Lower the platen cover.



- 4** Enter the number of prints required using the **Number** keys.

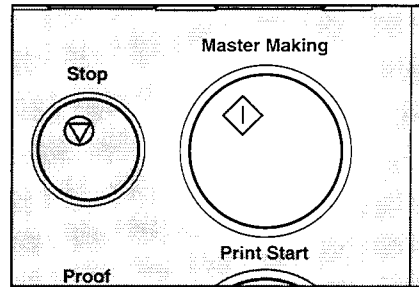
- ▣ Up to 9999 prints can be entered at one time.
- ▣ To change the number entered, press the **Clear** key and then enter the new number.



## OPERATION

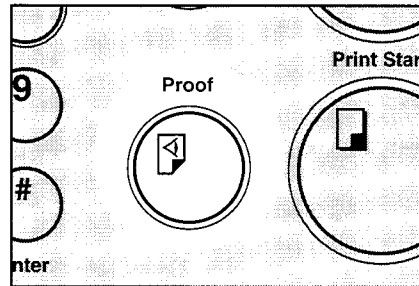
**5** Press the **Master Making** key.

- A trial print is delivered to the paper delivery table.



**6** Press the **Proof** key and check the image density and the image position of the proof print.

- If the image position is not correct, adjust it using the **Image Position** keys or the fine adjustment dial. (See pages 21 and 22.)
- If the image density is slightly dark or light, adjust the image density by pressing the **Speed** keys. (See page 23.)

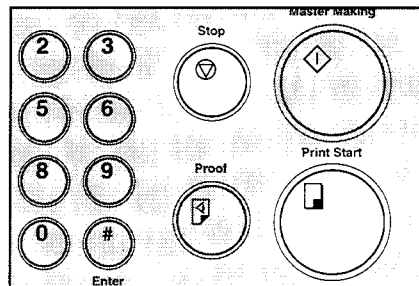


**7** Press the **Print Start** key.

- After printing is completed, the same number of prints is automatically set for the next job.
- If you want to stop the machine during a print run, press the **Stop** key.

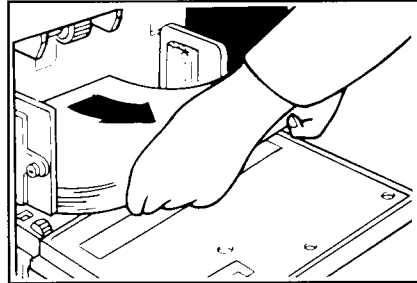
**8** Remove the prints from the paper delivery table.

- To clear all the modes you have selected, press the **Clear Modes** key.
- If A4, 8 1/2" x 11" or smaller paper is not delivered to the paper delivery table properly, set the small size end plate prop to the small size paper delivery end plate. (See page 16.)

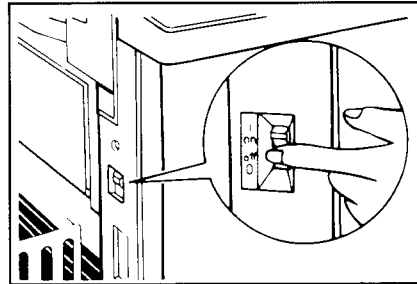


## Restoring Paper Feed And Paper Delivery Tables

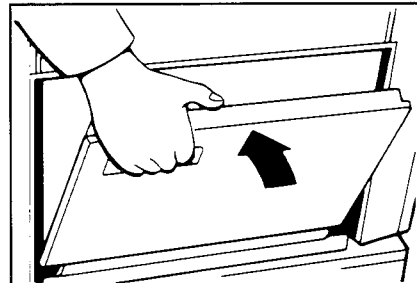
- 1** Remove the paper from the paper feed table.
  - The paper feed table will lower.



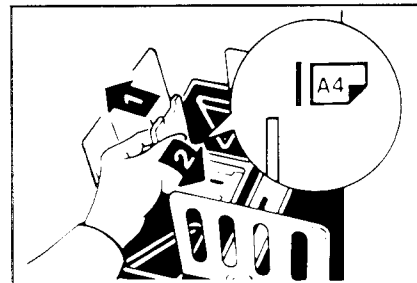
- 2** Turn off the main switch.



- 3** Push the paper feed plate down and close the paper feed table.



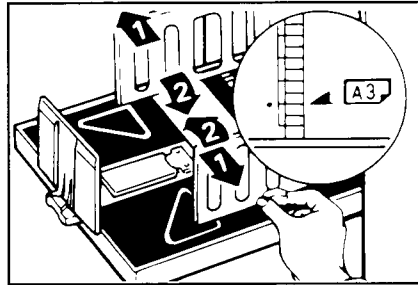
- 4** Push the small size paper delivery plate to the left, then lower it, if necessary.



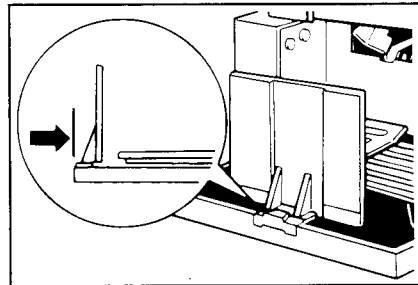
## OPERATION

**5** Move the side plates to the sides, then lower them.

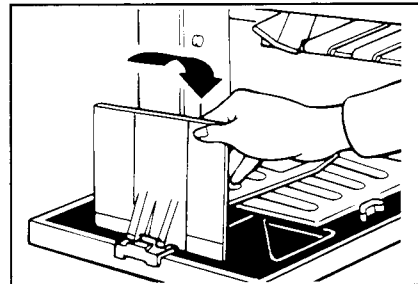
- Make sure that the side plates do not touch the small size paper delivery end plate.



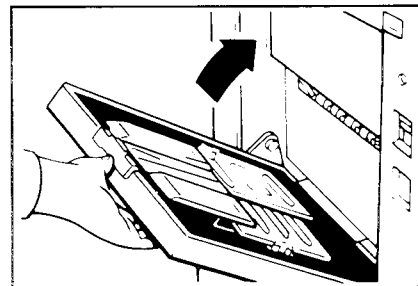
**6** Move the end plate until the plate handle is flush with the end of the table.



**7** Lower the end plate.

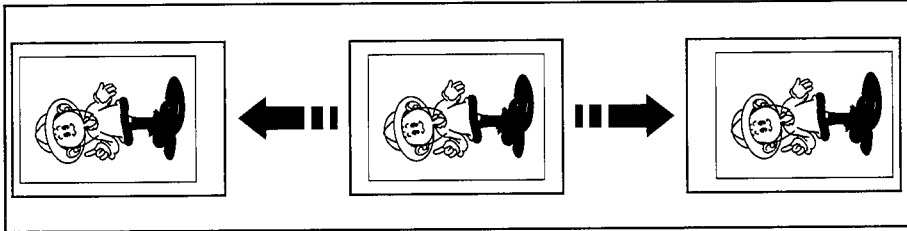


**8** Close the table.



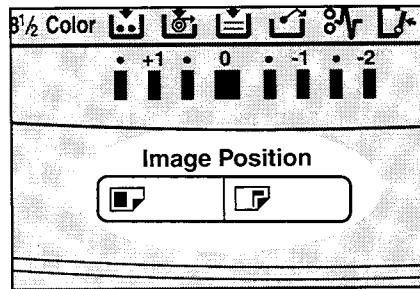
## Adjusting The Image Position

### Shifting the image position forward or backward

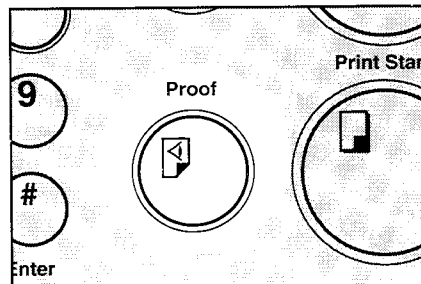


**1** Press the right **Image Position** key to move the image forwards, the left key to move it backwards.

- When you shift the image forwards, leave a margin (more than 5 mm, 0.2") at the leading edge. If there is no margin, paper might wrap around the drum and cause a mis-feed.
- The right or left **Image Position** keys shift the image about 0.5 mm, 1/50" each time they are pressed. When the indicator changes, the image position shifts about 5 mm, 1/5".

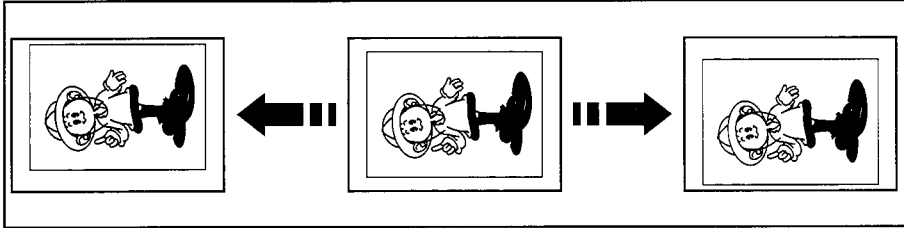


**2** Press the **Proof** key. Check the image position again.



## Shifting the image to the right or left

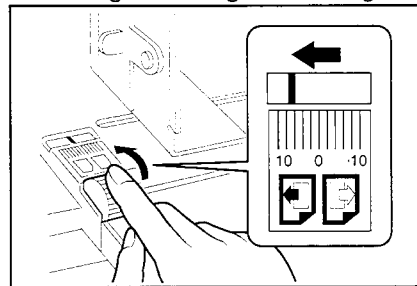
- If your machine is equipped with the optional large capacity tray, see page 106.



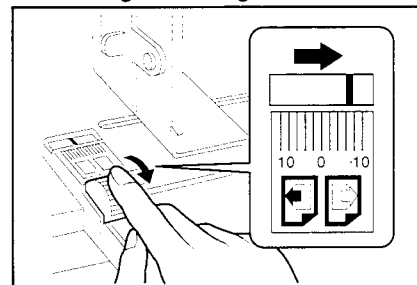
**1** Turn the side plate fine adjusting dial as shown in the illustrations.

- The image position can be shifted up to about 10 mm, 2/5" each way. Each division on the scale is 2 mm, 0.08".
- If your machine is equipped with the optional sorter stapler, the image position is shifted to 3 mm, 0.12" for each division on the scale.

Shifting the image to the right

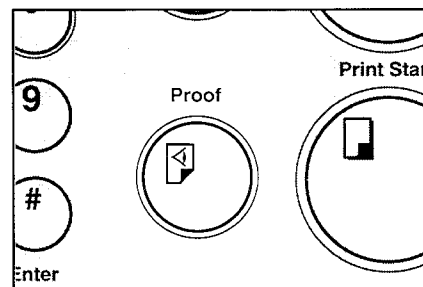


Shifting the image to the left



**2** Adjust the paper delivery side plates to the print paper position.

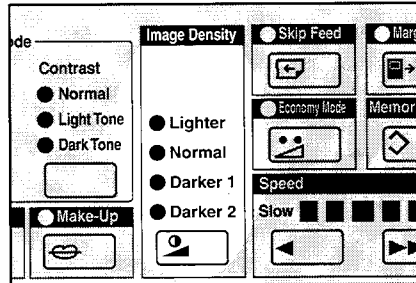
**3** Press the **Proof** key. Check the image position.



## Adjusting The Image Density

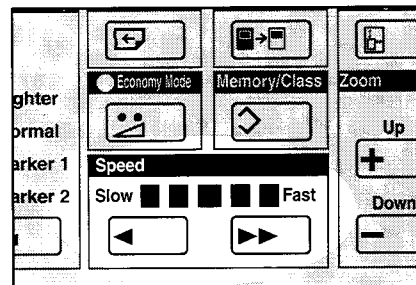
### Before making a master

- 1 Use the **Image Density** key before pressing the **Master Making** key.



### After making a master

- 1 Press the **Speed** keys. To increase the speed, press the “▶▶” key. To reduce the speed, press the “◀” key.
- The faster the printing speed becomes, the lighter the printing density is. If you want darker prints, decrease the printing speed.
  - If you use the Sort, Staple Sort, or Class Sort function, the setting should be Setting 1.



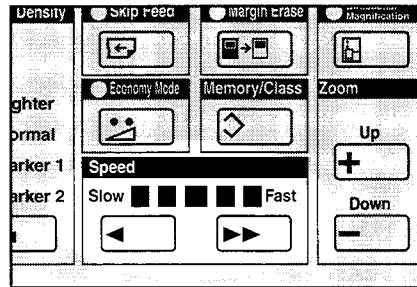
## Changing The Printing Speed

Use the **Speed** keys to adjust the speed of the machine with the image density and printing paper.

Press the **Speed** keys. To increase the speed, press the “▶▶” key. To reduce the speed, press the “◀◀” key. The printing speed will be changed as follows:

Setting 1: 60 sheets/minute  
 Setting 2: 75 sheets/minute  
 Setting 3: 90 sheets/minute  
 Setting 4: 105 sheets/minute  
 Setting 5: 120 sheets/minute

- When the main switch is turned on, Setting 3 is selected.
- The faster the printing speed becomes, the lighter the printing density is, and vice versa.
- If you use the Sort, Staple Sort, or Class Sort function, the setting should be Setting 1.

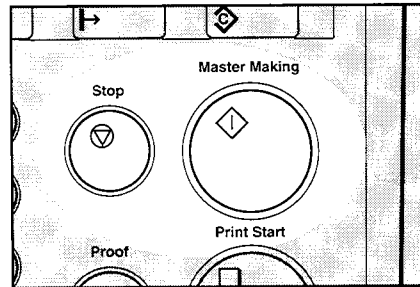




## Stopping The Machine During A Print Run

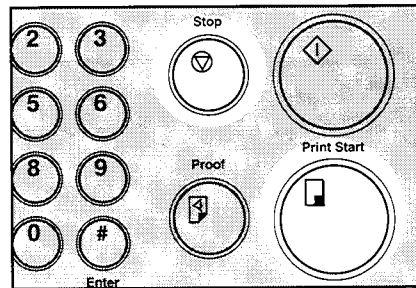
When you want to stop the machine during a print run and print the next original

- 1** Press the **Stop** key.
- 2** Set the new original.
- 3** Enter the number of prints and press the **Master Making** key.

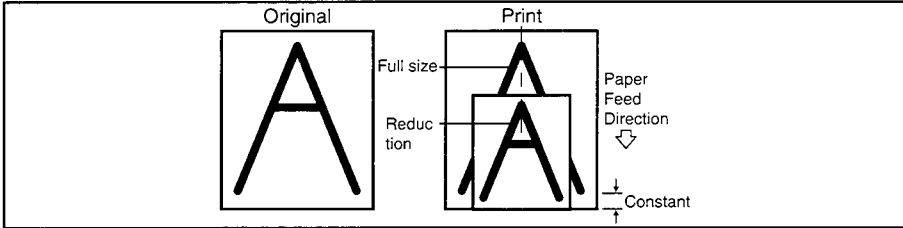


When you want to change the number of prints entered or check the completed prints

- 1** Press the **Stop** key.
- 2** Change the number of prints or check the completed prints.
  - When you change the number of prints, you can re-enter the number using the **Number** keys after pressing the **Stop** key.
- 3** Press the **Print Start** key.

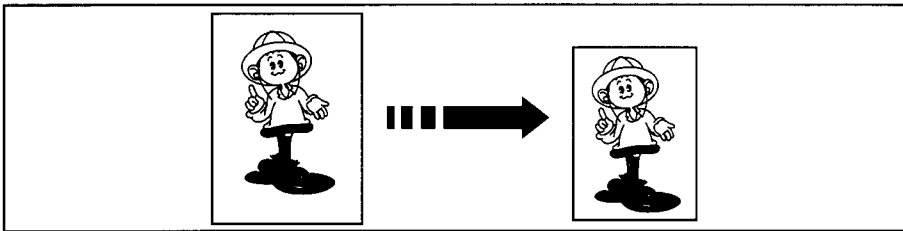


## Reduction/Enlargement Printing



- The center and the leading edge of the print image do not shift when a print image is made with this function.

### Reduction



Prints can be reduced in size by using the **Reduce/Enlarge** key.

— Metric version —

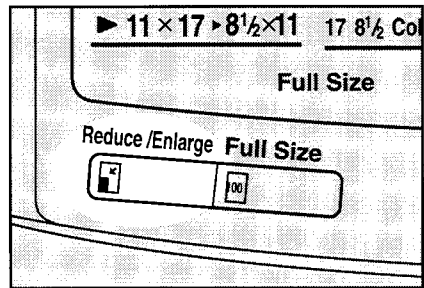
— Inch version —

Reduction Ratio	Original Size	Print Size
93 %	*	
87 %	A3	B4
	A4	B5
82 %	B4	A4
	B5	A5
71 %	A3	A4
	A4	A5
	B4	B5

Reduction Ratio	Original Size	Print Size
93 %	*	
77 %	8 1/2" x 14"	8 1/2" x 11"
74 %	11" x 15"	8 1/2" x 11"
65 %	11" x 17"	8 1/2" x 11"
	8 1/2" x 11"	5 1/2" x 8 1/2"

\* Select this ratio when you make prints with a lot of edge margins.

- 1 Select the desired reduction ratio using the **Reduce/Enlarge** key.

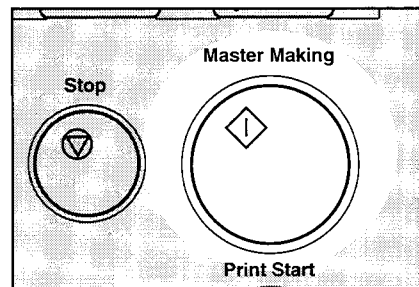


- 2 Make sure that the original and the print paper are the correct size.

- 3 Set your original on the exposure glass or in the optional document feeder.

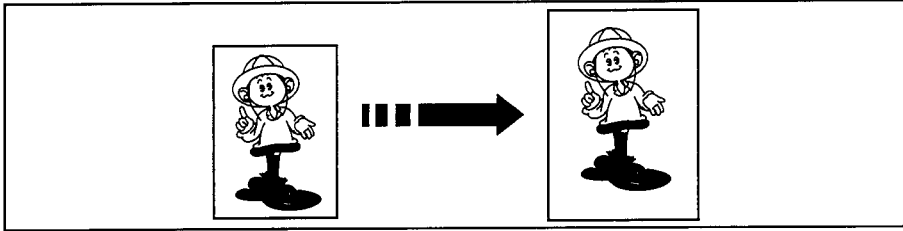
- 4 Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



- 5 Make your prints.

## Enlargement



Prints can be enlarged by using the **Reduce/Enlarge** key.

— Metric version —

— Inch version —

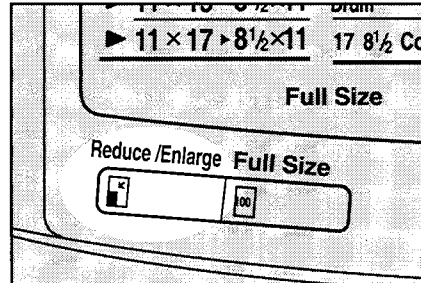
Enlargement Ratio	Original Size	Print Size
141 %	A4	A3*
	A5	A4
	B5	B4
	B6	B5
122 %	A4	B4
	A5	B5
115 %	B4	A3*
	B5	A4
	B6	A5

Enlarge-ment Ratio	Original Size	Print Size
155 %	5 1/2" x 8 1/2"	8 1/2" x 14"
129 %	8 1/2" x 11"	11" x 17"
	5 1/2" x 8 1/2"	8 1/2" x 11"
121 %	8 1/2" x 14"	11" x 17"

- \* Some part of the image on the trailing edge might not appear. To print the entire image, adjust the enlargement ratio with the **Zoom up/down** keys.

**1** Select the desired enlargement ratio using the **Reduce/Enlarge** key.

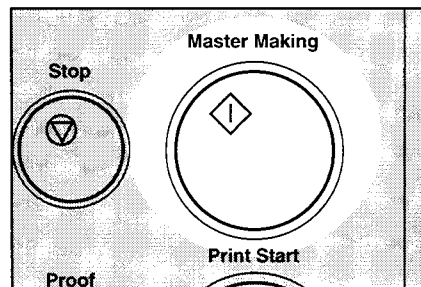
**2** Make sure that the original and the print paper are the correct size.



**3** Set your original on the exposure glass or in the optional document feeder.

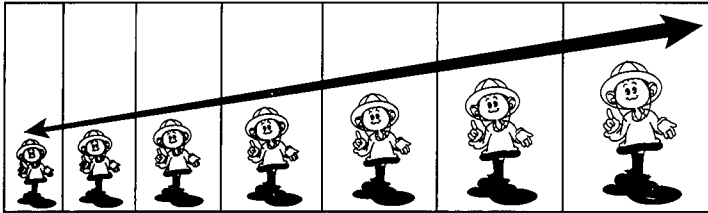
**4** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



**5** Make your prints.

## Zoom



In this mode, the reproduction ratio can be changed from 50 % to 200 % in 1 % steps.

- 1** Press the **Zoom down (-)** key repeatedly to reduce the ratio in 1 % steps.

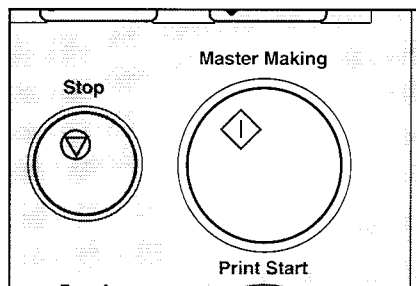
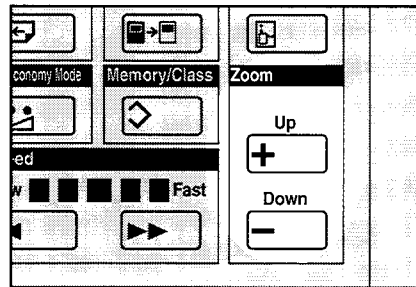
Or, press the **Zoom up (+)** key repeatedly to increase the ratio in 1 % steps.

- 2** Make sure that the original and the print paper are the correct size.
- 3** Set your originals on the exposure glass or in the optional document feeder.

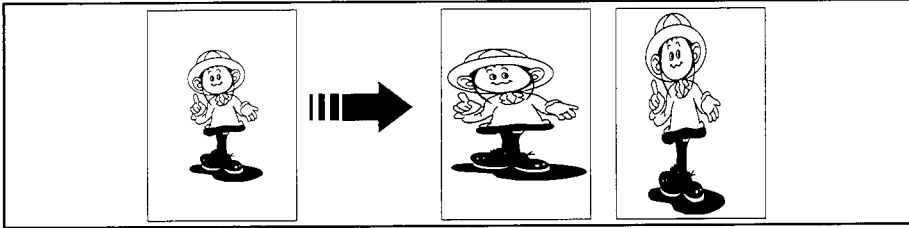
- 4** Press the **Master Making** key. Check the image position of the trial or proof print.

- ☐ If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

- 5** Make your prints.



## Directional Magnification Printing

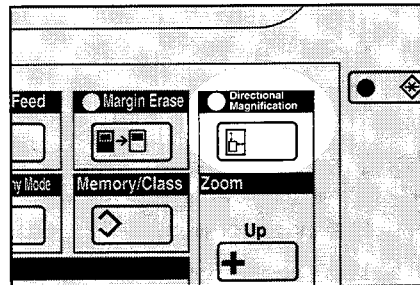


You can select independent ratios for vertical and horizontal directions.

- ▮ If you do not know the proper reproduction ratios, you can use SP mode to enter the size of the original and print paper ( See page 133). The machine will then select the proper reproduction ratios and you can make prints.

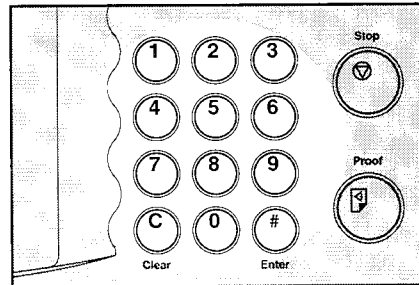
### When you enter the reproduction ratios

- 1** Press the **Directional Magnification** key.



- 2** Enter the desired reproduction ratio for the vertical direction using the **Number** keys.

- 3** Press the **Enter** key.



## OPERATION

**4** Enter the desired reproduction ratio for the horizontal direction using the **Number** keys.

**5** Press the **Enter** key.

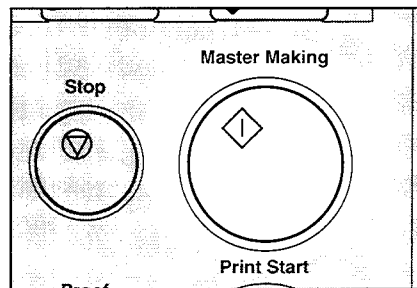
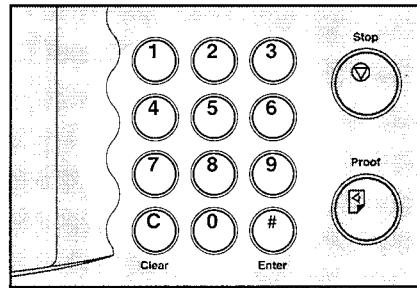
**6** Make sure that the original and the print paper are the correct size.

**7** Set your original on the exposure glass or in the optional document feeder.

**8** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

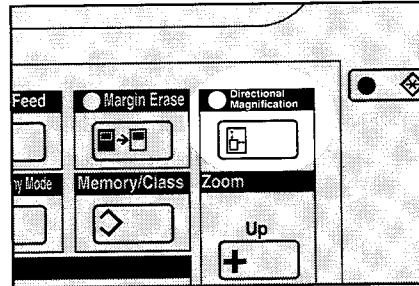
**9** Make your prints.





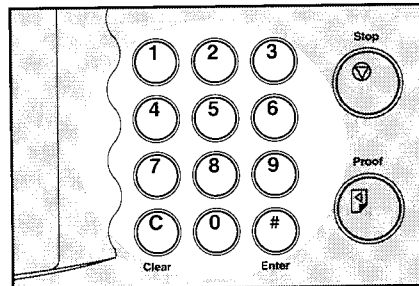
## Entering the lengths of the original and print paper

- 1 Press the **Directional Magnification** key.



- 2 Enter the vertical length of the original using the **Number** keys and press the **Enter** key.

- 3 Enter the horizontal length of the original using the **Number** keys and press the **Enter** key.



- 4 Enter the vertical length of the print paper using the **Number** keys and press the **Enter** key.

- 5 Enter the horizontal length of the print paper using the **Number** keys and press the **Enter** key.

- The machine will select proper reproduction ratios for vertical and horizontal directions.

## OPERATION

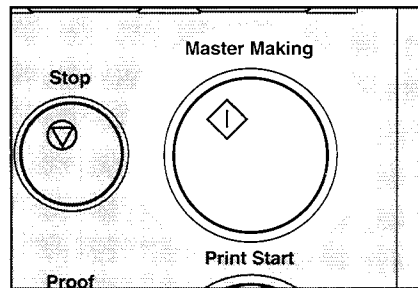
---

**6** Make sure that the original and the print paper are the correct size.

**7** Set your original on the exposure glass or in the optional document feeder.

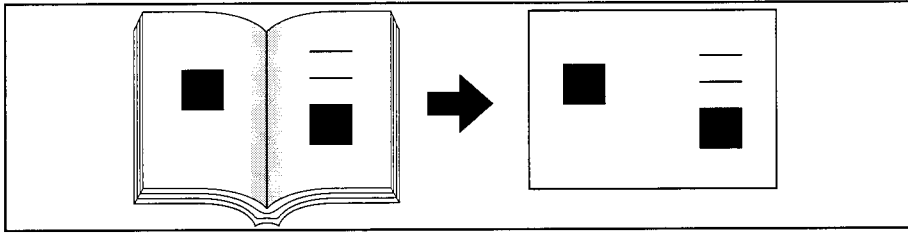
**8** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



**9** Make your prints.

## Erasing Center And Edge Margins



When printing from thick books, or similar originals, the binding margin at the center and the edges might appear on prints. To prevent this, follow the steps on the next page.

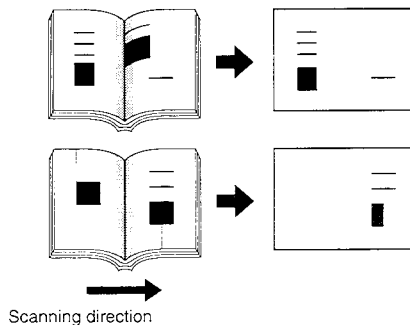
- The 1 mm, 0.02" margins on all four sides of the original will be erased. The width of the margins will change depending on the reduction ratios.
- Shadows near the book edge might not be erased completely.
- If the shapes of the originals are as below, shadows might appear on the prints. In this case, make a master with the platen cover closed.

Shadow



Scanning direction

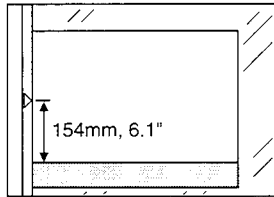
- If there is a line or solid image on the margin and you erase the center and the edges, the image might be erased as shown below. In this case, use the function described on page 38.



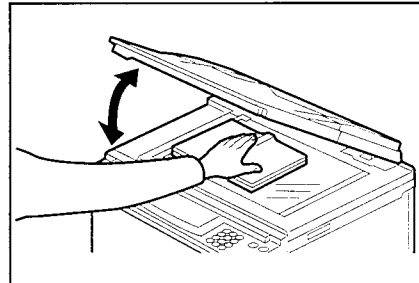
## OPERATION

---

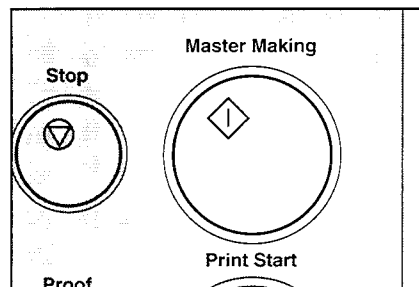
- ❑ If you do not press hard on the book while it is scanned, the margin at the center might not be erased completely.
- ❑ If the machine is installed under a strong light, such as a fluorescent light, a shadow might appear on the prints. In this case, close the platen cover a little to block the light or move the machine.
- ❑ If you set the original on the exposure glass as shown below, the screened image below may not be printed. Lines or solid images that run from the screened image below onto the original may also not be printed.



- 1** Set the book on the exposure glass.
- 2** Keep the platen cover at an angle of at least 25 degrees with the exposure glass.

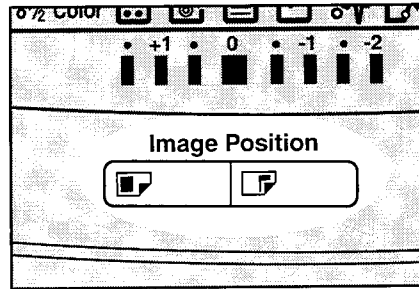


- 3** Press the **Master Making** key. Press hard on the book with your hand while it is scanned.



**4** Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

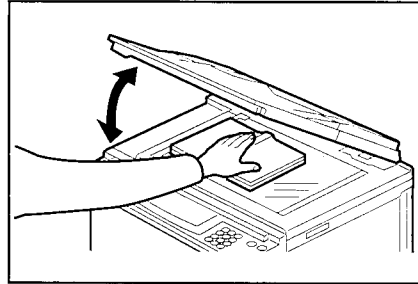


**5** Make your prints.

## Erasing Margins

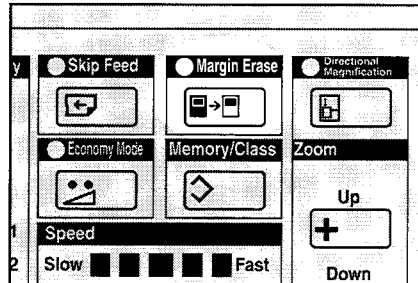
If you want to erase edge margins of a book original, follow the steps below.

- 1 Set the original on the exposure glass.



- 2 Enter the number of prints required using the **Number** keys.

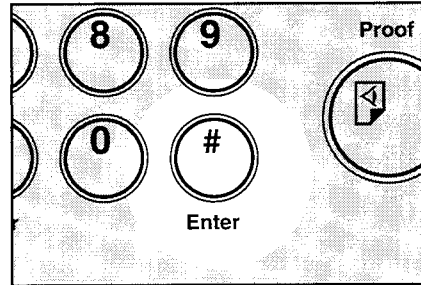
- 3 Press the **Margin Erase** key.



- 4 The following message will appear on the guidance display. The paper size and direction will be changed by pressing the **Zoom up/down** keys.

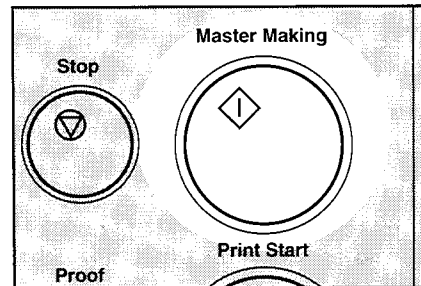
SCROLL BY ZOOM KEY  
(YYY x XXX MM)

- 5** When you reach the desired paper size and direction, press the **Enter** key.



- 6** Press the **Master Making** key. Check the image position of the trial or proof print.

- ▮ If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



- 7** Make your prints.

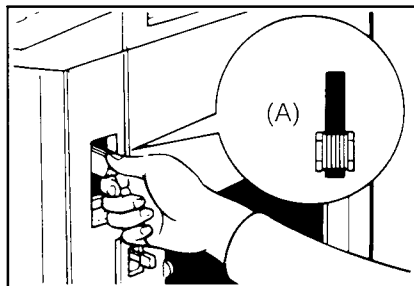
## Printing On Thick Or Thin Paper

When you make prints on thick (127.9 to 209.3 g/m<sup>2</sup>, 34 to 55.6 lb) or thin (47.1 to 81.4 g/m<sup>2</sup>, 12.5 to 21.6 lb) paper, perform the following steps.

### Printing on thick paper

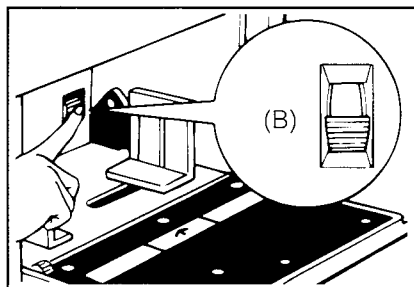
**1** When you use paper heavier than 127.9 g/m<sup>2</sup>, 34.0 lb and lighter than 209.3 g/m<sup>2</sup>, 55.6 lb, position the pressure lever (A) to the Thick paper position.

- When you use paper heavier than 64 g/m<sup>2</sup>, 17 lb and lighter than 157.0 g/m<sup>2</sup>, 41.7 lb, position the pressure lever (A) to the standard position.
- In the case of paper smaller than B5, 5 1/2" x 8 1/2" and heavier than 81.4 g/m<sup>2</sup> (21.6 lb), move the feed roller pressure lever to the Thin paper position.



**2** Push the pressure levers (B) down.

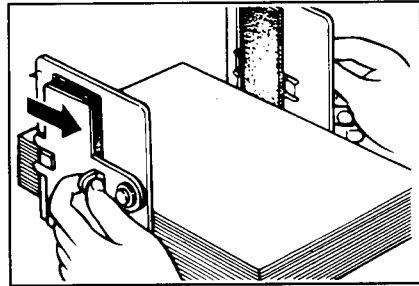
- There are two pressure levers (B). Make sure that both levers are down.
- If dog-eared or wrinkled prints are delivered, push the levers up.



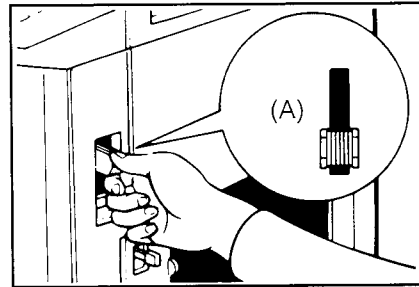


## Printing on thin paper

- 1** Set the side pads (move the side pad levers to as shown opposite).

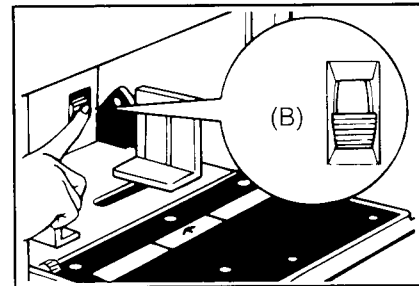


- 2** Position the pressure lever (A) to the Thin paper position.

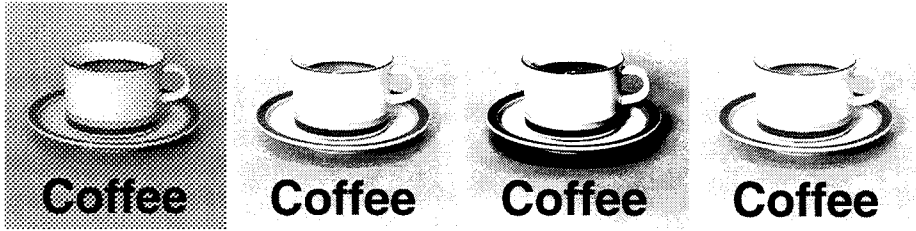


- 3** Push the pressure levers (B) down.

- If dog-eared or wrinkled prints are delivered, push the levers up.
- There are two pressure levers (B). Make sure that both levers are down.



## Photo Mode Printing



Original

Photo mode

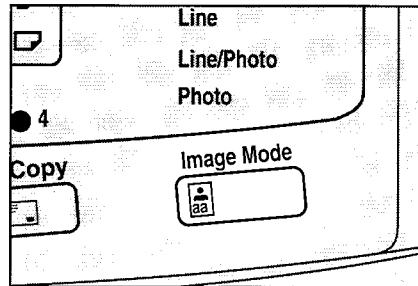
Line mode

Line/Photo mode

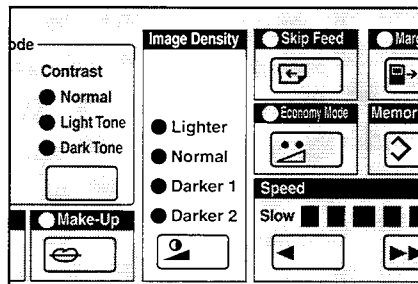
When printing a photograph or a color original, select Photo mode.

- Moire patterns may occur when screened originals are printed.
- When using Photo mode to print originals with both text and photographs, the text will appear lighter. To avoid this, select Line/Photo mode with the **Image Mode** key. Alternatively, use the optional Make-up function to specify Line mode for text areas and Photo mode for photograph areas.

- 1** Press the **Image Mode** key to select Photo mode.

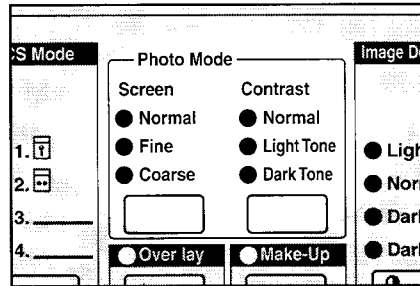


- 2** Press the **Image Density** key to adjust the image density.



- 3** If necessary, adjust the screen image by pressing the **Screen** key in Photo or Line/Photo mode.

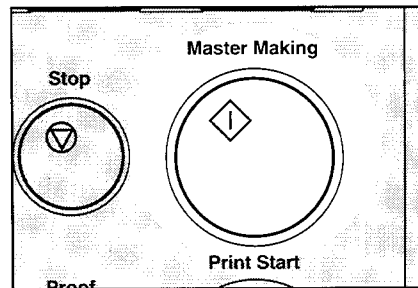
If necessary, adjust the contrast by pressing the **Contrast** key in Photo mode.



- 4** Set your original on the exposure glass or in the optional document feeder.

- 5** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



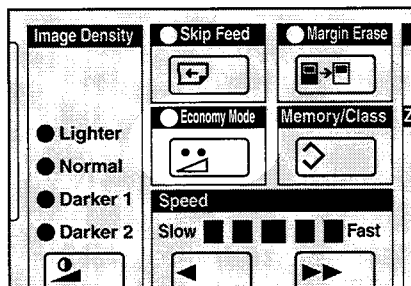
- 6** Make your prints.

## Ink Saving (Economy Mode)

When you want to save ink, select Economy mode.

- The printing density may be light in this mode.
- When you set Tint mode and press the **Economy Start** key, Tint mode is canceled.

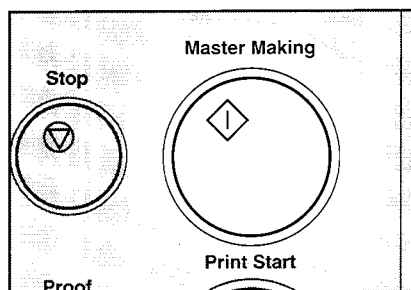
**1** Press the **Economy Mode** key.



**2** Set your original on the exposure glass or in the optional document feeder.

**3** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



**4** Make your prints.

## Printing From Several Originals At Once

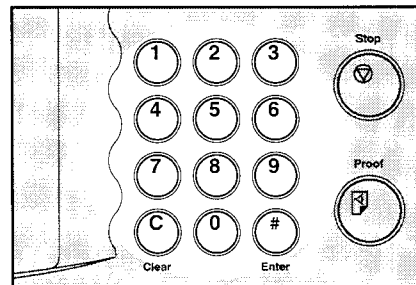
Use the **Auto Cycle** key to process masters and make prints at one stroke.

- When you use the optional document feeder, it is not necessary to place originals one by one. All originals are fed and prints are completed after you press the **Print Start** key.
- If you use the optional tape dispenser, the tape dispenser drops a strip of paper onto the top of the paper stack after the last page of each printing set is fed out to the paper delivery table. This marks the end of each printing group.

**1** Set the original face down on the exposure glass or in the optional document feeder.

- You can set up to 20 originals into the optional 20 originals document feeder.
- You can set up to 50 originals into the optional 50 originals document feeder.

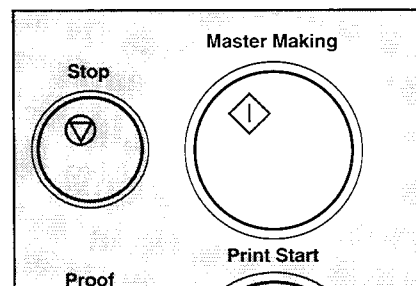
**2** Enter the number of prints required using the **Number** keys.



OPERATION

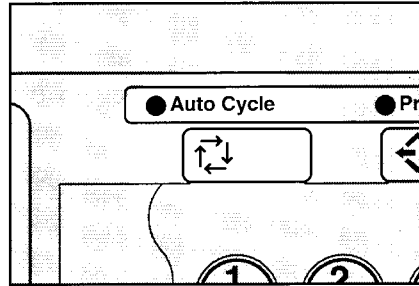
**3** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

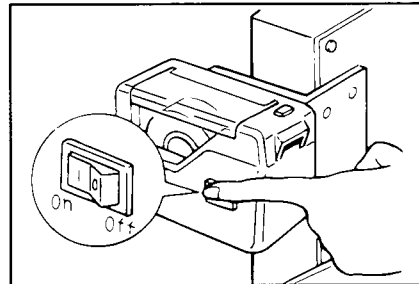


## OPERATION

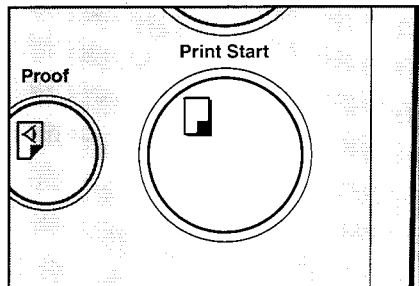
- 4** Press the **Auto Cycle** key.
- If you press the **Auto Cycle** key, you cannot make proof prints by pressing the **Proof** key.



- 5** If you use the optional tape dispenser, turn on the power switch of the tape dispenser.

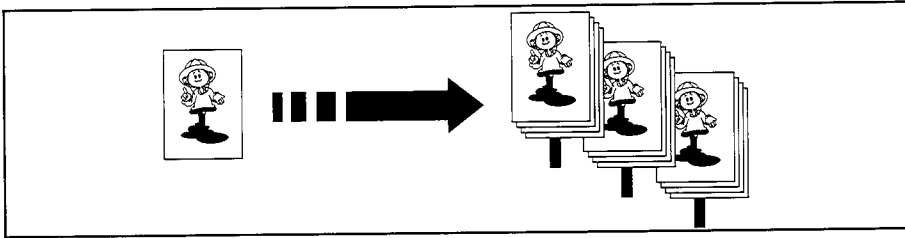


- 6** Press the **Print Start** key.
- If you set originals into the optional document feeder, originals are fed and prints are completed automatically.



- 7** Repeat steps 1 through 3 until all originals are printed when you set originals on the exposure glass.
- After the last page of each set is fed out to the paper delivery table, the optional tape dispenser drops a strip of paper on the top of the paper stack. The next cycle begins.

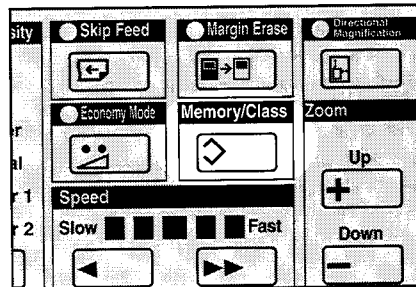
## Group Printing From The Same Original (Class Mode)



Use the **Memory/Class** key to make sets of prints from the same original. The same number of prints is made for each set.

- The optional tape dispenser automatically feeds out strips of paper which separate the printing groups on the paper delivery table.
- Up to 99 sets of prints can be selected for one original.

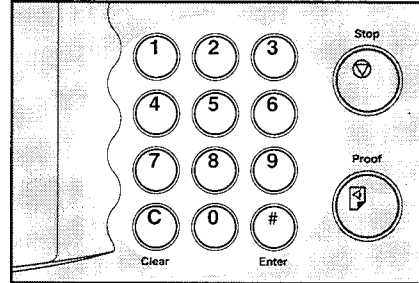
- 1** Press the **Memory/Class** key to light the Class indicator.



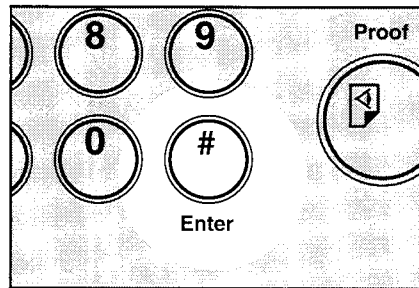
- 2** Set the original face down on the exposure glass or in the optional document feeder.

## OPERATION

- 3** With the **Number** keys, enter the number of prints for each set to be made from the original.

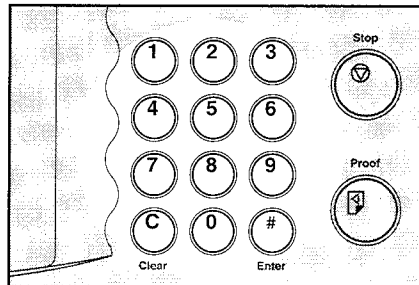


- 4** Press the **Enter** key.

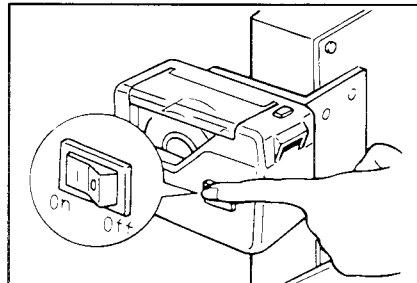


- 5** With the **Number** keys, enter the desired number of sets.

- The maximum number of sets that can be made is 99.



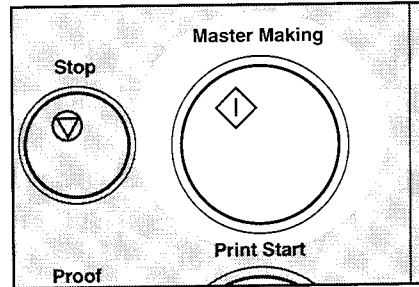
- 6** Turn on the power switch of the optional tape dispenser.





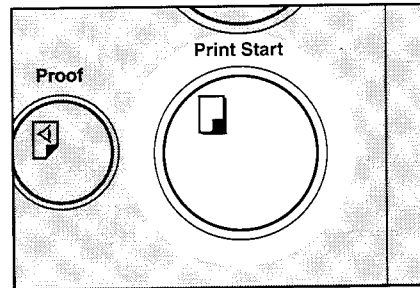
**7** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (• See page 21) or the side plate fine adjusting dial (• See page 22).

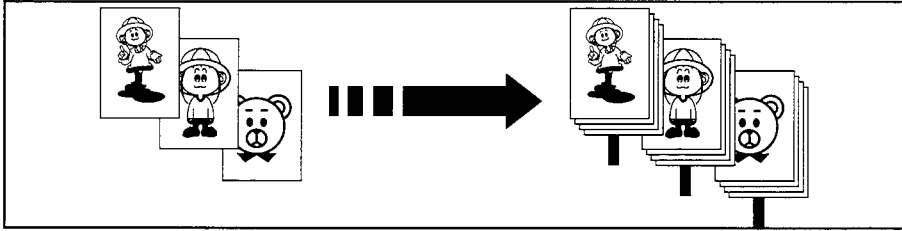


**8** Make your prints.

- After the last page of each printing set is fed out to the paper delivery table, the tape dispenser drops a strip of paper on the top of the paper stack.
- If the power switch of the optional tape dispenser is turned off or the tape dispenser is not installed in your machine, the group printing cycle stops after each set is delivered. Remove the set of prints from the paper delivery table and press the **Print Start** key to start the next group printing cycle.



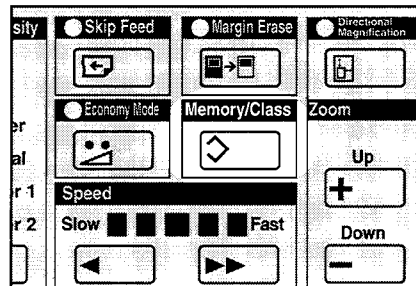
## Group Printing From Different Originals (Memory Mode)



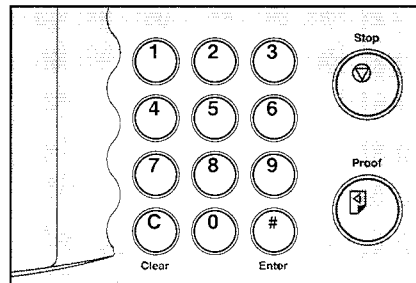
Use the **Memory/Class** key to make sets of prints from different originals.

- ❑ With the optional document feeder, you can set several originals and make prints of all of them at once. ➤ See page 75.
- ❑ The optional tape dispenser automatically feeds out strips of paper which separate the printing groups on the paper delivery table.

**1** Press the **Memory/Class** key to light the Memory indicator.

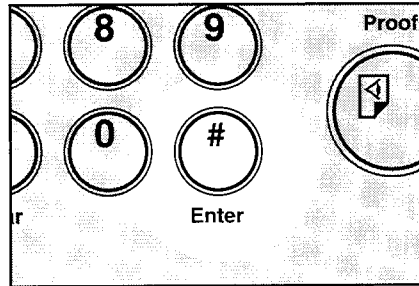


**2** With the **Number** keys, enter the desired number of prints for the first original.



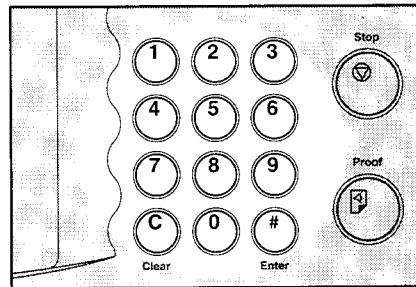
**3** Press the **Enter** key. This stores the number of prints to be made for the first original in memory 1.

- When the number of prints in each set is the same, it is not necessary to input the number of prints for each group in memory. Simply select Auto Cycle mode and enter the desired number of prints once.



**4** With the **Number** keys, enter the number of prints for the second original.

**5** Press the **Enter** key. This stores the number of prints to be made for the second original in memory 2.

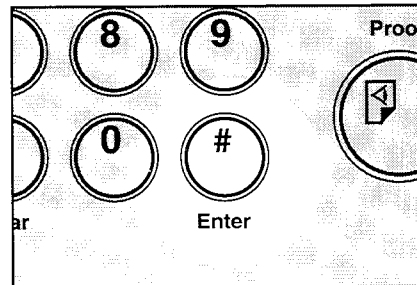


**6** Repeat steps 4 and 5 for each original.

- The number of prints for up to 25 originals can be stored.

**7** Press the **Enter** key again. The memory returns to memory 1.

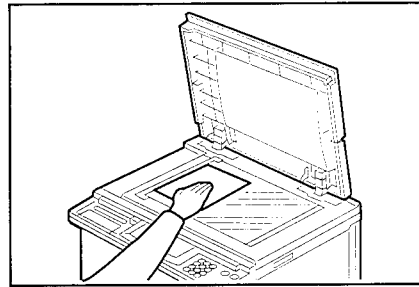
- If you store the number of prints for 25 originals, the memory number returns to 1. It is not necessary to press the **Enter** key.



## OPERATION

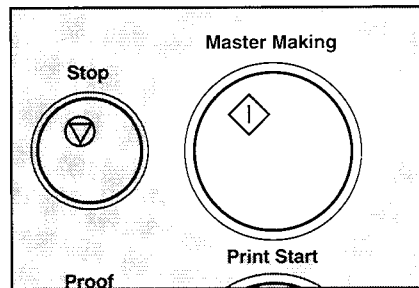
**8** Set the first original face down on the exposure glass.

- Set originals one sheet at a time in the same order that you stored them in memory.

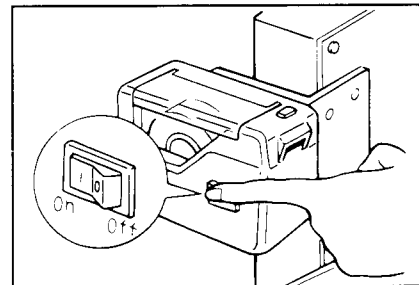


**9** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

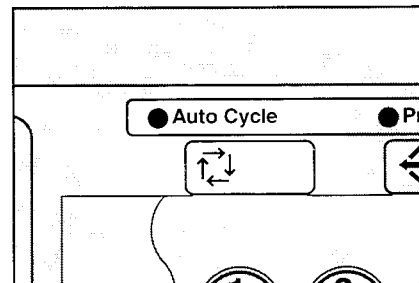


**10** Turn on the power switch of the optional tape dispenser.



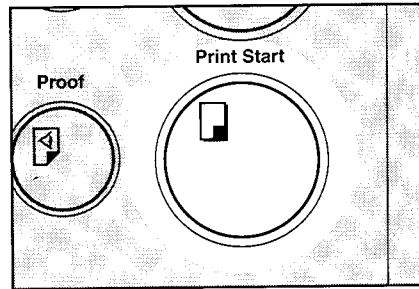
**11** Press the **Auto Cycle** key.

- If you press the **Auto Cycle** key, you cannot make proof prints by pressing the **Proof** key.

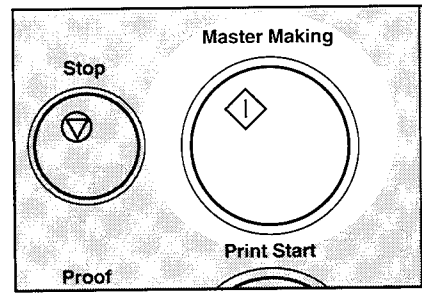


**12** Press the **Print Start** key.

After the first set is fed to the paper delivery table, the optional tape dispenser drops a strip of paper on the top of the paper stack.



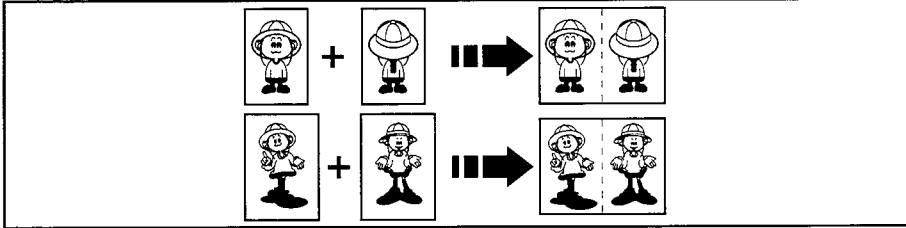
**13** After the first set is completed, set the second original on the exposure glass and press the **Master Making** key.



**14** Repeat step 13 until you have finished printing.

# Multi Copy

## Combine 2 originals



You can print 2 separate originals on a single sheet of paper. The following tables list the combinations that can be used when combining two originals.

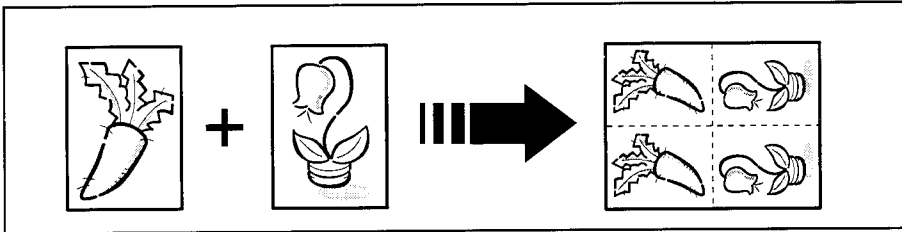
— Metric version —

Original Size Paper Size	A4 □	B5 □	A5 □	B6 □	A6 □
A3 □	100%	115%	141%	163%	200%
B4 □	87%	100%	122%	141%	173%
A4 □	71%	82%	100%	115%	141%
B5 □	61%	71%	87%	100%	122%
A5 □	50%	57%	71%	82%	100%

— Inch version —

Original Size Paper Size	8 1/2" x 11" □	5 1/2" x 8 1/2" □
11" x 17" □	100%	129%
8 1/2" x 14" □	77%	100%
8 1/2" x 11" □	65%	100%
5 1/2" x 8 1/2" □	50%	65%

## Combined print



You can print 4 original images on a single sheet of paper using 2 originals. The images are positioned on the print as shown above. The following tables list the combinations that can be used when combining originals.

— *Metric version* —

Original Size \ Paper Size	A3 ☐	B4 ☐	A4 ☐	B5 ☐	A5 ☐	B6 ☐	A6 ☐
A3 ☐	50%	58%	71%	82%	100%	115%	141%
B4 ☐	—	50%	61%	71%	87%	100%	122%
A4 ☐	—	—	50%	58%	71%	82%	100%
B5 ☐	—	—	—	50%	61%	71%	87%
A5 ☐	—	—	—	—	50%	58%	70%

— *Inch version* —

Original Size \ Paper Size	11" x 17" ☐	8 1/2" x 14" ☐	8 1/2" x 11" ☐	5 1/2" x 8 1/2" ☐
11" x 17" ☐	50%	65%	65%	100%
8 1/2" x 14" ☐	—	50%	50%	77%
8 1/2" x 11" ☐	—	—	50%	77%
5 1/2" x 8 1/2" ☐	—	—	—	50%

## Notes for multi copy mode

- If originals are longer than the maximum length for combined prints, images do not completely appear on prints. The following table gives the maximum combined original length for each print paper size.

Print paper size	Maximum original length for combining prints
A3	210 mm
B4	182 mm
A4 ☐	148 mm
B5 ☐	128 mm
A5 ☐	105 mm
11" x 17"	216 mm, 8.5"
8 1/2" x 14"	178 mm, 7.0"
8 1/2" x 11" ☐	140 mm, 5.5"
5 1/2" x 8 1/2" ☐	108 mm, 4.3"

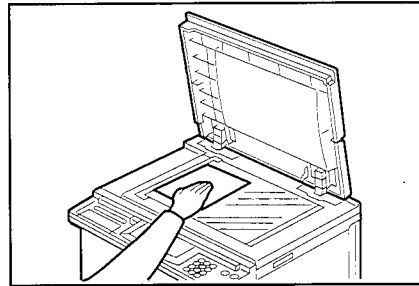
Maximum original length = actual original  
length x magnification ratio

- Any image closer than 5 mm, 0.2" to the leading edge of the first original will not be printed. Also, any image closer than 4 mm, 0.16" to the leading edge of the second original will not be printed. When the image is too close to the leading edge, use copies of the originals with the image shifted at least 5 mm, 0.2" for the first original (4 mm, 0.16" for the second original) from the leading edge.
- You can select different kinds of image settings for the first and second original.
- When you use the optional document feeder with this function, ☐ see page 73.
- Make sure that the paper feed side plates contact the paper lightly when you use Multi Copy. Otherwise, the two original images will not appear at the proper position on the prints.

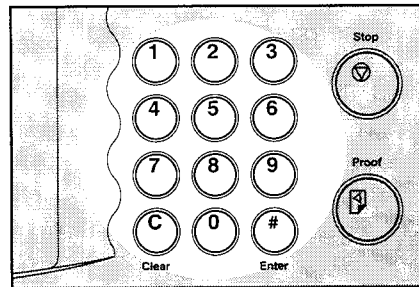


## How to make prints in multi copy mode

- 1** Set the first original face down and with the top toward the operating side.
  - The first original will be printed on the leading part of the print.



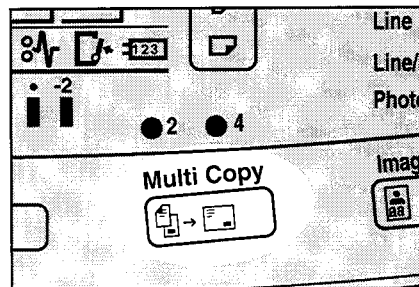
- 2** Enter the number of prints using the **Number** keys.



- 3** Check the print paper size and the reproduction ratio.

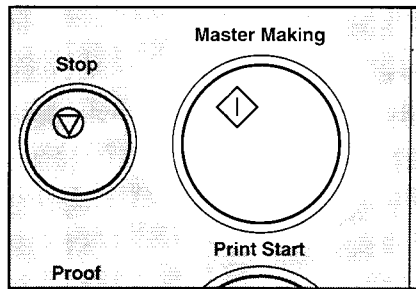
- 4** Then press the **Multi Copy** key either:

Once to select the Combine 2 Originals function.  
or  
Twice to select the Combined Print function.

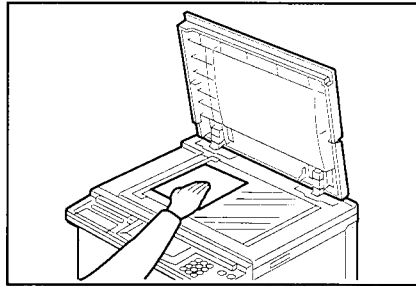


## OPERATION

- 5** Press the **Master Making** key.

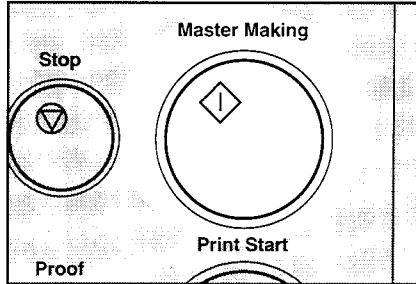


- 6** The beeper sounds after the first original is on the master. Set the second original face down and with the top toward the operating side.



- 7** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ See page 21) or the side plate fine adjusting dial. (☛ See page 22.)



- 8** Make your prints.

## Skip Feed Printing (Skip Feed Mode)

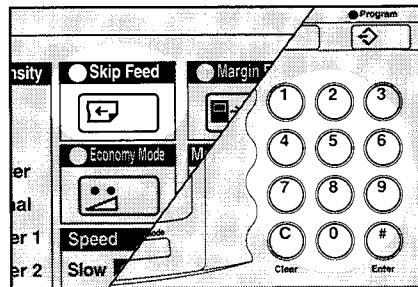
If the backs of prints are dirty, you can increase the time between two prints using the **Skip Feed** key. In the default setting, when one sheet of paper is fed the drum rotates once. However, you can select the number of rotations of the drum. This gives you the chance to remove prints one by one from the paper delivery table or insert one sheet of paper between two prints. If you use this function, you can also use paper longer than 447 mm, 17.5" in spite of the maximum length limitations of paper.

- The maximum length of paper in Skip Feed mode is 590 mm, 23.2".
- When you use paper longer than 447 mm, 17.5", completed prints will not be delivered to the paper delivery table properly, so receive them by hand.

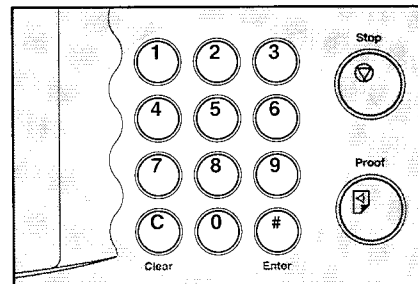
**1** Set your original on the exposure glass or in the optional document feeder.

**2** While pressing the **Skip Feed** key, select the number of rotations of the drum while one sheet of paper is fed, using the **Number** key.

- You can select from 1 to 9 rotations.
- The beeper sounds after you set the number of rotations.



**3** Release the **Skip Feed** key and enter the number of prints using the **Number** keys.

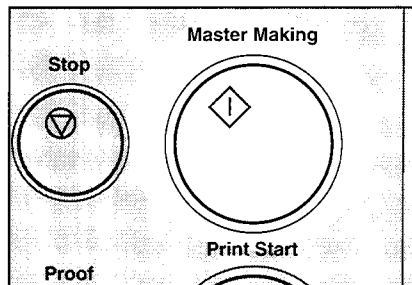


## OPERATION

---

**4** Press the **Master Making** key. Check the image position of the trial or proof print.

- If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).



**5** Make your prints.

## User Programs

This User Program function allows you to store and recall up to 8 frequently used job setups.

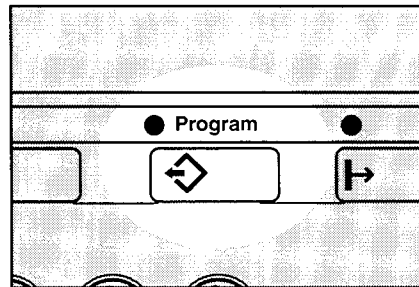
- The stored programs are not cleared when you turn off the main switch.

### How to input a user program

**1** Select and enter the job settings you want to store in memory.

**2** Press the **Program** key.

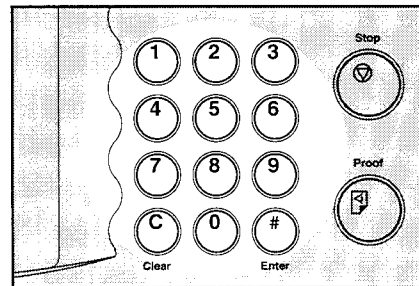
- Numbers already containing a program are displayed on the guidance display.



**3** Enter "0" using the **Number** key.

**4** Press the **Enter** key.

- The program numbers (1 to 8) will be displayed in the guidance display.
- If a user program has been protected, that program number will not appear in the display. For changing a protected user program, see page 65.
- If all the user programs have been protected, the machine returns to the ready condition.



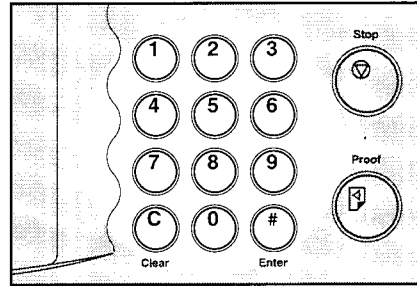
## OPERATION

---

**5** Enter one of the program numbers displayed on the guidance display using the **Number** keys.

- Make sure that the previous job settings stored under the selected program number are overwritten.

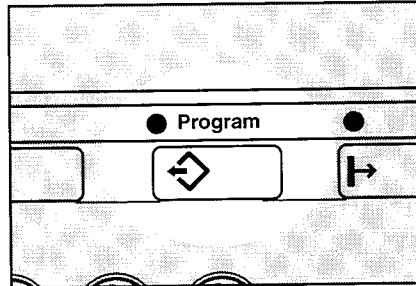
**6** Press the **Enter** key.



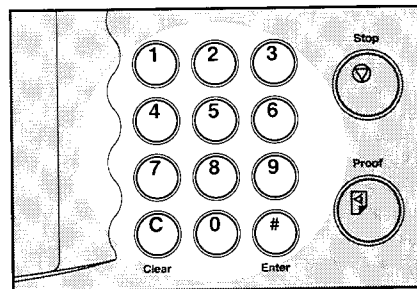
## How to access a user program

**1** Press the **Program** key.

- ☐ Numbers already containing a program are displayed on the guidance display.

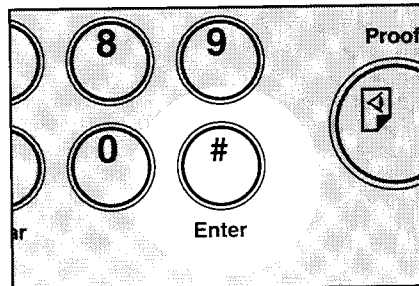


**2** Using the **Number** keys, enter the number of the program that you want to access.



**3** Press the **Enter** key.

- ☐ All stored job settings are recalled.

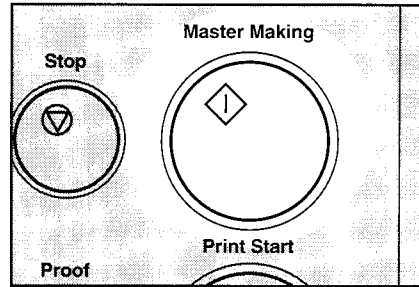


## OPERATION

---

**4** Set your originals on the exposure glass or in the optional document feeder.

**5** Press the **Master Making** key.

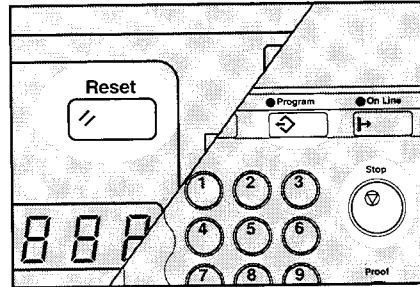




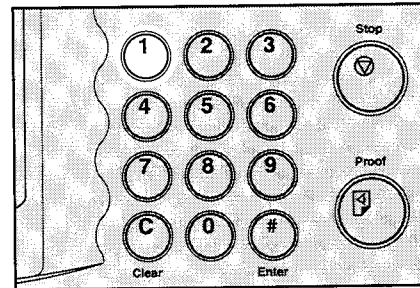
## How to protect a program

If you want to prevent someone from writing over your program, do the following procedure.

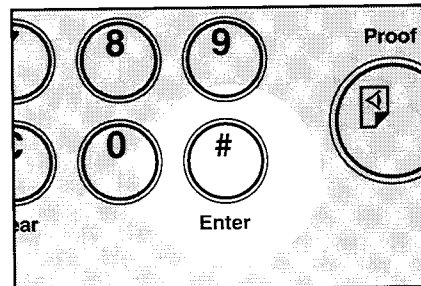
- 1** While pressing the **Reset** key and **Stop** key simultaneously, press the **Program** key.



- 2** Enter "1" using the **Number** key.



- 3** Press the **Enter** key.  
 The numbers of the programs which are not protected will be displayed in the guidance display.

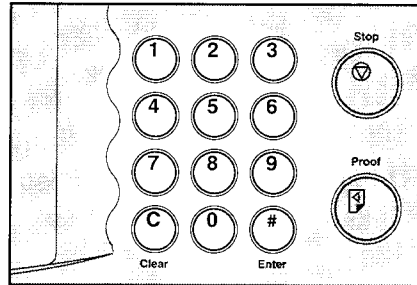


## OPERATION

---

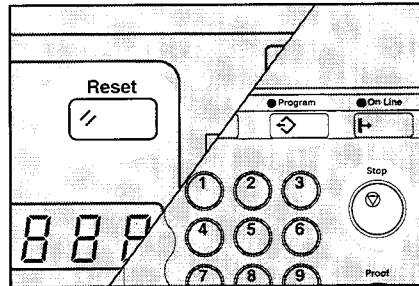
**4** Using the **Number** keys, enter the number of the program that you wish to protect.

**5** Press the **Enter** key.

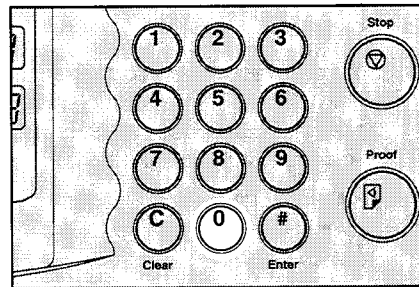


## How to remove user program protection

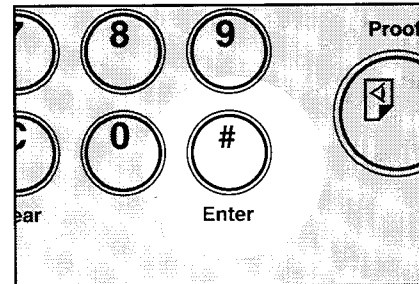
- 1 While pressing the **Reset** key and **Stop** key simultaneously, press the **Program** key.



- 2 Enter "0" using the **Number** key.

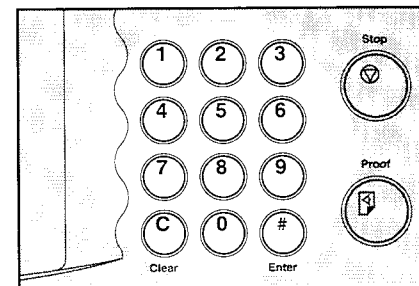


- 3 Press the **Enter** key.
  - If no program number is protected, the machine returns to the ready condition.



- 4 Using the **Number** keys, enter the number of the program that you wish to remove protection from.

- 5 Press the **Enter** key.



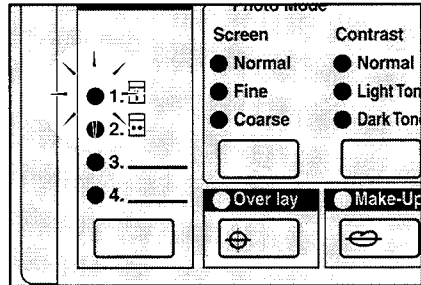
## Printing Of Secret Documents (Security Mode)

This function prevents others from making prints of secret documents from the master. For example, if you want to print some documents with sensitive information, use this function after making your prints so that nobody can access that aster again.

**1** Make your prints.

**2** While pressing the **CS Mode** key, press "1" using the **Number** key.

- If you press the **Proof** key or the **Print Start** key after finishing one print job, the beeper sounds and you cannot make prints.
- You cannot cancel Security mode even if you turn off the main switch.
- If you make the next master, Security mode is canceled.

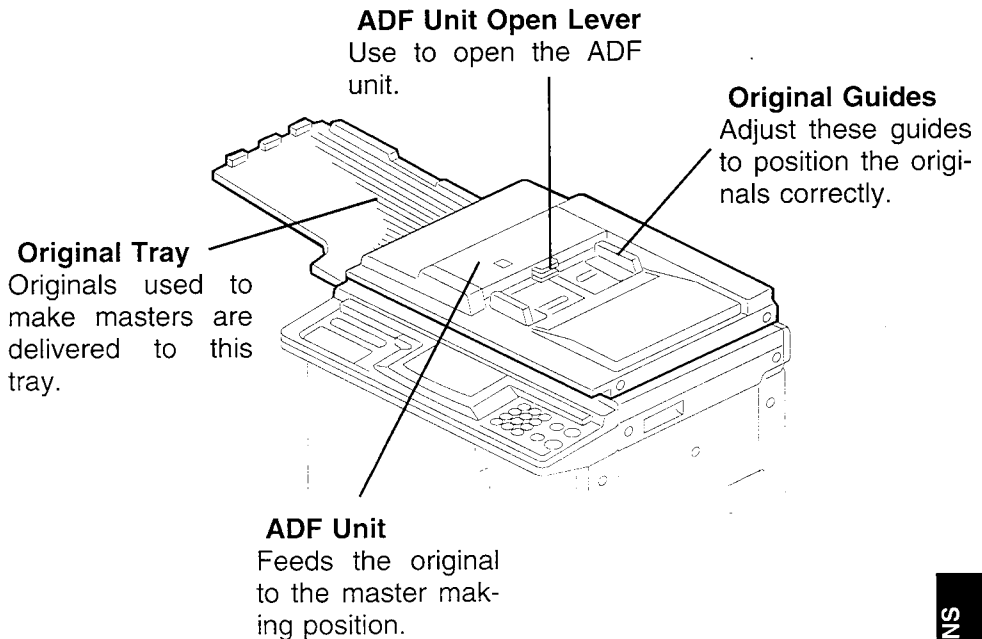


## OPTIONAL FUNCTIONS

### Printing Using The Optional 20 Originals Or 50 Originals Document Feeder

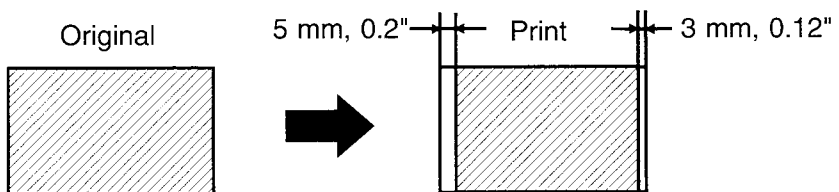
#### Guide to document feeder components

- ▮ If you have optional sorter staplers and you want to have a document feeder, the optional 50 originals document feeder should be equipped with your machine.



## Originals

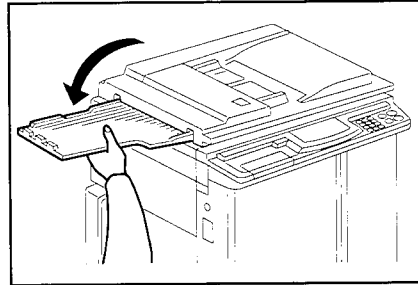
- The following types of originals are not recommended for use with the optional document feeder. Set these types of originals on the exposure glass.
  - Originals heavier than  $127.9 \text{ g/m}^2$ , 34 lb
  - Originals lighter than  $40.7 \text{ g/m}^2$ , 10.8 lb
  - Carbon coated originals
  - Damaged originals
  - Originals with glue on them
  - Originals perforated for ring binders
  - Book originals
  - Originals written with a pencil or ball-point pen
  - Originals smaller than 90 mm x 140 mm, 3.6" x 5.6"
  - Originals larger than 307 mm x 432 mm, 12.0" x 17.0"
  - Folded, curled, creased originals
  - Bound, stapled, or clipped originals
  
- If you use paste-up originals, make sure the pasted parts hold firmly to the base sheet. If the thickness of the paste-up original is more than 0.2 mm, 1/125" and the space between the pasted parts is less than 2 mm, 2/25", a shadow might appear on the prints.
  
- The first 5 mm, 0.2", of the leading edge and the last 3 mm, 0.12", of the trailing edge cannot be printed. Make sure the leading edge margin is at least 5 mm, 0.2", and the trailing edge margin is at least 3 mm, 0.12".



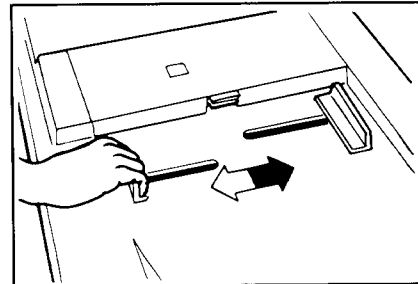
## Setting originals into the document feeder

- ❑ If you set one original into the document feeder while another original is still on the exposure glass, the original set into the document feeder will be scanned first.

**1** Set the original tray.

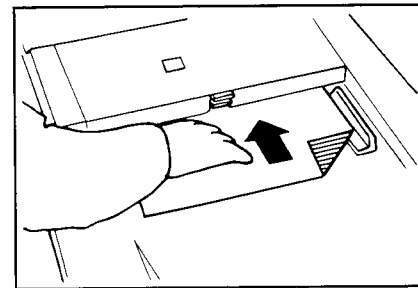


**2** Adjust the original guides to the size of the originals.



**3** Insert the originals face down in the document feeder until it stops.

- ❑ Do not insert different size originals at the same time.
- ❑ Approximately 20 originals can be inserted at one time in the 20 originals document feeder. The first (bottom) original will be fed first.
- ❑ Approximately 50 originals can be inserted at one time in the 50 originals document feeder. The last (top) original will be fed first.
- ❑ The guides must fit snugly against both sides of the stack.



## OPTIONAL FUNCTIONS

**4** Set the required image settings and press the **Master Making** key.

**5** Make your prints.

- If the next original has been set in the document feeder before the machine stops, that original is fed automatically and a trial print is delivered to the paper delivery table after the print of the first original is completed. Check the image position of the trial print of the next original. If necessary, make proof prints using the **Proof** key to check the image position again.
- When you set originals in the 50 originals document feeder, the last original (original set on the top of the original stack in the document feeder) will be delivered to the original tray first and the first original (original set at the bottom of the original stack in the document feeder) will be delivered to the original tray last. So, the order of originals is inverted as shown in the illustration. Reset the order of originals.

