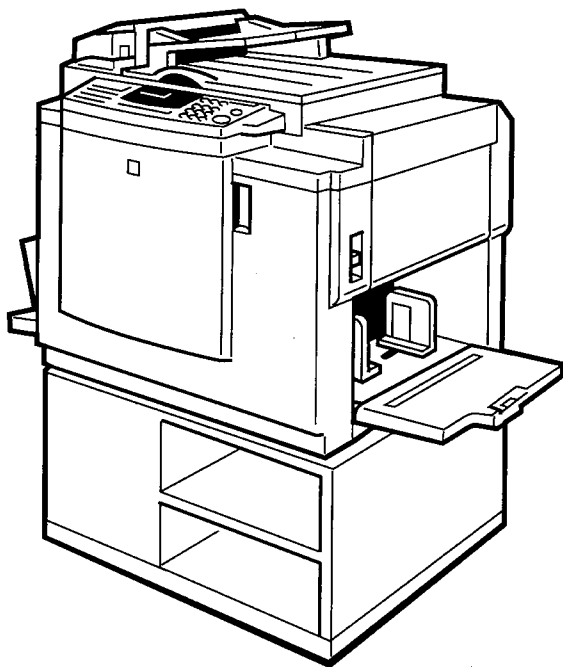


Savin

3250DNP

Operating Instructions



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

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.

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

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

Power Source:

Master Making: AC 120 V, 50/60 Hz, less than 2.9 A

Printing: AC 120 V, 50/60 Hz, less than 2.9 A

Please make sure to connect the power cord to a power source as above. For details about power source, see page 9.

INTRODUCTION

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


SAFETY INFORMATION

When using your machine, the following safety precautions should always be 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**  **means a situation that requires you take care.**

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

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

WARNINGS:



- *Only connect the machine to the power source described on the inside front cover of this manual. Avoid multi-wiring as it could cause an electric shock or a fire.*
- *Avoid using an extension cord. 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 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 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. 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 looks damaged or breaks down, smoke is coming out, there is a strange smell or anything looks unusual, immediately turn off the main power switch then unplug the power cord from the wall. Do not continue using the machine in this condition. Contact your service representative.*



- *Do not put any metal objects or containers holding water (e.g. vases, flowerpots, glasses) on the machine. If the contents fall inside the machine a fire or electric shock could occur.*



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



- *Do not plug or unplug the power cord with wet hands or an electric shock might occur.*

CAUTIONS:



- *When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.*



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



- *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.*



- *When the machine will not be used for a long time, unplug the power cord.*



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



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

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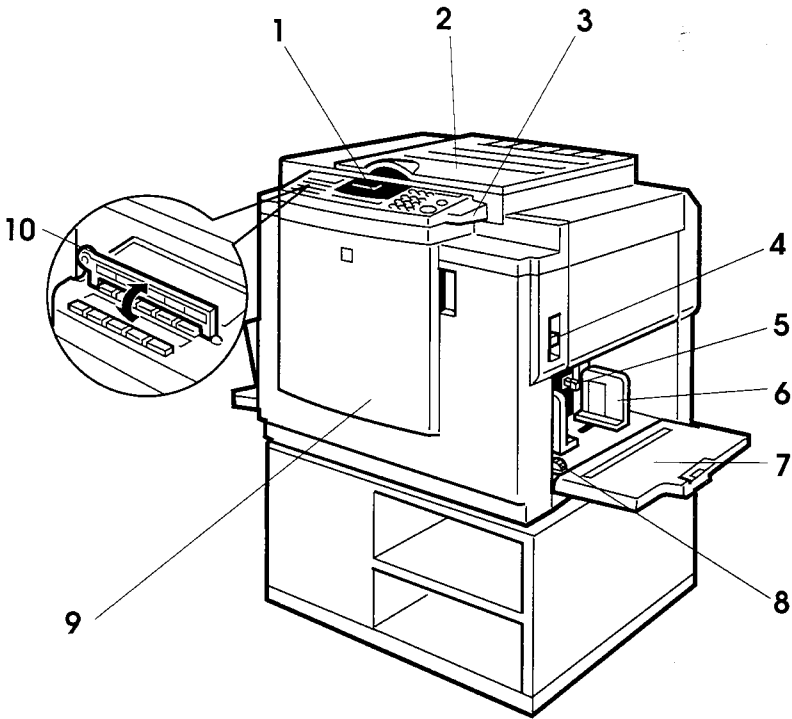
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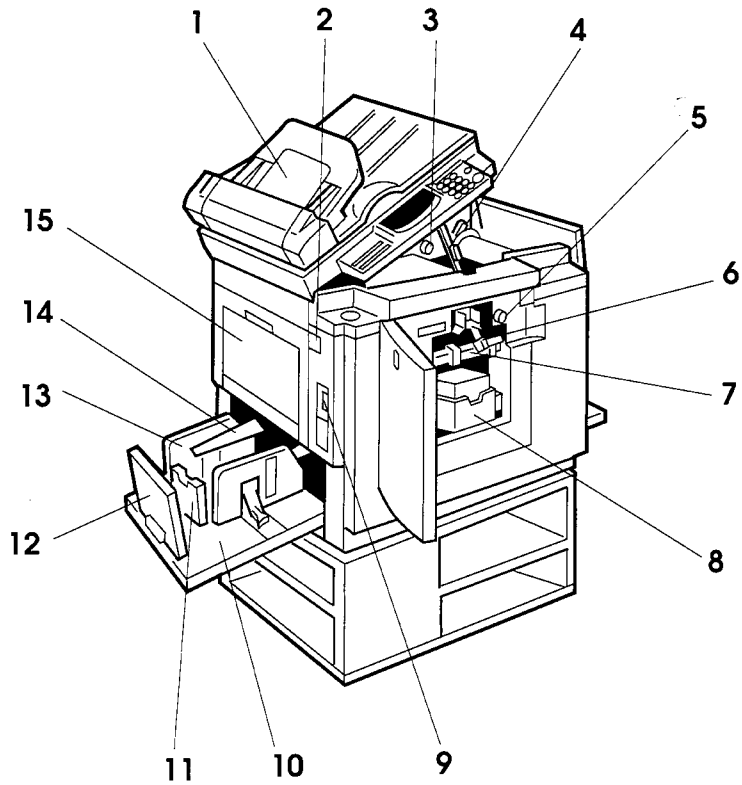
GUIDE TO COMPONENTS

Machine Exterior



- | | |
|--|---|
| 1. Operation panel | Operator controls and indicators are located here. ➡ See pages 5 ~ 7. |
| 2. Platen cover | Lower this cover over an original before printing. |
| 3. Original table release lever | Use to open the original table unit when installing the master. |
| 4. Feed roller pressure lever | Use to adjust the contact pressure of the paper feed roller according to paper thickness. |
| 5. Separation roller pressure lever | Use to adjust the separation roller pressure to prevent double feed. |
| 6. Paper feed side plates | Use to prevent paper skew. |
| 7. Paper feed table | Set paper on this table for printing. |
| 8. Side plate fine adjusting dial | Use to shift the paper feed table sideways. |
| 9. Front cover | Open to access to the inside of the machine. |
| 10. Plate | Flip over when you use One Touch Class function. ➡ See page 47. |

Machine Interior

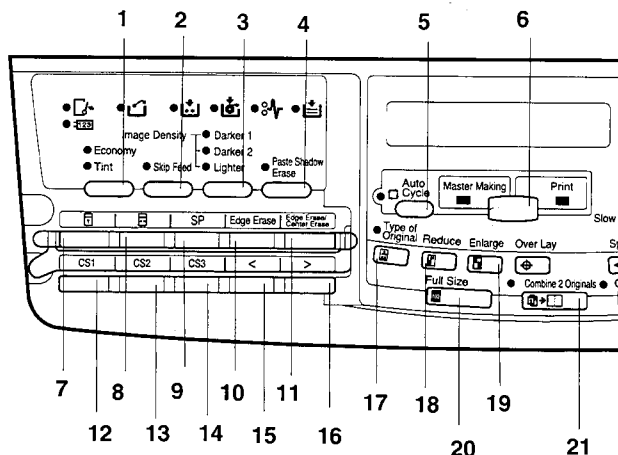


1. **Document feeder (Option)** Original inserted into the document feeder are individually and automatically fed onto and removed from the exposure glass. ➤ See page 82.
2. **Master eject unit open button** Press to remove misfed paper or a misfed master.
3. **Master cut button** Press this button to cut the master leading edge after installing a new master roll.
4. **Pressure release lever** Use to install the master roll.
5. **Drum rotation button** Press to rotate the drum unit.
6. **Drum unit lock lever** Lift to unlock and pull out the drum unit.
7. **Drum unit** The master is wrapped around this unit.
8. **Ink holder** Set the ink cartridge in this holder.
9. **Main switch** Use to turn the power on or off.
10. **Paper delivery table** Completed prints are delivered here.
11. **Small size paper delivery end plate** Use to align the leading edge of prints that are A4, 8 1/2" x 11" or smaller.
12. **Paper delivery end plate** Use to align the leading edge of prints larger than A4, 8 1/2" x 11".
13. **Paper delivery side plate** Use to align the prints on the paper delivery table.
14. **Wing guides** When printing on thin or small size paper, lift these guides. ➤ See page 15.
15. **Master eject container cover** Open when removing the master eject box.

- ❑ Other options: Color Drums (red, blue, green, brown, yellow, purple, navy, maroon, orange and teal)
Tape Dispenser
Key Counter
Cabinet

Operation Panel

Keys



1. Economy/Tint key

☛ See pages 42 ~ 44.

2. Skip Feed key

☛ See page 71.

3. Image Density key

☛ See page 23.

4. Paste Shadow Erase key

☛ See page 36.

5. Auto Cycle key

☛ See page 45.

6. Master Making/Print key

Press to select Master Making or Print mode.

7. Security key

☛ See page 79.

8. Quality Start key

☛ See page 80.

9. SP mode key

☛ See page 94.

10. Edge Erase key

☛ See page 34.

11. Edge Erase/Center Erase key

☛ See page 31.

12. 13. 14. CS mode keys

☛ See pages 97 ~ 101.

15. 16. Scroll keys

Press to select size and direction of paper or original in Edge Erase/Center Erase and Edge Erase function.

Press to select the mode in Service Program mode.

17. Type of Original key

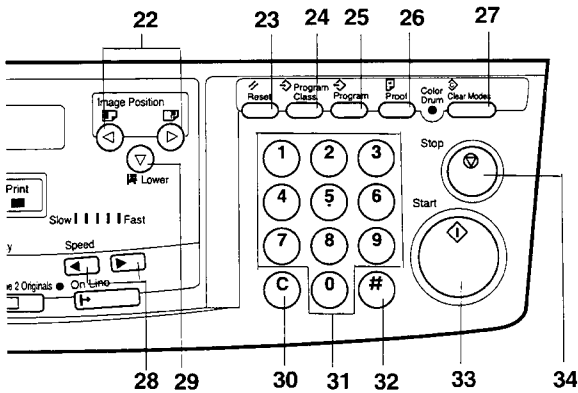
☛ See page 40.

18. Reduce key

☛ See page 27.

19. Enlarge key

☛ See page 29.

**20. Full Size key**

Press to make full size prints.

21. Combine 2 Originals key

See page 63.

22. Image Position keys

See page 21.

23. Reset key

Press to reset the error indicators.

24. Program Class key

See page 47.

25. Program key

See page 73.

26. Proof key

Press to make proof prints.

27. Clear Modes key

Press to cancel all previously entered settings.

28. Speed keys

See page 24.

29. Lower key

Press to lower the paper feed table.

30. Clear key

Press to change the number set.

31. Number keys

Press to enter the number of prints and data.

32. Enter key

Press to input data into memory.

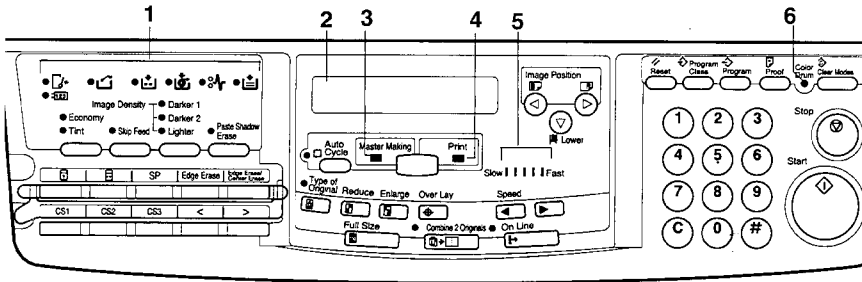
33. Start key

Press to start making of a master or printing.

34. Stop key

Press to stop the machine operation.

Indicators



1. Error indicators

These indicators are lit when a non-standard condition occurs within the machine. See page 128.

2. Guidance Display

Press to stop the machine operation.

3. Master Making indicator

This indicator is lit when Master Making mode is selected.

4. Print indicator

This indicator is lit when Print mode is selected.

5. Speed indicators

These indicators show the printing speed that is selected. See page 24.

6. Color Drum indicator

This indicator is lit when the optional color drum unit is set. See page 88.

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: Main frame: 20 - 90 % RH
Document feeder (option): 20 - 70 % 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 m³/hr/person.

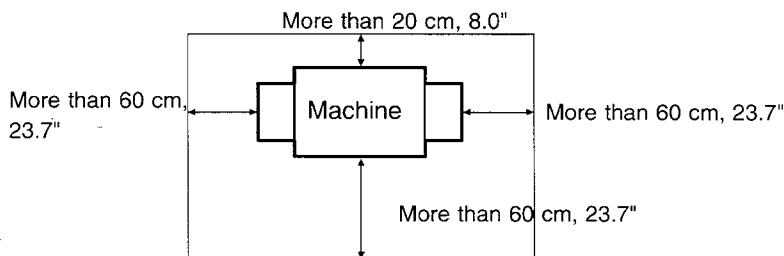
INSTALLATION
REQUIREMENTS

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.



Power Connection



WARNING:

- ***Only connect the machine to the power source described on the inside front cover of this manual.
Avoid multi-wiring as it could cause an electric shock or a fire.***
- ***Avoid using an extension cord. 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 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.***



CAUTION:

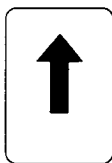
- ***When you move the machine, unplug the power cord from the wall outlet to avoid fire or electric shock.***
- ***When you pull out the plug from the socket, grip the plug to avoid damaging the cord and causing fire or electric shock.***

- ☐ Make sure the plug is firmly inserted in the outlet.
- ☐ Avoid multiwiring.
- ☐ Do not pinch the power cord.

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/m², 55.6 lb
 - Paper lighter than 47.1 g/m², 12.5 lb
(However, 45 g/m², 11.9 lb paper may be used when the printing speed is setting 1, 2 or 3 and the separation pressure levers are in the "Thick" position.)
 - Roughly-cut paper
 - Paper of different thickness in the same stack
 - Buckled or curled paper
 - Short grain paper
 - Low stiffness paper
- ❑ 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.



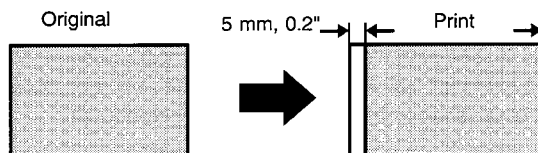
Not OK



OK

Originals

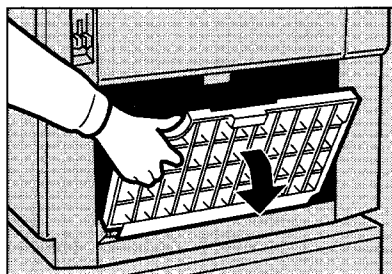
- ❑ Originals that can be set on the exposure glass are as follows:
 - Maximum size: 257 x 364 mm, 10.2" x 14.4"
 - Maximum total thickness: 30 mm, 1.1"
 - Maximum total weight: 5 kg, 11.0 lb
- ❑ If you use paste-up originals, make sure the pasted parts hold firmly to the base sheet and press the **Paste Shadow Erase** key. If the thickness of the paste-up original is more than 0.1 mm 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 cannot be printed. Make sure the leading edge margin is at least 5 mm, 0.2".



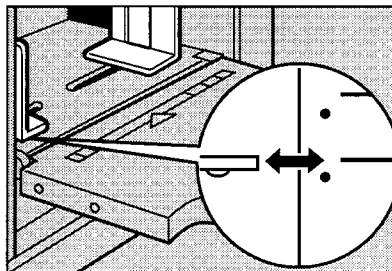
Preparation For Printing

- 1** Carefully open the paper feed table.

- ☐ Keep hold the paper feed table until it stops.

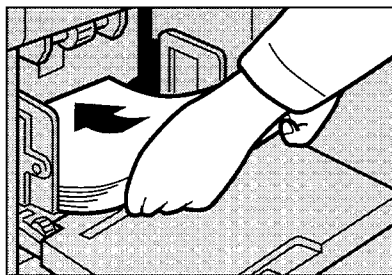
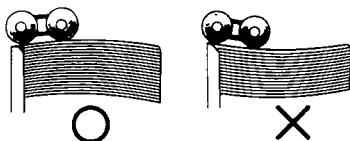


- 2** Adjust the side plates to match the paper size.

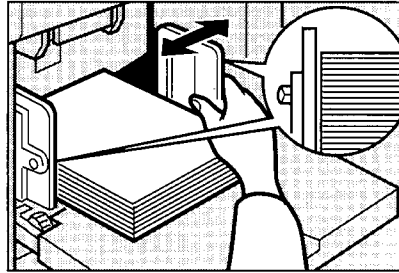


- 3** Place the paper on the paper feed table.

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

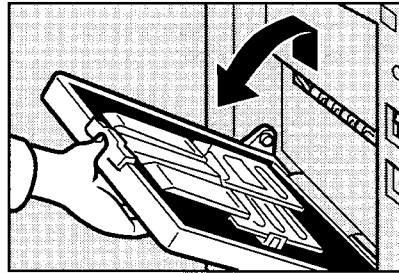


- 4** Make sure that the paper feed side plates contact the paper lightly.

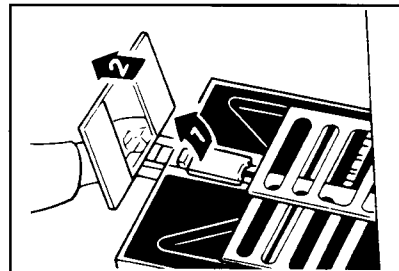


Setting up the paper delivery table

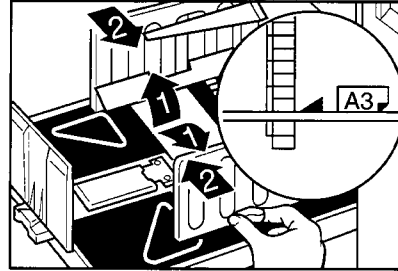
- 5** Lift up the paper delivery table a little and then open it.



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

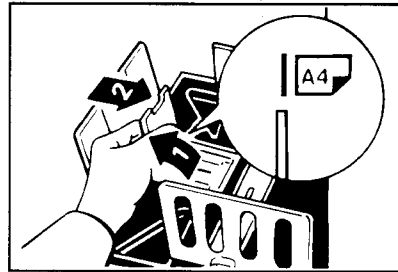


- 7** Lift the paper delivery side plates and adjust them to the paper size.



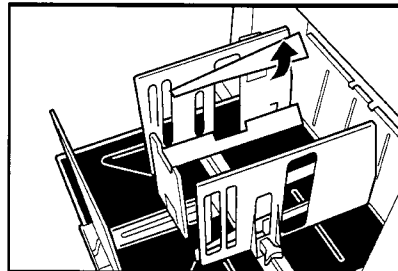
- 8** If you want to use A4, 8 1/2" x 11" or smaller paper, lift the small size paper delivery end plate and move it to match the print paper size.

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

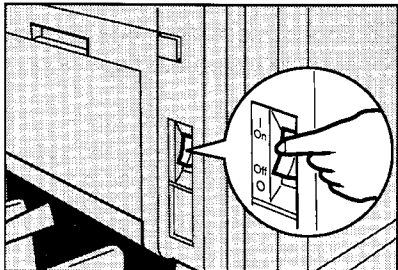


- 9** If necessary, lift the left and right wing guides.

- ☐ If you find paper is not delivered properly when printing on thin paper, make sure the wing guides are up.
- ☐ When printing on paper thicker than 81.4 g/m², 21.6 lb, do not lift up the wing guides.



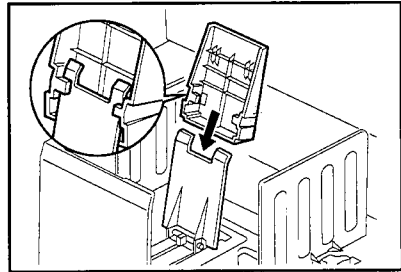
- 10** Turn on the main switch.



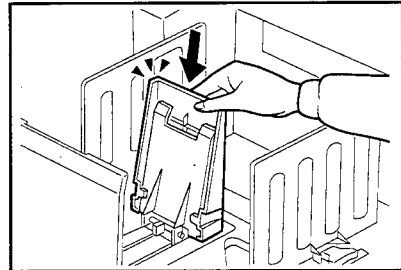
Setting the small size end plate prop

If A4, 8 $\frac{1}{2}$ " 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.

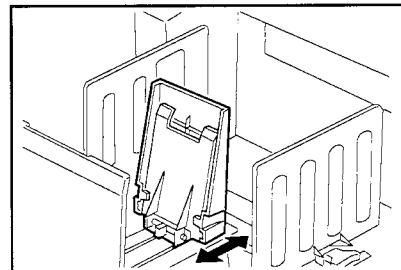
- 1** Set the small size end plate prop to the small size paper delivery end plate as shown in the illustration.



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

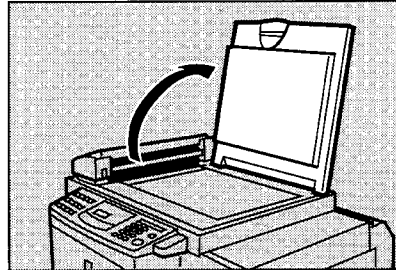


- 3** Adjust the main frame side of the prop to match the paper size.

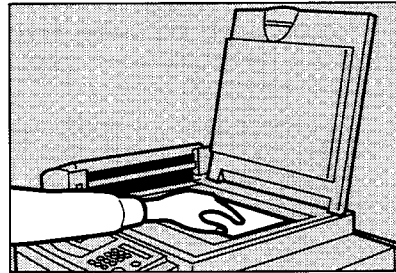


Standard Printing

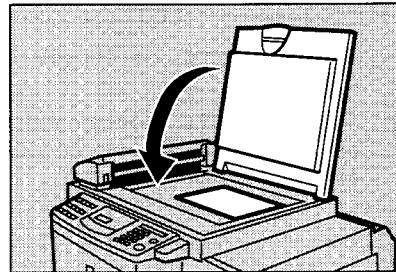
- 1** Open the platen cover.



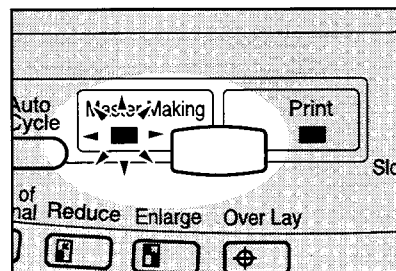
- 2** Place the original face down on the exposure glass. The original should be centered according to the size marks on the right scale.



- 3** Lower the platen cover.

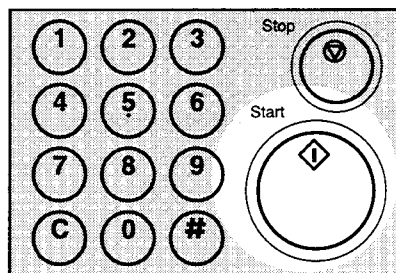


- 4** Make sure the **Master Making** indicator is lit. If not, press the **Master Making/Print** key and select the Master Making mode.



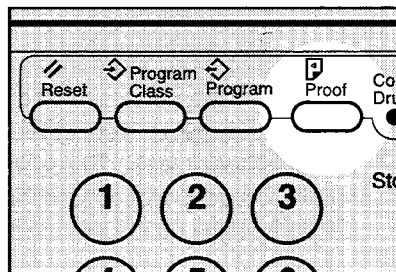
5 Press the **Start** key.

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



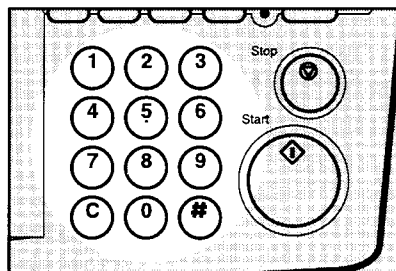
6 Press the **Proof** key and check the image density and the image position of the proof print.

- ☐ 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 24.)



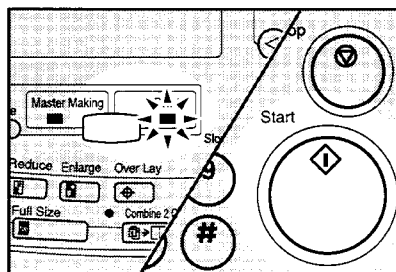
7 Enter the number of prints required using the **Number** keys.

- ☐ 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.



8 Make sure the **Print** indicator is lit and then press the **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.



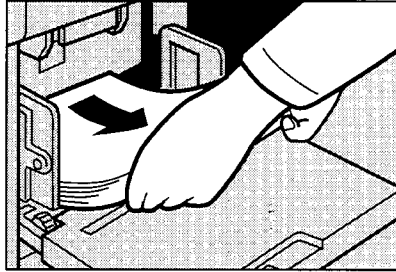
9 Remove the prints from the paper delivery table.

- ☐ To clear all the modes you have selected, press the **Clear Modes** key.

Restoring Paper Feed And Paper Delivery Tables

- 1** Remove the paper from the paper feed table.

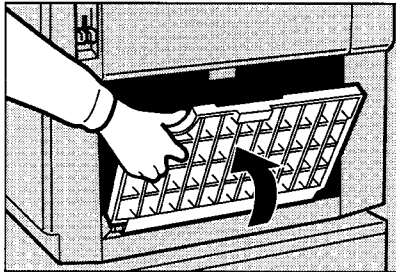
❑ The paper feed table will lower.



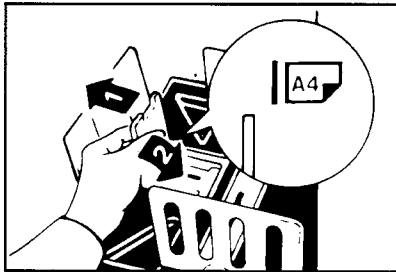
- 2** Turn off the main switch.



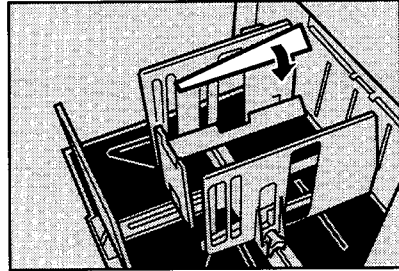
- 3** Close the paper feed table.



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

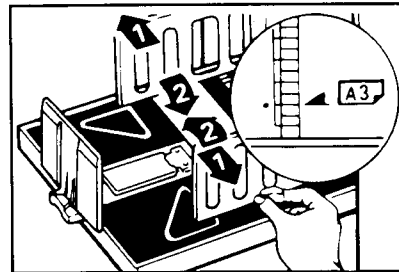


- 5** Return the left and right wing guides to their original positions, if necessary.

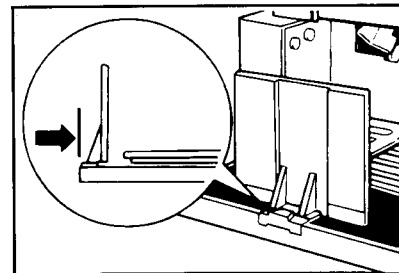


- 6** Move the side plates to the sides, then lower them.

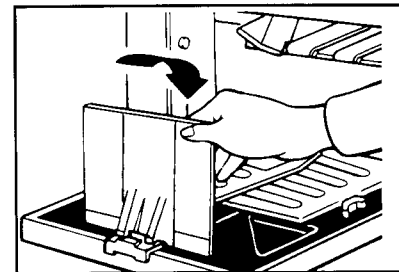
- ☐ Make sure that the side plates do not touch the small size paper delivery end plate.



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



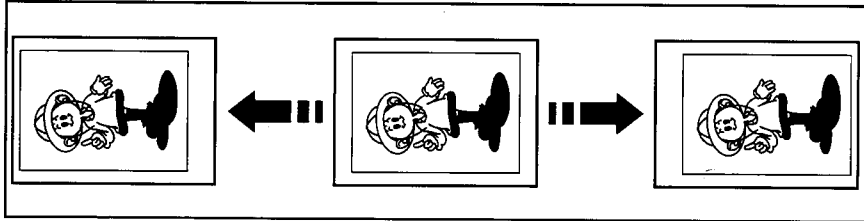
- 8** Lower the end plate.



- 9** Close the table.

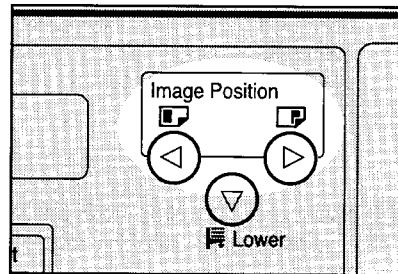
Adjusting The Image Position

Shifting the image position forward or backward

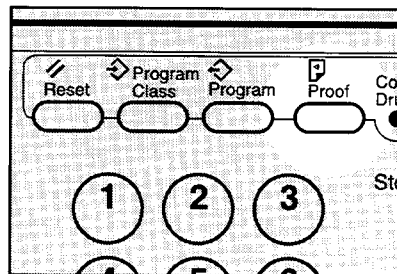


1 Press the right or left **Image Position** key.

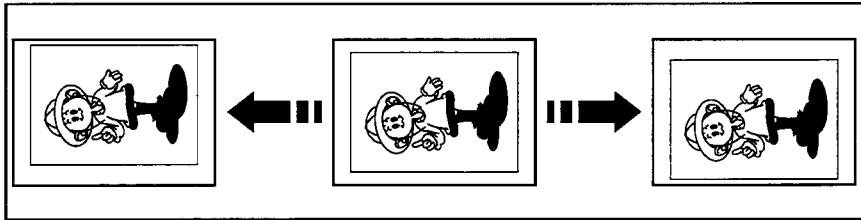
- ❑ When you shift the image forwards, leave a margin (more than 5 mm, 0.2") at the leading edge. If there is no margin, paper might wrap around the drum and cause a misfeed.
- ❑ The right or left **Image Position** keys shift the image about 0.5 mm, 1/50" each time they are pressed. When the indicator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



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



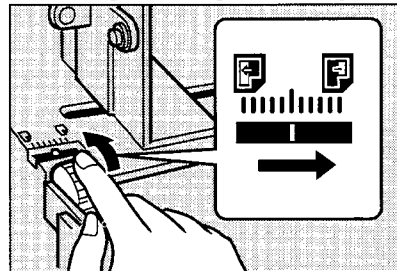
Shifting the image to the right or left



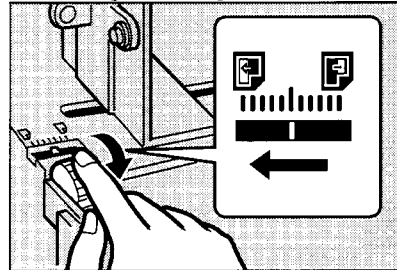
- 1** Turn the side plate fine adjusting dial as shown in the illustrations.

- ☐ 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".

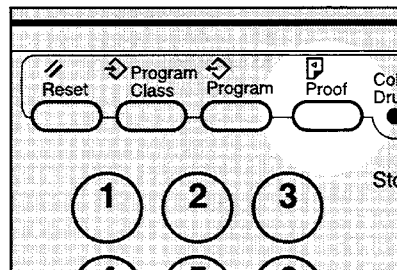
<Shifting the image to the right>



<Shifting the image to the left>



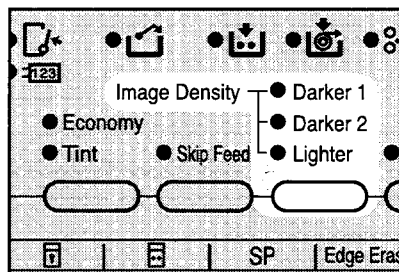
- 2** Adjust the paper delivery side plates to the print paper position.
- 3** Press the **Proof** key. Check the image position.



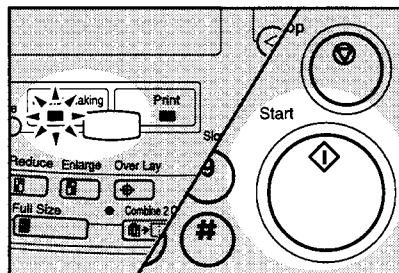
Adjusting The Image Density

Before making a master

- 1** Select the desired image density using the **Image Density** key.

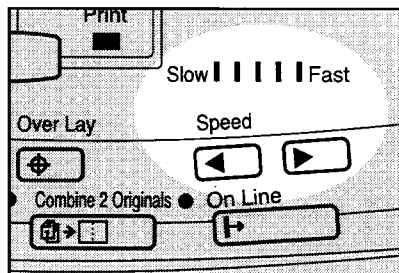


- 2** Make sure that Master Making indicator is lit and then press the **Start** key.



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.



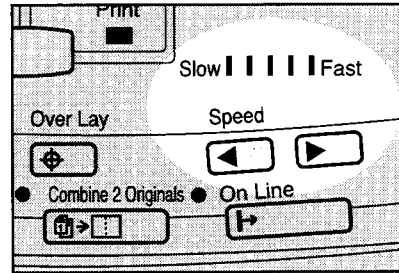
Changing The Printing Speed

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

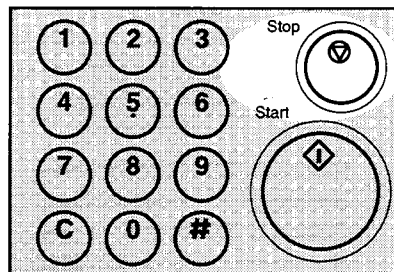
- ☐ When the main switch is turned on, Setting 3 is selected.
- ☐ The faster the printing speed becomes, the lighter the printing density is, and vice versa.



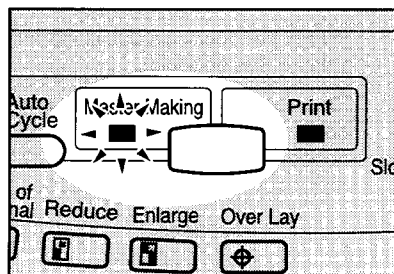
Stopping The Machine During A Print Run

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

- 1** Press the **Stop** key.

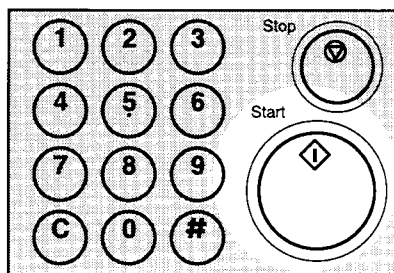


- 2** Press the **Master Making/Print** key to select Master Making mode.



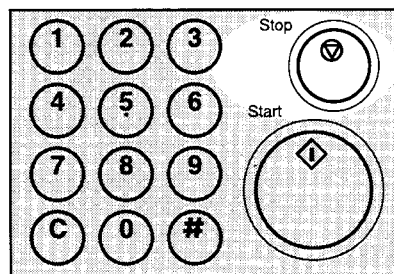
- 3** Set the new original.

- 4** Press the **Start** key.



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

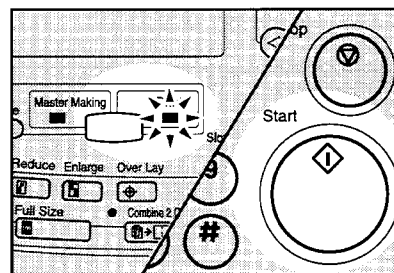
- 1** Press the **Stop** key.



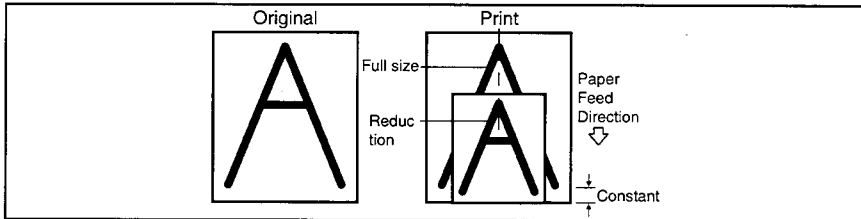
- 2** Change the number of prints or check the completed prints.

- ☐ When you change the number of prints, you can re-enter the number using the **Number** keys after pressing the **Stop** key.

- 3** Make sure that **Print** indicator is lit and then press the **Start** key.

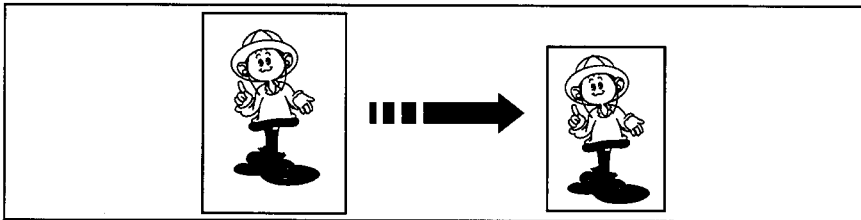


Reduction/Enlargement Printing (Reduce/Enlarge)



- 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** key.

— Metric version —

Reduction Ratio	Original Size	Print Size
93 %	*	
87 %	A5	B6
	A4	B5
82 %	B4	A4
	B5	A5
71 %	A4	A5
	B4	B5

— Inch version —

Reduction Ratio	Original Size	Print Size
93 %	*	
77 %	8 1/2" x 14"	8 1/2" x 11"
74 %	10" x 14"	8 1/2" x 11"
65 %	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** key.

- ☐ If you want to return the ratio to 100 %, press the **Full Size** key.

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

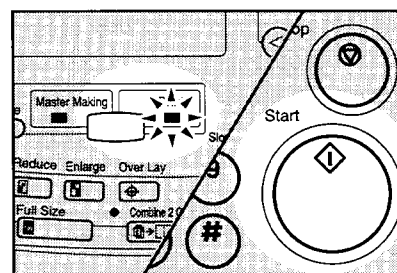
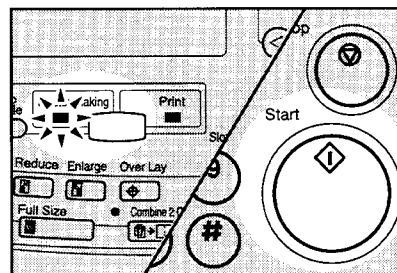
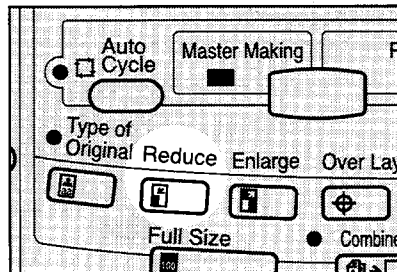
3 Set your originals on the exposure glass or in the optional document feeder.

4 Make sure that **Master Making** indicator is lit and then press the **Start** key. Check the image position of the trial or proof print.

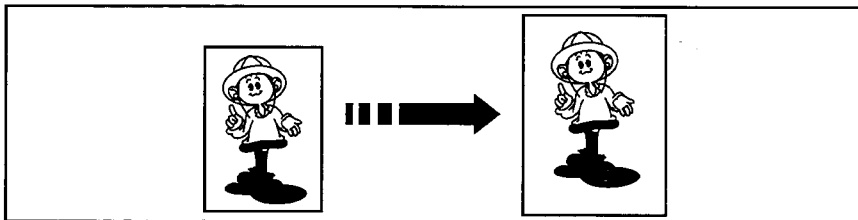
- ☐ If the image position is not correct, adjust it using the **Image Position** keys (☛ see page 21) or the side plate fine adjusting dial (☛ see page 22).

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

6 Make sure that the **Print** indicator is lit and then press the **Start** key.



Enlargement



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

— Metric version —

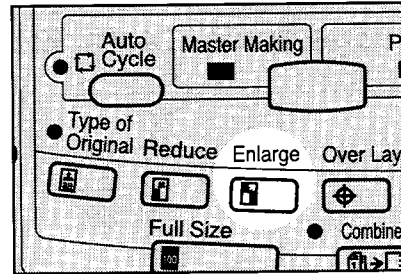
Enlargement Ratio	Original Size	Print Size
141 %	B5	B4
	A5	A4
122 %	A4	B4
	A5	B5
115 %	B5	A4
	B6	A5

— Inch version —

Enlargement Ratio	Original Size	Print Size
155 %	5 1/2" x 8 1/2"	8 1/2" x 14"
129 %	5 1/2" x 8 1/2"	8 1/2" x 11"
121 %	8 1/2" x 11"	11" x 15"

- 1** Select the desired enlargement ratio using the **Enlarge** key.

☐ If you want to return the ratio to 100 %, press the **Full Size** key.

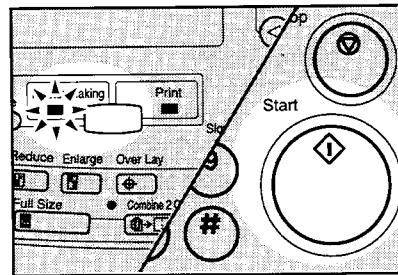


- 2** Make sure that the original and the print paper are the correct size.

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

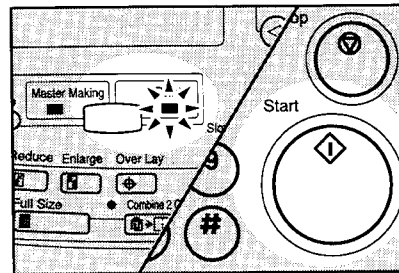
- 4** Make sure that **Master Making** indicator is lit and then press the **Start** key. Check the image position of the trial or proof print.

☐ 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).

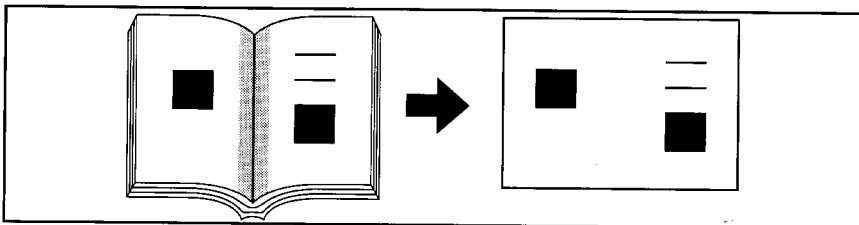


- 5** Enter the number of prints required using the **Number** keys.

- 6** Make sure that **Print** indicator is lit and then press the **Start** key.



Erasing Center And Edge Margins (Edge Erase/Center Erase)

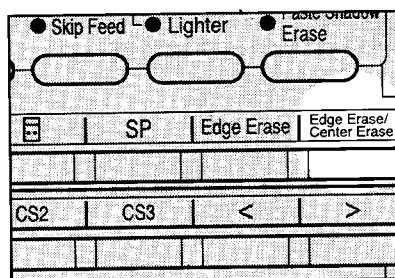


When printing from thick books, or similar originals, the binding margin at the center and the edges might appear on prints. To prevent this, follow the steps on the next page.

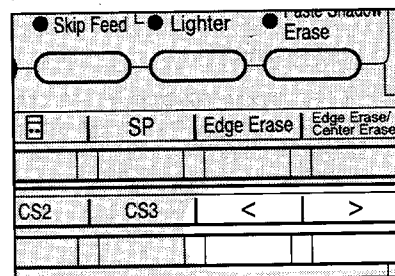
- ☐ As a default setting, the paper sizes and directions that can be used are as follows:
 - Metric version: B4 □, A4 □, A5 □, A5□, B5 □, B5 □
 - Inch version: 8 1/2" x 14" □, 8 1/2" x 11" □, 5 1/2" x 8 1/2" □, 5 1/2" x 8 1/2" □
 If you want to use other size originals, you can register the size using Service Program mode. ➤ See page 107.
- ☐ The margin width to be erased can be adjusted with Service Program mode.
 - See page 107.

1 Press the **Edge Erase/Center Erase** key.

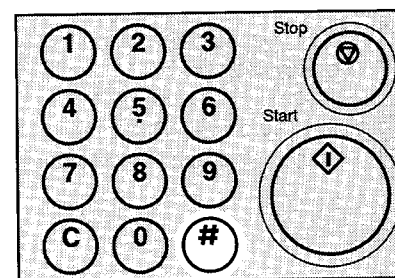
- ☐ To cancel this mode, press the **Edge Erase/Center Erase** key again.



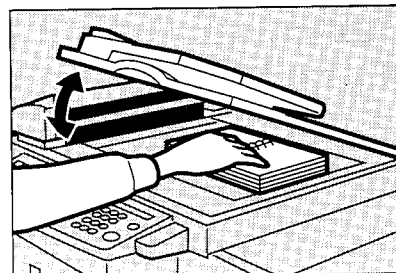
2 Press the "<" or ">" key to select the paper size and direction.



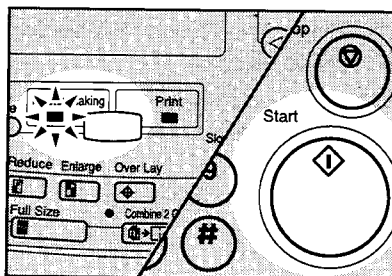
3 When you reach the desired paper size and direction, press the **Enter** key.



4 Set the book on the exposure glass.

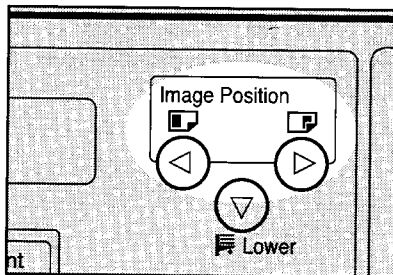


- 5** Make sure that **Master Making** indicator is lit and then press the **Start** key.



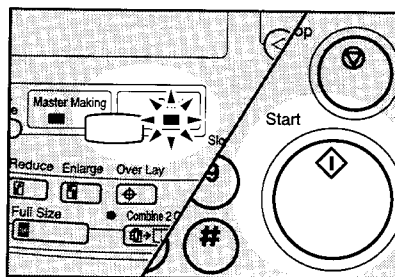
- 6** Check the image position of the trial or proof print.

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

- 8** Make sure that **Print** indicator is lit and then press the **Start** key.



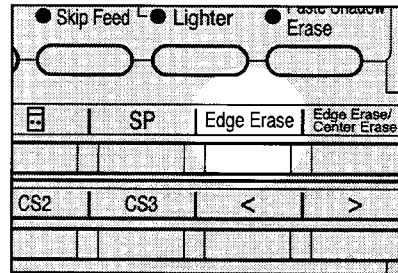
Erasing Edge Margins (Edge Erase)

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

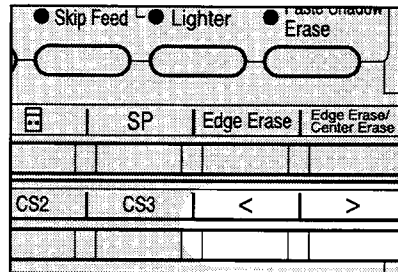
- As a default setting, the paper sizes and directions that can be used are as follows:
 - Metric version: B4 □, A4 □, A5 □, A5□, B5 □, B5 □
 - Inch version: 8 1/2" x 14" □, 8 1/2" x 11" □, 5 1/2" x 8 1/2" □, 5 1/2" x 8 1/2" □
 If you want to use other size originals, you can register the size using Service Program mode. • See page 107.
- The margin width to be erased can be adjusted with Service Program mode.
 - See page 107.

1 Press the **Edge Erase** key.

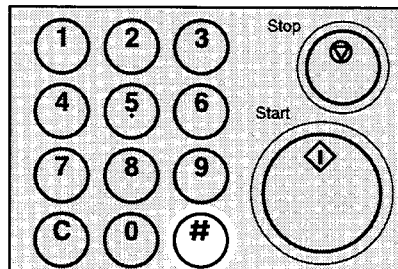
- To cancel this mode, press the Edge Erase key again.



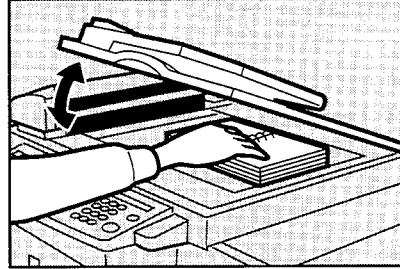
2 Press the "<" or ">" key to select the paper size and direction.



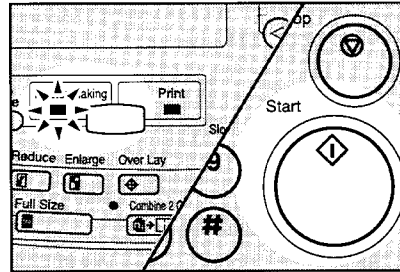
3 When you reach the desired paper size and direction, press the **Enter** key.



- 4** Set the book on the exposure glass.

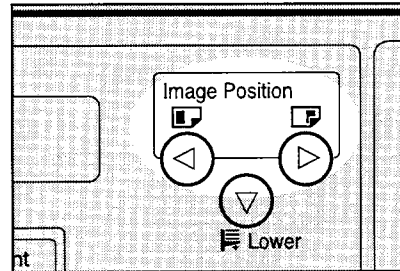


- 5** Make sure that **Master Making** indicator is lit and then press the **Start** key.



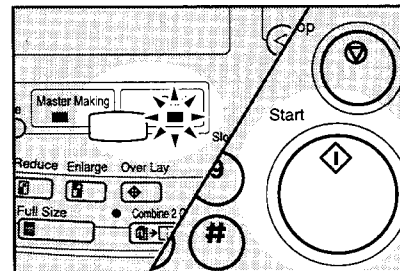
- 6** Check the image position of the trial or proof print.

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

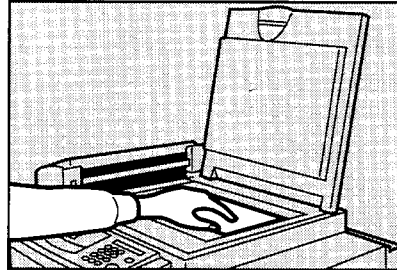
- 8** Make sure that **Print** indicator is lit and then press the **Start** key.



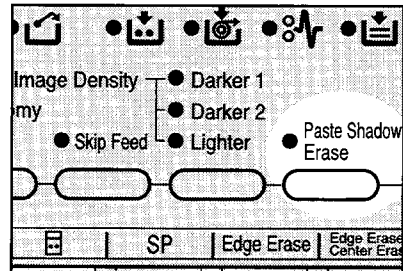
Erasing The Shadow Of Pasted Originals (Paste Shadow Erase)

If you want to erase the shadow of pasted originals, follow the steps below.

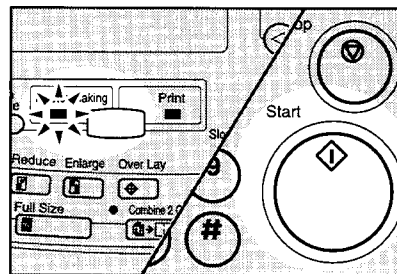
- 1 Set the original on the exposure glass.



- 2 Press the **Paste Shadow Erase** key.

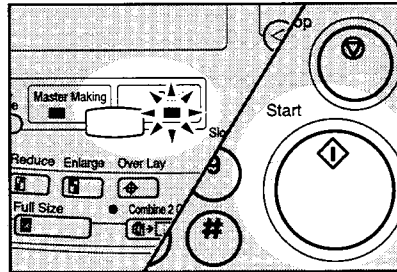


- 3 Make sure that **Master Making** indicator is lit and then press the **Start** key.



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

- 5** Make sure that **Print** indicator is lit and then press the **Start** key.



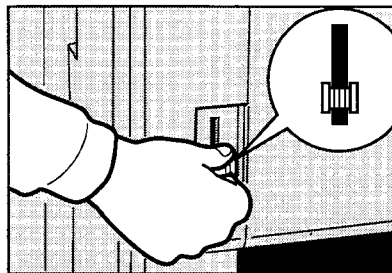
Printing On Thick Or Thin Paper

Printing on thick paper

If your paper applied to "Thick" in the table below, perform the following steps.

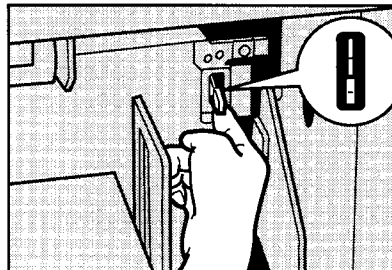
Size \ Weight	B4	A4	B5
209.3 g/m ² , 55.6 lb	Thick		Standard
157.0 g/m ² , 41.7 lb	Thick	Standard	
127.9 g/m ² , 34.0 lb	Thick	Standard	
47.1 g/m ² ~ 105 g/m ² , 12.5 lb ~ 28 lb	Standard		

- 1** Push down the feed roller pressure lever.



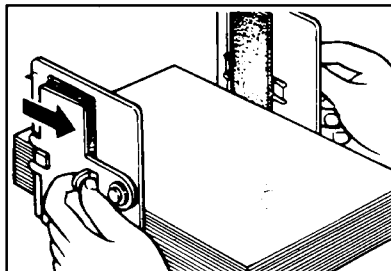
- 2** Push the separation roller pressure levers up to the thick paper position.

- ☐ There are two pressure levers. Make sure that both levers are up.

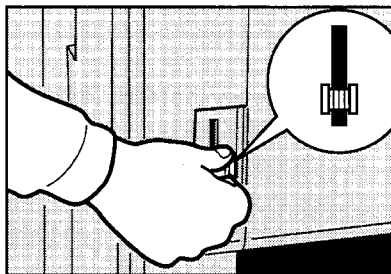


Printing on thin paper

- 1** Set the side pads (move the side pad levers to the right).



- 2** Position the feed roller pressure lever to the Standard paper position.



- 3** Set the separation roller pressure levers to the standard position.

- ☐ There are two pressure levers. Make sure that both levers are down.

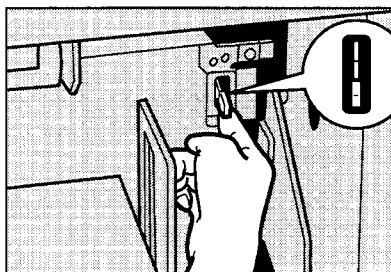
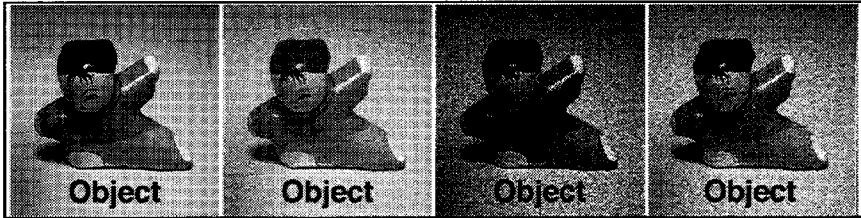


Photo Mode Printing (Type of Original)



Original

Photo mode

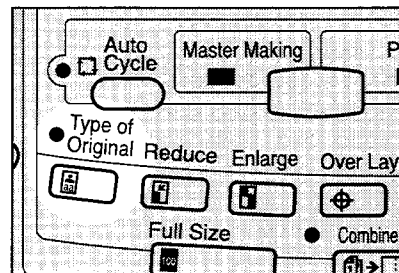
Letter mode

Letter/Photo mode

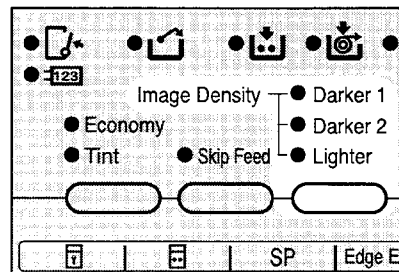
When printing a photograph or a color original, select Photo mode.

- ☐ Moire patterns may occur when screened originals are printed.
- ☐ When printing originals with both letters and photos using Photo mode, the image of the letters will be light. Select Letter/Photo mode using the **Type of Original** key.

- 1** Press the **Type of Original** key to select Photo mode.



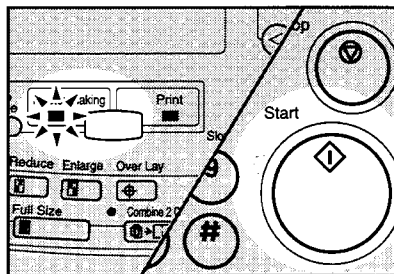
- 2** Press the **Image Density** key to adjust the image density.



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

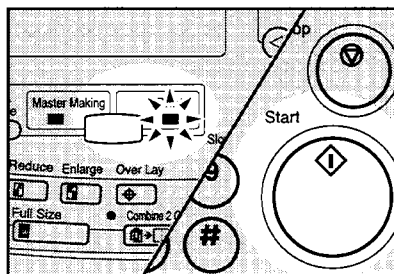
4 Make sure that the **Master Making** indicator is lit and then press the **Start** key. Check the image position of the trial or proof print.

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

6 Make sure that the **Print** indicator is lit and then press the **Start** key.

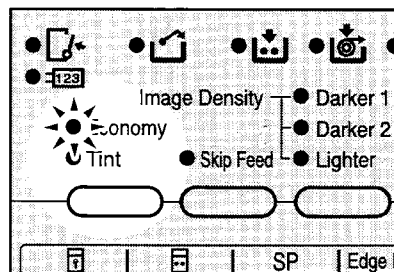


Ink Saving (Economy Mode)

When you want to save ink, select Economy mode.

- ☐ The printing density may be light in this mode.

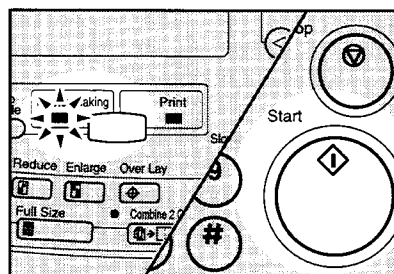
- 1** Press the **Economy/Tint** key to select Economy mode.



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

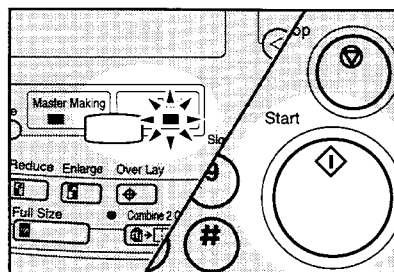
- 3** Make sure that the **Master Making** indicator is lit and then press the **Start** key. Check the image position of the trial or proof print.

- ☐ 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).

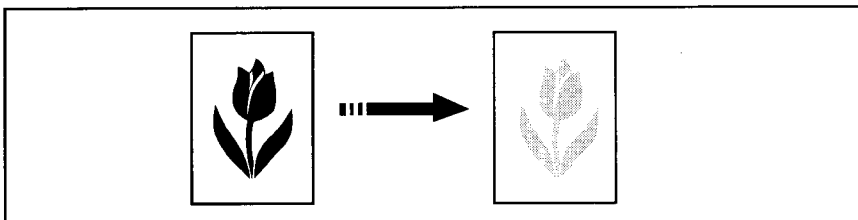


- 4** Enter the number of prints using the **Number** keys.

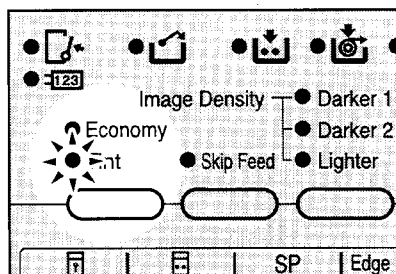
- 5** Make sure that the **Print** indicator is lit and then press the **Start** key.



Making Half-tone Prints (Tint Mode)



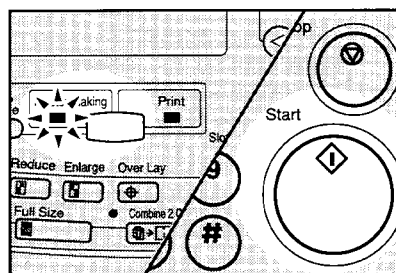
- 1** Press the **Economy/Tint** key to select Tint mode.



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

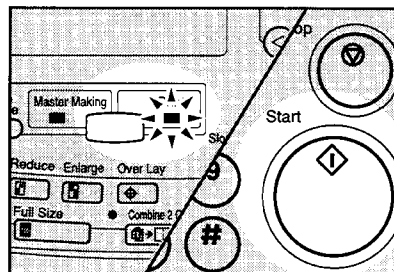
- 3** Make sure that the **Master Making** indicator is lit and then press the **Start** key. Check the image position of the trial or proof print.

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

- 5** Make sure that the **Print** indicator is lit and then press the **Start** key.



Printing From Several Originals At Once (Auto Cycle)

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

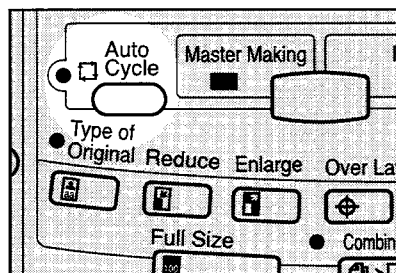
- ❑ When you use the optional document feeder, it is not necessary to place originals one by one. All originals are fed and prints are completed after you press the **Start** key.
- ❑ If you use the optional tape dispenser, the tape dispenser drops a strip of paper onto the top of the paper stack after 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 on the exposure glass or in the optional document feeder.

- ❑ You can set up to 30 originals into the optional document feeder.

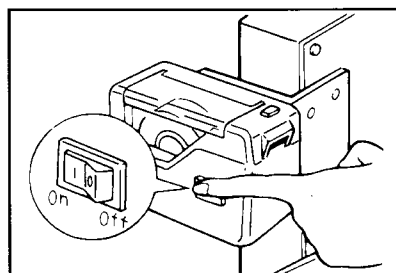
2 Press the **Auto Cycle** key.

- ❑ Both indicators of Master Making mode and Print mode are lit.
- ❑ If you press the **Auto Cycle** key, you cannot make proof prints by pressing the **Proof** key.



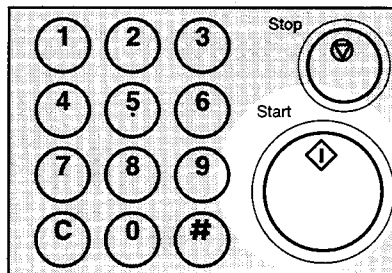
3 Enter the number of prints using the **Number** keys.

4 If you use the optional tape dispenser, turn on the power switch of the tape dispenser.



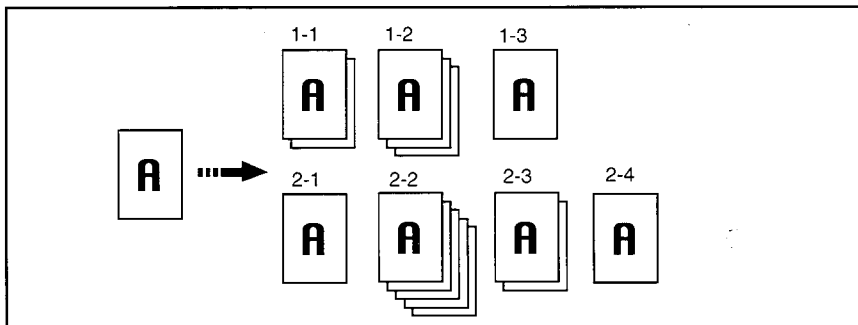
5 Press the **Start** key.

- ❑ If you set the originals into the optional document feeder, originals are fed and prints are completed automatically.

**6** Repeat steps 1 through 5 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.

Printing With A Programmed Number Of Prints For Each Class (One Touch Class Mode)



What is One Touch Class mode?

This feature is useful for teachers who frequently make multiple print sets for their classes, e.g. notes, handouts, tests etc.

Using a standard print function, the teacher would have to stand by the machine entering the number of prints and pressing the Start key for each class. However, One Touch Class mode allows you to program the number of students in each class into the machine beforehand. Then, whenever you need to make print sets for several classes, set your original, select the classes who need prints and press the Start key. Print sets will be made containing the correct number of prints for each class.

- ❑ If you have the Tape Dispenser option, print sets will be sent to the paper delivery table separated by a slip of tape for easy separation. If you do not have this option, the machine will stop after each set has been printed. In this case, remove the stack from the paper delivery table and press the Start key to start printing the next set.
- ❑ You can program student numbers for up to 9 grades with 10 classes in each, giving a maximum of 90 classes. Each class can have up to 9999 students.

Example:

Imagine a school with 4 grades and 6 classes in each grade. There are 27 students in every class in grades 1 to 3, and grade 4 has varying numbers of students due to a high transfer rate. The information you need to program in the machine might look like that shown in the table below:

Grade \ Class	1	2	3	4	5	6
1	27	27	27	27	27	27
2	27	27	27	27	27	27
3	27	27	27	27	27	27
4	25	20	23	24	25	20

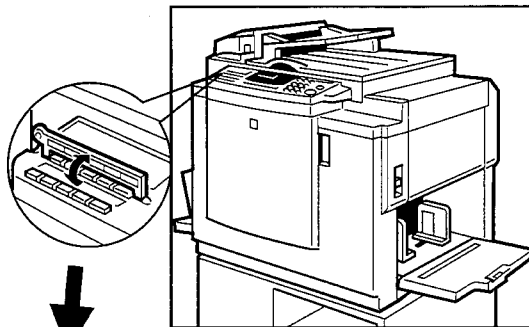
Programming student numbers

Before you can use One Touch Class Mode, you need to program the number of students in each class. Because classes are grouped into grades, you must program one grade at a time.

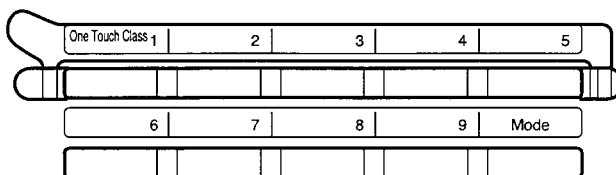
There are two methods of programming a grade:

- Simple: Use if all classes in a grade have the same number of students. (saves entering the same number over and over again)
- Multi: Use if class student numbers vary.

- Note that to specify a grade, you need to use the One Touch Class keys. If you cannot see the key you need, flip over the plate (see below).



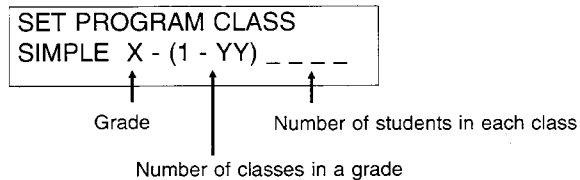
One Touch Class keys



Simple programming

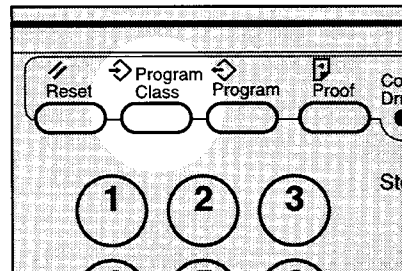
In this example we will program student numbers for grade 1 of the table shown on page 48.

The information on the guidance display is in the format:



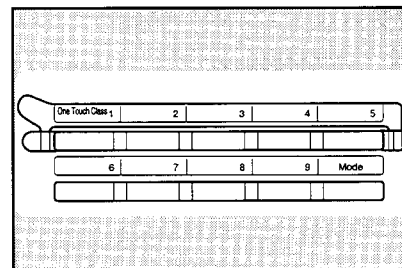
- ❑ If you want to clear any class numbers you have programmed, you need to program each class number as "0".

1 Press the **Program Class** key.

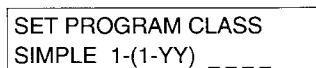


2 Enter the grade you wish to program with the **One Touch Class** keys.

- ❑ E.g. to Program grade 1, press the One Touch Class key 1.



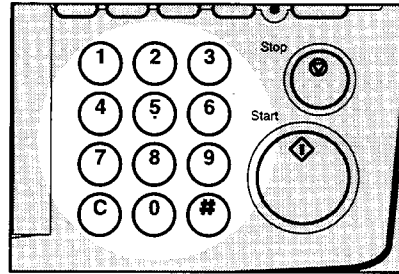
- ❑ The guidance display will appear as opposite.



OPERATION

- 3** Enter the number of students per class using the **Number** keys then press the **Enter** key.

- ❑ E.g. press "2", "7" and "#" key.

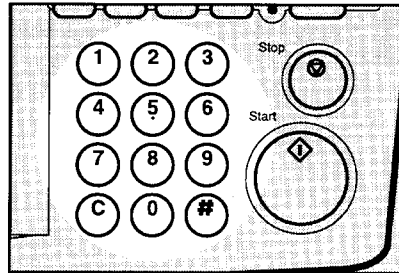


- ❑ The guidance display will appear as opposite.
- ❑ If you want to clear the class you have programmed, enter "0" then press the **Enter** key.

SET PROGRAM CLASS
SIMPLE 1 - (1 - YY) _ _ 2 7

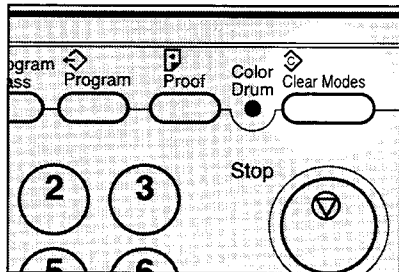
- 4** Enter the number of classes in the 1st grade with the **Number** keys then press the **Enter** key.

- ❑ E.g. press "6" and "#" key.



- 5** You now have two options:

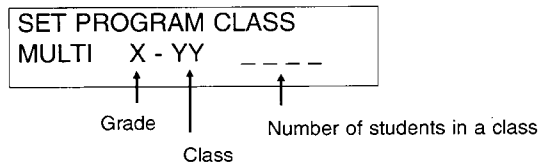
- ❑ Program another grade: go to step 2.
- ❑ Finish programming: press the **Clear Modes** key.



Multi-programming

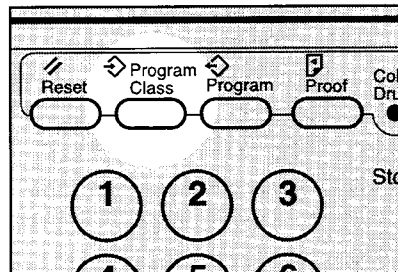
In this example we will program student numbers for grade 4 of the table shown on page 48.

The information on the guidance display is in the format:

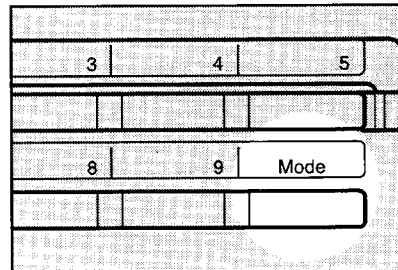


- ❑ If you want to clear any class numbers you have programmed, you need to program each class number as "0".

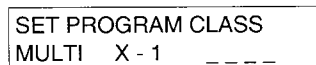
1 Press the **Program Class** key.



2 Press the **Mode** key to select multi programming mode.



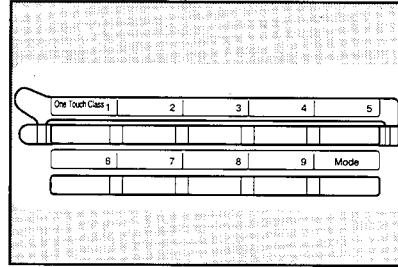
- ❑ The guidance display will appear as opposite.



OPERATION

3 Enter the grade you wish to program.

- ❑ E.g. to program grade 4, press the **One Touch Class** key 4.

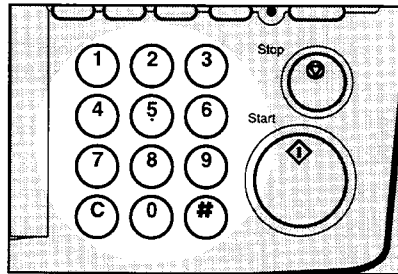


- ❑ The guidance display will appear as opposite.

SET PROGRAM CLASS
MULTI 4 - 1 _ _ _ _

4 Enter the number of students in class 1 with the **Number** keys, then press the **Enter** key.

- ❑ E.g. press "2", "5" and "#" key.



SET PROGRAM CLASS
MULTI 4 - 2 _ _ _ _

- ❑ The guidance display will show it is ready for you to enter the next class.

- ❑ If you want to clear the class you have programmed, enter "0" then press the **Enter** key.

5 You now have three options:

- ❑ Program the remaining classes in this grade: repeat steps 4 for all classes.
- ❑ Program another grade: go back to step 3.
- ❑ Finish programming: press the **Clear Modes** key.

