

Gestetner

MODEL 1120 | Electronic
Stencil Imager

Operating

Instructions

Gestetner Model 1120

The Gestetner Model 1120 is a variable speed electronic stencil cutter which produces a facsimile of the original on an electronic stencil. The stencil then can be used for reproduction on any stencil duplicator.

The 1120 can record any printed matter including line, tone, or a combination of line and tone, both black and colored. Originals may have a White or colored background as long as there is contrast.

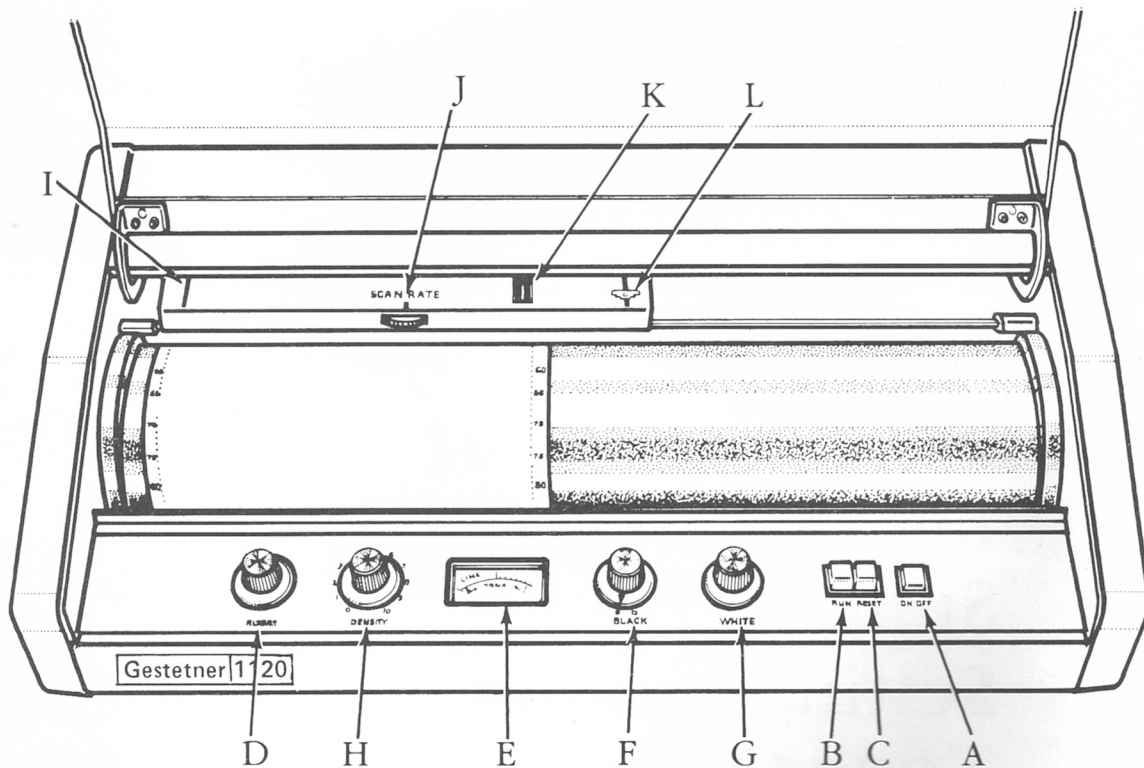
The operator controls have been arranged to facilitate easy set-up procedure.

Stencil recording time varies from 3 to 14 minutes, for an average 7" wide scan, depending on the desired quality of reproduction.

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Controls & Functions



Operator's Controls

A - POWER BUTTON
 B - START BUTTON
 C - RESET BUTTON
 D - FILTER SWITCH
 E - METER
 F - BLACK CONTROL

G - WHITE CONTROL
 H - DENSITY CONTROL
 I - SCANNING INDICATOR
 J - SCAN RATE
 K - MARGIN STOP
 L - STYLUS

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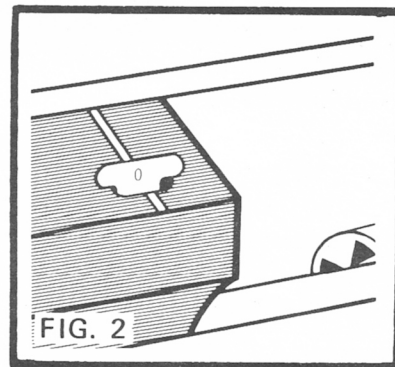
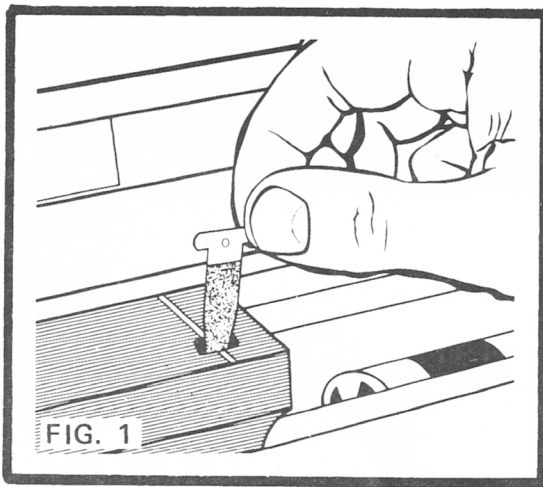


- 1) **POWER BUTTON (WHITE)**
Applies power to the machine. Depress to turn on. Depress again to turn off. When power is on, the button is lit.
- 2) **START BUTTON (GREEN)**
Applies power to the drum and carriage motors.
- 3) **RESET BUTTON (RED)**
Resets the (Green) start button and illuminates as a reminder to change the particulate filter. The indicator lamp is reset by depressing the reset button.
- 4) **DENSITY CONTROL**
Controls the degree of perforation in the stencil.
- 5) **WHITE CONTROL**
On line work this control determines elimination of background. On tone work, this control prevents white background from being cut on the stencil.
- 6) **BLACK CONTROL**
On line work this control is switched off. On tone work, control ensures that black and gray areas are cut on the stencil.
- 7) **METER**
Used in setting White and Black controls.
- 8) **FILTER SWITCH**
Black Dot: normal position for all stencil recording except when separating colors for color printing.
Y (Yellow), R (Red), and B (Blue): Color filter positions used in separating colors in an original for color printing.
- 9) **SCAN RATE CONTROL**
The scan rate controls the time required to make a stencil. Generally a longer scan time results in greater detail and a better copy. The following table gives the time needed to make a stencil at the various scan rates.
- 10) **MARGIN STOP**
Used to reduce stencil scanning time to a minimum.

Note: The Scan Rate and Density Controls should be set to the same number.

ORIGINAL	SCAN RATE	DENSITY	LINES PER INCH	TIME
BEST QUALITY COPY				
Photographs, Half Tones, Color Separation	5	5	650	14 min.
Average Copy,				
Line and Coarse Screen	6	6	400	8.5 min.
Acceptable Lower				
Quality Where	7	7	300	6.3 min.
Speed is Important,	8	8	200	4.2 min.
Line Copy	9	9	150	3.0 min.

Operation



Insert plug into appropriate electrical outlet. Raise the plexiglass safety cover. Depress the white power button to switch on machine.

1. Stylus

A stencil is made with a stylus through which an electric current flows. During the recording process the stylus slowly wears. It is recommended that the stylus be inspected periodically. If the fine wire (stylus) is worn down to $\frac{1}{32}$ of an inch, a new stylus should be fitted. If inspected and found good, it may be

reinserted in the stylus holder. A stencil scanned with a worn stylus will have a mottled uneven appearance.

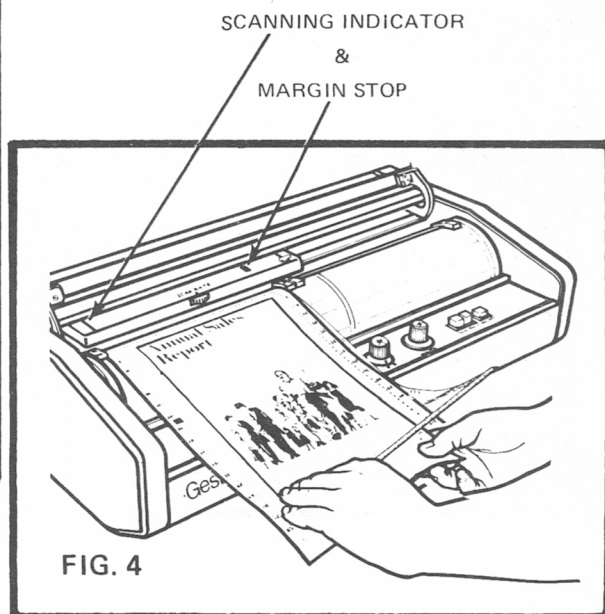
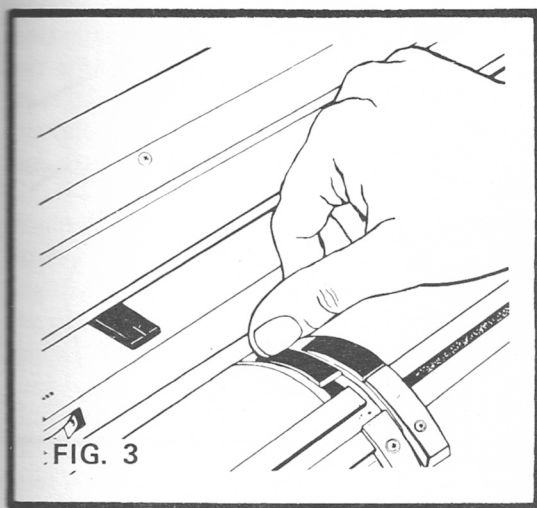
The tip of the stylus is fragile and care must be taken not to damage it. Carefully insert a new stylus with the circle facing you (Fig. 1). If the stylus is inserted about half way (Fig. 1) and then released, it will drop into position (Fig. 2).

2. Fitting the Stylus

To fit the original:

1) Rotate drum until both original and copy holder are up.

2) Release bottom of the original holder. At a time, by pushing the stylus into the holder (Fig. 3).



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ance.

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image it. Carefully insert a ne
circle facing you (Fig. 1). If th
ed about half way (Fig. 1) an
it will drop into positio

2. Fitting the Original

To fit the original:

1) Rotate drum until both metal bars of the copy holder are up.

2) Release bottom of the copy holder, one end at a time, by pushing the sliding locks back (Fig. 3).

3) Holding the free ends of the copy holder, pull it towards you until it is unwrapped from the drum. Place the original between the copy holder and guide sheet, using the guide lines to position the original correctly. (Fig. 4).

4) Rotate the drum to roll the copy holder on to the drum and replace the bottom of the copy holder.

Operation (cont'd)

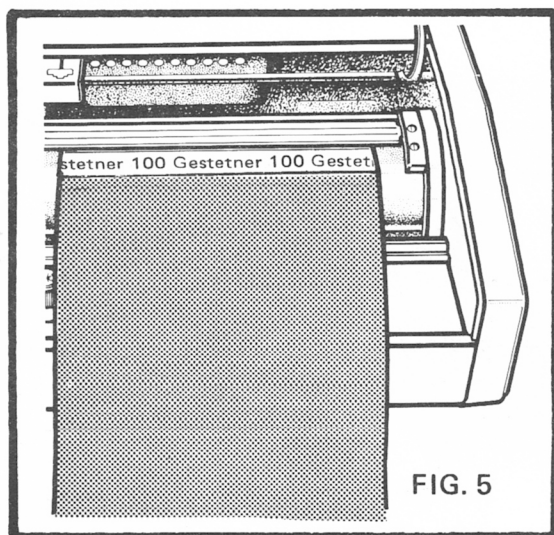


FIG. 5

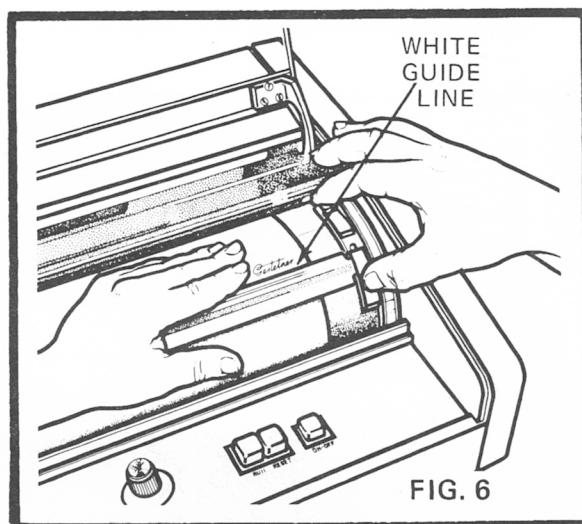


FIG. 6

3. Fitting the Stencil

- 1) Release the stencil clamp by pushing the sliding locks back. Insert about two inches of the heading of the stencil under the forward edge of the stencil clamp (Fig. 5).
- 2) Rotate the drum away from you until the stencil clamp is at the top of the drum. Insert the bottom edge of the stencil under the back edge of the clamp until the two white guide lines, printed on the bottom of the stencil, line

up with the back edge of the clamp, (Fig. 6). Position the left edge of the stencil on the appropriate groove for either a standard 9" or narrow width 8½" stencil.

- 3) Using finger pressure to keep the right hand part of the stencil tightly wrapped on the drum, depress the right hand end of the stencil clamp and pull the sliding lock forward (Fig. 6).

- 4) Tighten and lock the left hand side in the same manner as indicated in paragraph 3. Stencil may be further tightened slightly with the fingers as a final step.

4. Setting the

The Gestetner Model 100 has two modes, a line mode and a tone mode, shades of gray and white are reproduced in the line mode, areas darker than a medium gray are reproduced as black, and areas lighter than that shade as white.

Originals are usually classified as either line or tone. Line originals are made by the line printer or by drawing with pencil. Tone originals are photographs with shading similar to a photograph. In addition, some originals are a combination of line and tone composition and must be regarded as tone.

Examine the original and determine if it is a line original or tone original.

ORIGINAL

BEST QUALITY COPY
Photographs, Half Tones,
Color Separation

Average Copy,
Line and Coarse
Screen

Acceptable Lower
Quality Where
Speed is Important,
Line Copy

d)



4. Setting the Controls

The Gestetner Model 1120 operates in two modes, a line mode and a tone mode. In the tone mode, shades of gray ranging from black and white are reproduced. In the line mode, areas darker than a medium shade of gray are reproduced as black, and areas lighter than that shade as white.

Originals are usually classified as suitable for either line or tone reproduction. Line originals are made by the typewriter or other line printer or by drawing lines with a pen or pencil. Tone originals are photographs or pictures with shading similar to a photograph. In addition, some originals combine both line and tone composition on a single page; these must be regarded as tone.

Examine the original and decide whether it is a line original or tone original.

Line originals fall into one of these categories:

1. Dark lines on a lighter background.
2. Light lines on a darker background.
3. Dark lines on a light background with color, possibly a letter heading or logo.
4. Pictures made with lines or small dots (screening) to create shading.

Tone originals fall into one of these categories:

1. Pictures or photos in black and white with shades of gray.
2. Pictures in process color or colored photos.

The set-up procedure for both line and tone work has been simplified by keying the control settings to dots and symbols. The only variation in this procedure is when greater detail or faster stencil making time is desired. Two controls are used in this variation: the Scan Rate and Density Controls.

Settings for these controls are given in the table below:

ORIGINAL	SCAN RATE	DENSITY	LINES PER INCH	TIME
BEST QUALITY COPY				
Photographs, Half Tones, Color Separation	5	5	650	14 min.
Average Copy,				
Line and Coarse Screen	6	6	400	8.5 min.
Acceptable Lower				
Quality Where	7	7	300	6.3 min.
Speed is Important,	8	8	200	4.2 min.
Line Copy	9	9	150	3.0 min.

Line Originals

Line C

Step 1

- Switch Black Control to ●
- Select Filter ●
- Set Scan Rate to 6
- Set Density to 6

Step 2

Rotate the drum and move the scanning carriage sideways until exciter lamps, which are located on the left end of the carriage, are shining on the background. Turn the White Control until the meter reads ●.

Note: To make the copy darker, or if the original has poor contrast, set the White Control so the meter reads to the left of ● as indicated.

Step 3

Set the Margin Stop so that it is slightly to the right of the image on the original. Set the Scanning Indicator slightly to the left of the image on the original (Fig. 4).

Step 4

Depress the start (Green) button.

Note: If you decide to readjust the White Control after the Start Button has been depressed, push the red Reset Button. The Start Button must be up if the White Control is to be set.

Step 5

Close the cover to start the scan. The machine will stop automatically when the stencil is complete. Remove the stencil.

Note: The machine may be stopped at any point during the scan by raising the cover.

1. DEPRESS WHITE
2. FIT ORIGINAL
3. FIT STENCIL
4. SET BLACK CON
5. SELECT FILTER
6. SELECT SCAN R
7. SET DENSITY ●
8. WITH LENS ON
- METER READING
9. SET SCANNING I
10. DEPRESS GREEN

Line Original Summary

1. DEPRESS WHITE POWER SWITCH
2. FIT ORIGINAL
3. FIT STENCIL
4. SET BLACK CONTROL TO ●
5. SELECT FILTER ●
6. SELECT SCAN RATE 6
7. SET DENSITY 6
8. WITH LENS ON BACKGROUND, SET WHITE CONTROL FOR METER READING ●
9. SET SCANNING INDICATOR AND MARGIN STOP
10. DEPRESS GREEN RUN BUTTON AND CLOSE COVER

Tone Originals

In order to achieve the best possible reproduction from a tone original it is recommended that the Scan Rate and Density be set at "5".

Step 1

Set Black Control to ☐
 Select filter ●
 Set Scan Rate Control to 5
 Set Current Control to 5

Step 2

With the exciter lamps shining on the background of the original, set the White Control for a meter reading of Δ .

Note: The background of the original is usually white or light in tone and will not reproduce when the white level is set as in Step 2. If the background is not white and you wish the background to appear on the duplicated copies, follow Step 2 with the exciter lamps shining on the white guide sheet.

Step 3

With the exciter lamps shining on the Black patch of the guide sheet, set the Black Control for a meter reading of \blacktriangle .

Step 4

Set the Scanning Indicator and Margin Stop. (Step 3, page 8)

Step 5

Depress the Green Start Button and close the cover. Remove the stencil when the machine stops.

1. DEPRESS WHITE
2. FIT ORIGINAL
3. FIT STENCIL
4. SET BLACK CO
5. SELECT FILTER
6. SET SCAN RATE
7. SET DENSITY T
8. WITH LAMPS O
- WITH LAMPS O
9. SET SCANNING
10. DEPRESS GREEN

Tone Original Summary

1. DEPRESS WHITE POWER SWITCH
2. FIT ORIGINAL
3. FIT STENCIL
4. SET BLACK CONTROL TO ☐
5. SELECT FILTER ●
6. SET SCAN RATE TO 5
7. SET DENSITY TO 5
8. WITH LAMPS ON BACKGROUND SET WHITE CONTROL TO
- WITH LAMPS ON BLACK PATCH SET BLACK CONTROL TO
9. SET SCANNING INDICATOR AND MARGIN STOP
10. DEPRESS GREEN BUTTON AND CLOSE COVER

Color Separation

Normally, if a stencil is made from a colored original, the colors in the original will be duplicated as various tones of gray. With the Gestetner Model 1120, it is possible, if desired, to make color separations of the original and these stencils can then be duplicated to obtain copies in the same color as the original. Normally three stencils of the colored original are made in the tone mode:

- 1) "Y" or stencil to be reproduced with Yellow ink.
- 2) "R" or stencil to be reproduced with Red ink.
- 3) "B" or stencil to be reproduced with Blue ink.

The set-up procedure for color separation is basically the same as for making a tone stencil. Follow the instructions below for making the yellow stencil, mark it "Y" and use yellow ink in the duplicator.

Step 1

Set Black control to ☐
Select Filter "Y"
Scan Rate Control to 5
Density Control to 5

Step 2

With exciter lamps shining on the White guide sheet, set the White Control for a meter reading of Δ .

Step 3

With exciter lamps shining on Black patch, set Black Control for a meter reading of \blacktriangle .

Step 4

Set the Scanning Indicator and Margin Stop (Step 3 Page 8). Depress Start Button.

Make the red stencil the same way, except set the Filter Switch to "R". Mark it "R" and use red ink in the duplicator. Make the blue stencil, setting the Filter switch to "B". Mark it "B" and use blue ink in the duplicator.

After printing the yellow copies, allow them to dry thoroughly before overprinting with red ink. Allow these to dry thoroughly before overprinting with blue ink. Adjust the duplicator for good registration when printing one color over another. The colors must be printed in the order stated.

It sometimes will be found desirable to modify the color balance or even to reduce the density of all three colors. This is best done by reducing the density setting.

Using Gestetner Paper Stencils

The paper stencil is used for line work and the same as for electronic stencils.

Because the bottom of the stencil is separated, it is easier to use the stencil clamp and the line on the bottom of the drum towards you and insert the top of the stencil.

Making Transparencies

Transparencies for use in the duplicator can be made with a stencil.

Pocket the electronic stencil to accept the transparency between the sheet and install on the duplicator. The settings are set up the same as for the stencil.

Making Single

Gestetner (PRP) permanent the name implies, is used high resolution, permanent.

General

Using Gestetner Paper Stencils

The paper stencil is designed for short run line work and the set-up of controls is the same as for electronic stencils.

Because the bottom of the paper stencil is separated, it is easier to insert the bottom edge of the stencil under the back edge of the stencil clamp until it lines up with the White line on the bottom of the stencil. Rotate the drum towards you until the clamp is up and insert the top of the stencil. Tighten and lock the stencil.

Making Transparencies

Transparencies for use with overhead projectors can be made simultaneously with a stencil

Pocket the electronic stencil from its backing to accept the transparency. Insert a Gestetner transparency between stencil and the backing sheet and install on the drum. The controls are set up the same as for line or tone work.

Making Single Copies

Gestetner (PRP) permanent record paper, as the name implies, is used for making single, high resolution, permanent copies of any

original. The "PRP" sheet is mounted on the drum in the same manner as a stencil and the controls are set up the same as for tone or line work.

Obliterating Unwanted Matter After Scanning

A Gestetner Scope is ideal for revealing unwanted images on the stencil.

Peel the stencil from the backing sheet and lay the stencil black side up on the scope. Apply correction fluid sparingly over parts to be obliterated and allow to dry before stencil is affixed to the duplicator. (Fig. 7).

A large area can be blocked out by covering the area with a piece of stencil and securing with Gestetner Stencil Cement.

Removing Stencils and Obtaining Copy

Release the stencil clamp by pushing back the two locking slides. Remove the stencil from the drum.

Ink up your Gestetner Duplicator and affix the stencil as per the operating instructions.

The Gestetner Duplicator is now ready to produce copies.

General (cont'd)

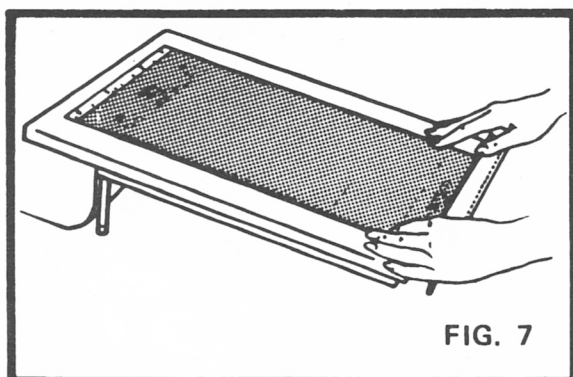


FIG. 7

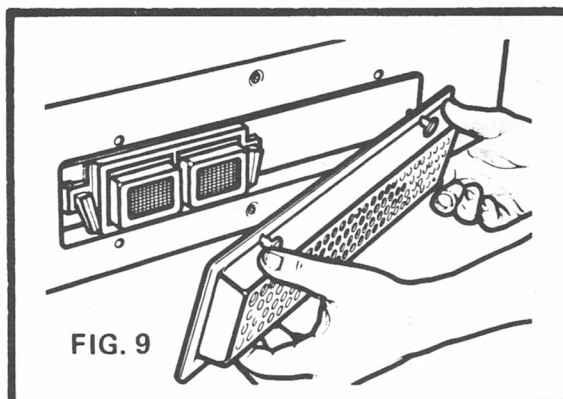


FIG. 9

Gestetner Model 1120/1100 Filter System Fitting Instructions

- 1) UNLATCH THE FILTER HOLDER (ZF-3).
- 2) THE PARTICULATE FILTER SHOULD BE REPLACED AFTER EVERY 25 STENCILS.
- 3) THE CHARCOAL FILTER IS REPLACED AFTER EVERY TENTH PARTICULATE FILTER. THE FILTERS ARE PACKAGED AT A 10:1 RATIO TO ASSIST IN CORRECT REPLACEMENT.

THIS EQUIPMENT IS DESIGNED TO BE USED IN A WELL-VENTILATED AREA.

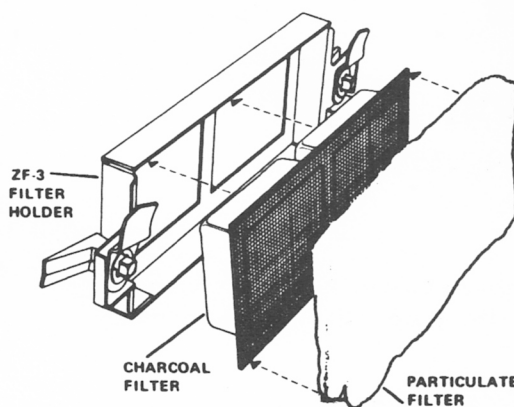


FIG. 8

Changing The Filters

As a stencil is cut combustion products are collected in a two stage filter at the rear of the machine.

Fig. 8 depicts both filters and when they

should be changed, the Red Reset Button illuminates as a reminder to do so. The Red Indicator Lamp is reset by depressing the Reset Button.

Fig. 9 depicts the Exhaust Grill which must be removed to gain access to the filters. This grill can be easily removed by pulling the four pop out thumb screws.

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Gestetner

OFFICE SYSTEMS

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Product Code: 259-5338

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