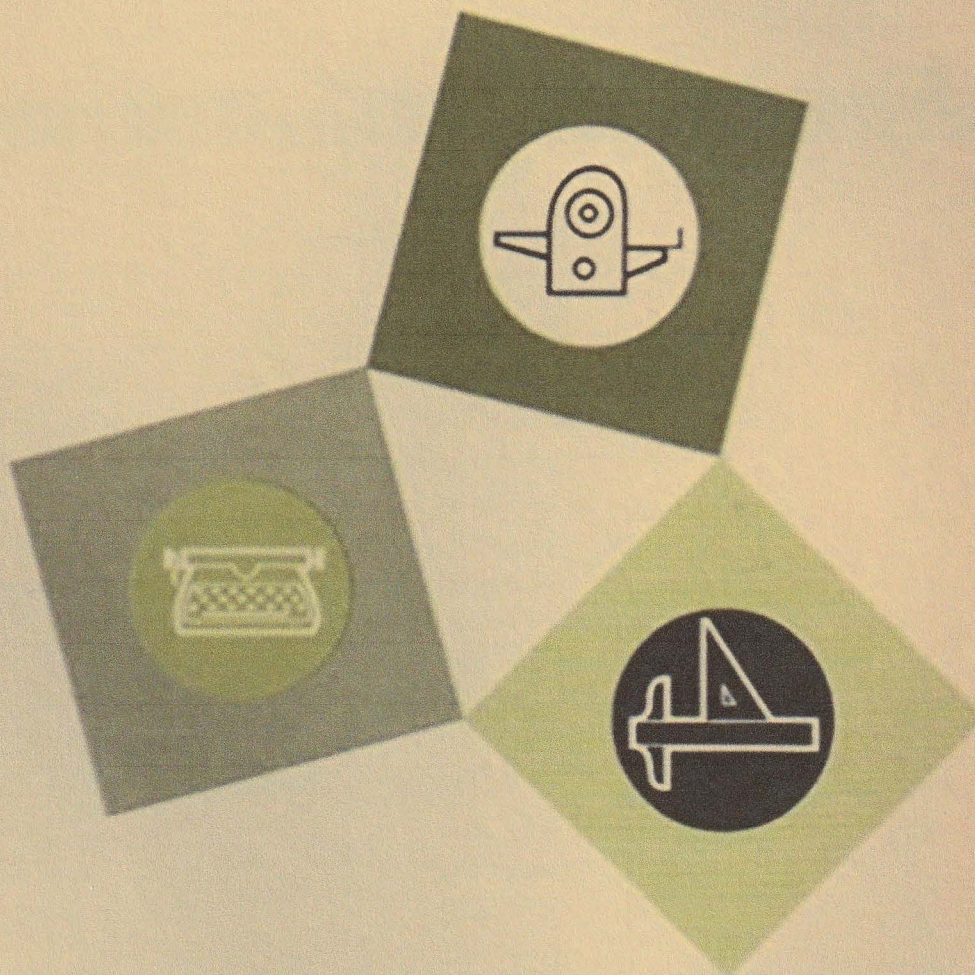


Published by the A. B. Dick Company
Chicago, Illinois
January, 1963



TECHNIQUES OF MIMEOGRAPHING

TABLE OF CONTENTS

FOR THE OPERATOR

The Mimeograph Cylinder	3-4
Importance and Care of the Ink Pad	4
Protective Cover	4
How to Select a Mimeograph Ink	5
How to Use Contac-Dri Ink	5-6
How to Use Colored Inks	7
Ink Tips	7
How to File Stencils for Reruns	8
The Mimeograph Paper Feed	8-9
Importance of the Strippers	9
Ink Pad Block-Outs	9
Copy Block-Outs	9-10
Mimeograph Impression Paper	10
Tips for Operators	11

FOR THE TYPIST

The Stencil Assembly	13
How to Select Stencil Sheets	13-14
How to Use the Stencil Guide Marks	14
How to Type a Stencil	15

How to Make Corrections	15
Copy Variations	15-16
Special Stencil Sheets	16
How to Use Insets	17
Signatures and Handwriting	17
How to Justify Lines	17
How to Type Stencils for Cards	17-18
How to Use a Layout	18
How to Use the Vari-Typer for Imaging Stencils	18-19
Tips for Typists	19

FOR THE ARTIST

The Mimeoscope	21
Tracing Illustrations	22
Screen Plates	22
Lettering Guides	22
Ruling a Form	23
How to mimeograph photographs, half-tone illustrations, and bold type faces with electronic stencils	23-25
Layout Tips	25
Layout Patterns	26

TECHNIQUES OF MIMEOGRAPHING

OPERATION

For the operator . . . know your mimeograph. Know what it is capable of doing. Know how to use it to best advantage. Learn the little techniques that save time, and help you produce the kind of copies that you and your employer can be proud to use.

TYPING

For the typist . . . plan before you type. The simplest bulletin, notice, or announcement can be made more effective if you spend a minute or two planning the page before you begin to type. A little thought—coupled with a thorough understanding of how the stencil sheet is made and why it is made that way—will make your job easy and produce results that you will be proud to claim as your own.

1.

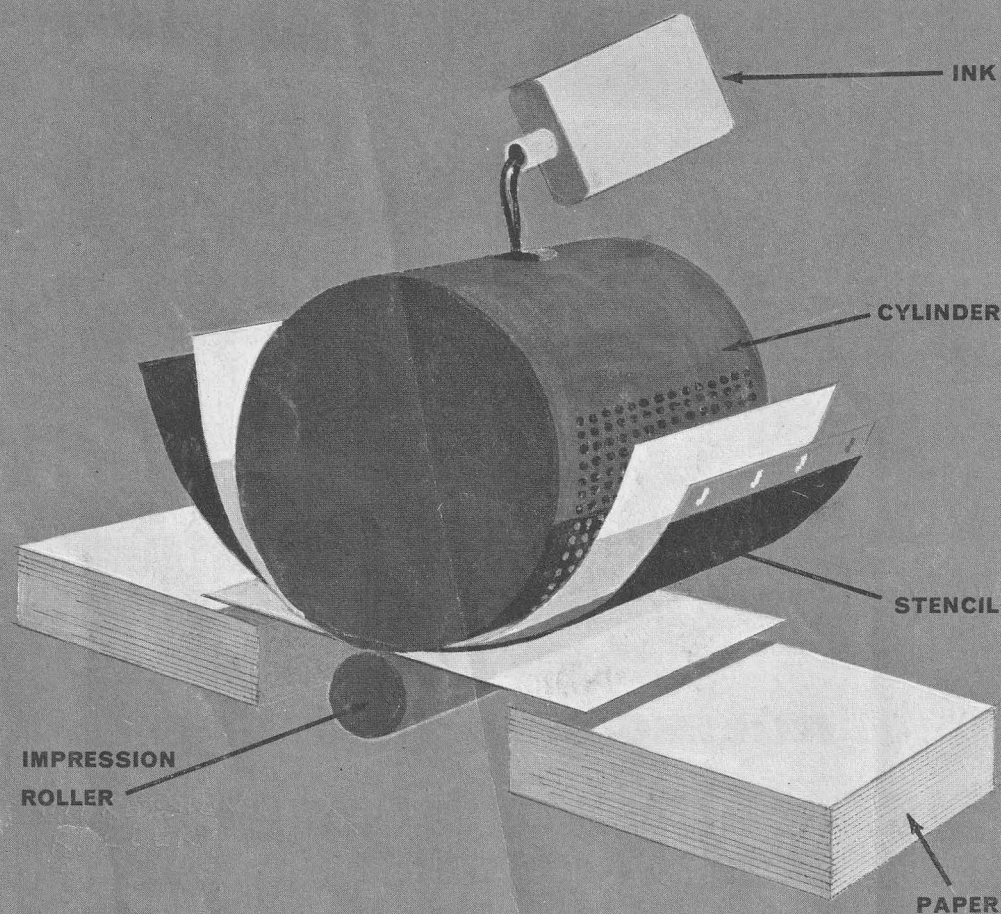
RULING AND DRAWING

For the artist . . . keep an idea file to help you develop ideas and to suggest combinations of copy and illustrations. Clip samples from magazines and newspapers—and keep the notices, announcements, advertisements, etc. that you receive in the mail. These pages explain the Mimeoscope illuminated drawing board and the accessories that make it easy for the non-professional artist to produce attractive and interesting mimeographed copies.

Learn how to make a paste-up for electronic stencils. You are no longer limited to simple line drawings and typing. These stencils make it possible to mimeograph print-like copies of newspaper clippings, drawings, or even suitable photographs.

The techniques recommended here are suitable for all A. B. Dick mimeographs unless otherwise stated—and your local A. B. Dick Company distributor is always ready to assist you with any production problems that go beyond the ideas covered in this book.

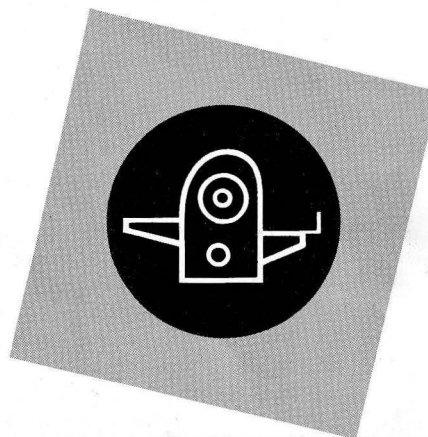
2.



THE MIMEOGRAPH PROCESS

The mimeograph process has four elements: the stencil, the ink, the paper, and the mimeograph. The stencil is typed, handwritten, or drawn. It is placed on the outside of the cylinder, and paper is fed between the cylinder and the impression roller of the mimeograph.

As the paper passes through the mimeograph, the impression roller rises automatically and presses the paper against the stencil on the cylinder. At the same time, ink flows from inside the cylinder through the ink pad, through the stencil openings, and makes a copy on the paper.



FOR THE OPERATOR

3.

THE MIMEOGRAPH CYLINDER

The supply of ink is held inside the mimeograph cylinder. The ink pad and the stencil are fastened on the outside of the cylinder.

One portion of the cylinder, the DIAPHRAGM, consists of a metal plate perforated with very small holes. The ink flows from inside the cylinder through these holes.

An ink pad is always used on the cylinder. It is attached over the perforated diaphragm, and the stencil is attached over the ink pad.

The ink in the cylinder flows through the diaphragm openings to the pad. The pad controls distribution of the ink through the stencilized openings in the stencil onto the paper.

There are three types of cylinders: closed, fluid ink; closed, paste ink; open.

CLOSED FLUID INK CYLINDER

Inside each closed fluid ink cylinder is an ink reservoir which holds the ink supply. This reservoir is suspended and does not rotate with the cylinder.

When the supply of ink in the pad needs replenishing, the reservoir is tipped so the ink will flow from the reservoir through the diaphragm to the pad. Grills on the diaphragm hold the ink evenly on the inside of the cylinder.

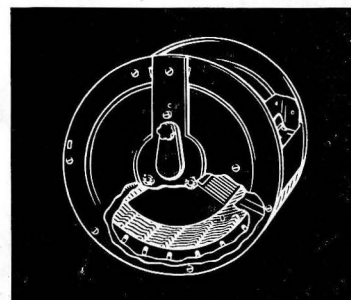
To ink a new cylinder, or one which has been cleaned, attach a clean ink pad and a protective cover—but do not secure the lower end of the cover. Turn the cylinder so ink filler cap is up. Remove the cap. Pour one can (one pound) of ink into the cylinder, and replace cap. Turn the cylinder so ink filler cap is at 3 o'clock position. Move the ink lever from vertical to horizontal position. Rotate cylinder so ink cap moves from 3 o'clock to

12 o'clock position. Return ink lever to vertical position immediately.

For all inks *except* Contac-Dri, 6000SE and 6200, rotate cylinder *slowly* to ink the pad; *with* Contac-Dri, 6000SE and 6200, the cylinder should be rotated *quickly*.

Run two hundred sheets of paper through the mimeograph to thoroughly saturate the pad with ink. If the mimeograph is not to be used immediately, secure the end of the protective cover under the side and end clamps, and place the cylinder in the STOP HERE position.

To add ink, leave cylinder in STOP HERE position a few minutes. Turn cylinder so ink filler cap is uppermost.



FLUID CYLINDER
WITH INK
RESERVOIR
SUSPENDED



FLUID CYLINDER
WITH INK
RESERVOIR
TIPPED

Remove cap, and insert ink measuring rod. If the measurement is between REFILL and FULL, do not add ink. If below REFILL, pour in one-half can (one-half pound) and replace cap. Never fill reservoir above full mark. Add only one-half can of ink at a time. This can be measured fairly accurately by holding the ink can in a horizontal position over the filler hole. When the ink stops flowing, the can is about half empty.

To re-ink pad, release the ink lever and rotate cylinder as explained in "To ink a new cylinder".

CLOSED PASTE INK CYLINDER

The paste ink cylinder is a closed drum which holds the ink supply.

To ink a new or clean cylinder, attach a clean ink pad and a protective cover—but do not secure the lower end of the cover. Screw ink tube into filler hole. Squeeze the ink from three tubes of ink (three pounds) into the cylinder. Slowly turn the cylinder once to ink the pad.

Run two hundred sheets of paper through the mimeograph to thoroughly saturate the pad with ink. If the mimeograph is not to be used immediately, secure the end of the protective cover under the side and end clamps, and place the cylinder in the STOP HERE position.

Re-inking the pad is completely automatic. It's never necessary to stop in the middle of a run to replenish the supply of ink in the pad. When copy indicates that the supply of ink in the cylinder is low, use the ink measuring rod as explained under "Closed Fluid Ink Cylinder". Add only one tube (one pound) of paste ink at a time.

OPEN CYLINDER

Models 90 and 420 have built-in ink brushes. Ink is poured into the cylinder and distributed over the diaphragm with the brush.

IMPORTANCE AND CARE OF THE INK PAD

The ink pad is very important because it is the secondary reservoir for ink. Its job is to absorb ink from the cylinder and deposit it, through the stencilized openings in the stencil, onto the paper.

OIL-BASE AND EMULSION INKS

Agitate the ink pad regularly and frequently. Release the lower end of the pad—leaving the upper end attached—and lift the pad up and away from the cylinder several times. Stretch it from side to side as you lift it. Then re-attach the lower end. This loosens the fibers and assures good distribution of ink.

Change pads regularly—whenever the quality of the copies indicates that ink is not flowing through the pad properly. Wipe off excess ink from the cylinder edges when you change pads.

CONTAC-DRI, PASTE, AND HARD-SET INKS

Do not agitate the ink pad when using these inks. Change pads only when spotty copies indicate that the pad is worn and needs changing. With these inks, it is advisable to use the pad as long as possible.

PROTECTIVE COVER

Always use a protective cover over the ink pad when the mimeograph is not in use

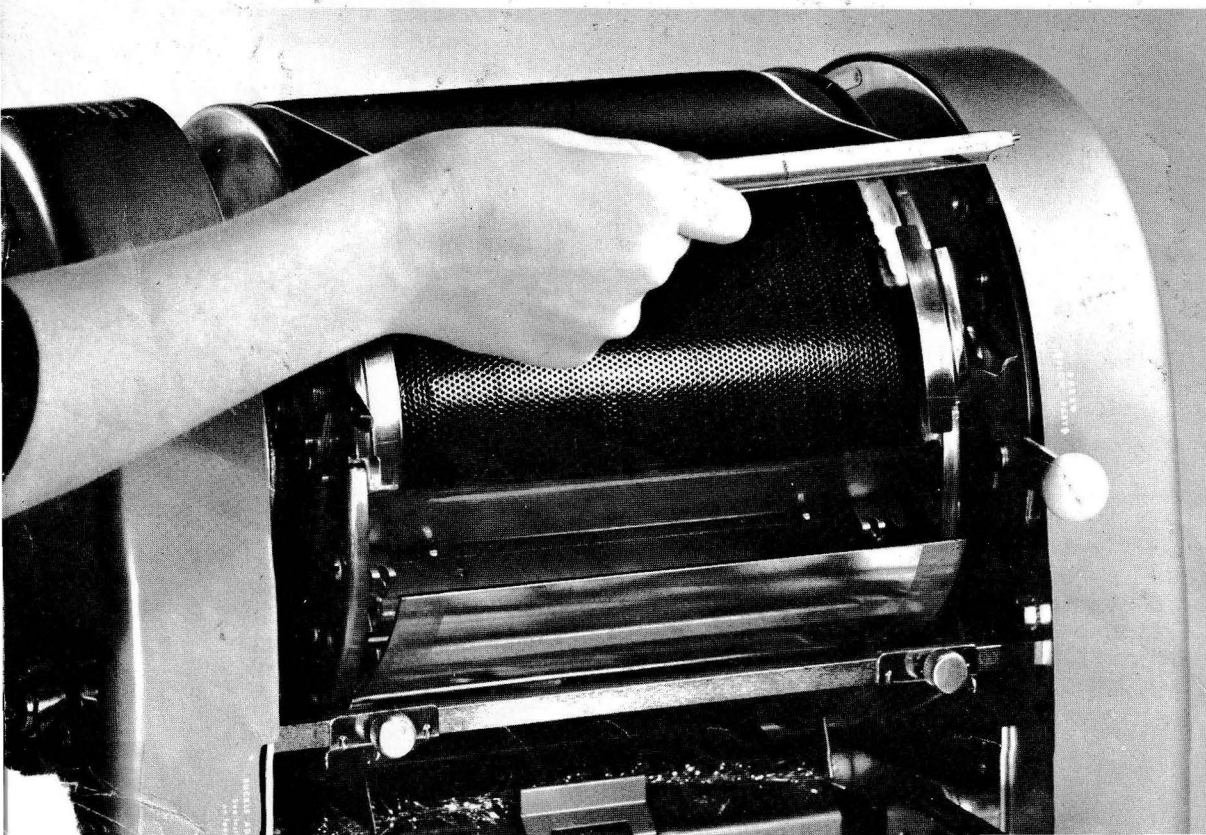
- ... to protect the cloth ink pad from dust and dirt,
- ... to seal the pad so the ink will remain evenly distributed in the pad, and
- ... to prevent the ink from being affected by atmospheric conditions.

The protective cover is attached to the cylinder in the same way that the stencil is attached. Remove the stencil before attaching the cover. (When a 749 protective cover is being used with a Koroseal blackout, remove the Koroseal before attaching the protective cover.)

Seal the cover to the pad by running several sheets of paper through the mimeograph BEFORE attaching the tail end of the cover under the end clamp. This seals the pad and prevents it from drying out.

Use a protective cover only once, and then discard it. When the cover is saturated with ink, it is not suitable for re-use. (A 749 cover, however, should be used until the outside of the cover becomes oily.)

4.



**AGITATE THE INK PAD
WHILE CYLINDER IS IN
STOP HERE POSITION.**

**(DO NOT AGITATE
WHEN USING
CONTAC-DRI, PASTE,
OR HARD-SET INKS.)**

HOW TO SELECT A MIMEOGRAPH INK

There are no hard and fast rules governing the selection of mimeograph inks. The selection should be made after an analysis of your duplicating requirements. The choice will depend mainly upon your copy specifications and the equipment (open or closed cylinder) that you are using. Do not hesitate to ask for the assistance of your A. B. Dick products representative in choosing the mimeograph ink that is right for you.

Although A. B. Dick Company makes a number of black inks, they all fall within five groups. The characteristics of these five groups are given below.

CONTACT-DRI INK

These inks dry almost instantly upon touching the paper. This quality allows duplicating on a wide choice of card stock, bond, and lightweight papers. Because of the minimum of show-through with this ink, savings can be achieved by mimeographing on both sides of the paper without slip-sheeting. Contac-Dri is especially recommended when the volume of mimeograph work is great, or when speed of production is important. It is limited to use in closed fluid cylinders of the 400 series mimeographs. The copy is permanent and non-smudge when dry.

1600, black 6700, blue
1610, black

HARD-SET INK

Hard-set ink gives high quality, dense black copies. It does not smear or smudge when dry and is not affected by oil, water, degreasing solvents, or sea water. Slip-sheeting is usually recommended unless absorbent types of papers are used. This ink gives good results with almost all papers and card stocks including vellums, linenized tags, coated stocks, rag papers, and many others. It is particularly recommended for use when copies are subjected to adverse handling conditions. Hard-set ink was formulated for use in closed fluid cylinders.

1766, black

PASTE INK

Paste ink is for use in closed, paste type cylinders only. It is extremely easy to use and provides fully automatic inking. Mimeographs an exceptionally large number of copies from just one inking.



3200, black	3312, blue
3400, black	3303, green
3301, red	3313, green
3311, red	3304, brown
3302, blue	3314, brown

EMULSION INK

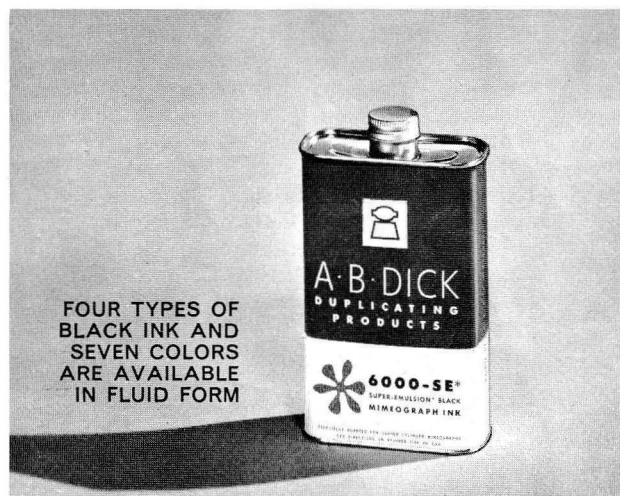
These inks are excellent for general usage and incorporate some of the features of Contac-Dri. They may be used in certain closed fluid cylinders. Permanent, sharp, black copies are produced. It is seldom necessary to slip-sheet copies when 6000SE or 6020 ink is used with reasonably absorbent paper. 6020 is particularly recommended for use with electronic stencils.

6000SE, black	6003, green
6020, black	6004, brown
6200, black	6005, yellow
6001, red	6006, purple
6002, blue	6007, orange

OIL-BASE INK

These inks are widely used and give good results even with infrequent use. They may be used in open or closed cylinders. The inks listed here are all black. Your A. B. Dick products representative should be consulted in selecting the best ink for your use.

1585	1767
1591	1777
1592	1787



5.

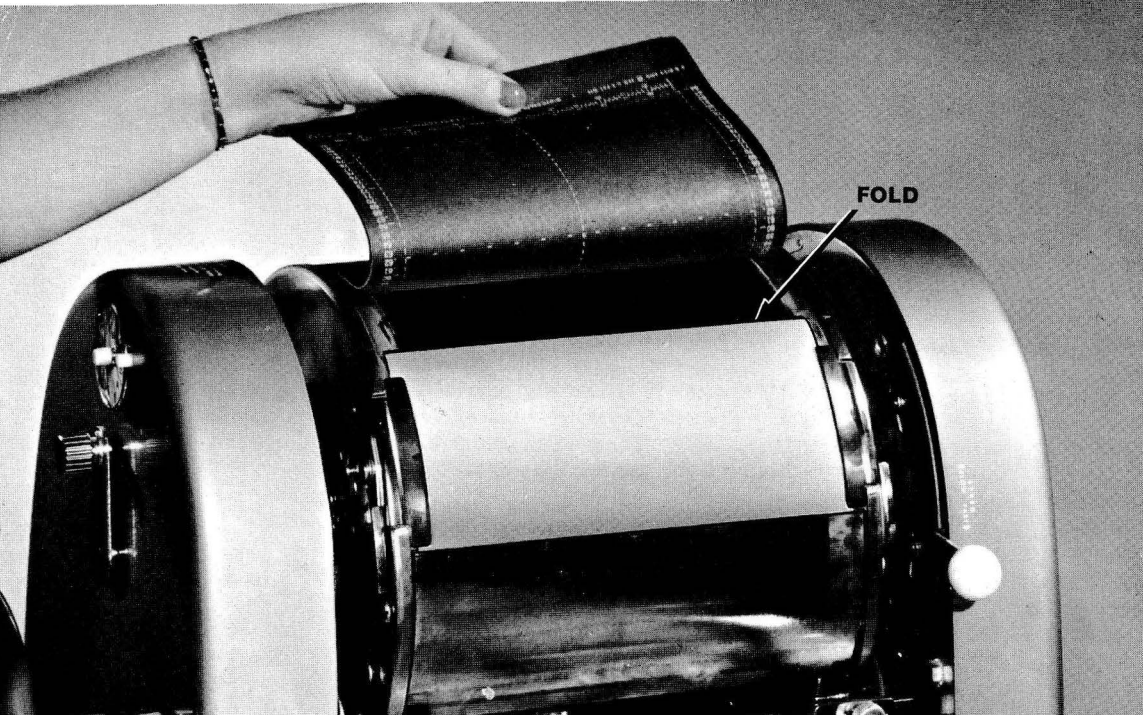
HOW TO USE CONTACT-DRI INK

Contac-Dri is a fast flowing, highly efficient ink. There are only two points to remember in handling this ink: (1) speed of handling is important; (2) exposure to the air starts drying action. Here are tips to help you get best results easily and quickly.

SETTING UP YOUR MIMEOGRAPH

Level the mimeograph. Place a spirit level on top of the cylinder, parallel to the axis. This will give even distribution of ink and prevent the ink pad from drying on the high side.

Use a 7⁵/₈" Buna rubber impression roller on Models 450, 445, 436, 435, and 430. (Note: With Models 432, 433, 437, 438, and 455, a 7¹/₄" impression roller is recommended.) Reduce impression roller spring pressure to about 4 pounds. This will be done for you by your A. B. Dick Company salesman or serviceman when you start to use this ink. The harder roller and lower pressure give longer runs from the stencil.



WHEN A 747 PROTECTIVE COVER IS USED AS A BLOCK-OUT WITH CONTAC-DRI INK, CUT THE PROTECTIVE COVER IN HALF. FOLD ONE PIECE IN HALF AND POSITION THE FOLD UPWARD, WITH THE OPEN END UNDER THE CLAMP.

6.

Use only 1790 ink pads. These pads are wider than the normal ink pad. Since Contac-Dri dries on contact with air, the ink pad will seal along the edges. This wider pad allows sealing without affecting the copy area.

Use No. 520 plastic block-out material—or a piece of protective cover—over the lower portion of the ink pad. The strip should be from 6 to 9 inches long and $8\frac{1}{2}$ inches wide. Position the block-out so the top edge will be just below the bottom line of typing when the stencil is placed over the ink pad, with the bottom two or three inches of the block-out extending under the end clamp. This eliminates the need for attaching the bottom end of the stencil under the end clamp. The stencil is easier to attach and remove, and cleaner to handle, as it is free of ink at the bottom.

HANDLING TECHNIQUE

Ink *very* quickly, taking only a few seconds. Re-ink before the copy gets light (about every three to five hundred copies). Frequent quick inkings will keep the pad inked uniformly.

Adjust the receiving tray carefully to stack paper as evenly as possible. Run the duplicator at highest practicable speed while maintaining good stacking. Best results with this ink are obtained at high speeds.

PREPARING THE MIMEOGRAPH FOR OVERNIGHT STORAGE

Always use a 747 protective cover to prevent the ink pad from drying out. Follow these steps:

- 1 Remove stencil. Open stub clamp, and attach the protective cover as you would a stencil with the coated side next to the ink pad. Close clamp.
- 2 Remove and discard block-out if a piece of protective cover is being used.
- 3 Seal protective cover to pad by feeding several sheets of paper through machine. Smooth out any wrinkles. Then place bottom end of cover under stencil end clamp. Close end clamp. Re-ink quickly to avoid storing a dry pad. Lock cylinder in STOP HERE position.

Re-ink again before removing cover when ready to use the mimeograph again.

The ink pad will remain in good condition *if it is*

properly protected when the mimeograph is not in use. Follow these instructions exactly for best results.

CHANGING THE INK PAD

Place a protective cover over the ink pad. Detach and lift the bottom end of the pad.

Fold an $8\frac{1}{2}$ " x 11" sheet of paper to approximately $8\frac{1}{2}$ " x 7". Place this paper under the end clamp and over the lower six inches of the cylinder diaphragm. The fold should be at the top and turned toward the cylinder.

Turn cylinder until the head clamp is accessible. Turn the brake on. Detach and remove the pad and protective cover. Attach a new pad to the head clamp (nap side down), and close the clamp. With brake off, turn cylinder so end clamp is accessible. Remove paper from cylinder. Center pad over diaphragm and attach bottom of pad. Close end clamp.

Note: Change pad only when necessary. It will stay in good condition if properly protected from air.

SPECIAL TECHNIQUES FOR CONTAC-DRI INK

When ink dries in the stencil openings, the copies will appear spotty. To correct, pat the dry areas of stencil on the cylinder with a damp cloth—or wet a sheet of paper and rub it over the entire stencil. In extreme cases, remove the stencil, wash it with water, dry it in a Dry-Clean file folder, and replace on cylinder.

Spotty copies will also occur when ink dries in the pad due to exposure of the pad to air with the machine idle. The ink pad should then be changed. Low humidities when offices are heated will tend to dry ink in the pad.

An accumulation of ink at the end clamp is due to over-inking or slow operating of the mimeograph. Remove excess ink by sliding a sheet of paper over the pad. To correct, place a protective cover over the pad and run about two hundred sheets of paper through the mimeograph to force the ink from the pad back into the cylinder.

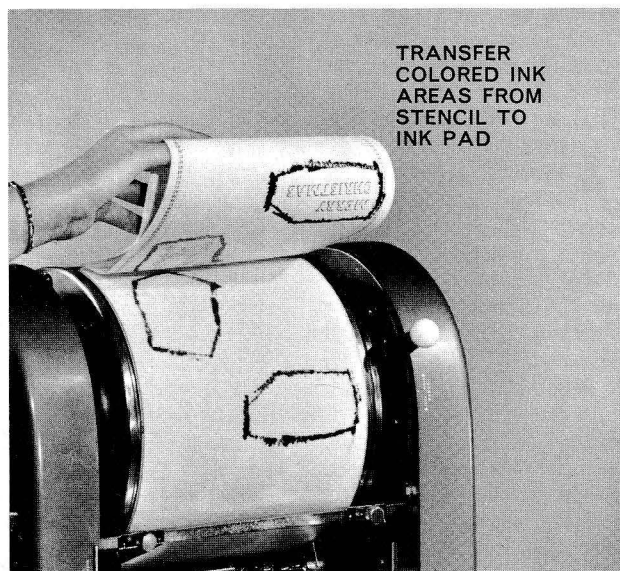
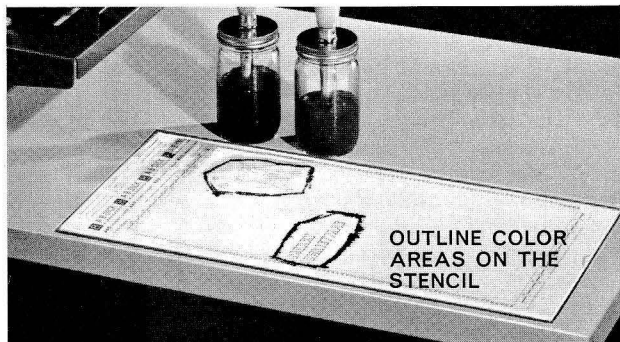
Avoid slow hand cranking. Always use the highest possible operating speed.

Do not agitate the pad, as this will cause the ink to dry in the pad.

HOW TO USE COLORED INKS

APPLYING COLORED INK

Image the stencil as usual. Remove the protective cover from mimeograph. Attach colored ink pad 1770 to the cylinder, pad side up, directly over the black ink pad. Place stencil, face up, on a flat surface. Using the plastic colored ink applicator bottle or the glass bottle with brush, outline the stencilized area lightly with colored ink.



Attach stencil to the cylinder without removing backing. Lay assembly over cylinder and rub the backing gently. Then raise the assembly and lay it over the feed table. The areas which should be covered with colored ink will now be spotted on the ink pad. Apply colored ink to the pad in these areas.

Work the ink into the pad thoroughly so the pad will be saturated with ink. Remove backing from stencil, lay stencil over cylinder, and run copies.

To re-ink when copies appear light, lift the stencil from the bottom and apply more ink to the pad. Re-ink as necessary to complete the run.

Note: If you are using A. B. Dick Models 90, 91, 92, 100, 93, 420, 430, 435, 436, 440, 445, or 450, it will be necessary to remove the black ink pad. Place a protective cover or a stencil typing film over the cylinder diaphragm so all openings are covered. Attach a clean cloth pad and proceed as explained above.

COLORED INK CYLINDERS

In a minute or two, you can change from black to color on the newest A. B. Dick mimeographs simply

by changing cylinders. These colored ink cylinders are inexpensive and very light in weight. Changing back to black is just as quick and easy.

MULTIPLE COLOR RUNS

When more than one color is to be run at one time, plan your layout so that there is at least one inch between color areas.

OVERLAPPING COLORS

When more than one color is used and color areas overlap, or for some reason the space must be less than one inch between colors, a separate stencil and a separate color run should be made for each color.

INK TIPS

Dark areas, with the spots appearing in the same position on each copy, are caused by too much ink. The excess will gather in some areas, and the paper will tend to stick to the cylinder when copies are being run.

Spotty copies, with the spots appearing in different positions on each copy, are caused by an impression roller in poor condition.

Uniformly poor copies, or copy which is too light in certain areas, are the result of too little ink.

Indistinct copies, with the light areas appearing in the same position on each copy, are caused by an ink pad in poor condition (matted down). Agitate or change the pad if oil-base or emulsion ink is used. Change the pad if hard-set, paste, or Contac-Dri ink is used.

Copy becomes gradually light on the high side of the cylinder as the ink supply in the pad becomes exhausted. This will occur if the mimeograph is not level; also, ink may seep from the low side of the cylinder.

Generally poor copies can result from ink residue in the cylinder diaphragm. When ink residue clogs the openings in the diaphragm, it prevents the flow of ink from the inside of the cylinder to the pad, causing poor copies. This can also be caused by leaving the stencil on the cylinder when the mimeograph is not in use, rather than using a protective cover. When the cylinder diaphragm openings become clogged, the cylinder should be cleaned thoroughly. Your A. B. Dick products representative will arrange to have the cylinder cleaned for you.

SETOFF

"Setoff" is the name given to the deposit of ink which is transferred from the copy in the receiving tray to the back of the copy which falls on top of it.

Setoff occurs when the ink on one sheet of paper does not dry before the next sheet falls into the tray. The drying time of the ink depends on:

- the type of ink;
- the type of paper;
- the speed at which the mimeograph is operated;
- the width of the stencilized openings in the stencil;
- stacking of paper in the receiving tray.

Slow-drying inks and slow-drying papers (non-absorbent) tend to increase setoff. A heavy deposit of ink on the paper tends to increase setoff. When the mimeograph is operated at slow speed and when the stencil openings are broad, you will get a heavy deposit of ink.

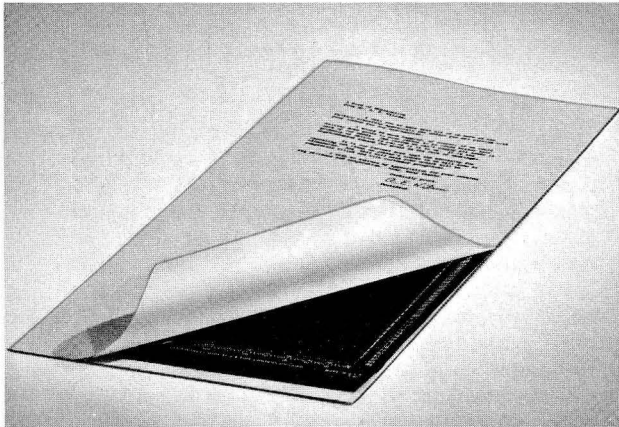
You can reduce setoff to a minimum by using a fast-drying ink, such as Contac-Dri or 6000SE, an absorbent paper (A. B. Dick mimeograph paper), and a stencil assembly which gives fine- or medium-line copy on a mimeograph run at high speed with good stacking of copies in the receiving tray.

Contac-Dri and 6000SE inks are highly recommended when setoff is a problem.

HOW TO FILE STENCILS FOR RERUNS

A. B. Dick Dry-Clean file folders are made of an absorbent paper which absorbs the ink from the stencil.

An exact reproduction of the stencil can be placed on the file folder by hand feeding it through the mimeograph. (Enough copy for identification may be reproduced by placing the folder on the stencil, while it is still on the mimeograph cylinder, and rubbing over the stenciled area.)



Remove stencil from the cylinder and place it smoothly (without any wrinkling or creasing) in the open file folder **INK SIDE UP**.

Close the folder and rub firmly, exerting considerable pressure over the entire top surface of the file folder. Good over-all contact between the folder and stencil means a cleaner stencil and better copies on the reruns.

Leave stencil in folder from five to sixty minutes; then open folder to loosen stencil and turn it over. Close folder. Stencils can be loosened and turned individually, or accumulated for about an hour and then turned all at once.

WHEN Contac-DRI OR HARD-SET INKS ARE USED*

Identify the file folder as described above. Then, place the stencil in the open file folder **INK SIDE UP**.

Immediately open the folder, and paint the entire inked side of the stencil with clear water. Use an ordinary soft bristle paint brush for this purpose. Turn stencil over after brushing with water. Close folder.

Leave the stencil in the folder from **TWO TO FIVE MINUTES**; then open folder to loosen the stencil and turn it over. Close folder.

*This procedure should be used *only* when necessary. Stencils used with Contac-Dri and hard-set inks should always be washed in running water or a stencil washing machine if at all possible.

PHOTOCHEMICAL STENCILS OR STENCILS WITH PHOTOCHEMICAL INSETS

Photochemical stencils or stencils with photochemical insets should be filed in an oiled file folder. They must be cleaned as follows before placing them in the file folder:

When using oil base, paste, or emulsion ink, clean with kerosene or Stoddard Solvent.

When using hard-set ink, clean with soap and lukewarm water.

When using Contac-Dri ink, clean with plain water. (Oiled file folders should also be used for filing any stencil which is to be stored for an extended period of time.)

Note: Photochemical stencils which have been cleaned

may wrinkle if stored for a considerable time. To restore plasticity, pat surface with a cloth moistened with water, and rub dry.

THE MIMEOGRAPH PAPER FEED

NEW A. B. DICK MIMEOGRAPH PAPER FEED

The newer A. B. Dick mimeographs have an entirely new feeding system. The separation of the sheets of paper is controlled by two corner separators which are located at the front of the feed table to hold the paper stack. As the feed moves the paper forward, the separators release the top sheet to be fed into the mimeograph. There are no retainer pads and no breaker bar.

You simply place the paper stack on the feed table, raise the corner separators, and slide the paper forward; then, release the separators so they rest on the paper stack. The two feed rolls are to be positioned $\frac{1}{4}$ " to $\frac{1}{2}$ " inside the guide rails. For card stock, position the rolls one inch from the rails.

The corner separators eliminate the feeding of doubles, and allow you to feed unevenly cut paper without difficulty. This new system also permits feeding down to and including the last sheet of paper on the feed table.

This paper feed system is currently available on Models 411, 412, 416, 418, 425, 433, 434, 438, and 455.

On some models 433, 438, and 455, you may find an adjustable center separator. This separator will normally be set $\frac{1}{64}$ " above the paper stack. When using light weight paper, or other paper difficult to feed, it may be necessary to raise the center separator slightly.

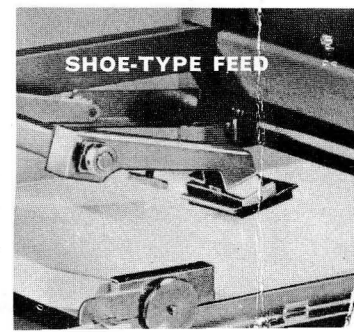
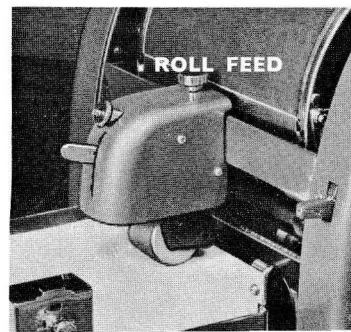
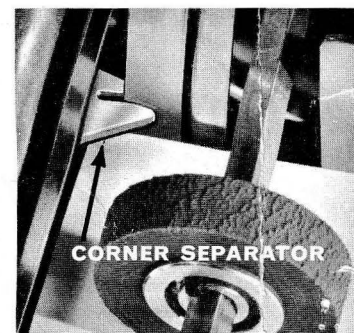
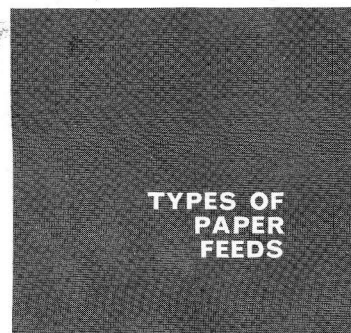
RUBBER RETAINER FEED SYSTEM

This feed system is found on older A. B. Dick mimeographs. There is one large feed roll (or a shoe-type feed) which is placed at the center of the paper stack.

The retainer pads are located on retainer rails and can be moved forward or back from the cylinder. Position them about one inch from the back end of the paper stack, just forward of the breaker bar.

When paper widths vary slightly from ream to ream, you may have feeding difficulties. Placing the wider stack on top should eliminate the problem. Set the retainers so the wider stack is held firmly. When all sheets in the top (wide) stack have been fed, the retainers will adjust themselves to hold the narrower stack firmly.

8.



If your mimeograph feeds doubles, or misfeeds, check these points:

Feed pad or feed roll . . . Be sure the pad or roll is clean. To clean, rub briskly with a clean cloth moistened with clear water. The feed pad should be reversed each time it is cleaned. Check the feed pressure. Use lighter pressure for light weight papers. See your operating instructions for directions on increasing or decreasing feed pressure.

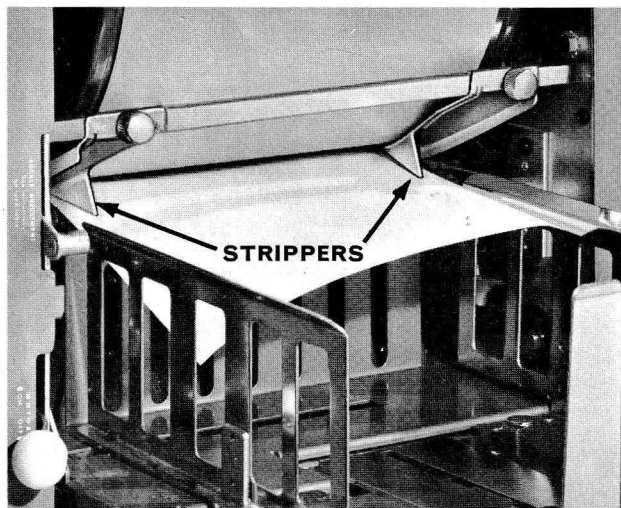
Retainer pads . . . Be sure these pads are clean and not badly grooved. They, too, are easily cleaned by rubbing with a clean cloth dampened with clear water. The retainer pressure also should be lighter for light weight papers—light enough to hold the paper gently but firmly. If the retainer pads are worn at the bottom, remove them from the housings and reverse them so the worn area is at the top.

Breaker bar . . . The breaker bar is used to put a bend in the stack of paper and assist the retainer pads in exerting greater pressure. The bar is under the paper stack, directly back of the retainer pads. Press down firmly on the paper stack to give a good “break” in the paper and enable the retainer pads to hold the stack firmly.

IMPORTANCE OF THE STRIPPERS

The strippers are the two pieces of curved metal which extend under the cylinder on each side of the impression roller. They are suspended from the stripper bar and can be moved to the left or right along this bar. The strippers peel each sheet of paper from the cylinder and guide it into the receiving tray.

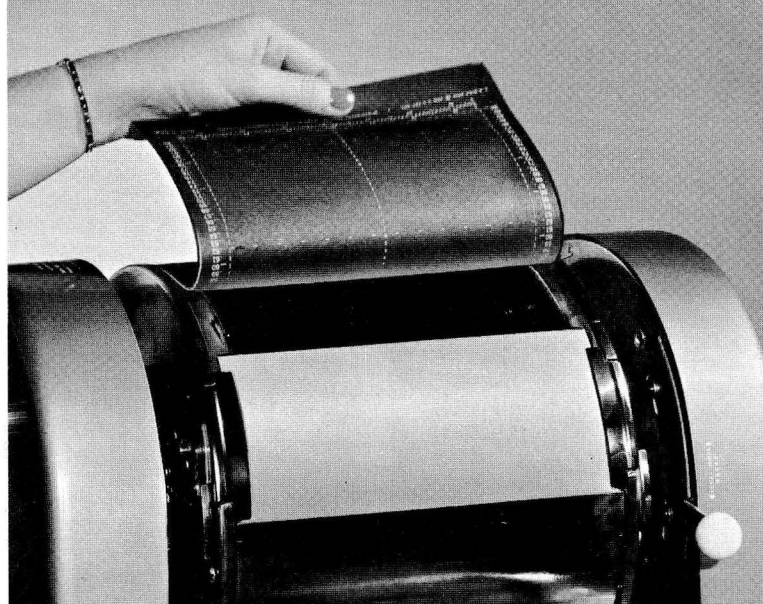
Set the strippers $\frac{1}{4}$ " away from the ends of the impression roller. If set too close to the roller, they may cut it or cause the paper to catch or wrinkle.



INK PAD BLOCK-OUTS

Place a strip of No. 520 plastic block-out material—or a piece of protective cover—over the lower section of the ink pad. This strip should be from 6 to 9 inches long and $8\frac{1}{2}$ inches wide. Position the block-out so the top edge will be just below the bottom line of typing when the stencil is placed over the ink pad, with the bottom two or three inches of the block-out extending under the end clamp.

This block-out makes it unnecessary to clamp the end of the stencil under the side and end clamps. The



STANDARD INK PAD BLOCK-OUT

stencil is easier to attach and remove, and cleaner to handle, as it is free of ink at the bottom end.

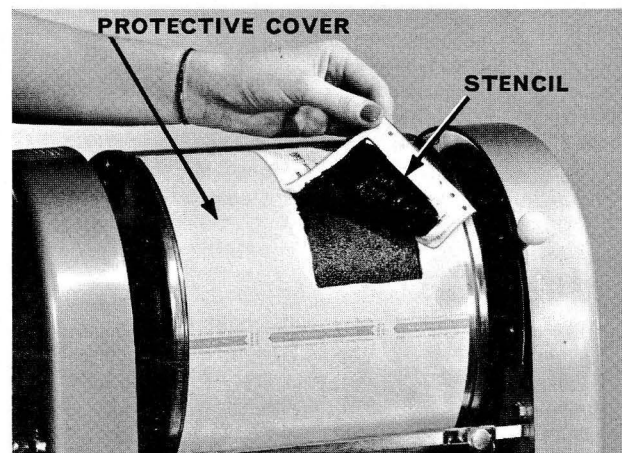
SMALL STENCILS

When small size stencils ($8\frac{1}{2}$ " x 4" or $8\frac{1}{2}$ " x $5\frac{1}{4}$ ") are used, it is necessary to block out that portion of the ink pad which is not covered by the stencil.

These stencils are usually used with papers or cards which are smaller than letter size. The small stencils are placed on the cylinder lengthwise because narrow paper and cards are fed into the machine lengthwise.

Since the stencil will not cover the ink pad, the uncovered portion is blocked out with a protective cover. The cover is attached just as you would attach a stencil. Then place the small stencil over the cover in the correct position for mimeographing. Indicate with pencil marks on the cover where the stencilization falls.

9.

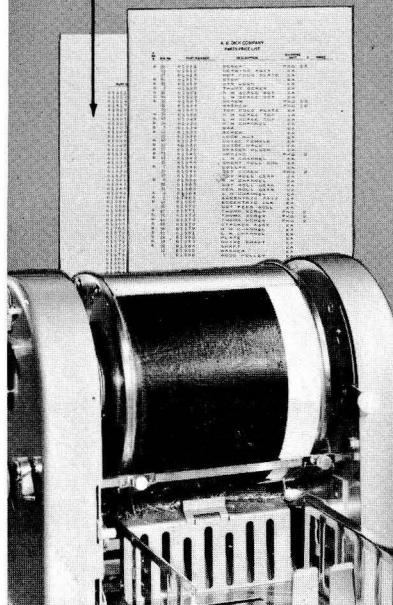


Remove the stencil and cut a window in the cover, using the pencil marks as a guide. Be careful not to damage the ink pad. After the window is cut, place the stencil over the opening, attach the stencil and run copies.

COPY BLOCK-OUTS

Many times it is desirable to mimeograph a number of copies from a complete stencil, and an additional number of copies of only certain portions of the stencil. This can be done easily and quickly.

Run the copies of the complete stencil first. If a

BLOCKED OUT**HORIZONTAL BLOCK-OUT****BLOCKED OUT****VERTICAL BLOCK-OUT**

vertical column is to be blocked out, place a strip of very light weight, smooth paper—or carbon paper—under the stencil head clamp.

If a portion is to be blocked out in a horizontal position on the stencil, you will have to depend on the adhesive action of the ink to hold the strip in place. Run the copies rather slowly and watch the copies as they fall in the receiving tray to be sure the block-out strip remains in the correct position. Replace the strip if it becomes saturated with ink.

When the block-out strip is removed, you can again run the complete stencil. The block-out strip should be removed and discarded before the stencil is filed.

PERMANENT COPY BLOCK-OUT

Copy can be permanently blocked out by using strips of gummed paper or paper which is gummed along one edge.

The strip should be large enough to cover the unwanted portion of the copy.

The required number of copies of the complete stencil are run, then the gummed portion of the block-out strip is moistened and attached to the stencil over the unwanted portion and the remaining copies are run.

MIMEOGRAPH IMPRESSION PAPER**WHAT KIND OF PAPER SHOULD YOU USE?**

Suitable impression paper is one of the most important factors in mimeographing. Paper affects the appearance of the finished copies, as well as the speed and ease with which these copies can be produced.

To be a full working partner, your impression paper must produce quality copies, with trouble-free duplicating performance, at low over-all cost.

A. B. Dick impression papers are available in many sizes, colors, and weights. There are five main types of mimeograph paper:

- Standard Mimeograph (Gold Label—watermarked, Red Label—unwatermarked)
- Bond (Gold Label—watermarked, Red Label—unwatermarked)
- Mimeotone—excellent for two-sided duplicating
- Vellum
- Mimeograph Card Stock

Using the correct paper for a duplicating process will insure getting the best possible copies. A. B. Dick mimeograph impression paper is made especially for use with the mimeograph process.

NEW—A TRUE BOND PAPER FOR MIMEOGRAPHING!

A. B. Dick Gold Label and Red Label Bond offer the mimeograph user a true bond paper for prestige mimeographing.

It gives you better copy quality and better performance characteristics than conventional mimeograph paper without the toothy, soft, mimeograph “feel.” The crisp feel of this sheet cannot be matched by any other mimeograph paper.

This same bond paper may be used with the offset process. It is brighter and more opaque than average bonds and allows faster drying for a wider range of offset inks. Use it to have your letterhead or bulletin head printed. Then mimeograph your message later.

COLORS PAPER

The easiest way to introduce color into your mimeographing is through the use of colored paper. Color is an emotional stimulus that can work for you in many ways. It can attract attention to the whole message or to a part of it. It can introduce a change of pace, provoke curiosity, distinguish your message as something special, or as one of a series.

Be careful not to use colored papers that are too dark, as this makes it difficult to read the text. As a rule, pastel colors are best.

Most colored papers have less “show through” (greater opacity) than white papers of corresponding weights. Such papers are very good for duplicating on both sides of the paper.

Ask your A. B. Dick Company representative to show you the complete range of A. B. Dick colored impression papers. Fourteen different shades are available to you:

Standard Mimeograph (Red Label)—blue, pink, green, canary, buff, goldenrod.

Bond (Gold Label and Red Label)—blue, pink, green, canary, buff, goldenrod.

Mimeotone—pink, green, canary, granite, tan.

Vellum—blue, green, yellow, buff, goldenrod, granite, tangerine.

Mimeograph Card Stock—blue, terra cotta, green, yellow, India, gray, granite, tan.

STORAGE OF PAPER

Store paper in a cool, dry location and see that it is stacked flat. Be sure it is handled carefully so the corners and edges do not become dented or bruised. This will reduce wastage and give you better quality copies.

STORE PAPER FLAT

HOW TO TYPE A STENCIL

Disengage the typewriter ribbon by placing the ribbon control lever in the "white" or "stencil" position.

Clean the typewriter keys with A. B. Dick type cleaning brush 956 or 957. Use a firm stroke, brushing in a circular motion toward you from the inside out all around the type basket. Do not scrub the type faces from side to side.

Push the rubber rollers on the typewriter paper bail to the extreme left and right ends of the bail so they will not roll on the stencil sheet.

Insert the cushion sheet (if using a coated cushion, be sure the *glossy side is up*) between the stencil sheet and the backing.

Insert the stencil sheet assembly into the typewriter as you would a sheet of paper, and straighten the stencil. An easy way to do this is to roll the stencil up until the stub meets the bottom of the backing. Release the paper release lever and move the corners of the stencil stub until they are evenly aligned with the corners of the backing. Lock the paper release and return the stencil to typing position. The paper bail rod should be in its normal position.

Use a firm, uniform, staccato, typing touch. Periods and commas should be typed more lightly than ordinary typing, and capitals (especially letters like "M" and "W") require a firmer stroke as they are wider, and more stencil coating must be pushed aside to produce good copy.

Proofread immediately after typing, and then remove the cushion sheet.

HOW TO MAKE CORRECTIONS

Correction fluid is essentially stencil coating in liquid form. It comes in bottles with a small brush attached to the bottle cap. A. B. Dick Company manufactures a variety of correction fluids. Your salesman will help you choose the proper fluid for your needs.

No. 363—a blue, heavy fluid.

No. 368—a blue, light fluid.

No. 370—a blue, medium fluid.

No. 364—a white, light fluid.

No. 367—a white, medium fluid.

No. 361—a red fluid intended especially for use with 2400 series (orange) stencil sheets.

When using a coated cushion, it is not necessary to burnish, although burnishing will result in a finer correction. Practice corrections both with and without burnishing to determine which method is best for your needs.

Burnishing replaces some of the stencil coating in the stenciled area and prevents the fluid from flowing through the base tissue onto the cushion. To burnish, gently rub the error in a circular motion with the rounded end of a paper clip. Before applying correction fluid, insert a pencil between the stencil and cushion sheet (or typing plate) to separate the stencil from the cushion.

Apply correction fluid over the error. (If film is used, it must be lifted away from the stencil sheet while the correction is being made.) Correct each character separately using a vertical, upward stroke of the brush. Several such brush strokes may be used if one follows the other immediately.

Allow the fluid to dry (10–30 seconds), and retype, using a lighter than normal touch. If you use a heavy typing touch, the correction will be darker than the rest of the typed material.

When using a tissue cushion (or typing plate), it is necessary at all times to burnish before applying correction fluid because correction fluid will stick to the cushion sheet. Apply correction fluid as directed above.

COPY VARIATIONS

A. B. Dick Company has a variety of materials which help you select the type of copy you prefer—from extra fine to ultra bold.

CUSHION SHEETS

Three types of white cushion sheets are available: Type-Fine for fine copy, Type-White for medium copy, and Type-Bold for bold copy. There are also two black cushion sheets to be used with A. B. Dick light colored stencil sheets. The copy obtained when using a Kozutint (black tissue) sheet is comparable to Type-Fine, and Type-Black is similar to Type-White.

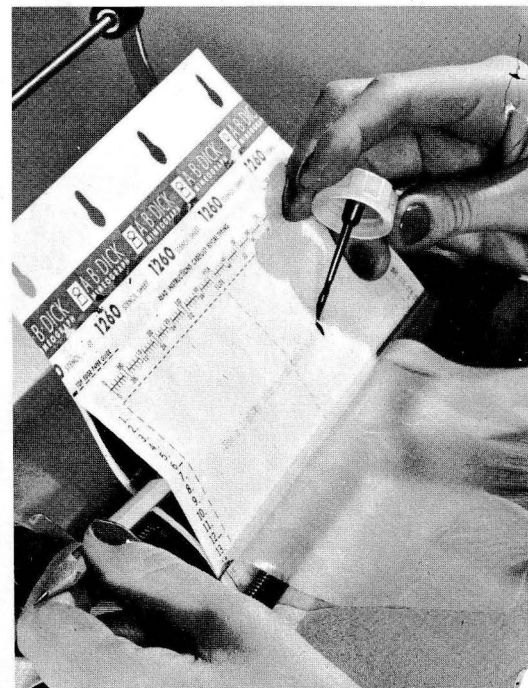
1 SEPARATE FILM FROM STENCIL SHEET



2 BURNISH



3 APPLY CORRECTION FLUID



FILM

Film-topped stencil sheets are stencils with film attached and are available in legal and letter sizes. Adding film to your stencil assembly—regardless of which cushion sheet is used—will make the copy bolder. Because the addition of film causes more coating to be pushed aside than the type alone does, the stencitized opening is broader and more ink passes through.

Film also reduces the possibility of letters cutting out if your typewriter type is so sharp that some characters cut the base tissue. Hard typewriter platens can also cause cutting difficulties. Film will minimize this problem.

Film eliminates typefill, too, so it is unnecessary to clean the type while typing. However, remember that the type must always be cleaned before starting to prepare a stencil.

TYPING PLATE

Every quire of Super series stencil sheets contains a typing plate. The typing plate inserted between the stencil sheet and backing sheet (no cushion) produces the finest copy.

Many variations of copy are possible by using different combinations of the typing plate, the various cushion sheets, and film. Experiment with these materials to find the mimeographed copy best suited to your needs.

SPECIAL STENCIL SHEETS

These special stencil sheets were designed to save time for the typist and assure accurate positioning of copy on the stencil. Simply follow the printed guide lines when typing, writing, or drawing.

ADDRESSING STENCIL SHEET

An easy, low-cost way to address your mail. Eliminates tedious writing and rewriting of addresses used frequently. Just type one name and address in each of the 33 spaces provided on the stencil sheet. Then, mimeograph as many sheets of 8½" x 11" gummed, perforated, label paper (33 labels to the sheet) as you

need, and file the stencil for future use. To mail—separate, moisten, and attach the labels to envelopes or post cards.

NEWSPAPER STENCIL SHEETS

Specially designed for mimeographing newspapers, newsletters, lists, and other columnar work. Two- and three-column guide lines printed on the stencil sheet eliminate time-consuming measuring and provide professional-looking layouts.

FOUR-PAGE FOLDER STENCIL SHEETS

Prepare print-like church programs, bulletins, menus, booklets, price lists, etc., in a minimum of time. Special guide lines eliminate measuring and copy positioning errors. This stencil sheet is available in both the letter and legal size format.

HANDWRITING STENCIL SHEETS

For a change of pace—or emphasis—personalize messages with handwriting. This stencil is particularly recommended for classroom needs. Guide lines spaced ½" apart provide ample space for handwriting. This stencil sheet is illustrated on the opposite page.

DOCUMENT STENCILS

These stencils were designed for mimeographing legal and other documents. Eliminate the need to stock special printed paper since the line or line-and-numbers, plus the information you type, are duplicated in one operation on blank paper.

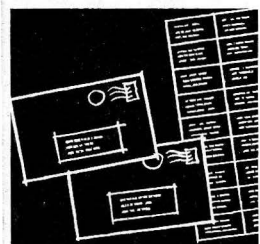
MUSIC STENCILS

Simply add notes with a stylus to the music staves already imaged on the stencil. You can mimeograph as many copies as you need for your chorus, orchestra, or band from one writing.

OUTLINE MAP STENCILS

A large selection of outline map stencils is available, enabling you to add any information you wish. No need to order and reorder printed maps when you can mimeograph the copies you need, file the stencil, and rerun when necessary.

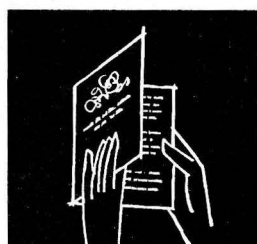
16.



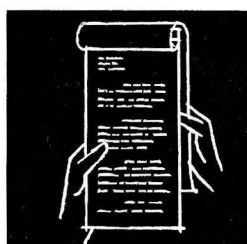
ADDRESSING STENCIL



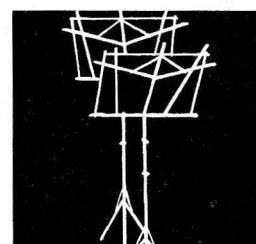
NEWSPAPER STENCIL



4-PAGE FOLDER STENCIL



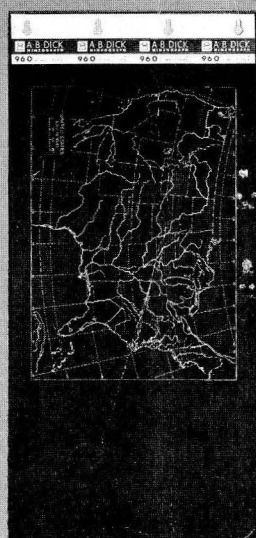
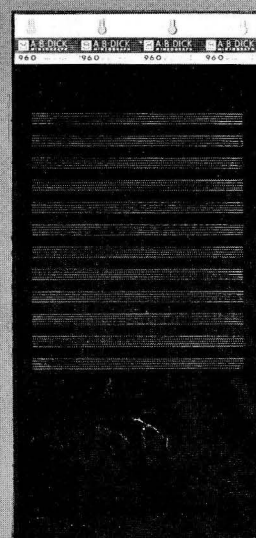
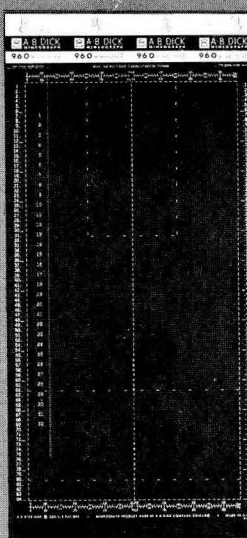
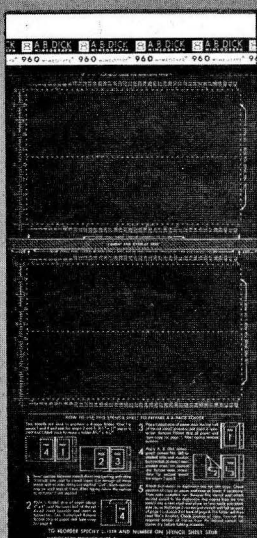
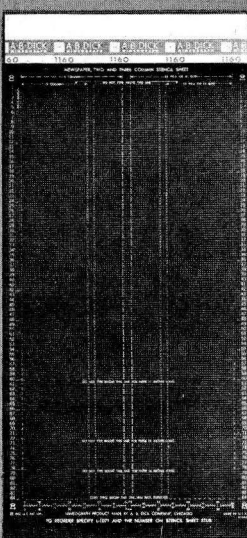
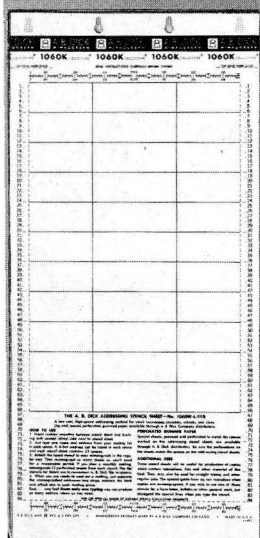
DOCUMENT STENCIL



MUSIC STENCIL



OUTLINE MAP STENCIL

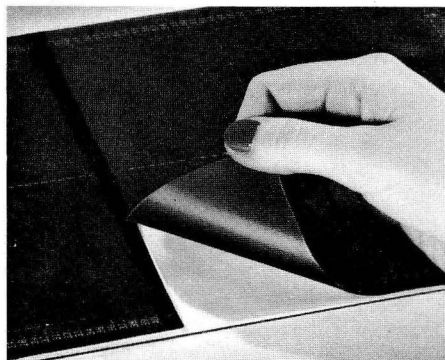
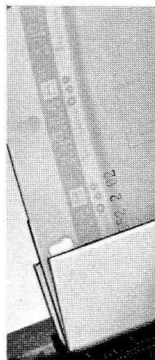


When the copy runs the long way on the card, use the following procedure to prepare a stencil. Lay the card on the stencil with the top edge of the card on the "Top Edge Guide Line" and centered.

With dots of correction fluid, mark the stencil to show the corners of the card. Plan your copy so it will be at least $\frac{1}{2}$ " from the left-hand edge of the card. Allow margins on the other three sides so the card will not have a crowded look.

Remove card, insert cushion, and cut through the stencil, cushion, and backing about one-two inches below the area which is to be typed.

Fold a strip of paper over one side of the stencil assembly and insert in typewriter. This paper protects the stencil as it is being inserted in the typewriter. Remove the strip of paper.



18.

After typing the stencil, take it from the typewriter and remove the cushion sheet. Apply A. B. Dick mimeograph cement to the bottom half-inch of the typed stencil. Place the upper half-inch of the unused portion of the stencil over the cemented area. Rub gently to seal. Allow to dry.

Do not attempt to fold a stencil assembly and insert it in the typewriter. It is always better to take a few minutes to cut and cement the stencil assembly—and be sure the copies will be good.

HOW TO USE A LAYOUT

Quite often, it is worthwhile to make a layout before you start typing or drawing on a stencil sheet.

1. Draw top, bottom, and side margins on the "dummy" page, leaving at least $\frac{1}{2}$ " at the top and bottom and $\frac{5}{8}$ " on the sides for margins. Use a sheet of thin paper and either type the copy in the locations you select, or indicate by pencil lines where it is to be located. If you plan to use an illustration, place the illustration under the dummy sheet and draw an outline of the illustration. If you wish to use lettering or handwriting, indicate on the dummy where they are to be located.
2. When the dummy is completed, place it between the stencil and backing. You will be able to see the dummy through the stencil.
3. Place small dots of correction fluid at the starting and stopping points of the various paragraphs, illustrations, lettering, etc. These dots will serve as guide marks for you when you type or draw on the stencil. They will not affect the stencil in any way.
4. Remove the dummy, insert the cushion sheet, and image the stencil. Always type the stencil first before adding handwriting, lettering, or insets.



DOTS OF CORRECTION FLUID AT STARTING AND STOPPING POINTS OF COPY AREAS LOCATE PARAGRAPHS, LETTERING, ILLUSTRATIONS, ETC.

HOW TO USE THE VARI-TYPER FOR IMAGING STENCILS

With the Vari-Typer Stencil Writer you can produce high quality copies in a variety of type sizes and styles. Changeable type plates available for this machine range from large 18 point to tiny 6 point sizes in Roman, Gothic, and italic types, foreign languages, and special symbols such as chemical symbols, and mathematical symbols. Complete fonts of type are low enough in cost to permit a wide selection of sizes and styles; and you achieve a completely different effect with each change of type . . . on one machine.

SELECTION OF TYPE

In general, sharp type faces give good stencilization while broad type faces tend to impact the stencil coating. For this reason, broad type faces should be limited to use in headings with the repeat key. Among the recommended type faces for stencil use are numbers 320-10; 325-10; 361-9; 361-7 $\frac{1}{2}$; 226; 27; 270; 180L; 145; 23B; 24; 232; 233; 169; 68; 28; 345 series. For headings, using the repeat key, No. 229 is recommended.

RECOMMENDED STENCIL SHEETS

Any A. B. Dick stencil sheet can be used with the Vari-Typer Stencil Writer.

MECHANICAL SETTING FOR THE VARI-TYPER

A hammer impression should be set to factory standard. The Vari-Typer service technician can check the setting very easily. The hammer length should be set at 103 thousandths. This hammer length must be set by the Vari-Typer service man.

IMPRESSION

The impression pressure will have to be adjusted according to the type being used. Small type such as 180 and 180L, or other six or eight point types, will usually require a pressure setting of one or two. The setting could go up to pressure four and the use of the repeat key when broad face types are used. The stencil light will assist you to see the quality of stencilization.

INSERTION OF STENCILS

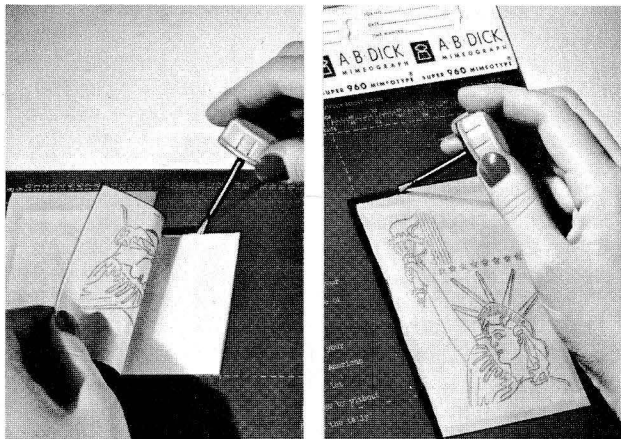
1. Remove the backing sheet from the stencil.
2. Place the coated cushion sheet under the stencil, coated side up.
3. Place two clips at the top to hold the assembly.
4. Place the assembly in your Vari-Typer, holding the top of the assembly with the left hand and close the feed rolls with your right hand.

HOW TO USE INSETS

Add the eye appeal of artists' drawings to your stencils without tracing. Choose from more than 104 ready-to-use die-impressed or photochemical illustration stencils, each containing six-eight illustrations per stencil. It's easy and fast.

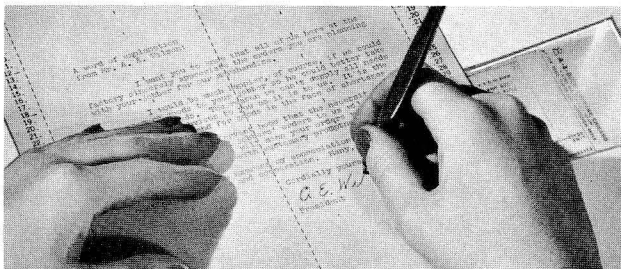
1. Type the required copy on the stencil sheet. Leave about $\frac{3}{8}$ " or $\frac{1}{2}$ " margin between the copy and the space needed for the illustration.
2. Using a sharp blade, cut through the transparent wrapping and inset along the outline of the illustration—leaving at least $\frac{1}{2}$ " for overlap when cementing inset in place.
3. Cut opening in typed stencil approximately $\frac{1}{8}$ " larger than the actual illustration.
4. Place stencil face up on a smooth surface. Place inset face up over the opening in the stencil to make certain the actual illustration shows through the opening. Remove the inset.
5. Apply mimeograph cement sparingly all around the edge of the stencil opening. Position the inset on the stencil, and press firmly. Allow several minutes for the cement to dry.
6. When cement is dry, paint a thin line of correction fluid (No. 363) along the edges of the inset where it overlaps the stencil to thoroughly seal the inset to the stencil.

The inset is now a part of your typed stencil. Attach it to the mimeograph and run copies in the usual manner.



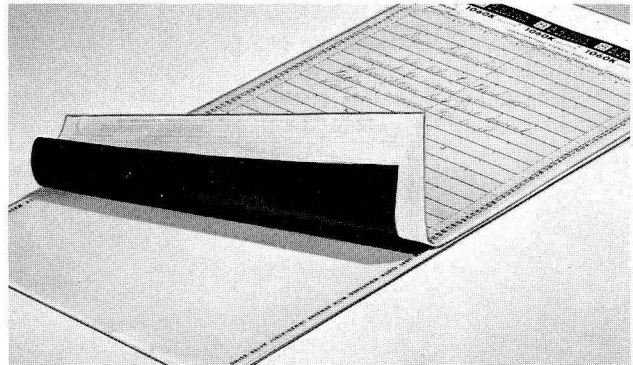
SIGNATURES AND HANDWRITING

It's easy to handwrite or sign stencils with the A. B. Dick roll-point stylus (No. 469). This stylus has a ball tip which functions in a very similar manner to a ball point pen. Hold the stylus almost vertically when you write with it. Use considerable pressure, and keep the pressure as even as possible.



When signing a stencil which has a coated cushion sheet, do not use a cushion. Place a writing plate or a signature plate between the stencil and the backing. Then place the assembly on a smooth surface such as a glass desk top or a piece of Masonite. Write as described above.

When using a stencil with a tissue cushion sheet, use both cushion sheet and the writing plate. Position the writing plate between the cushion and the backing sheet of the stencil.



HOW TO JUSTIFY LINES

When typed lines are "justified", the right-hand margin will be even because all lines will be of equal length. This is easy to do and requires very little additional time and effort.

Set the typewriter stops to the width of the line required. Do not type beyond this width, but fill out the extra spaces with asterisks:

Typed lines which have an**
even right-hand margin give
your copy a look which is**

Go back over the copy and indicate by pencil checks where you can skip spaces. Spread the skips so they do not occur directly under one another, making rivers of white space:

Typed lines which have an**
even right-hand margin give
your copy a look which is**

Then type the stencil, skipping the spaces indicated by the checks:

Typed lines which have an
even right-hand margin give
your copy a look which is

HOW TO TYPE STENCILS FOR CARDS

Cards are fed into the mimeograph lengthwise and from the center, so the copy is typed or drawn in the top center location of the stencil. Special stencil guide marks show where the copy is to be located when a post card is used. Use the center location for all size cards.

When the copy runs the narrow way on the card, type in the usual manner.

5. Place the palm of the left hand just above the anvil. Roll the stencil down into the machine with the right hand. The left hand will force the bulge to the top, preventing creases as the assembly enters the feed roll.
6. When the stencil is approximately 3 inches from the top, release the paper clips, straightening out the bulges in the typing film, the stencil, and the cushion sheet. Replace the paper clips.
7. The typing film removes easily from the stencil top.
8. Move the paper guides into position.
9. Align the stencil horizontally, using the paper scale, so the stencil will feed uniformly.

If two column work is to be done, requiring the stencil again be rolled down into the basket, place the left hand against the stencil just above the anvil when rolling down.

If the stencil is to be used lengthwise, the wooden roller which accompanies each Vari-Typer machine should be used to hold the assembly in position. The top of the stencil should be placed at the right, which will keep this part of the stencil out of the feed rolls.

CARE OF THE VARI-TYPER MACHINE AND TYPE

Do not leave a stencil in the Vari-Typer overnight.

Clean the feed rolls thoroughly with denatured alcohol not less than twice daily when in use.

Keep the anvil slot clean by running a 3" x 5" card through the slot.

Brush the type thoroughly; dip the brush in denatured alcohol to remove particles of coating which may become lodged in the centers of the letters, such as the A, O, E, etc.

Clean the back of the type carefully with a soft cloth dipped in denatured alcohol. An accumulation of ink on the back of the type will cause the type to become sluggish or to stick in the anvil.

The types should be cleaned as often as necessary in order to produce clean copy. Naturally, the smaller types must be cleaned more frequently than the large types. By occasionally checking the copy, clearly visible with the aid of the stencil light, the careful operator can determine when the letters are beginning to fill up. If the stencil has a typing film, a great deal of the cleaning will be eliminated.

If letters are being cut, that is, if the O, E, etc. are dropping out of the stencil, it indicates that either too heavy an impression is being used, or the letters have become impacted with coating and the type should be thoroughly cleaned.

CORRECTIONS, FILING, AND STORAGE OF STENCILS

Follow standard instructions for making corrections, filing stencils for rerun, and storage of unused stencil sheets.

TIPS FOR TYPISTS

LAYOUT

Avoid a crowded appearance. Use even margins with plenty of "white space".

Break up solid typed pages by using caps or lettering guides for headings.

Indent important paragraphs—set them off by themselves—or draw "boxes" around them.

Handwritten headings add emphasis. Use the 469 roll point stylus for both handwriting and signatures. It is as easy to use as a ball point pen.

For narrow paper, type in the upper left-hand location on the stencil. For cards, use the upper center location.

TECHNIQUE

Use a loop stylus (No. 405B) to underscore. This is faster than using the underscore typewriter key and gives a cleaner, sharper line.

If you are using a noiseless typewriter, use an extra backing when you type a stencil. This raises the stencil slightly so the type strikes it with a little greater impact.

CORRECTIONS

Keep the cap on the bottle of correction fluid except when applying fluid to a stencil. This will retard evaporation, and the fluid will be easier to use.

Make corrections carefully. Apply a thin but complete coat of fluid over the error. Allow it to dry thoroughly, and retype using a lighter than normal touch. When tissue cushions are used, burnish the stencil and separate it from the cushion sheet before applying fluid.

ANALYZING MIMEOGRAPHED COPY

If your mimeograph is in good condition—properly inked and properly operated—and copies are not as good as you'd like, check the following points:

COPY QUALITY GENERALLY POOR: Typing touch may be too light. Use a firm, staccato touch.

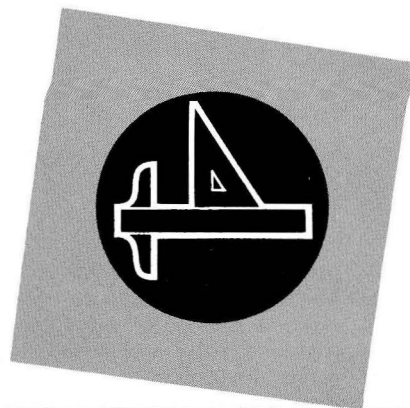
O'S AND E'S CUT OUT: Typewriter type may be too sharp or out of alignment. Have this condition corrected by a qualified typewriter serviceman.

CORRECTIONS TOO DARK: Too much pressure was used when retyping. Use a lighter than normal touch when typing a correction.

CORRECTIONS NOT COMPLETE: Entire character has not been covered with fluid. Be sure entire character is covered, and fluid is thoroughly dry before retyping.

COPY AT BOTTOM OR SIDES DOES NOT MIMEOGRAPH: Stencil has been typed beyond the duplicating limits. Copy will not reproduce if typed outside the broken line which indicates the typing area.

POOR SIGNATURES: Stencil may tear if a writing plate is not used. A weak signature is usually due to too little pressure being used. Considerable pressure can be used for signatures when the writing plate is used, as it protects the stencil. Use only the 469 or 405B stylus for signatures and handwriting.



FOR THE ARTIST

THE MIMEOSCOPE

The Mimeoscope is an illuminated drawing board. It is used to add illustrations, lettering, and shading to stencils and to rule office forms.

It consists of a metal frame, supporting a sheet of glass. This glass is specially finished to diffuse the light evenly and provide a good working surface. The light is located under the glass to furnish ample illumination for tracing.

A flexible writing plate is used instead of a cushion sheet when stencils are imaged on the Mimeoscope. This writing plate is made of translucent plastic and should be positioned directly on the glass.

USING THE MIMEOSCOPE

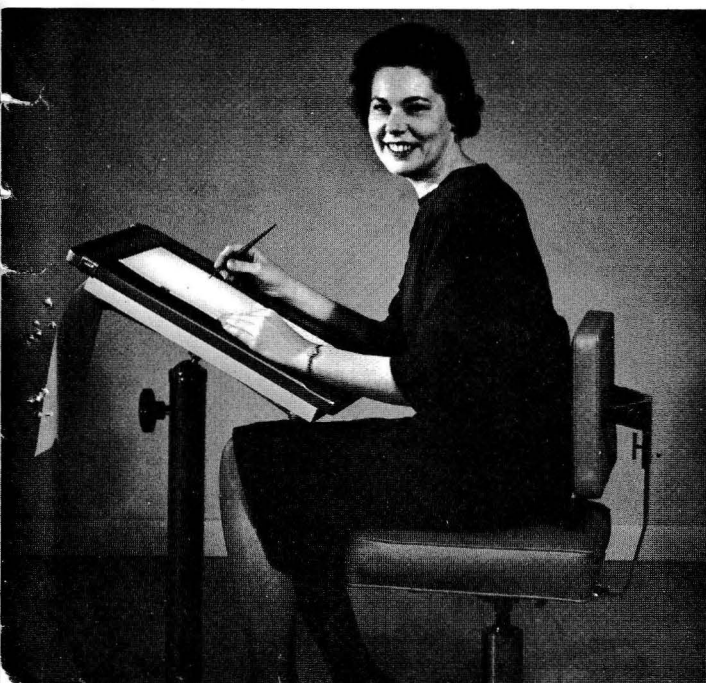
1. If you plan to use illustrations, lettering, or shading—or if you're drawing an office form—make a layout on a thin sheet of paper so you will know where to position the lettering, illustrations, or lines on the stencil sheet. Tape the illustration to the layout.

2. Lift the stencil from the backing, and feed the backing through the opening at the top of the Mimeoscope so it will be out of the way. The writing plate should be in position between the glass and the stencil.

3. Slip the layout sheet *under* the writing plate. This sheet should be the exact size of the finished copies. (To simplify manipulation of the layout, a tab of cellulose tape may be attached to the upper left and lower right edges of the sheet.) Position the layout sheet so its top edge falls exactly under the line on the stencil which is marked "Top Edge Guide". The left edge of the layout should be directly under the left edge of the stencil sheet. Check carefully to be sure the illustrations and typing fall within the duplicating limits indicated by the broken lines on the stencil.

4. Draw the stencil down so it is smooth and firm over the writing plate. Fasten the stencil in position.

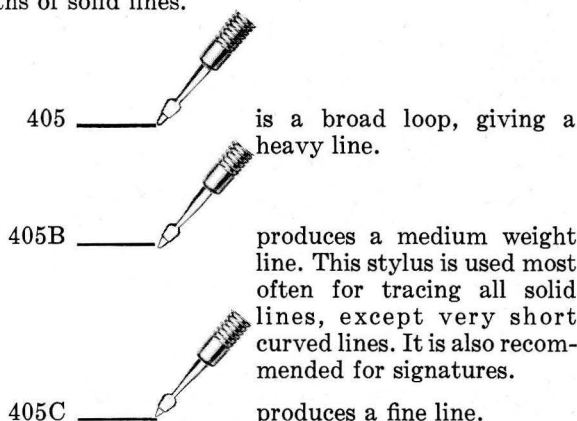
21.



TRACING ILLUSTRATIONS

WIRE LOOP STYLI

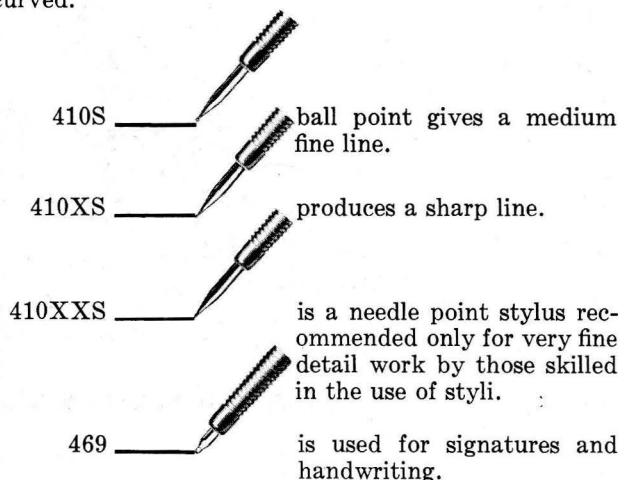
The wire loop styli are used for tracing most illustrations. Three are available, producing different widths of solid lines.



To trace an illustration with a wire loop stylus, hold the stylus so the thinnest part of the loop moves along the line being traced. Trace the line slowly, pressing hard enough to make a clear, white line. For curved lines, roll the stylus between the thumb and index finger, keeping the thinnest part of the loop on the line. *Never pull the loop broadside.*

BALL POINT STYLI

Ball point styli are also used to trace solid lines, but they are recommended only when the lines are short and curved.



Use a ball point stylus as you would a pencil, but holding it almost vertically. Press firmly so all lines are clear and white. Work toward junctions of lines from opposite points.

SCREEN PLATES

Screen plates are made of transparent plastic with raised patterns on one side. The plate is placed directly under the stencil area which is to be shaded, with the raised pattern against the stencil. Hold the stencil smoothly against the screen plate, and rub the stencil with the stylus in a circular motion. Keep the pressure firm and even.

Go over the area several times to reproduce the pattern of the screen plate in the stencil. Remember that enough stencil coating must be pushed aside to allow the ink to flow through the base tissue.

SCREEN PLATE STYLI

No. 455 screen plate stylus is recommended for use with all screen plates and especially with the border ornament screen plate.

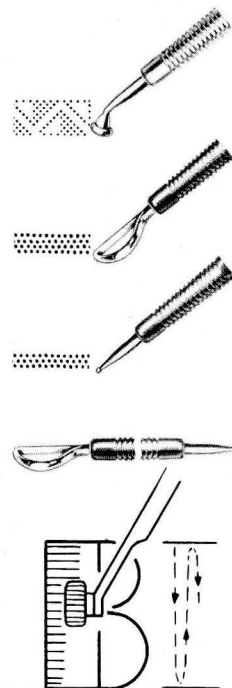
No. 454 screen plate stylus is a heavy loop stylus used for screening large areas and with screen plates having large patterns.

No. 410B is a heavy ball screen plate stylus used with screen plates having fine patterns when the area to be screened is small.

No. 1412 is a dual stylus. It has the 454 point on one end, and the 410B point on the other end.

WHEEL STYLUS FOR SHADING

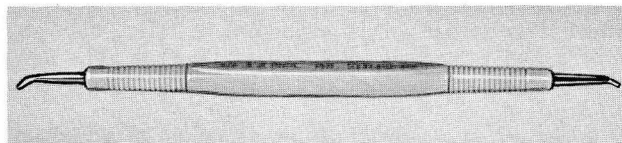
The No. 460 wheel stylus may be used to shade small areas. Hold the stylus so the wheel is vertical to the stencil and roll the wheel over the area to be shaded. *Do not lift stylus from stencil until shading is completed*, or the pattern being formed by the stylus will be broken.



LETTERING GUIDES

Lettering guides are made of plastic and have openings in the shape of letters, or letters and numerals.

There are two styli for lettering: No. 470 for the smaller letters and numbers; No. 472 for the larger sizes. A dual stylus, No. 1411, is also available which has the 470 point at one end, and the 472 point at the other.

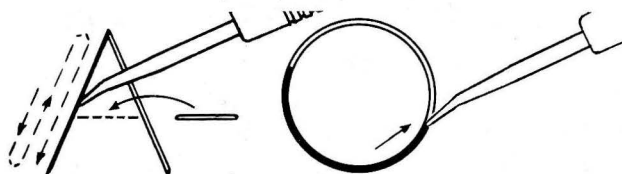


The correct stylus point for each guide is marked on the guide. Be sure to use the correct point, as these styli are made so the points fit exactly into the openings of the guides.

HOW TO USE LETTERING GUIDES

Attach a stencil to the Mimeoscope. Position the lettering guide on the stencil, resting it on the edge of the T-square of the Mimeoscope. Insert the stylus point into the guide opening. Using a *light* pressure, move the stylus back and forth to remove all the coating. *Do not try to make the line with one heavy stroke.* When you have properly stencilized a line, the light will show through the opening very distinctly.

When two lines meet, as in the letter "A", the second line must be drawn from bottom to top—toward the



junction. This prevents a ragged line at the joining point.

Some characters (such as "A") will be in two sections, and the guide must be moved to bring the two sections together. Move the lettering guide along the

SOLID AREAS

Solids can be used with electronic stencils, but since large solids are not recommended for the mimeograph process, particularly when long runs are required, there are some techniques to be followed for best results.



If your original has a large solid area, it can easily be broken up by applying a patterned shading sheet (Zipatone, Presto-Tone, etc.) over the solid. This technique makes the solid more suitable for mimeographing without detracting from its effectiveness.

Very heavy solids and very fine-lined copy should not be combined on one original. The imaging device would have to be adjusted to record as much of each area as possible, resulting in a poor reproduction of both the solid and the light copy.

PHOTOGRAPHS

Photographs are made up of highlights (white portions), middle tones (gray areas), and shadows (black areas). Since a black and white original will result in sharpest electronic stencil reproduction, a contrasty photograph is your best choice. This means that it has strong highlights and shadows with few middle tones.

Your A. B. Dick Company distributor may recommend "screening." This process breaks the photograph into definite black and white areas and eliminates all gray tones. Screening frequently allows you to use a photograph which otherwise would not be suitable for reproduction.

24.



Photo by Eleanor Fulcher Model Agency, Toronto, Canada

PREPARATION OF AN ORIGINAL

There are three types of originals which can be submitted for reproduction on an electronic stencil: (1) an original to which no additions or changes have been made; (2) an original made up of parts of existing material; (3) an original to which you have added your own art work.

ORIGINAL TO WHICH NO ADDITIONS ARE TO BE MADE

Examples of this type of original are existing letterheads or bulletin headings. Check your original against the following three points to make certain it is suitable for reproduction on an electronic stencil.

1. Size. All copy on your original must fall within the duplicating limits of your mimeograph. The normal duplicating area on an A. B. Dick mimeograph is $7\frac{1}{4}'' \times 13\frac{1}{2}''$ (legal size), or $7\frac{1}{4}'' \times 10\frac{1}{4}''$ (letter size). In addition, there should be sufficient margin around the copy to give it a balanced look.
2. Color. As mentioned earlier, black-on-white is the best possible copy for electronic reproduction, as it affords the greatest contrast. All colors reproduce as black or varying shades of gray. Red, dark blue, yellow, purple, orange, and dark green will reproduce as black or very dark gray. Pink, light blue, light green, or orchid will reproduce as light gray. It is important, therefore, that the colors on your original do not differ greatly in tonal value. If all copy on an original is orchid, for example, it is possible to reproduce it on an electronic stencil to mimeograph as black. However, when it is combined with other material which is black, or a deep shade such as red, the resulting copy will vary greatly in density. All copy should be as nearly the same tonal value as possible to result in top quality mimeographed copies.
3. Copy. Check the copy to make sure it is suitable for reproduction: (a) line copy—should be sharp and clear; (b) solids—area should not be too large and should not be combined with very fine line copy; (c) photograph—best reproduction is obtained from a contrasty photograph.

ORIGINAL MADE FROM PARTS OF EXISTING MATERIAL

An original may be made by combining clippings from magazines, newspapers, portions of existing forms or bulletins, etc. However, if the material is copyrighted, it should not be reproduced without written permission from the owner of the copyright.

In preparing this type of original, the same points must be checked as were listed previously: size; color; copy. (The color of the background of each clipping must be considered as well as the color of the copy. If, for instance, one segment of copy is printed on colored paper, and pasted on a white sheet, this area would reproduce as gray.)

Carefully prepared paste-ups will result in an electronic stencil which will give you the desired professional look. At least $\frac{1}{4}''$ should be allowed from the copy to the cutting edge. Position the various segments on a smooth, white sheet of paper (similar to a 20 lb. bond sheet), or on an A. B. Dick layout sheet 8594. Be sure that all copy falls within the duplicating area of your mimeograph.

When pasting up copy, be sure to leave at least $\frac{1}{4}''$ or more between the various clippings. The edge of the clipping leaves a shadow and reproduces on the stencil. This edge can easily be removed with correction fluid, but sufficient space must be allowed to apply the fluid.

Use rubber cement to paste your copy on the layout sheet. Cellulose tape should not be used, as it will show up on the stencil. Rubber cement should be used sparingly—just at the top of the clipping, and just enough to hold it firmly in place on the sheet. As you

T-square until the cross bar of the "A" fits exactly between the two lines previously drawn. Begin at the center of the cross bar, and draw lightly to one side and then to the other. Then, complete the line by moving the stylus back and forth until all the coating has been pushed aside.

Open letters such as "O" and "D" should be stencilized by holding the stylus so it pushes against the lettering guide.

Practice lettering before imaging a stencil for duplication. You will learn very quickly how to use the lettering guides properly.

RULING A FORM

The Mimeoscope T-square is marked in picas and inches. These markings simplify ruling and eliminate the need for a layout in many cases.

Attach a stencil to the Mimeoscope. If a layout sheet is used, position it correctly under the writing plate, and fasten it to the glass with transparent tape.

A selection of styli for ruling is available. In addition to the three loop styli for solid lines, six wheel styli provide you with a wide choice of dotted, dot-dash, or shaded lines.

Many forms may be drawn with just one stylus—a special, dual, ruling stylus No. 1410. It has the 405B wire loop on one end for solid lines, and the 468 wheel on the other end for dotted lines.

LOOP STYLI

Place the T-square in the correct position. Place the broad side of the stylus flat against the top edge of the T-square. Use a firm and uniform pressure as you draw the line. If any line extends too far, block off the unwanted portion with No. 363 correction fluid.

WHEEL STYLI

The T-square is also used with the wheel styli. Hold the stylus in a vertical position, with the wheel next to and parallel to the T-square. Use a heavy, uniform pressure. *Do not lift stylus from the stencil until the line is completed*, or the pattern being formed by the stylus will be broken.



HOW TO MIMEOGRAPH PHOTOGRAPHS, HALF-TONE ILLUSTRATIONS, AND BOLD TYPE FACES WITH ELECTRONIC STENCILS

What is an electronic stencil? It is a plastic stencil prepared especially for you from your original on an electronic stencil imaging unit. Fine linework, office forms, letterheads, direct mail, bulletin and memo headings, catalog pages—even coarsely screened photographs and solid areas—can now be mimeographed.

The imaging unit will copy just what it sees—so it is important to select your original material with care. The most important thing to remember is that the copy must be *sharp* and *clear*. The most successful mimeographed copies are produced from original copy which is printed, written, or drawn in black on a white background. The original must be flexible so it can be attached to the imaging machine, and it must be clean and unwrinkled.

SELECTION OF ORIGINAL MATERIAL

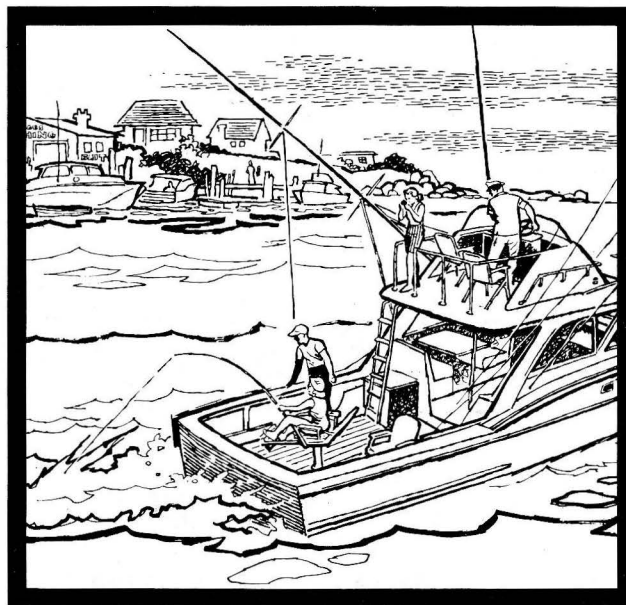
Any graphic material (pen, pencil, crayon, printing, etc.) will reproduce on electronic stencils, but proper selection and—if necessary—modification of this material will assure you of the best possible quality.

LINE COPY

Line copy may be as simple as this typewriting—

Electronic stencils allow you to mimeograph copies that rival printing.

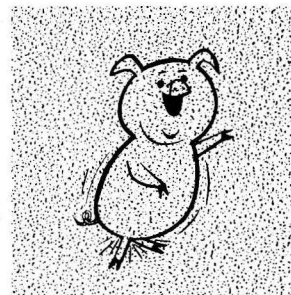
or as detailed as this drawing—



23.

Each is an example of line copy—because each has but one tone rather than a variety of shadings. The drawing may appear to have areas of light and dark, but actually each line is of the same density. It is the thickness of the lines, and the amount of white space between the lines which create the illusion of shades of gray.

An effective way to add shading or texture to your original—and still keep it within the linework limitation—is to use prepared shading sheets. These sheets are made of printed, transparent plastic and are available in hundreds of patterns. There are many brands, such as Zipatone, Presto-Tone, and Add-a-Tint; they may be purchased at any art supplies store.



position each clipping, use a T-square to check alignment of the copy. Rubber cement does not dry immediately, and there will be no difficulty in making an adjustment.

ORIGINAL COMPOSED OF NEW ART WORK

The preceding instructions on selecting material, and pasting up copy also hold true when you are composing your own art work. Listed here are some of the mediums most commonly used, and the techniques to be followed.

TYPEWRITER

Before preparing typed copy, be sure the type faces are clean, and the ribbon is well inked. Carbon paper ribbon, silk, and nylon ribbons all give excellent copy. Cotton ribbons should not be used, as the mimeographed copies will be fuzzy.

PEN AND/OR PENCIL

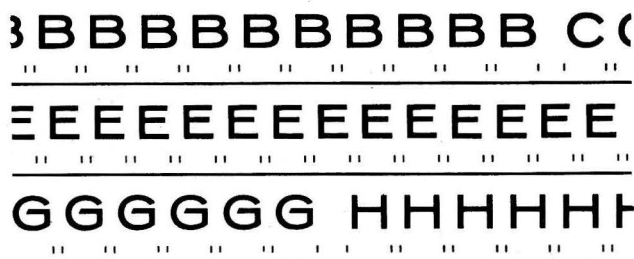
Pencil lines need not be thick, but should be firm and sharp. No. 1 and No. 2 lead pencils, or drawing pencils, give the best results. Since dense, black copy on a white background produces well, it is always advisable to use black ink rather than pencil.

RULING

If ruling is to be included, use a ruling pen and India ink. India ink is also helpful in touching up breaks in a solid area, or to strengthen a weak line in a drawing.

PAPER TYPE

Paper type (such as Presto-Type, Add-a-Type, Prestype, Fototype, etc.) can be used very effectively for composing headlines and titles. Some have adhesive backs, and are simply affixed to the layout sheet. Others are printed on cardboard strips and come in small pads. These letters are



individually inserted into a composition stick which automatically aligns the letters. When a line is completed, a strip of cellulose tape is applied across the back of the letters to hold them together. Then, remove the line from the stick and position it on the layout sheet. Use a T-square to align the type when pasting it on the sheet. This simple method of composing professional-looking type adds greatly to the final appearance of your mimeographed copy.

TOUCHING UP THE ORIGINAL

When the original is complete, remove any unwanted marks. Excess rubber cement may be simply rubbed off. Fingerprints, smudges, pencilled guide lines, etc., may be removed with an art gum eraser. Particularly stubborn marks (or unwanted copy) may easily be covered with Chinese white. Chinese white should also be used around the edges of pasted material to avoid the possibility of reproducing shadows on the stencil.

MAILING AN ORIGINAL

If your original is to be mailed, remember to mail it flat, between sheets of cardboard, to prevent wrinkling or folding.

25.

LAYOUT TIPS

Layout is a term that artists use, and because it sounds a bit technical, most of us shy away from attempting to make layouts. It simply means to arrange your message in such a way that the important points stand out and get first attention, and the entire message is easy to read.

WHITE SPACE

White space means the top, bottom, and side margins as well as the space between the typed copy and illustrations and headings. A balanced, uncluttered, easy-to-read page is usually the result of plenty of white space.

EMPHASIS

Decide what you want to emphasize, and

then plan how you will get attention for these points. Use lettering guides or hand lettering for the main headings. Or use typewriter caps. A simple, attention-getting heading can be achieved by simply spacing out the caps L I K E T H I S. Use one space between letters, and three spaces between words.

ILLUSTRATIONS

Select illustrations that tie in with your message. A. B. Dick tracing pages, or ready-to-use insets contain hundreds of illustrations. The tracing pages are available in special portfolios for schools, churches, associations, and commercial organizations. Your A. B. Dick products representative will be glad to show you the complete selection.

26.

\$00	
\$00	
\$00	
\$00	
\$00	
\$00	

A hand-drawn diagram of a closed, irregular curve. A horizontal line segment passes through the curve, starting from the left edge and ending at a point inside the curve. The line segment is drawn with a single stroke, and the curve is also drawn with a single stroke.

[illegible]

WELCOME

○ BULLETIN ○