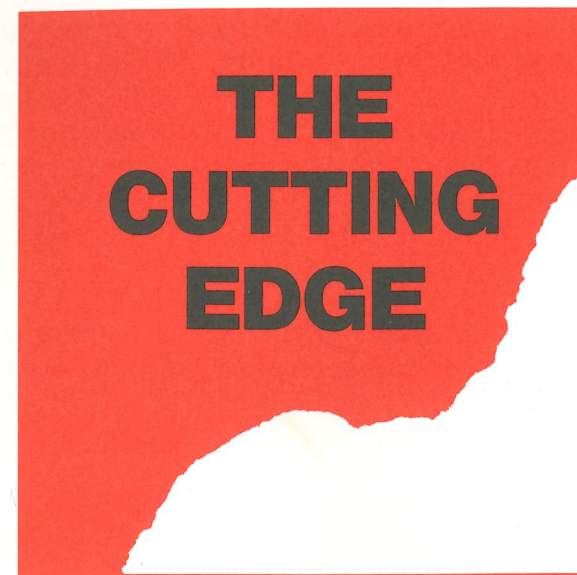


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Rev. 04/95



ELLISON LETTERMACHINE™  
...and so much more

INSTRUCTION BOOKLET  
ORIGINAL MACHINE

# Instructions

Your ELLISON™ LETTERMACHINE™ comes fully assembled and ready to use. Place the dies (letters, numbers and decoratives) in their storage racks. Have handy a supply of various materials you will be cutting with your machine. The ELLISON LETTERMACHINE will cut multiple sheets of material at a time, depending on the thickness of the material to be cut. See Materials Guide (page 12) for specific numbers on different materials.

The blade in the die does the cutting. This sharp cutting edge is covered with rubber to protect your fingers and to eject the material that has been cut. The machine applies the pressure needed to cut through the material.

## Operation

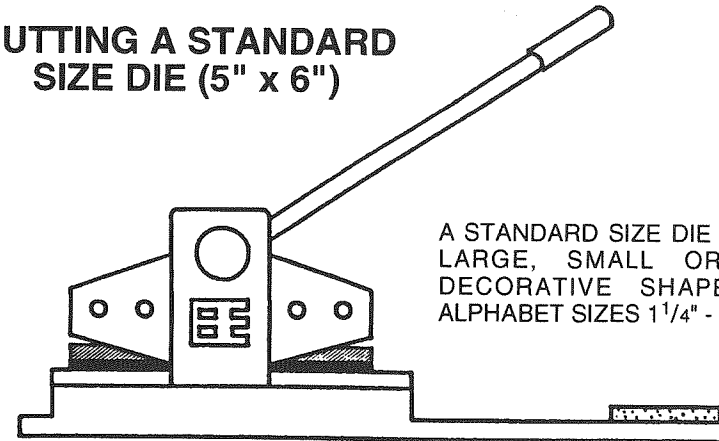
1. Raise the handle all the way up.
2. Place the paper against the rubber side of the die you have selected, turn the die over and slide it into the machine, **RUBBER SIDE DOWN**, so that the back of the die is even with the back side of the pressure plate.
3. Bring the handle down as far as needed to cut through the paper.

### \* IMPORTANT\*

4. After cutting, keep a good grip on the handle as you raise it. Keep your face away from its path because the handle could spring back quickly and cause injury.
5. Remove the die and the cut-out letters, numbers or shapes.
6. The ELLISON LETTERMACHINE can be used to cut anything scissors can cut - see Materials Guide (page 12) for suggestions.

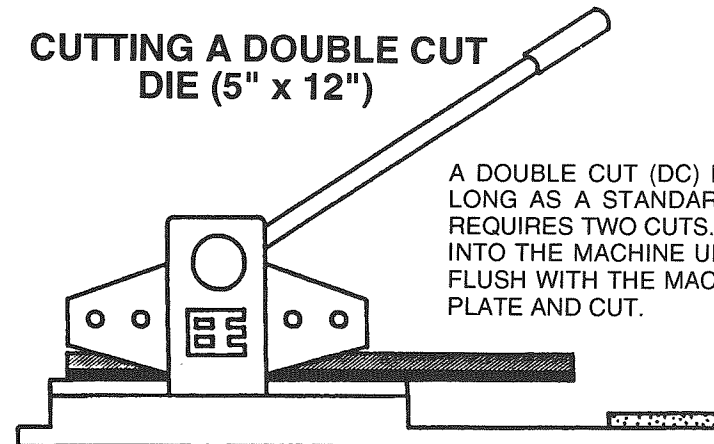
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## CUTTING A STANDARD SIZE DIE (5" x 6")

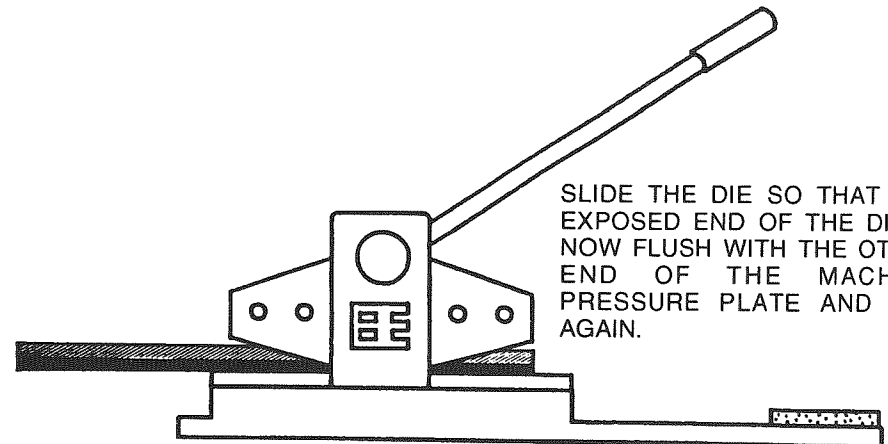


A STANDARD SIZE DIE CUTS A LARGE, SMALL OR TINY DECORATIVE SHAPE AND ALPHABET SIZES 1 1/4" - 5"

## CUTTING A DOUBLE CUT DIE (5" x 12")



A DOUBLE CUT (DC) DIE IS TWICE AS LONG AS A STANDARD SIZE DIE AND REQUIRES TWO CUTS. INSERT THE DIE INTO THE MACHINE UNTIL ONE END IS FLUSH WITH THE MACHINE PRESSURE PLATE AND CUT.



SLIDE THE DIE SO THAT THE EXPOSED END OF THE DIE IS NOW FLUSH WITH THE OTHER END OF THE MACHINE PRESSURE PLATE AND CUT AGAIN.

# Maintenance

**WRONG**



"My dies must be getting dull - they're not cutting very well anymore."


**RIGHT**

It is not the die that needs replacing. It's the cutting pad.

## RECOGNIZING A WORN CUTTING PAD

THE ELLISON LETTER MACHINE requires very little maintenance. After considerable use (usually 3-4 months or more), the cutting pad will become worn. This will be obvious to you because your machine will not cut as effectively through the appropriate number of paper sheets. At this point, the cutting pad will have so many grooves from previous cuts that the blade in the die will not make complete contact with the cutting pad. When this happens it is time to change the cutting pad, or to turn it over.



## CHANGING THE CUTTING PAD

1. Remove the four corner screws (12) with the 1/8" hex wrench provided and remove the cutting pad.
2. The pad is reversible. When the first side is worn out, turn the pad over and use the second side. Flip the pad side to side, not end over end.
3. After much use, the cutting pad will also become thinner (more compressed). To insure proper cutting action, place one or more mylar shims under the pad when it is flipped. **ALWAYS** use the  shim first, before using the regular shims. The proper cutting height is achieved when a die will cut the appropriate amount of material easily, without leaving deep grooves in the cutting pad with each cut. Each time you flip or change the cutting pad, you should check the cutting pad height:

(DO NOT re-install screws in the cutting pad until this procedure is complete.)

4. When the cutting height is correct, re-install the screws in the cutting pad. When cutting pad has been screwed into place, the screws should not sit above the level of the cutting pad. If screws sit too high, your cutting pad is too thin and should be replaced.  
\*It is important to keep the screws tightened.

## CHECKING THE CUTTING PAD HEIGHT

1. Select a large die with the cutting blade evenly distributed over the surface (ie 4" or 5" upper case S or large pumpkin #1A).
2. Place the die (rubber side down) on the new cutting pad in the machine with **NO** paper or mylar shims.
3. Press the handle down in the normal cutting action.
4. Remove the die. Slide out the cutting pad and check the impression made by the die. There should be a light impression of the die shape in the cutting pad.
5. If no impression is made, add one shim at a time until impression appears. **Always** use the  shim first, before using the regular mylar shims. This  shape helps to distribute the pressure more evenly in the machine.
6. When impression appears, try cutting four or five sheets of construction paper. If all pieces cut completely through, the pad height is correct and you may install the screws and proceed with cutting.

## KEEPING THE DIES CLEAN

It is important to use the die pick to clean out the bits of paper and other material that build up in the joints of the dies (where the blades meet). If unattended, these scraps will eventually push the blades slightly apart. This cleaning is especially important if you are cutting thick materials such as magnet or pop-up sponge.

## RECOGNIZING WORN PRESSURE BEARINGS

After several years of use, you may need to change the pressure bearings. It is time to replace pressure bearings when:

- handle sticks or action is not smooth.
- bearing assembly (17 & 18) is not snug on the cam when jiggled up and down by hand. (It is normal for bearings to slide back and forth sideways on the cam.)
- arc shaped end pieces of the bearing assembly fall out.
- Needle bearings come out. Do not use the machine once this has happened. Damage may occur.

(continued)

## Helps & Hints

- Paper can be saved if letters and designs are cut from long strips, rather than individual squares of paper.
- It is helpful to mark your paper cutter with lengths of colored tape to indicate the appropriate width for paper strips to be cut. Paper should be slightly wider than designs being cut. For example, use yellow tape to indicate width of paper for your 4" alphabet. Use red tape for 2" alphabet, and other colors for large and small dies.
- Don't forget — you can use your ELLISON LETTER MACHINE to cut a variety of different materials (see materials guide for suggestions).
- Fewer sheets of paper (or other material) should be used when cutting larger, more complicated shapes.
- When cutting thin fabrics, place a scrap of paper over the fabric on the die so that the material will slide into the press without slipping or wrinkling.
- When cutting with a die that is asymmetrical (uneven distribution of the cutting blade on dies such as capital T or sailboat), you can aid the cutting process by moving the die approximately 1/4" farther into the machine so that the end with the greater amount of blade is closer to the center of the machine (under the pressure bearings).
- A convenient way to store your dies is on their sides (the rack is placed so that the dies sit on their sides). This makes the die titles easier to alphabetize because we read from left to right, rather than up and down. The die user is more likely to return the dies to their appropriate alphabetized slot. It also helps to prevent catching the rubber part of the die on the shelf dividers.

## Materials Guide

Generally, the Ellison Letter Machine will cut anything that scissors will cut. When cutting woven materials, single threads will remain uncut at each juncture where the die blades meet. Snip them with scissors.

Your bearings will last longer if you do not overload your Ellison Letter Machine. Here are some guidelines:

NUMBER OF PIECES	PRODUCT
5	construction paper
6	butcher paper
1	posterboard
2	fabric — cotton, linen, etc.
★	felt — as much as will fit in the machine with a piece of paper
1	flexible magnetic sheets*
5	gift wrap
5	laminated tissue
1	sandpaper (use only fine grade)
1	self-adhesive felt*
1	self-adhesive rubber*
1	sponge (pop-up)*
2	static-cling vinyl*
2	tagboard/cover stock
4-5	wallpaper
1	spongy placemats
1	heat 'n shrink plastic*

\*Available from Ellison Educational. See catalog for details.

★Any letter or design will cut 2 folded invitations from construction paper.

★A backing paper should be placed on felt or delicate materials to keep the material from wrinkling (not necessary on backed materials).

★Fewer sheets of paper should be used with larger, more complicated dies (ie. large snowflake, large spider, large crab or 5" upper case W).


# Trouble Shooting

## PROBLEM

1. Dies do not cut through .....
2. Edges of letters not smooth .....
3. Upper or lower part of die does not cut .....
4. Rubber does not eject all parts of the cut paper .....
5. Paper letters/shapes come out wrinkled or "embossed." .....
6. Dies cut through only part of letter or design .....
7. Handle sticks: action not smooth .....
8. Blade on a double cut die damaged along sides .....

**Note:** Keep side posts tightened — periodically check screw located in the side post. Use the 1/4" hex wrench to tighten.

## SOLUTION

1. Cutting pad is worn out. If pad is worn on one side only, turn pad over for a fresh cutting surface. If worn on both sides, replace. If problem still exists: Add one or more mylar shims under the cutting pad until proper cutting action is achieved. Always use the  shim first.
2. Cutting pad is rough. Turn pad over. If needed, replace it with a new pad.
3. Push the end of the die that isn't cutting 1/4" farther under the pressure plate. This balances the pressure on asymmetrical dies.
4. Use the die to cut one pattern out of cardboard. Remove the rubber from the offending area. Insert the piece of cardboard into cavity and recap with rubber. If necessary, repeat procedure with a second piece of cardboard.
5. Press the handle down only far enough to make cut (usually about half way).
6. If, when you have tried solutions 1 and 3, the dies still don't cut completely, try cutting fewer pieces of paper at a time. Very large or intricate dies demand more pressure and may not cut through as many thicknesses. For example: 5" Circus E or snowflake.
7. Replace pressure bearings.
8. Screws securing the cutting pad are sitting above the level of the cutting pad and damaging the die blade. Tighten the screws so they are below the height of the cutting pad.