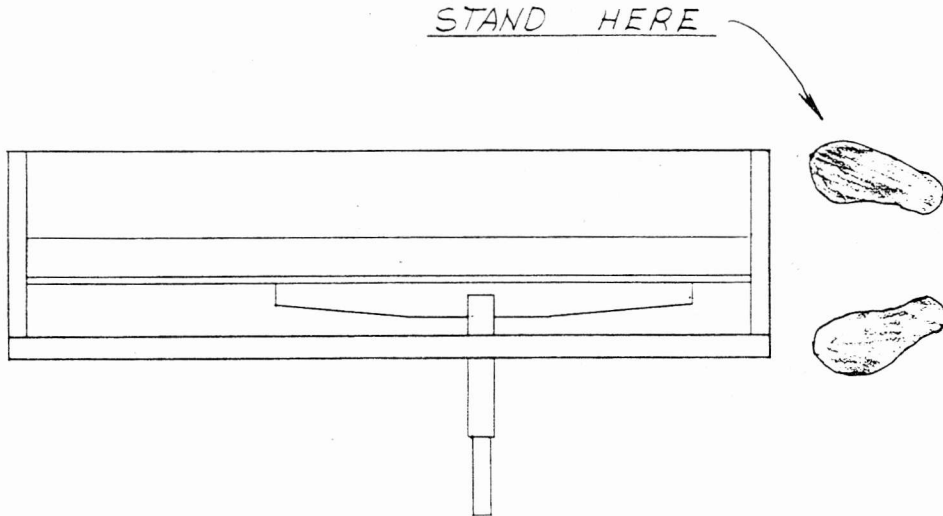


PROGRAM I – BASIC MAT KUTTING
Cutting Single Opening Mats

ALWAYS stand at the end of the mat kutter when cutting mats (see sketch below)

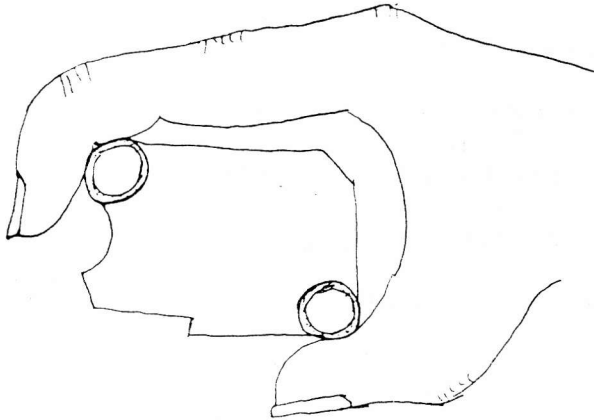


Loosen locking screw on the side of the duplicator housing. Move duplicator housing back out of the way. For our examples we will be using only 8" x 10" blanks simply for illustration. Use your Cardboard and Glass Cutter sample 8" x 10" mat blanks.

Set your mat guide to read 2" (see sketch below).....

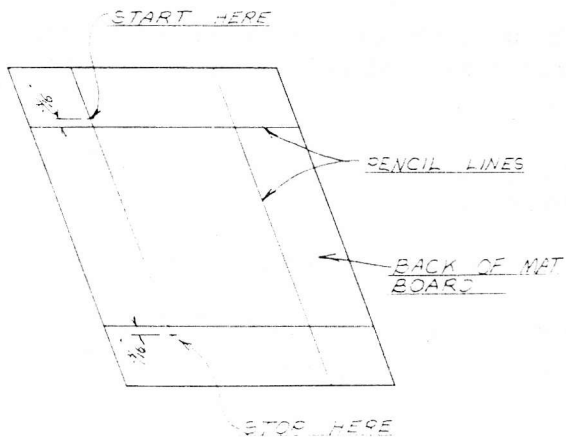


Raise kutter handle, using your left hand (it is only necessary to raise the handle about 2"). Place mat board face down underneath the kutter guide bar. Checking to be sure the mat board is flush against the mat guide bar, mark the mat from top to bottom (use 6-H pencil *only* - NEVER mark mats with a pen). Turn the mat board 90 degrees, mark again top to bottom, repeat on the other two sides. Take the kutter head (see sketch below for the proper hand placement.....



Rotate the blade cover forward and down and begin your cut at a point approximately 3/16" above where the two lines cross. Gently, but firmly, pull the kutter head down to a point approximately 3/16" below where the bottom two lines cross. Rotate the mat board clockwise and repeat on the other sides. You have now completed cutting a single mat. We suggest you practice until you have cut five perfect mats.

While practicing cutting mats change the mat guide setting to any other reading each time. See sketch below for starting and stopping lines.



..... SHORT STEP SUMMARY FOR CUTTING SINGLE MATS.

1. Determine mat blank size.
2. Cut mat to desired size.
3. Set the mat guide for desired border width.
4. Raise the kutter bar, place mat.
5. Position the mat blank against the mat guide bar.
6. Mark from top to bottom with a 6-H pencil.
7. Rotate the mat clockwise.
8. Repeat steps 6 and 7 three times.
9. Cut the mat.
10. Repeat step 9 until the mat is cut completely.

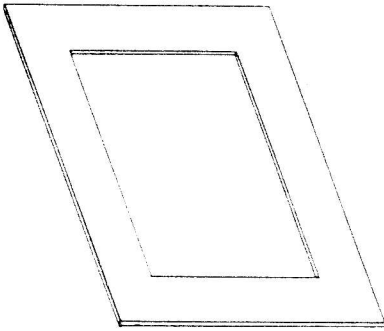
..... SHORT STEP SUMMARY FOR CUTTING DOUBLE MATS

In cutting double mats you follow the same procedure that is laid out above for cutting a single mat. We simply add a few steps.

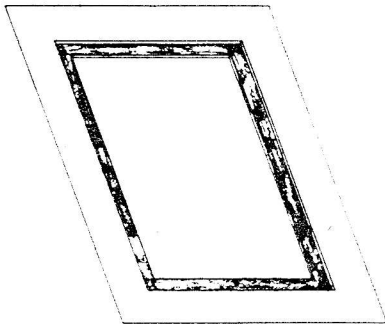
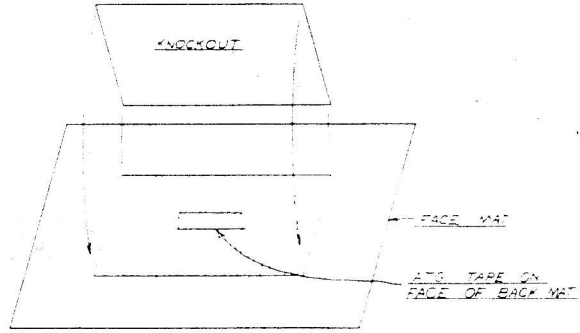
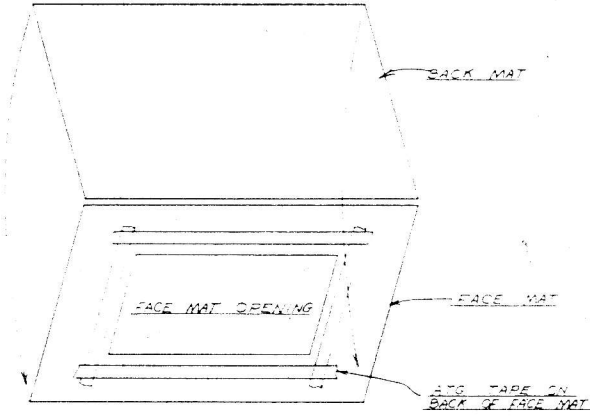
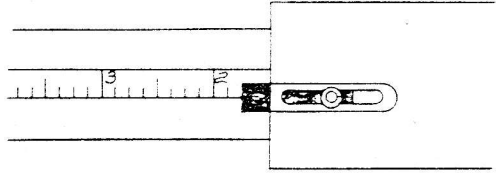
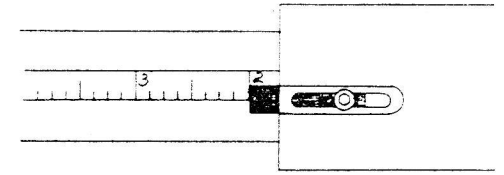
11. Take back mat and trim it down approximately $\frac{1}{4}$ " on the side and bottom.
12. Apply ATG tape to the back of the face mat and position back mat to face mat. (see sketch)
13. Turn mats face up, apply ATG tape to the face of back mat and put knock-out back in position. Reset mat guide to read $\frac{1}{4}$ " more than previous setting (see sketch).
14. Remove underlayment and repeat the marking and cutting exactly as you did in steps 5 through 10.

..... SHORT STEP SUMMARY FOR CUTTING TRIPLE MATS.

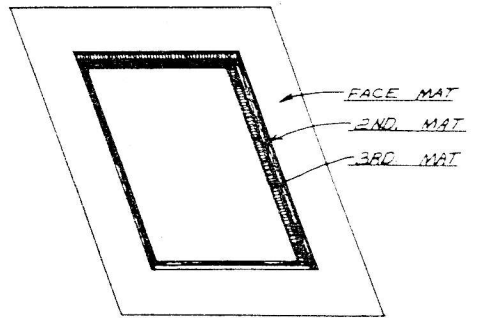
In cutting a triple mat you will follow the same procedures that are laid out above for cutting a double mat, you simply add a third mat blank and repeat steps 11 through 14.



SINGLE MAT



DOUBLE MAT



TRIPLE MAT

PROGRAM II

Single, Double, and Triple Mats With Uneven Borders Using the Duplicator.

Why use the duplicator? The duplicator is an attachment you will use to help you simplify the math in setting your mat guide for uneven borders when the following takes place. This is strictly an example.

Mrs. Customer has a picture that she wants matted in a ready made frame. The image size is $5\frac{1}{2} \times 7$. You would probably select for her a 9×12 frame. This means the TBW would be $3\frac{1}{2} \times 5$ which would give you a border width of $1\frac{3}{4}$ " sides and $2\frac{1}{2}$ " top and bottom. See formula for figuring your mat border size below.

9" x 12" . . . Frame size and mat blank size.
Less $5\frac{1}{2}$ " x 7" . . . Image size.
Equals $3\frac{1}{2}$ " x 5" . . . TBW.
Divide TBW by 2 $1\frac{3}{4}$ " x $2\frac{1}{2}$ ". . . Mat border size.

. . . .SHORT STEP SUMMARY FOR CUTTING UNEVEN BORDER SINGLE MATS

1. Determine mat blank size and cut.
2. Set mat guide for smallest number you are using, for example $1\frac{3}{4}$ " and lock in position. Move the duplicator up so that the long stop bar is against the back of the mat guide. Lock duplicator in position.
3. Raise the long duplicator stop bar, release mat guide and move out to the largest number you are using, for example $2\frac{1}{2}$ ", and lock.
4. Move the short stop bar up until it is against the back of the mat guide and lock.
5. Mark the widest number, for example $2\frac{1}{2}$ ", with a 6-H pencil. Release mat guide, move forward, push down duplicator long stop bar. Back the mat guide up against the long stop bar. This will put you back at the smallest number, $1\frac{3}{4}$ ". Mark and cut the two smallest sizes (left and right sides).
6. Raise the long stop bar, back the mat guide until it hits the short stop bar. Mark and cut those two sides (top and bottom). You have now cut a single mat with uneven borders.

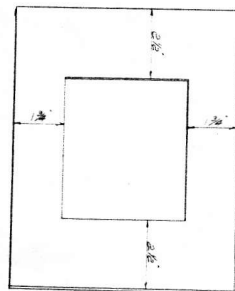
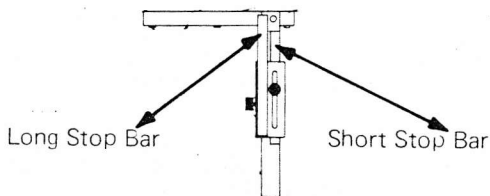
. . . SHORT STEP SUMMARY FOR CUTTING UNEVEN BORDER DOUBLE MATS. . . .

In cutting double mats you follow the same procedure that is laid out above for cutting a single mat. We simply add a few steps.

7. Take back mat and trim it down approximately $\frac{1}{4}$ " on the side and bottom.
8. Apply ATG tape to the back of the face mat and position back mat to face mat.
9. Turn mats face up, apply ATG tape to the face of back mat and put knock-out back in position. Reset mat guide to read $\frac{1}{4}$ " more than previous setting. Release the lock on the *side* of the duplicator housing, slide the duplicator back with the mat guide until the long stop bar is against the back of the mat guide. Lock duplicator housing (Remember - the difference between the uneven borders is locked into the duplicator).
10. Remove underlayment and repeat the marking and cutting exactly as you did in steps 5 and 6.

. . . .SHORT STEP SUMMARY FOR CUTTING UNEVEN BORDER TRIPLE MATS

In cutting a triple mat you will follow the same procedures that are laid out above for cutting a double mat, you simply add a third mat blank and repeat steps 7 through 10.

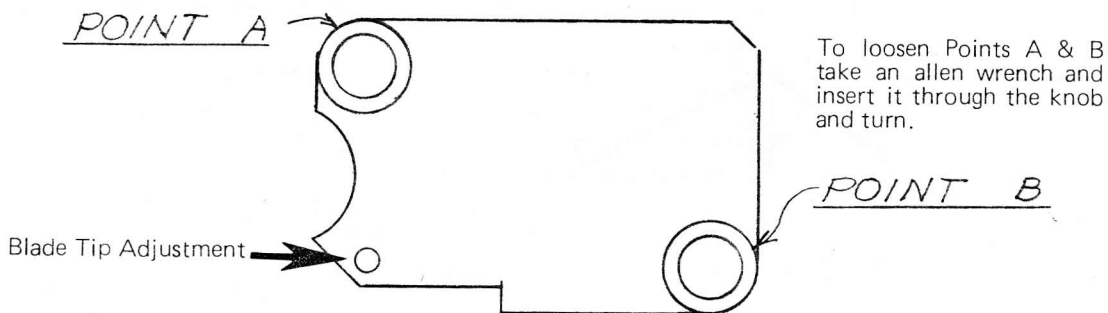


ESSENTIAL KUTTER MAINTENANCE

As previously mentioned, *regular and proper* kutter care is a must. To help you on your way to numerous years of unequalled service from your kutter, we recommend that you follow these steps (daily or as required):

1. Protect kutter's base with scrap mat.
2. Dust off all areas of the cutting bar with a brush.
3. Clean between rod and cutting bar with Q-tips and beveled mat scraps.
4. Flush cutting bar and head with lighter fluid and run head up and down. This should strip old silicone build-up.
5. Dry completely with absorbant material.
6. Apply a *light even coat* of silicone spray lubricant (protection of the general area around your kutter is recommended).
7. Burnish it into the metal by running the cutting head up and down.
8. *Wipe off all excess silicone before it drys! Dried excess silicone can gum up a kutter making control difficult.*
9. Apply silicone to hinges and bearing blocks - wipe off excess.
10. Apply silicone to all guide areas noted and wipe dry.
11. Clean kutter's base with a desk cleaner.

HOW TO CHANGE THE BLUE BLADE



Loosen points A and B. Pull blade forward. If both ends are used discard blade properly. To replace Blue Blade insert into blade assembly, cutting edge down. **Caution:** Do not allow blade to project out too far. The blade tip adjustment on the lower tip of the assembly will have to be adjusted as the Kutter wears. **DO NOT** move the blade tip adjustment unless you are getting wavy cuts. See "Techniques of Mat Kutting".

GLOSSARY OF FRAMING TERMS

BLADE ASSEMBLY - the device used to hold the Blue Blade securely in cutting position.

DOUBLE MAT - two mat blanks permanently put together with one opening with two colors of a given size showing (example: 2" top mat showing - ¼" second mat color showing).

DUPLICATOR - attachment on your straight line kutter that helps you to do mats with unequal borders.

FACE MAT - the top mat.

GROOVER - gold attachment on side of Heavy Duty Mat Guide that is used in the grooving techniques taught in programs 3 and 4.

HOOKED CORNER - a corner that is not a perfect 90 degrees.

IMAGE SIZE - the amount of the art work that you want to show through the opening in the mat.

KEETON BLUE BLADES - a blade used in the bevel side of your straight line kutter.

KEETON HEAVY DUTY MAT GUIDE - instrument attached to your kutter that allows you to set and layout your mat borders.

KEETON STRAIGHT LINE KUTTER - equipment used to cut openings in mat blanks.

KNOCK-OUT - the center portion of the mat blank that is cut out to form the opening.

LAYOUT - lines you draw to give you your border width as well as the cross line for starting and stopping your cut.

MAT BLANK - a piece of mat board cut to a given size (example: 8 x 10).

MAT BOARD - colored board (paper or fabric) used in decorating prints or art.

MATTING - process of creating space between art work and glass so that art will not stick to the glass.

OPENING - hole that is cut out of the mat blank (example: 8 x 10 mat with a 5 x 7 opening).

OVERCUT - a cut that is cut beyond corner to corner.

PRINT SIZE - the total size (image size plus border) of the art work being framed.

SINGLE MAT - mat blanks with one opening cut in it (example: 8 x 10 with a 5 x 7 opening).

TBW - Total Border Width. Total amount of mat board you can see after the opening has been cut.

UNDERCUT - a cut that is not complete from corner to corner.

UNDERLAYMENT - piece of 6 x 40 mat board placed underneath the cutting bar to protect the base of the kutter.

UNITED INCHES - length plus width of mat blank (example: 8 x 10 equals 18 united inches. This is the way all matting cost must be derived. See mat board pricing charts on pages 3 and 4.

WAVY CUTS - a cut that is not parallel to the outside borders.