

*Purchased  
May 3, 1992*

# OVAL-ART

## INSTRUCTIONS

We believe that Oval-Art is the finest & most accurate oval machine in the world, and we want it to work well for you. Please read this manual completely and watch the VIDEO.

OUR WARRANTY IS 5 YEARS  
AND COVERS MANUFACTURING  
AND DEFECTIVE PARTS.

ACCURACY IS ALSO COVERED.

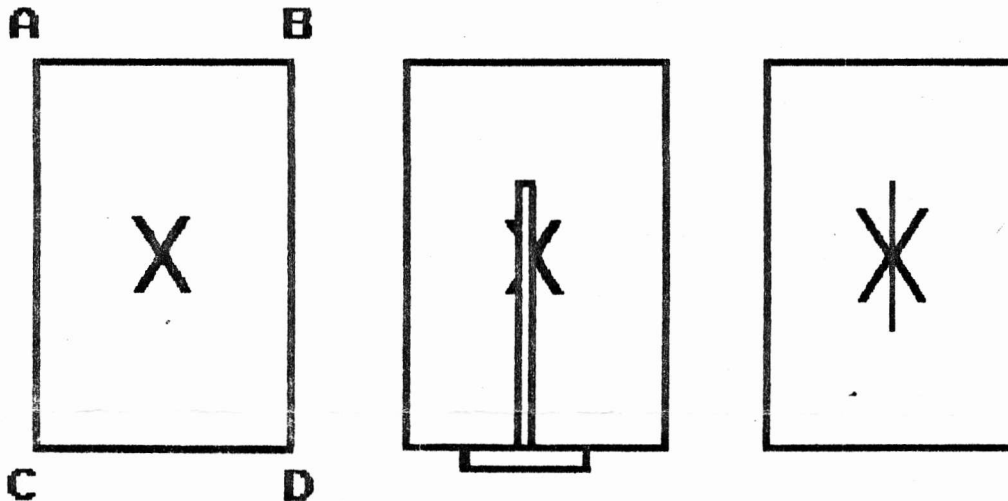
If you experience a problem, we want to be the second to know about it. If you return the unit for repair, be sure to include a note describing the problem, and a sample mat illustrating what is happening. Not a bad idea to phone us first...Maybe we can solve the problem together.

# OVAL-ART INSTRUCTIONS

One of the many advantages of Oval-Art is that it does not require a special table.

If you have plenty of room in your shop, it is a great idea to have a table for the cutter, one which you can walk all the way around. If this is not possible, no problem, just use the corner of your existing work table. In either case, the surface should be of 3/4" thick plywood, as smooth and level as possible. A piece 24"x24" is suggested, and a larger board should be available for the occasional large opening.

**MAT PREPARATION:** Working with the COLOR side up, locate the exact center of the mat. One easy way is to use a T-square at corners A-D, drawing a short PENCIL line near the approximate center. Then B-C. The lines intersect at exact center.



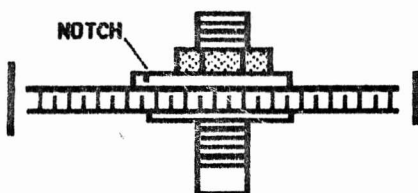
Next..Place the square at the bottom of the mat, so that it passes thru the center, and draw a vertical PENCIL line, at least 2 1/4" above and below the X ( for smaller ovals) or 3 1/4" for 5" x 7" or larger ovals. NO VERTICAL LINE NEEDED FOR CIRCLES.

**SETTING THE SIZE: -OVALS** Since ovals have 2 dimensions, Oval-Art has 2 scales. The right scale is used for setting the WIDTH of the oval. Loosen the knurled washer and slide the right assembly until the NOTCH lines up with the desired width. Tighten the washer finger tight, or use the allen wrench in the hole in the washer to lever it tight.

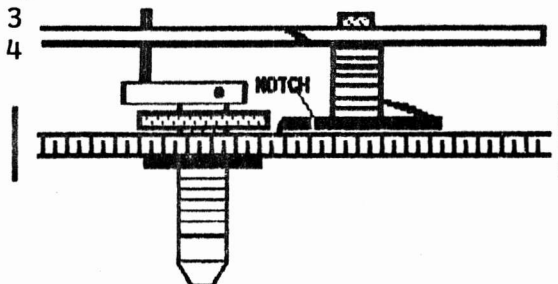
The left scale is for setting the DIFFERENCE BETWEEN THE WIDTH AND HEIGHT. Use a 9/16" wrench to loosen the nut and move the left assembly until the notch lines up with the desired DIFFERENCE. Lock the nut tightly with the wrench. RIGHT SIDE CAN BE FINGER TIGHT....LEFT SIDE MUST BE WRENCH TIGHT.

Example: for an 8" x 10" right at 8..left at 2  
 9" x 12" right at 9..left at 3  
 16" x 20" right at 16..left at 4

## THE LEFT ASSEMBLY

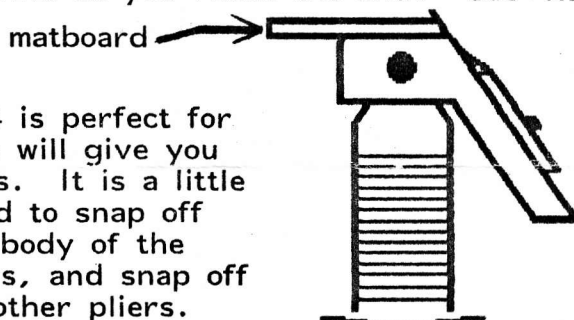


## THE RIGHT ASSEMBLY



**CUTTING THE MAT:** ALWAYS use an undermat, or matboard. For openings of 5" x 7" or larger, use the largest aluminum base. ( smaller base for smaller ovals ) Line up the base on the pencil marks you drew and nail thru the matboard, & the undermat, into the plywood. 2 nails, diagonally, are sufficient until the plywood has been used hundreds of times. The center hole in the base should be centered over the X and the lines at each end of the base should line up with the marks etched into the long ends of the base. PLEASE USE A PLASTIC TIPPED HAMMER FOR NAILING. Plastic will not dent or mark up the base, and will not move the metal in the slot area. The slot is machined to just allow Part B to slide thru it. If you reduce the size of the slot, you might get some binding. If you cannot find a plastic tipped hammer, we have some.....good ones... for \$11.00.

Move the slide in the base until the vertical pin is around the center of the base. The threaded tube in the left assembly will fit down over the vertical pin, and part 'B' will slip into the upper slot in the base. Lower the upper unit into the proper positions on the base. You will probably have to rotate the large black knob a little to get it to drop into the slot. Lower it gently so the blade tip rests on the mat. You DO NOT have to start the cut in any particular place, as with other cutters. Your starting spot will be dictated by the table. If you have a free standing table you can walk around, it matters not where you start. If you work on a table corner, and cannot walk the entire way, you will need to twist up a bit to start the cut, and unwind as you reach the end. See 'REMARKS' page.



**THE BLADE:** X-Acto #24 is perfect for our machine. Each blade will give you 12 or more good oval cuts. It is a little too long, so you will need to snap off the back end. Hold the body of the blade with a pair of pliers, and snap off about 1/8" or so with another pliers.

#### SETTING THE DEPTH :

Loosen the 2 allen screws and slip the blade in from the bottom. Use a scrap (beveled) of mat up against the tip to be sure that extension is enough to go thru the mat, plus 1/16" or so.

THE CUTTER IS DESIGNED TO MOVE CLOCKWISE DURING THE CUT, SO BE SURE THAT THE BLADE IS INSTALLED FOR THAT DIRECTION.

**LEFT HAND:** The left hand should rest lightly on the large black knob, with just enough downward pressure to keep part 'B' in the upper slot, as the cut is made.

**RIGHT HAND:** The right hand should hold the MASTER BAR behind, but near the blade holder assembly. We have found that results are better, as the two hands get closer to each other. Don't hold the little black knob, except on the maximum size ovals or circles.

**MAKING THE CUT:** ENTER THE MAT GRADUALLY, over an inch or so, AND NOT AS YOU ARE USED TO DOING WITH YOUR STRAIGHT CUTTER. The entire cut can be made in just one pass, but that does not mean that great pressure must be exerted. Remember, the mat is thin, and the blade is sharp, so take it easy. If you get a little bump at the stop/start spot, it is probably due to too much starting pressure. Many owners make their cuts with 2 passes, one just partially thru the mat, and the second time around with just a bit more pressure.

DO NOT STAND IN 1 SPOT AND TRY TO MAKE THE ENTIRE CUT. For a free standing table, start anywhere, and keep your arms parallel throughout the cut. See sketch on 'REMARKS' page for cutting on a table corner.

After finishing the cut, use a screwdriver to pry off the base. Both bases have slots underneath for that purpose.

**CIRCLES:** Find the center. No need for the vertical line. Place the pointed pin at the center of the X and tap it with a hammer, making an indentation in the mat. Put the pointed pin in the white circle base and put the base on the mat. Feel for the indentation, which assures you that the base is properly centered. Use 2 of the hardened steel screws in the countersunk holes and start them with a hammer. Finish with a phillips head screwdriver. (perfect job for a battery operated driver)

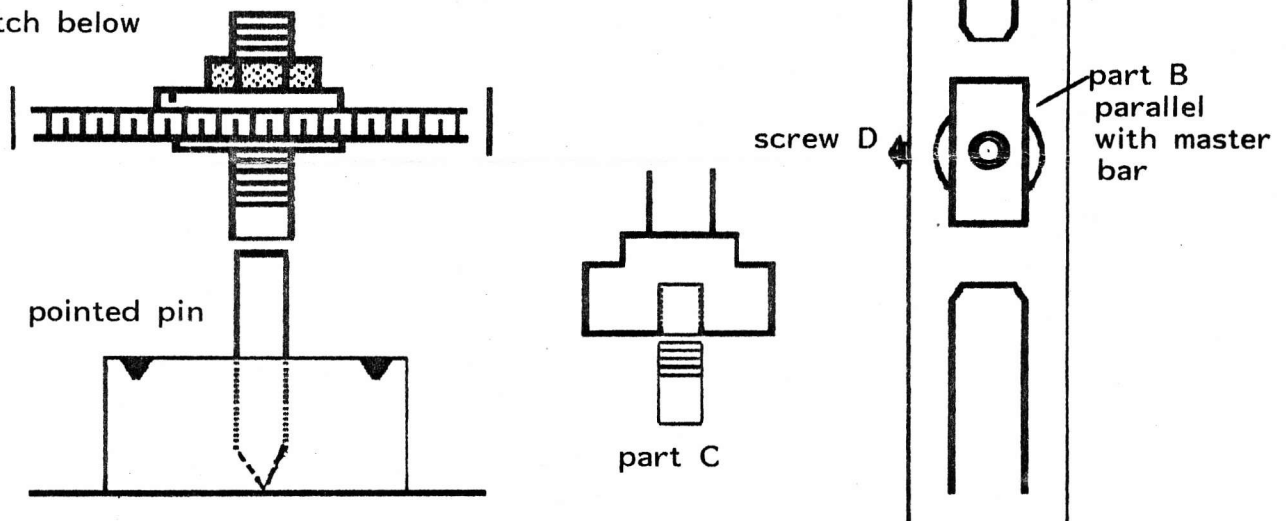
Screw part 'C' into part 'B'. Turn the large black knob until part 'B' is parallel with the master bar and then firm up screw 'D'. DO NOT OVERTIGHTEN. Set the desired DIAMETER of the circle on the right scale. The left scale is not used for circles less than 20 inches. When 'B' is parallel, the blade is set at the proper cutting angle for circles, and it doesn't matter where you begin the cut. As noted before the table arrangement will determine that. THE HAND POSITION AND ENTRY AND THE CUT IS THE SAME AS FOR OVALS. Lower part 'C' into the base center hole and make the cut.

For larger circles, leave the pointed pin in the center hole after screwing the base down, and don't use part 'C'. Use the left assembly in this case and set the notch on the left added to the right to give you the desired diameter.

Ex. for a 23" circle, you can set the right at 18" and the left at 5"  
 or " " " " " " " " 19" " " " " " 4" etc. etc.

This will allow you to get out to about 27" with a bevel.  
 The left assembly tube fits down over the pointed pin.

See sketch below



**DOUBLE MATS:** The bottom mat should be a bit smaller than the top. Tape or glue the 2 mats together along the outside edges, both with color side up, and the top mat...on top. Find the center of that top mat and mark as usual. Use an undermat and nail the base. Assuming you want the bottom mat to have a hole 11" x 14", with a 1/4" lip all around, you should set the right notch at 11 1/2", and the left at 3". That means that the hole in the top mat will be 11 1/2" x 14 1/2". The blade setting is exactly the same as usual, and that means that the blade tip will enter slightly into the bottom mat, but that is of no consequence as it won't be seen. Make the cut. Next, move the right assembly in a few inches or so...LEAVE LEFT ASSEMBLY ALONE. Make another cut. This creates an oval halo, which you should pry up and remove. Now you have access to the bottom mat. Move the right assembly to 11", and make the cut. Because you are one mat level lower, a little more than usual downward pressure should be applied on this second cut. Pry off the base, and you will have a perfectly matched double mat. Triple mats are accomplished the same way, starting with 3 mats attached. Procedure is the same. For the 3rd mat, extend the blade just a bit. REMEMBER, DO NOT MOVE THE LEFT ASSEMBLY.....

INLAYS: Mark the outside mat and nail down. Using the same dimensions as above, make the  $11\frac{1}{2}'' \times 14\frac{1}{2}''$  cut. Remove the base and the mat. Nail the base down on the inner ( lip ) mat. DO NOT CHANGE THE CUTTER SETTINGS. Make the cut. NOW, move the right assembly in  $\frac{1}{2}''$  and make the cut. This created a  $\frac{1}{4}''$  halo. Remove the base and halo. Use a few pieces of tape on the back of the outside mat, so that some of the tape overhangs the bevel. Fit the lip into the outside mat and secure to the tape. When it is perfect, turn it over & tape all around.

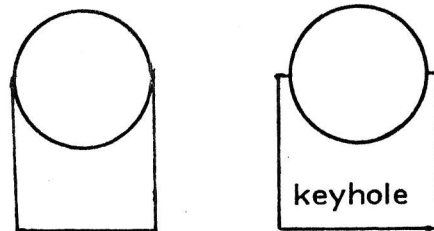
GLASS MATS: Clean the glass and cover with contact paper. Center the base and attach to the contact paper with double faced tape. Set blade tip so it just barely sticks out and cut some rings in the contact. Peel out one or more of the rings. Burnish what is left down tightly to the glass. Leaf or paint the exposed glass. When dry, remove the rest of the contact paper.

FANCY MATS: Many complex and creative mats can be done with our machine, because of its unique ability to make an oval or circle in just one pass. That also means that you can cut a partial oval or circle, and combine those partial cuts with straight cuts. All you need to know is where to start and stop your partial cuts. Light pencil lines will do it. Also, bear in mind that the blade tip is  $\frac{5}{8}$  of an inch behind the leading edge of the blade holder. You can make a pencil mark  $\frac{5}{8}''$  ahead of where you want the blade to stop, and you will know that you're there when the leading edge reaches that mark.

MULTIPLE OPENINGS: With Oval-Art you can cut as many holes as you like, and in any direction. Use the back of the mat for layout work, as you will need to determine the center of each hole. When this is done take a nail and punch a hole at each center point. Turn the mat over and there are your centers. Use the T square to draw the vertical lines for each. Nail the base down over 1 center...cut the hole....pry off the base....nail the base down over the next center...etc.

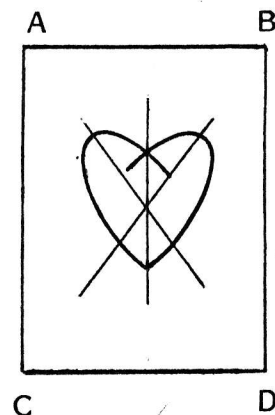
CATHEDRAL MAT: This mat is nothing more than a circle or oval near the top of the mat, and then squared off with a straight mat cutter.

These are not easy to do, for 2 reasons. Our bevel is generally not the same angle as the various straight mat cutters, so some sanding is generally required. Also, the point where the 2 cuts meet must be very precise, and that's tough. It can be done, so take your time. Some prefer to cut a keyhole mat, which is very fast, and the bevel difference will not be noticed.

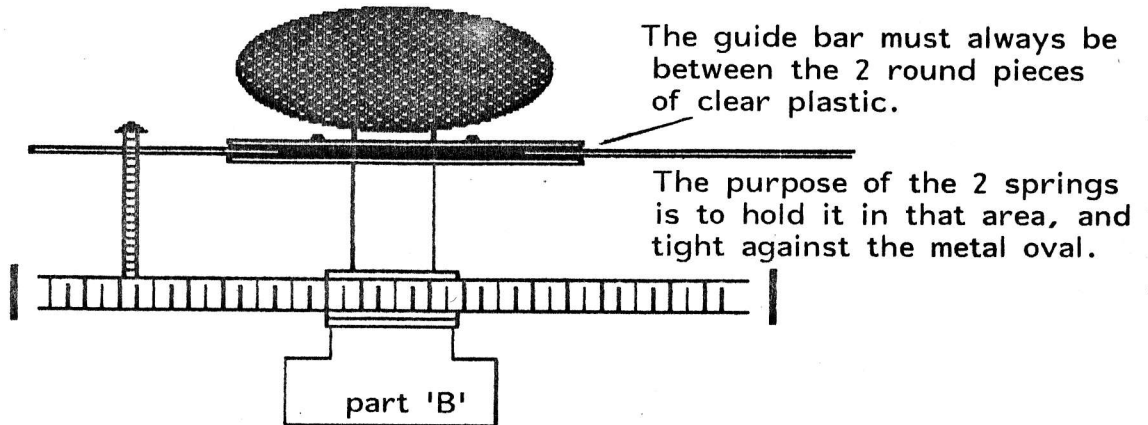


THE HEART: Do your line up work as for an oval, with the vertical line being a little longer. Line up the base as usual, but this time, on the A-D diagonal line. Using an example..use the smaller base...set the right assembly at  $4\frac{1}{2}''$  and the left at  $3''$ . Set the blade tip at the bottom of the vertical line. Enter the mat more abruptly than usual. Continue the cut until the cut crosses the upper part of the vertical line. Stop..

Remove the base and realine it on the B-C line. Start the cut on the left side of the upper vertical line and continue until it reaches the original starting point. You will feel the blade enter that spot..Stop. Some prefer to cut the heart, starting with the base at B-C, and then A-D. Try both ways. Line up work is critical so the bottom of the heart is a nice neat meeting of the 2 cuts. If you are going to cover the mat with fabric...it is not so critical.



## REMARKS



OK...SO WHAT CAN GO WRONG ??

Our 17 years of experience has shown that very little can go wrong with Oval-Art.

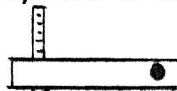
If there is a problem, it usually centers around 2 things. First, the cutter binds in the base making it difficult for the cutter to move smoothly during the cut.

SOLUTION: If the cutter is new, it may be tight due to the close tolerances we build in. Use the Tri Flon to keep 'B' lubricated...Also, the base slide.

If the cutter is older, it may be that you are using a metal hammer to nail the bases down. This could cause a little bump or burr to form at the edge of the upper slot. Run your finger down both sides of the upper slot. If you feel anything, file it away....gently..

Second..a start/stop bump...If you get the bump all the time..the cutter may need an adjustment. send it back to us for immediate..no charge...repair. If you get the bump sometimes, SORRY, but, it has to be you OR your technique. Make sure the blade extends only a bit as shown. Enter the mat gradually, or make the cut in 2 passes or more to illustrate to yourself that little downward pressure is required. Other possibilities...left assembly not wrench tight or right not tight.

Be sure that the machine screw in part 'E' is not bent to one side. If it is, try to get it straight, or send

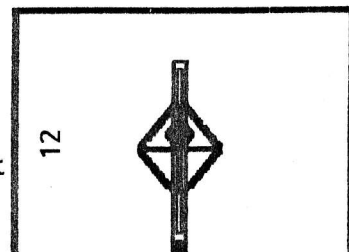


upper unit back. Do not adjust the angle (2 allen screws) without calling us first.

## WORKING ON THE CORNER OF A TABLE

Position yourself as illustrated. Left hand on large knob. Reach around and OVER the left arm with the right & hold the master bar. Lift the blade 3 tip a little and enter the mat GRADUALLY.

When the small knob nears the 3 area your arms will be parallel. Keep them that way and walk around the corner pulling the cutter towards you.



Start here facing 12... small knob towards 9

Finish over here to the left



9

## THE CUTTER SHOULD MOVE CLOCKWISE

### FINAL NOTE AND TIPS

When changing the V-groover back and forth, be sure that you do not create vertical play in that unit. Be sure that part 'E' is wedged down with your finger so the blade holder fits all the way up on the exposed flatted bar. After locking the blade holder or groover on, check for excessive play. There should be just a tiny bit. If there is too much..remove and put it back on properly.

The bottom of the blade holder should be even with the bottom of the aluminum base. It is set that way at the factory, and should never change....but...once in a long while one does. It's easy to check. Hold the base in your left hand. Set the cutter on the base normally, and move the right assembly until it touches the base. Turn it all over and run your finger across the meeting spot.They should be close to the same level...a 64th of an inch one way or the other is OK.

Remember to keep your right hand on the master bar somewhere near the blade holder area.....not on the small knob ( except for the very large ovals or circles )

If you drop the base on the floor, check for burrs, and also to be sure you have not bent the vertical base pin. Write us for replacement. \$1.50 incl postage.

If you lose part 'C' use a standard 1/4-20 thread bolt 3/4" long, and hack saw off the head .

When cutting different thickness material use a scrap of that board to set blade depth. If it is very thick, plan to make the cut in several passes, working your way down on each pass. You may want to change the blade depth setting once or twice as you go.

REMEMBER TO MOVE WITH THE CUTTER AS YOU MAKE THE CUT, ALWAYS PULLING IT TOWARDS YOU...NEVER PUSHING IT AWAY. That means you twist up a bit to start and unwind as to go. Don't stop moving as you approach the end of the cut. I've noticed that alot of people do that. They walk almost all the way and stop...and end up pushing the cutter the last several inches. That might cause a bump, since you are really changing the bar angle when you stop pulling and start pushing.

**WE HOPE YOU WILL WATCH THE VIDEO  
BECAUSE IT WILL ANSWER MANY OF YOUR  
QUESTIONS.**

We hope you will enjoy many years of successful mat cutting, and of course , make alot of profit with Oval-Art.

Thanks for buying it.



Gene Green Assoc. Inc. 22 Windsor Isle...Longwood, Fl. 32779...407-333-0286

## THE ACCESSORY PACKAGE

UNIVERSAL BLOCK  
SWIVEL KNIFE

ALUMINUM TUBE  
EMBOSSING TOOL

GLASS CUTTER ARM  
ROLL OF TAPE

The universal block attaches to the master bar and holds the other items listed above.

**CUTTING GLASS :** Clean the glass and place it on a non slip surface, or lay it on a smooth surface and tape the corners to the table to keep the glass from moving during the cut. Cut 4 small pieces of the double faced tape and stick them to the underside of the base. If the glass is a couple inches larger than the finished size will be you will not need to mark the glass to find the center. Chances are you can eyeball it close enough. Stick the base to the glass. Looking at the universal block you will see the numbers 1 & 2. Install the block from UNDER the master bar with the thumb screw locking against the side of the master bar WITHOUT the decal ruler. You will note that the # 2 is right side up. The 2 is to remind you to subtract 2" from the desired size. So, if you want an oval glass 12" x 16", you will set the block so that the edge of the block is at 10". The left assembly is set to 4" as you normally do.

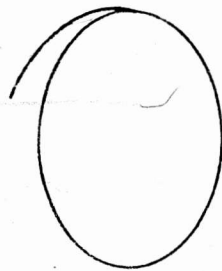
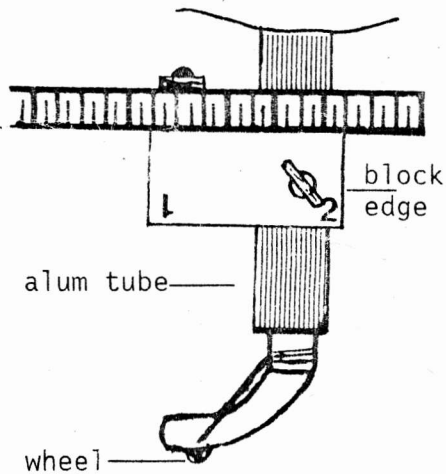
Install the aluminum tube in the hole in the block and the glass cutter arm in the tube. There is a magnet at the top of the tube which will keep the arm from falling out. Remove the blade or retract it, and set the alum tube so that the bottom of the wheel would be approximately at the level the blade tip was.

Place the cutter on the base. Before applying pressure move the arm out to a point outside the intended arc. As you begin to apply pressure you will see the arm swing into the proper arc. So, start with very little pressure and as you enter the correct arc apply the pressure. If you cut glass by hand you know that the correct pressure is just enough to see and hear the score. Stop the score at the start point. **DO NOT GO OVER AN OLD SCORE.** Remove the base by twisting it off. Turn the glass over and apply thumb pressure directly over some part of the score. You will see the glass fracture and the score will run for 4 or 5 inches. Where it stops press again, and repeat until the entire score is fractured. Using a regular hand glass cutter make 3 or 4 scores A-B, beginning  $\frac{1}{2}$ " away from the oval score. Turn the glass over and press on these scores. The outside pieces will fall off, leaving you a perfect oval glass.

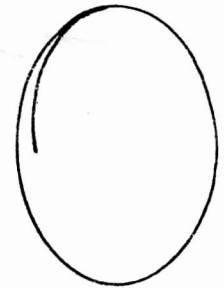
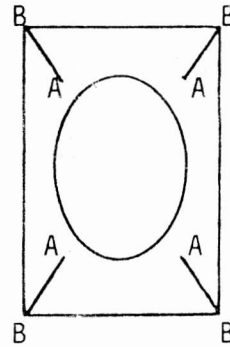


**SWIVEL KNIFE:** Install the universal block from the top of the bar. The #1 will be upright. The 1 is to remind you to subtract 1" from the desired size. Insert the body of the knife in the hole in the block and secure with the thumb screw so that the blade tip would be about where the tip of the X-acto is. Remove or retract the X-acto. Turn the blade **INSIDE** the intended arc, and as you apply pressure it will move into the correct arc. This is a welded blade, so don't try to make the full cut in one pass. Plan to go around 2 or 3 times with increasing pressure each time.

**EMBOSSING TOOL:** Fits in the hole in the block and makes an indentation in the mat. You can also use it against a straight edge to emboss your straight cuts.



begin score with  
arm outside  
intended arc



swivel knife  
begin cut  
inside intended  
arc

U. BLOCK UNDER MASTER BAR FOR GLASS.....AND.....ABOVE FOR SWIVEL KNIFE  
THUMB SCREW LOCKED AGAINST SIDE OF BAR **WITHOUT** THE DECAL. BOTH CASES

## SPECIAL POINTS TO REMEMBER

1. Although our cutter enjoys the unique advantage of being able to make the entire cut in just one pass , many owners prefer to make 2 passes on standard ovals and circles. ( one pass, of course, on fans, hearts, and special creative mats. ) When making 2 passes, the first should begin with the blade gliding into the mat as a plane would land, and with the blade only going part way thru the mat ...using light pressure. The second pass should be with the same pressure, and will go thru the mat.

IF YOU MAKE THE CUT IN 1 PASS AND SOMETIMES EXPERIENCE A START STOP BUMP .....try the above method.....

2. The right hand should hold the bar near the blade area, AND NOT THE LITTLE BLACK KNOB.
3. Walk around the table, or at least work on a corner and walk the final quarter of the cut. ( see instructions for working on a table corner )