DK MONORAIL ANGLE SYSTEM

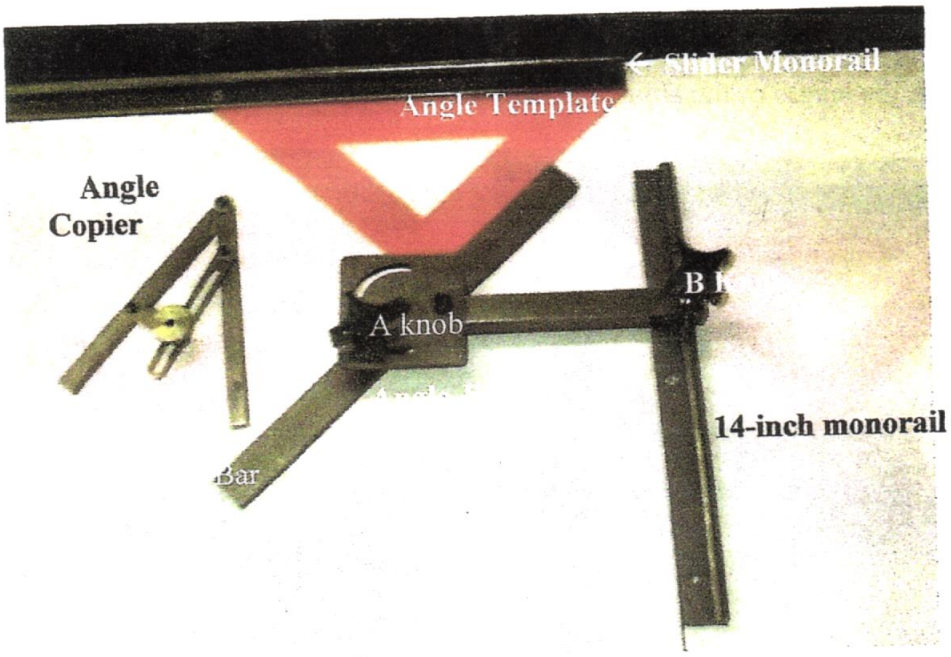


Figure 1

The Monorail Angle System is designed to work with the DK Monorail Stripper System. It can be attached to your worktable. The Angle System comes with a 14-inch monorail that is placed at a 90-degree angle to the DK Monorail Stripper. Use a square to ensure accurate placement. Leave about a four to 6 inch space between the 14-inch monorail and the DK Monorail Stripper. As you can see, the Angle Jig will rotate 180 degrees. In order to set the Angle Jig to the precise angle, you can use off–the-shelf angle templates for 30, 45, 60, or 90 degrees or use the Angle Copier to duplicate an angle from a pattern. Then use it to set the Angle Jig. **If your geometric designs require more than a 14-inch monorail to handle the scoring operations, you can use a 30-inch monorail in place of the 14-inch one.**

Special Note: When you are using the angle system, it is very important to inspect the break line. If there are any imperfections, such as jagged edges, they must be ground off before you continue. Jagged edges will prevent you from getting perfect angles.

Our **"ANGLE COPIER"** is no longer available. You may purchase a similar **ANGLE COPIER** at an art supply store.

Take angle copier, place one side against the monorail base. Loosen the angle bar knob and adjust it to fit against the copier. When finished tighten the bar knob. (Fig. 20)

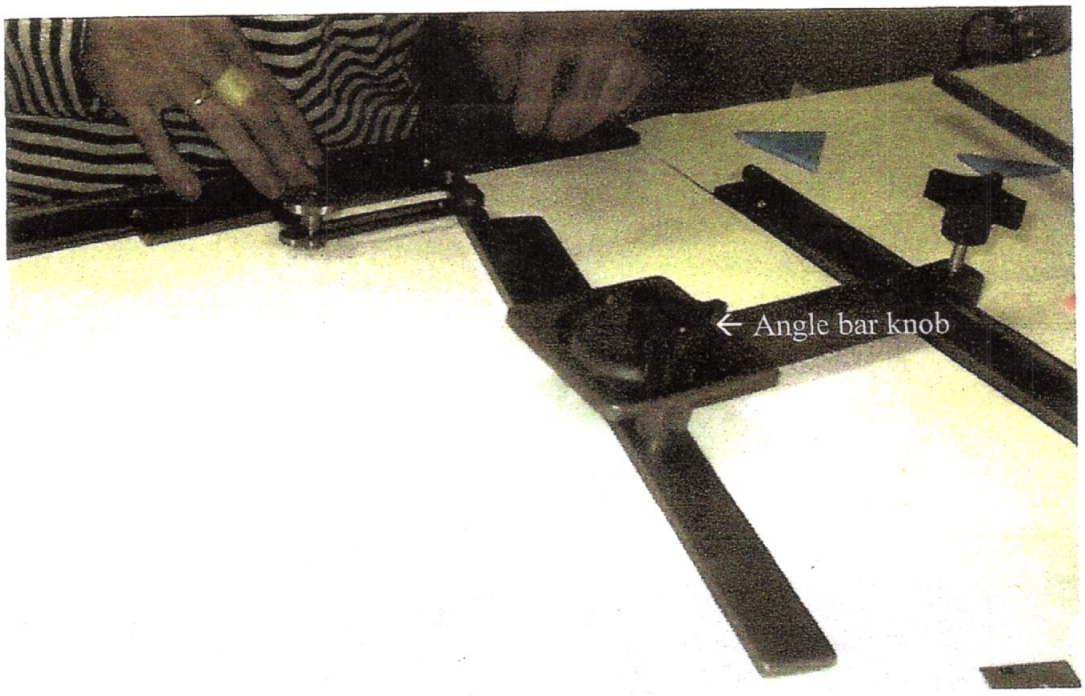


Figure 20

Take your strip of glass; lay it flush against the angle bar and the corner against the monorail. Score glass. If the angle system is to close, loosen the monorail nut and slide it up. Score your glass and break it. (Fig. 21)

Figure 21

Lay your glass on the pattern to make sure you have the proper angle. Mark the glass with a small permanent black marker at points A & B. (See figures 22 & 23)

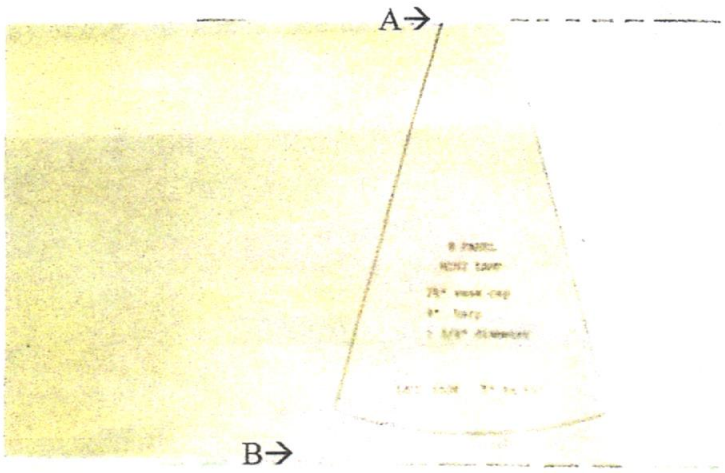


Figure 22

Figure 23

The X's depict the points you have marked. Make sure you angle bar is above 1x. If not, loosen the monorail nut and slide it up.

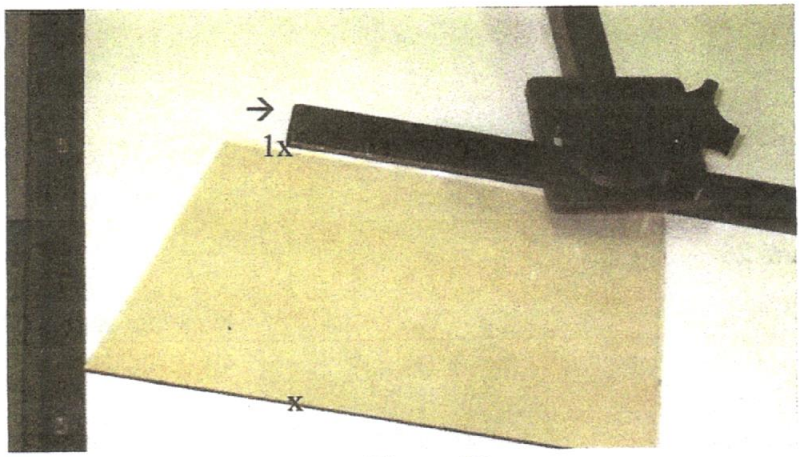


Figure 24

Place the cutter head wheel on top of your mark (1x) as shown in fig.25. Then go to 2x mark to make sure your angle is accurate. If okay, score and break your glass.

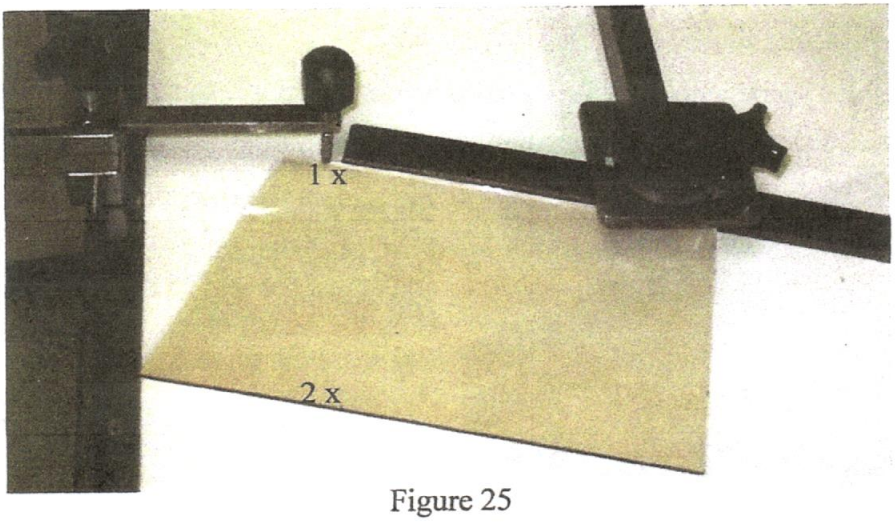
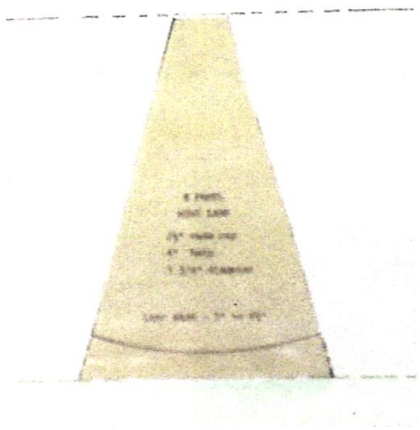
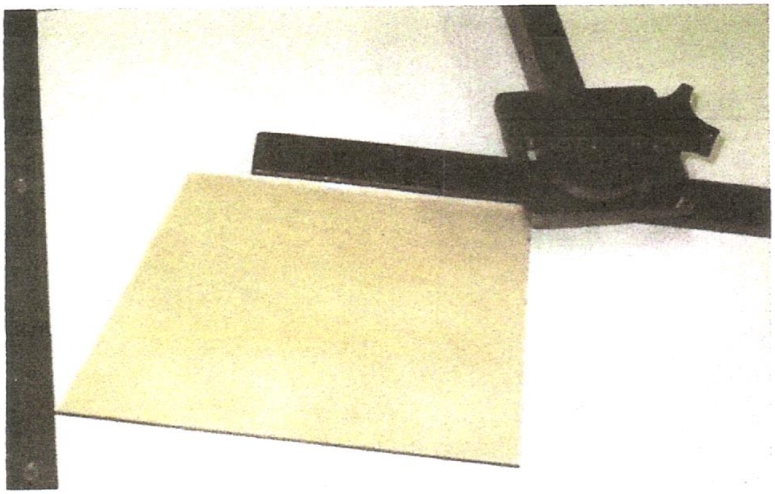


Figure 25



Lay your finished piece on the pattern. Hopefully it fits as this one does.

Figure 26

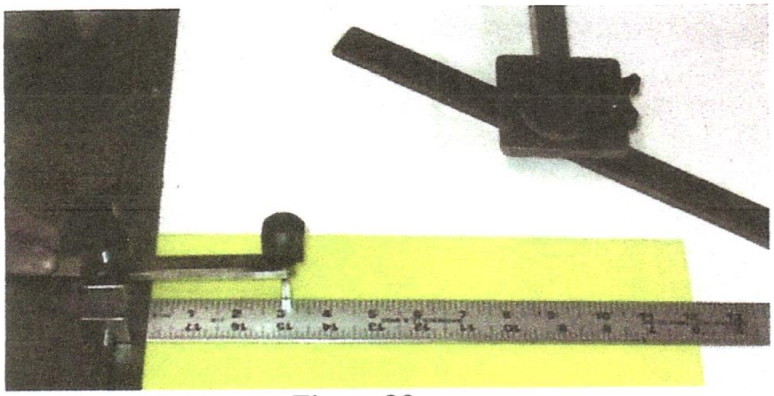


Now the angles have been set now you can cut your panels. You are well on your way to making panel lamp.

Figure 27

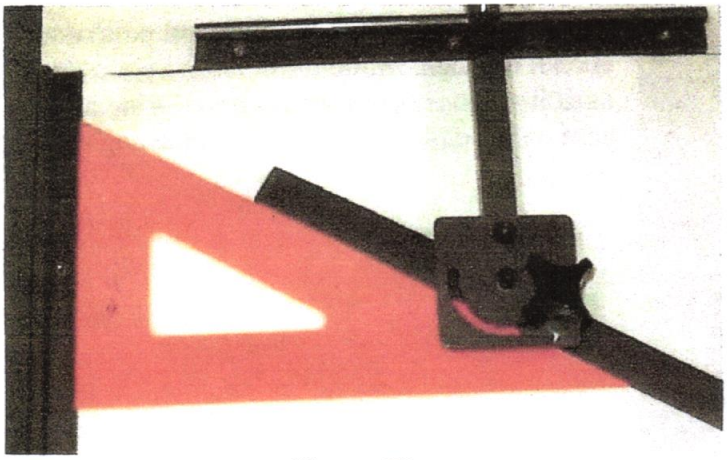
HEXAGON

The hexagon a six-sided shape with 60-degree angles is relative simple to make.



We are going to make a 3-inch hexagon. First, place the ruler on top of the glass and adjust the arm so that the cutter wheel is on the 3-inch mark. Tighten the arm, and score the glass.

Figure 28



Set the angle jig for 60 degrees.

Figure 29

Place the three-inch strip against the angle jig. Bring the strip down far enough to score the first 60-degree cut (figure 30). Score and break. Do not changed settings on the adjustment arm.

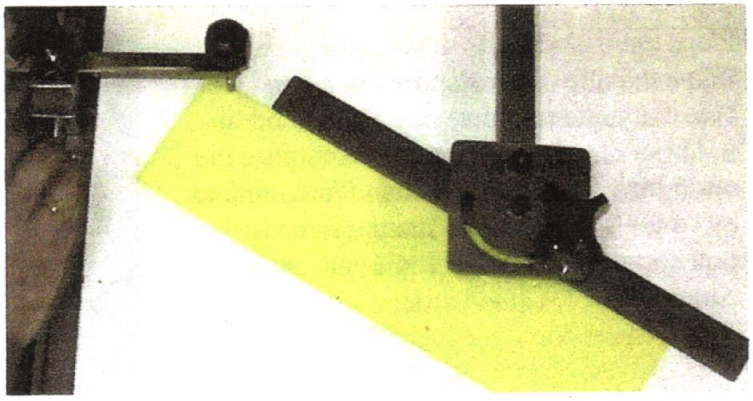
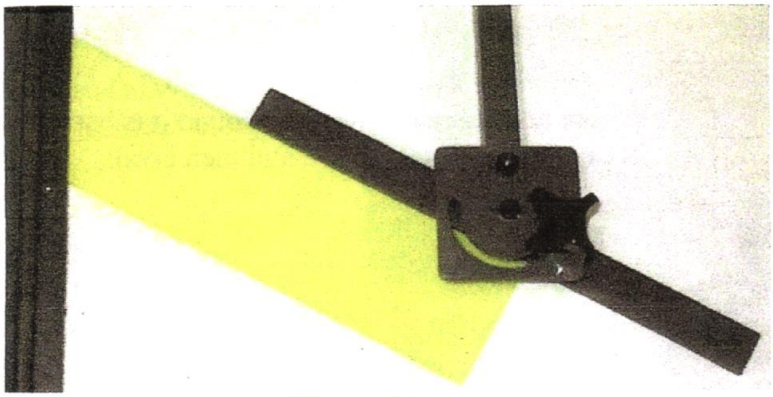
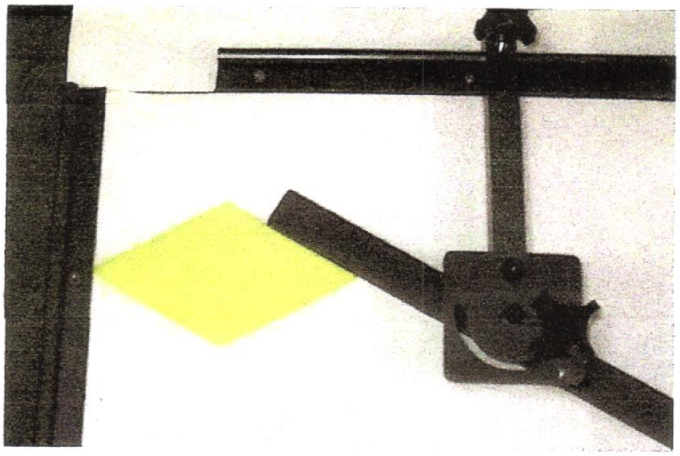


Figure 30



Slide the glass down against the monorail as shown in figure 31. The arm is still set for three inches. Score and break.

Figure 31



That's right, we just made a diamond. But we are not through. Slide the diamond point down until it touches the monorail base. Also make sure the side is butted up against the angle jig.

Figure 32

Place the diamond as shown in figure 33. Use the angle template as a third hand to hold the diamond in place. Remember the width of the glass is 3 inches. To complete our 3 inch hexagon, divide the three inches by two = 1 1/2 inches. Using the same procedures for establishing 3 inches set the cutter wheel for 1 1/2 inches.

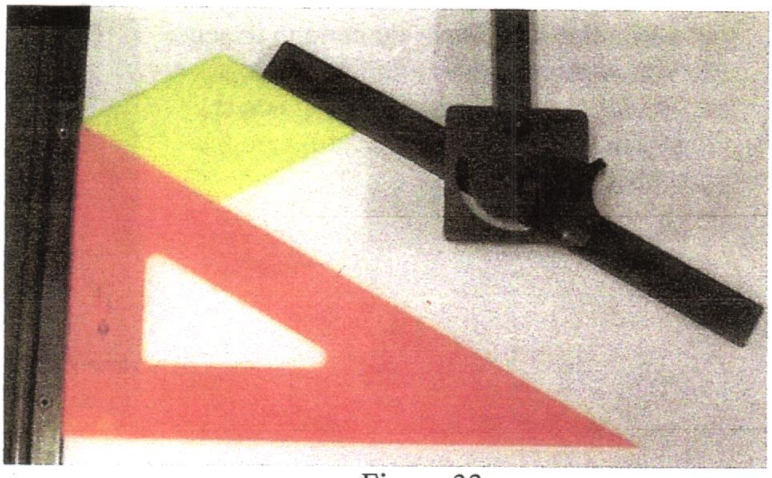
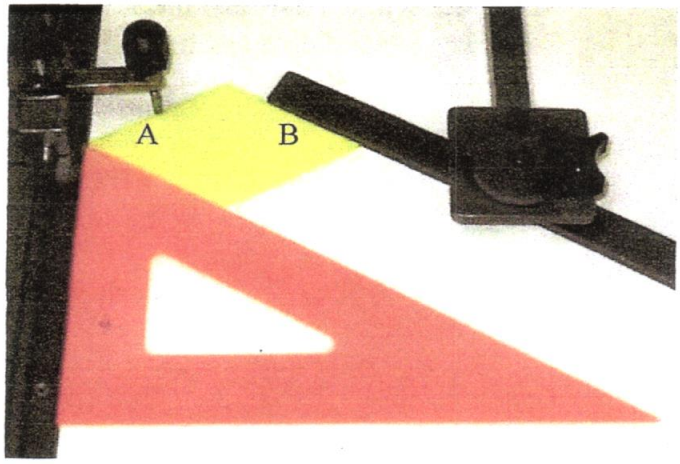


Figure 33



Score and break. We have found it is better to Score both ends (A & B), and then break.

Figure 34

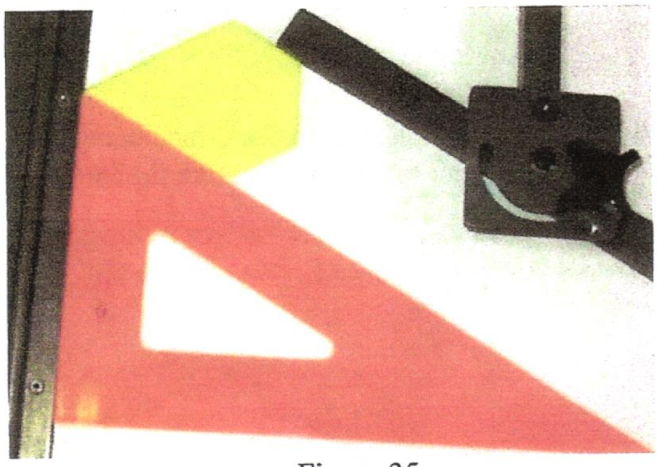


Figure 35

This photo shows you can score, break and then turn it around and do the other end. However, as you see there is very little glass against the angle jig. If you decide to do it this way, then bring the angle jig down toward the monorail, so you have more glass butted up against the jig.

As you see we now have a 3-inch hexagon!!!

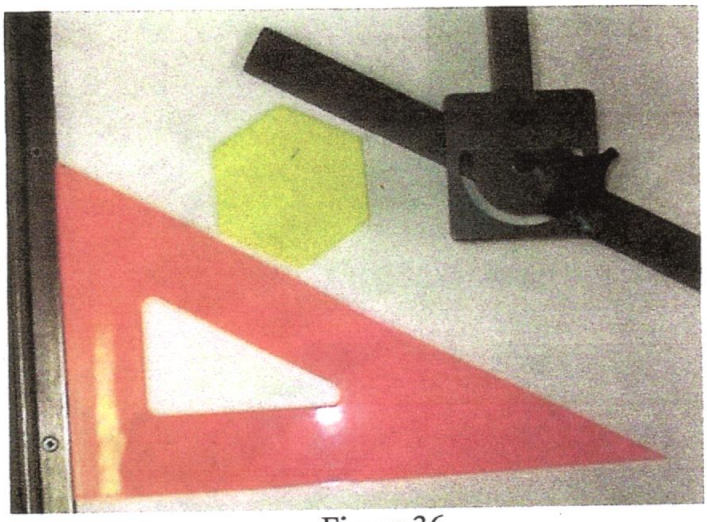


Figure 36

OCTAGON:

The octagon is simple, almost as simple as making a square. For example, we need a 5-inch octagon. Measure out a 5-inch square. Score and break. Draw line from corner to corner. Just like fig.38.

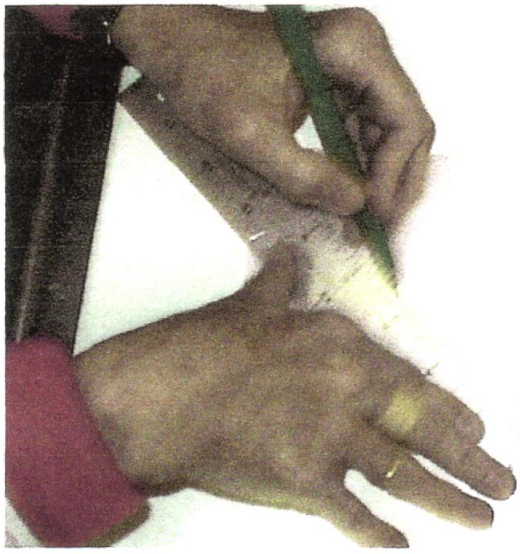


Figure 37

Figure 38

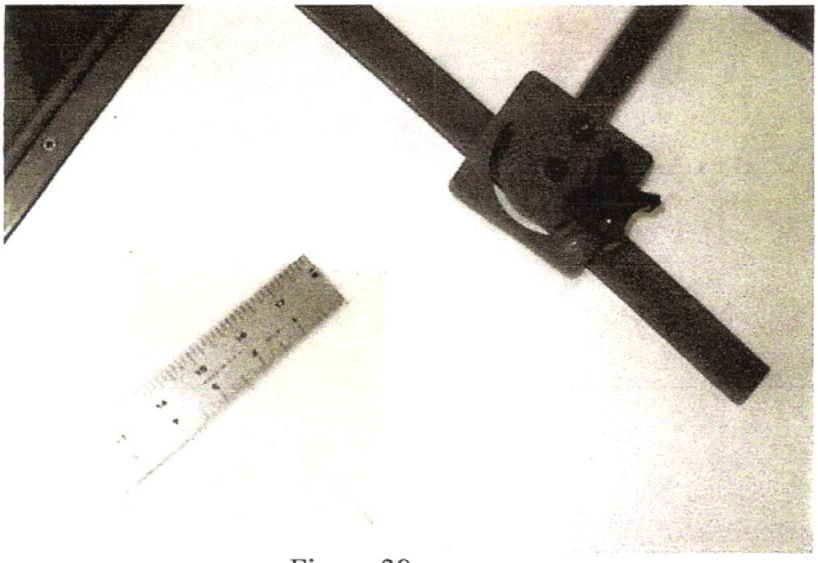
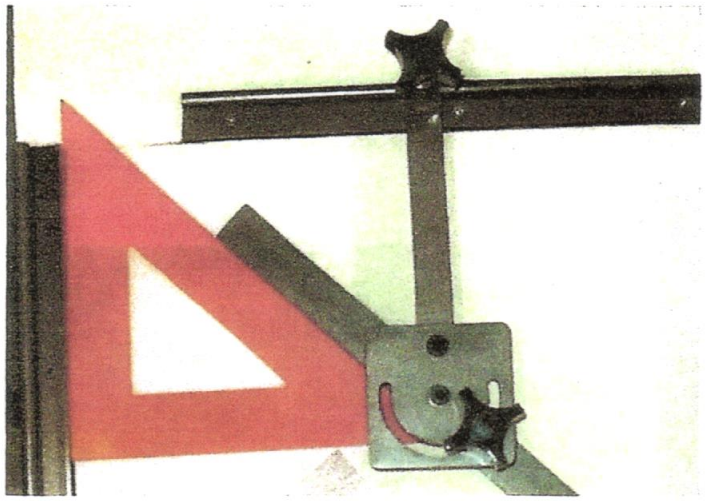


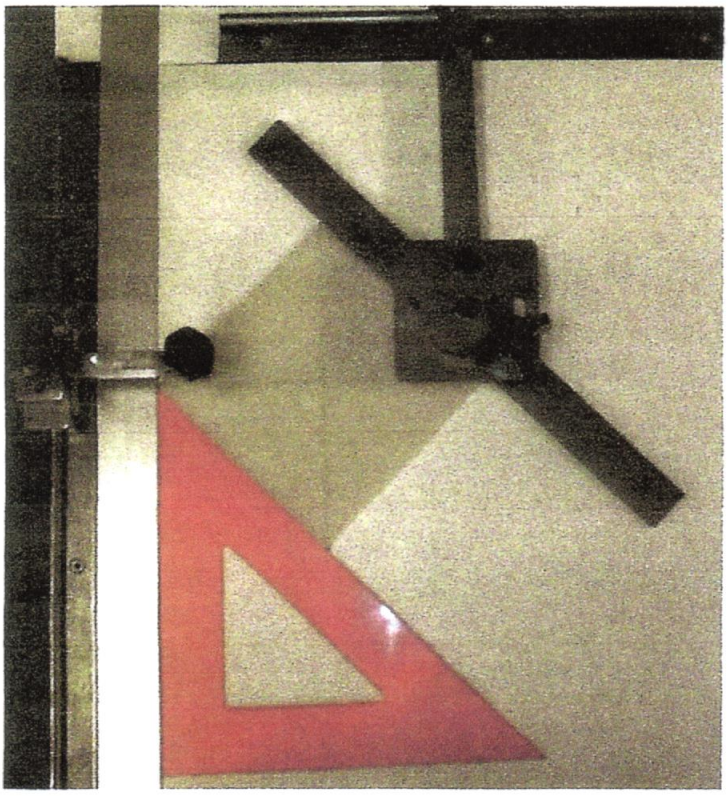
Figure 39

Since our octagon is 5 inches, next step is to measure from the center point 2 1/2 inches out on each line. Mark those four points



Set the angle bar for 45 degrees, and tighten the bar knob.

Figure 40



Since this score line will be close to the monorail, place a ruler next to monorail base to give you more room to score the glass. Position the glass as shown in figure 41. You use the angle template as an extra hand to hold the glass in place while scoring. Place the cutter wheel on the measurement mark, tighten, and score all four corners.

Figure 41

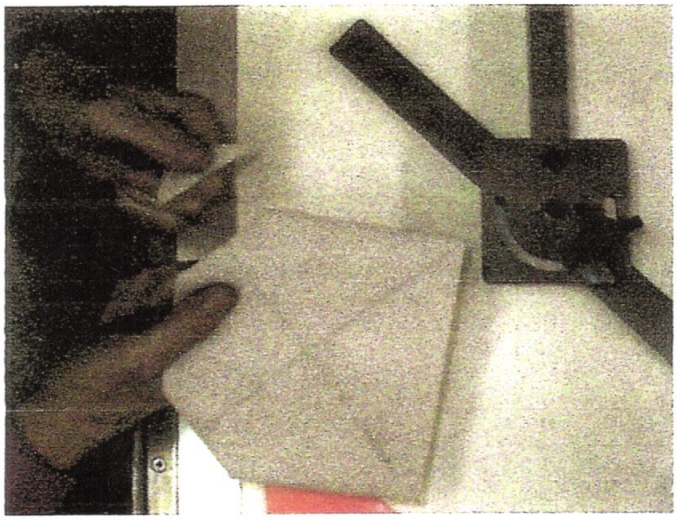


Figure 42
Break all four corners

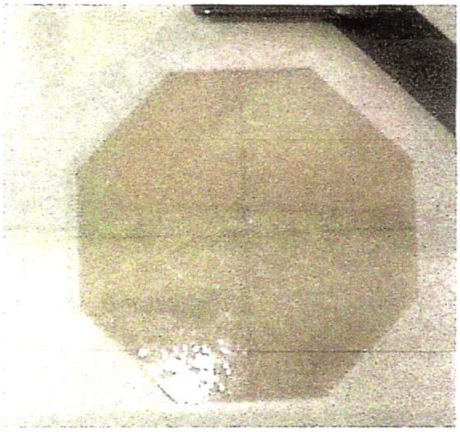


Figure 43
Great looking octagon!!

PENTAGON:

The Pentagon is a five sided geometric design. We started to create the design using one of those adjustable angle templates. We found when we set the adjustable angle template to 72 degrees, it was not accurate. So we went back to basics: protractor and angle copier. Draw a straight line on a piece of paper, about 6 inches long. Next lay a protractor on the straight line. Place the center point of the protractor on one end of the line. Make sure the protractor is properly placed. Find the 72-degree mark and mark it on the paper (figure 44).

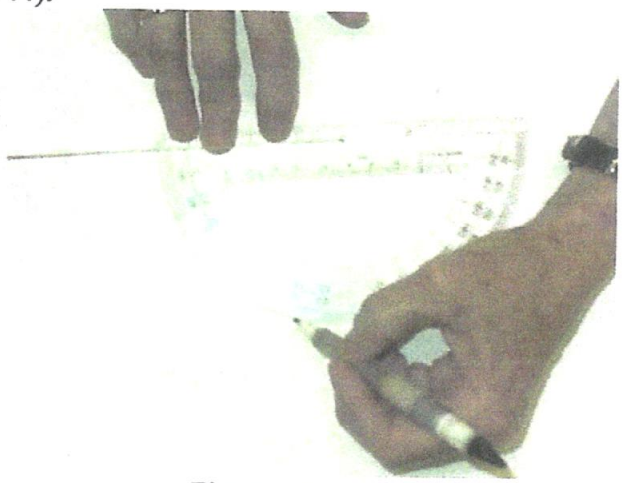


Figure 44

Next draw a line connecting the two points: 72 degree point to the center point of the protractor (figure 45). Make this line also 6 inches long. The reason for 6 inches is it helps to work with a larger angle.

Figure 45

Place the angle copier on the lines, just so you barely can see the lines. Tighten the knob. If you don't have the angle copier, you can use an adjustable angle template. Use it to copy the angle, not to create it (figure 46).

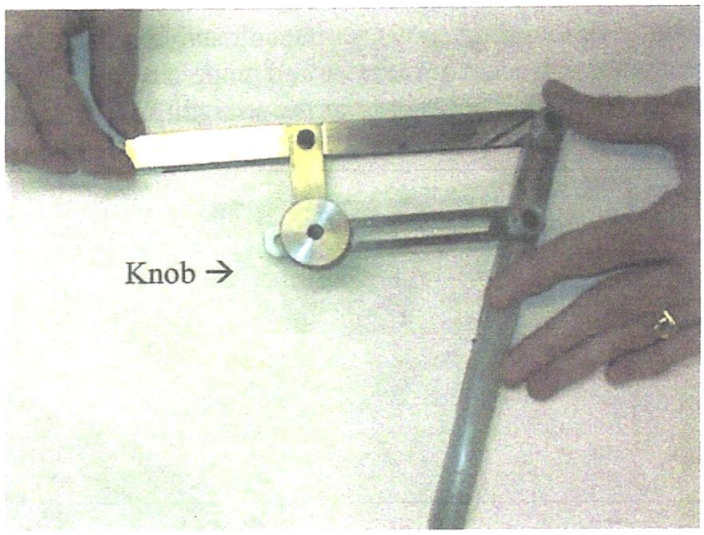


Figure 46

Next lay one side of the angle copier against the base of the monorail. Place the angle jig bar flush against the angle copier. Tighten the angle jig knob (figure 47). Now you are ready to cut glass.

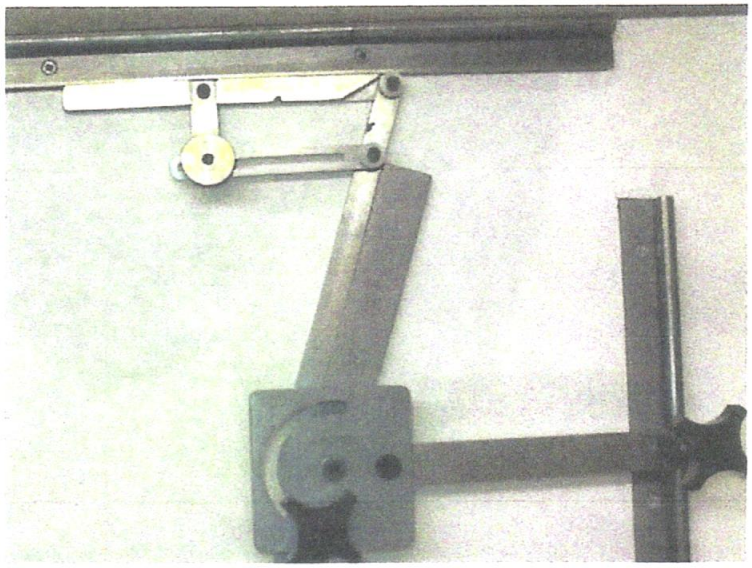


Figure 47

Determine what size you want your pentagon to be. For example, we want our pentagon sides to be two inches. Therefore we need our strip of glass to be about 4 inches wide, because the widest part of our pentagon will be about 3 1/16 inches wide (figure 48).

Figure 48

Next take the four-inch of glass flush against the angle jig. Bring the bottom of the glass strip past the end of the angle jig just enough to score the glass. You do not want to start a score line at the point of the glass, because it might not break clean (figure 49).

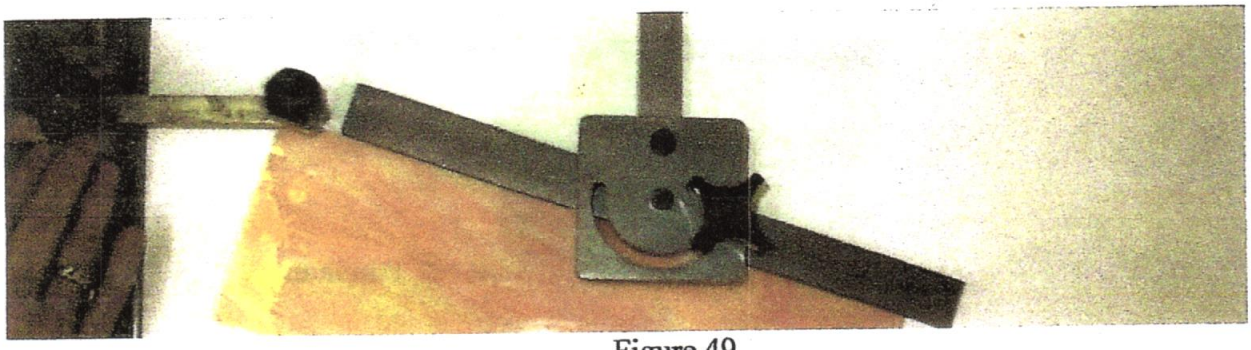


Figure 49

Score and break the glass (figure 50).

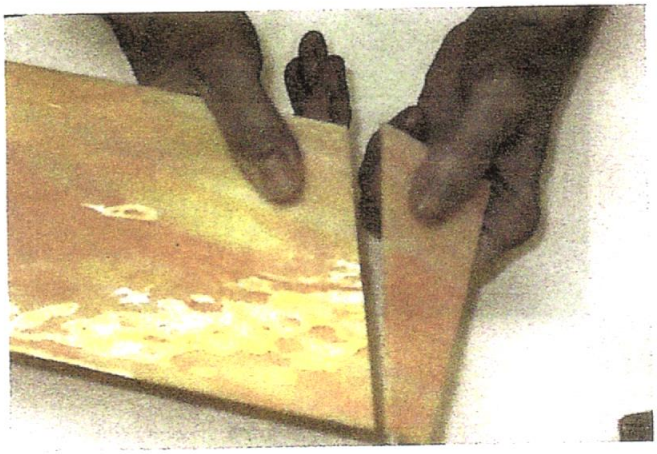


Figure 50

Turn the glass over. Measure from point A to point B and mark the 2 inch point on the glass
Place the glass against the angle jig as shown in figure 51. Find your 2-inch mark, and make sure it is below the angle jig bar so you can score the glass (figure 51).

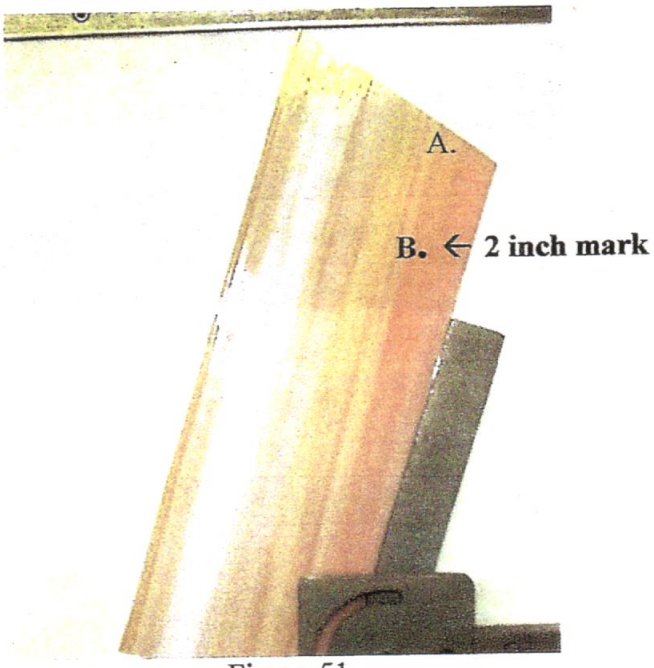


Figure 51

Score and break the glass (figure 52 and 53).

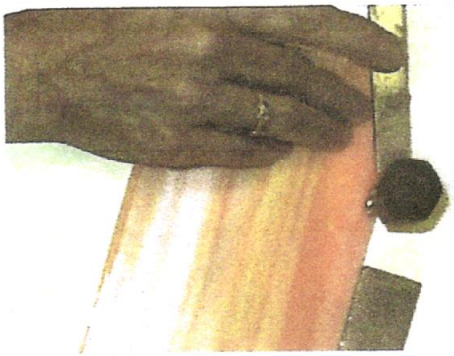


Figure 52

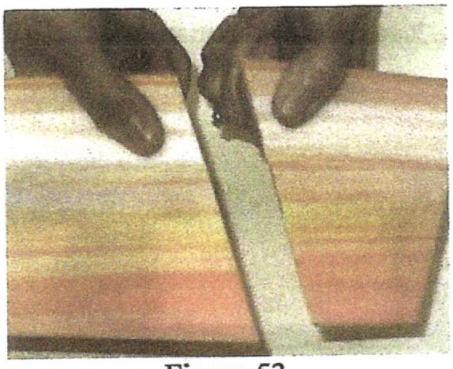


Figure 53

Turn the glass over (figure 54) and measure from the narrow end up to 2 inches and mark (figure 55).

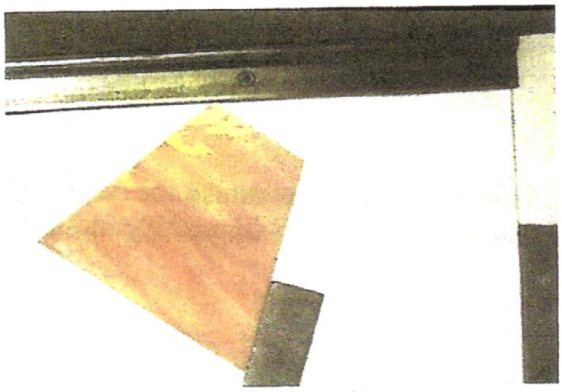


Figure 54

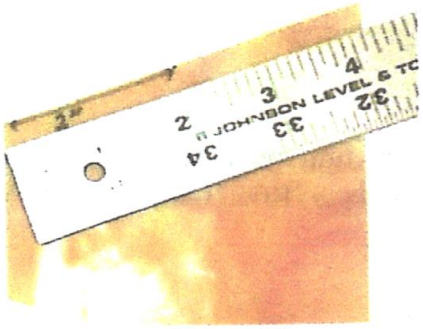


Figure 55

After you marked the 2 inches, place the glass flush with the angle jig bar and bring the glass down so that the tip of the narrow end touches the base of the monorail as shown in figure 56. Place the cutter wheel on top of the 2-inch mark Score and break (figure 57).

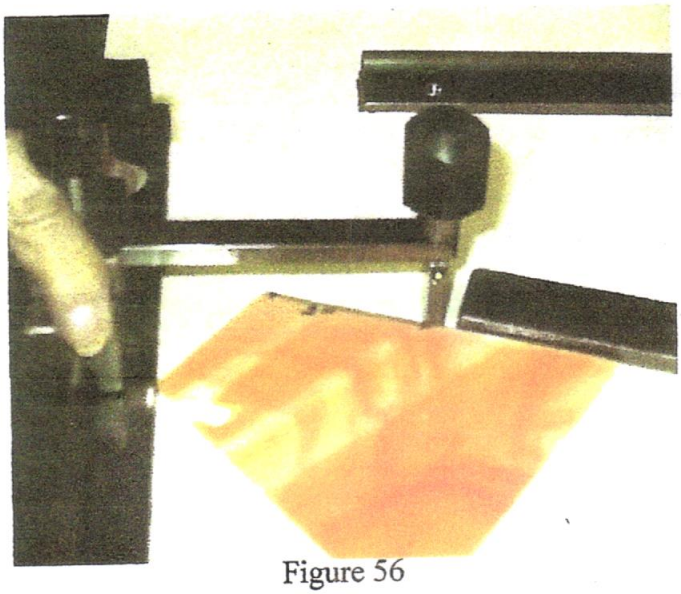


Figure 56

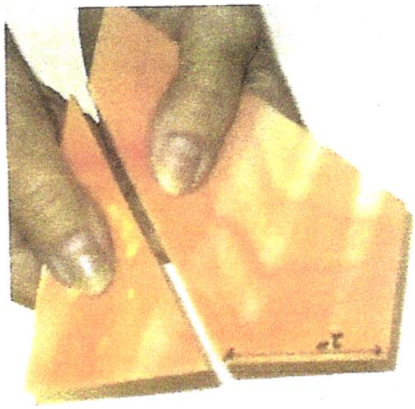


Figure 57

Now turn the glass over and it should look like figure 58. Keep the adjustment arm at the same setting (2 inches) Bring the glass down until the point touches the base of the monorail (figure 59) and score.

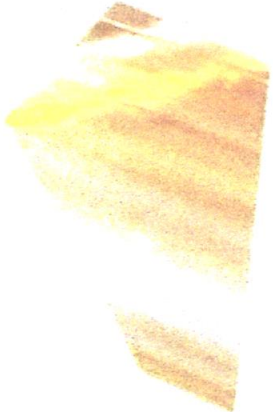


Figure 58

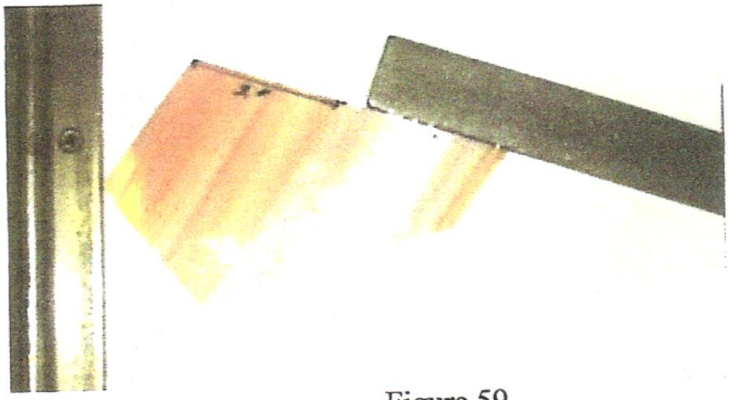


Figure 59

You are ready to score for the last time (figure 60). Score and break (figure 61).

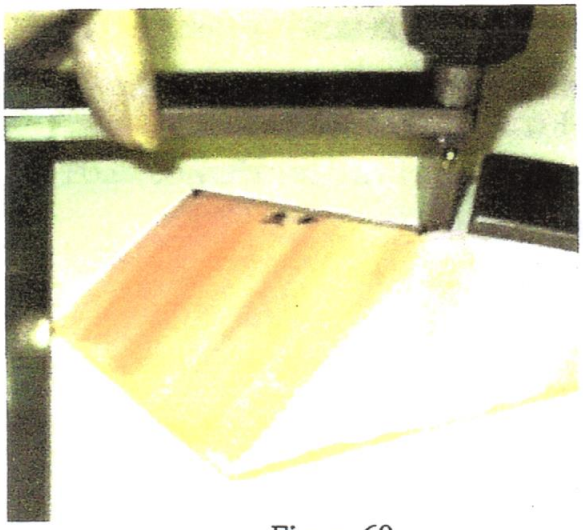


Figure 60

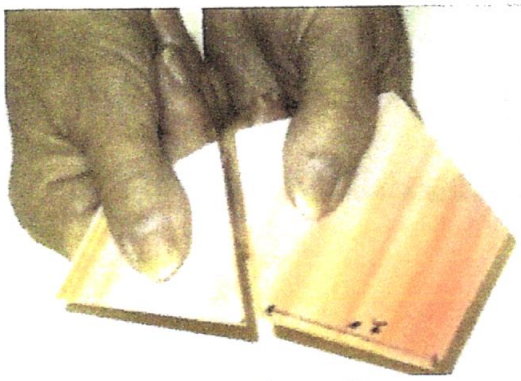


Figure 61

You now have a pentagon (figure 62)!!!! Each side is 2 inches in length. The width of the pentagon from the middle of a flat side to a point is 3 1/16 inches. Therefore, when you need a pentagon, there are two things you must consider: the length and the width. The width (figure 63) will tell you how wide you need to make your strip. As with the other geometric designs, once you make the first angle cut, you repeat the steps to make multiple pentagons.

Figure 62

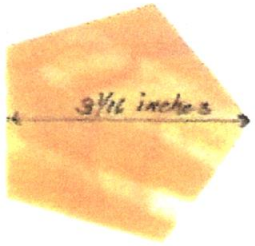


Figure 63

We sincerely hope you enjoy using our **DK Monorail Strippers** as we do. It will make your glass cutting experience more accurate and pleasant. If you encounter any problems, or have questions about other products, please call toll free **1 (866) 865-3903.** Our Email is dkmonorailstrippers@gmail.com. Please visit our website for demos, and other information at www.dkmonorailstrippers.com

DK Monorail Strippers