

How To

ENGRAVE

using the

**EASYMARK™
ELECTRIC
ENGRAVER**



and the

**20 PIECE
DIAMOND TIP SET**

 **inland**



Engraving with the EasyMark™ Electric Engraver and the 20 Piece Diamond Tip Set

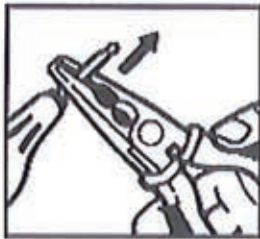
You can use the Inland EasyMark electric engraver with diamond tips to engrave designs on beveled glass, glassware, polished stone pieces, stone slabs, stone vessels, glazed ceramics, and more. The technique is simple and with a little practice you will be creating beautiful designs for yourself, as gifts or to sell.

The Tools

- EasyMark Electric Engraver
- 20 Piece Diamond Tip Set
- A pattern. You can draw you own, use commercially available patterns, or take a color picture and make it into a black and white copy.
- For opaque pieces you will need a way to transfer the pattern on to the surface. Saral transfer paper is a good choice. It comes in five colors and is wax free.
- Item to engrave
- Safety Glasses
- Double stick tape
- Scissors
- Tissues or soft cloth
- Black felt

Getting Started

Inserting and Removing Tips

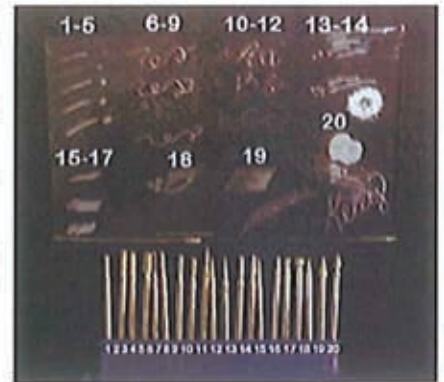


Refer to the last page for the EasyMark™ Engraver user guide on how to insert and remove the diamond tips. Because the EasyMark spins the diamond tip, it does most of the work for you. Using a light hand allows you to better control the tip on the engraving surface and prevents premature wearing of the diamond. If you hear the tip "squeal" you are pressing too hard causing the tool motor to turn against a stationary tip. It is the repeated application of the diamond tip to an area that progressively whitens the glass to produce shading and depth in the design.

Practice First!

We suggest you start by practicing on a scrap piece of the final material you will be engraving. The first thing to remember is there is no right or wrong tip for creating your designs. You need to find the tips that achieve the results you want. There is no right or wrong tip and the different tips will create different lines; carve to different depths and at different angles. You will find some are better for drawing thin lines and outlining; others for shading and still others for stippling. You will also find that some tips work best on flat surfaces and others are better at working designs on three dimensional pieces. Here are some guidelines to get you started:

- Ball Tips: Tracing patterns and outlines; fine line details; shading by applying a series of etched lines very close to each other; applying dots and stipple patterns; writing
- Cones: Drawing fine lines; etching arcs and shading areas on flat and curved surfaces
- Cylinders: Making dots and circles; shading, striping, especially useful on curved surfaces
- Cone / Cylinder Combinations: Drawing lines and details; shading on flat and curved surfaces; making arcs; etching dots and circles and writing or drawing.
- Christmas Tree: Shading, shading arcs, lines
- Disc: Use for making dots and circles
- Teardrop: Shading and deeper carving, making feathered and tapered lines



Here are some simple practice exercises you can do using the different tip to get a better idea and feel for what they and the tool will do for you:

- Try pulling the tip across, pushing it and moving it back and forth, and in circles.
- Filling an area with dots is called stippling and is done by just touching surface with the tip end. Create the appearance of a shadow by using this technique.
- Draw a square and shade it in to a solid white using a ball and/or cylinder tip.
- Practice writing and printing to get a feel of how the engraver feels and moves on the glass.
- Draw a long rectangle and shade from clear to opaque white using different tips
- Practice making half-tones and shading using different tips.
- Create feathered strokes by applying the tip to the surface lightly and then fling the tip away as you lift it off the glass.
- Draw the same line in series using different tips to see variations created.

Ready, Set, Engrave!

Applying your Design

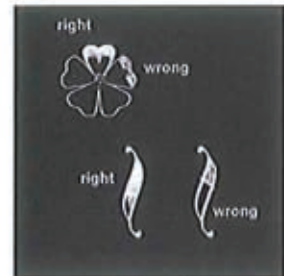
There are different ways to transfer your design to the surface you are engraving. Keep in mind that etched areas appear lighter and un-etched areas appear darker when working your design. Choose the one that best fits the material being engraved and your comfort level. You will find it easier to work from a black and white pattern.

- If you are artistic, you can draw the pattern on the piece with a chinagraph or wax based pencil.
- If you are engraving on glass or an item you can see through secure the pattern face up to the back of the material using double stick tape. Cut the pattern leaving about a 1/4" border around the picture.
- If you are engraving on an opaque surface you will transfer the pattern using Saral paper. Place the pattern on the Saral paper and then cut around the pattern, leaving about 1/4" edge. Put the transfer paper down on the front side with the pattern on top, tape in place. Use a red pen to trace the pattern so that you can see where you have gone. Trace only the outline of the design, flower centers, leaf veins and the main pattern lines of animals and other designs. Shading lines are etched by referring to the pattern. When you're done tracing, carefully lift only one side of the pattern and check to make sure you have traced the entire pattern.



Engraving the Design

1. Work in a well lit area.
2. Start by drawing in the outlines and other primary lines in the design. Start at the top and work down using light continuous strokes to avoid making double lines.
3. Keep your eyes directly above the area you are working to avoid distorting the pattern.
4. To make sure you haven't forgotten any lines, tilt the object and look at it from an angle. You should see your engraved lines and the pattern lines as two separate lines. Fill in any you may have missed.
5. Once the outlines are drawn you will remove the pattern and put it to the side to serve as guide as you add the shading and details. Place the piece on black felt, or in the case of a glass or similar item, stuff the inside with the felt. This will provide contrast and allow you to see your progress.
6. Using the pattern for reference begin adding the shading and other details that will bring your design to life. Remember to let the tools do the work! Avoid using excessive pressure; a light, steady hand is best. You can always go over and to an area to etch it more but you can't remove marks already there!
7. Make sure to shade in a direction natural to the lines of the pattern. For example, shade in toward the center of flowers, not across. Engrave grass, fir, feathers, and similar in the direction they grow. You will get a more realistic looking image.
8. Periodically wipe away the dust to view your progress.
9. When you are satisfied with the design, gently wash the object to remove any dust, prints, and drawing marks.
10. Congratulations! You have completed your first etched piece.



Final Notes

With practice you will become more adept at picking out the right tips for the design and manipulating them. Don't be afraid to experiment and find your own style! Here are some patterns to get you started!





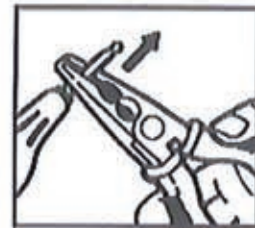
inland
EASYMARK GLASS ENGRAVER™
User Instructions

Operating Instructions

1. Make sure the engraving diamond tip is securely fastened in the chuck before plugging adapter into electrical receptacle.
2. Make sure that the power connection from the engraver to the top of the adapter cord is lined properly: + to + and 0 to 0.
3. Turn switch to "ON".
4. Hold the engraver like a pen and apply minimal pressure--allow the diamond to do the work. Applying too much force will cause the diamond tip to rotate at a slower speed and work less effectively.
5. All diamond tools last longer if you keep the abrasive surface and the material being worked wet. This has the added benefit of greatly reducing the danger of breathing debris.

Changing Diamond Tips

1. Unplug the EasyMark™ Glass Engraver.
2. Use pliers to grasp and pull the diamond tip straight out.
3. Insert new diamond tip into the chuck making sure it seats fully down into the chuck.



Additional Engraver Diamond Tips

- 20 Piece Diamond Tip Set: item #50115
- Standard Ball Tip: item #50107
- Large Ball Tip: item #50110
- Cone Tip: item #50111
- Inverted Cone Tip: item #50112

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