



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:

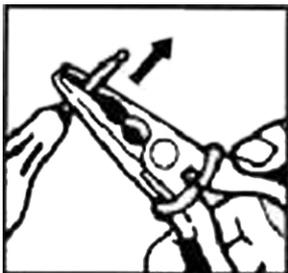
- EasyMark Electric Engraver
- 20 Piece Diamond Tip Set
- A pattern. You can draw your own, use commercially available patterns, or take a color picture and turn it into a black and white copy on a copy machine or using image editing software.
- Item you want to engrave.
- If you are engraving on an opaque surface 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.
- Safety Glasses
- Double stick tape
- Scissors
- Tissues or a soft cloth
- Black felt
- Water to use as coolant to lubricate the diamond tips.

Keep It Cool!

To protect and prolong the life of your engraving tips (or any diamond tool) it is important to supply coolant to the diamond surface during use. There are a number of ways to achieve this depending on what you are engraving:

- Have a container of water at hand that you can dip the project into frequently.
- Use a spray bottle, sponge or similar device to keep the surface being engraved lightly coated with a film of water. NEVER spray or apply water directly on the EasyMark Engraver or any other electrical device.
- Frequently wipe the tip on a very saturated sponge to keep it lubricated.
- Provide a slow drip of water onto the engraving surface. This can be from a water reservoir (like the WaterDrip™ AddOn™ Kit, [Inland no. 50008](#)), a faucet, or some other similar means. Be extremely careful to drip only onto the point of contact between the diamond tip and engraved surface and NOT on the EasyMark Engraver.
- Partially submerge the item being engraved in water so that the point of contact with the diamond tip is just below the water's surface. Caution must be taken so that ONLY the end of the diamond tip extends into the water. DO NOT allow the engraver or any other electrical device to get in the water or get wet.
- You can add a capful of Inland [Diamond Coolant™](#) (Inland no. 50011) to the water you are using to further increase the life of your diamond tips and tools.

Getting Started

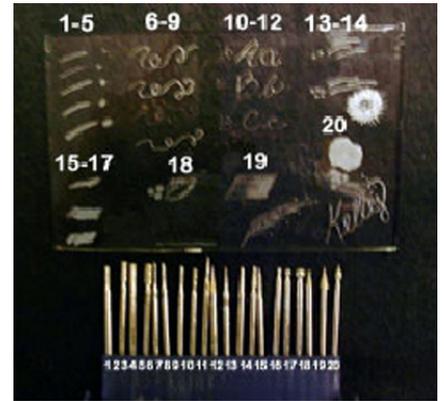


Refer to the EasyMark Engraver [user guide](#) on how to insert and remove the diamond tips. Because the EasyMark spins the diamond tip, it does most of the work for you. Using a light hand allows you to better control the tip on the engraving surface and prevents premature wearing of the diamond. If 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; different tips will create different lines, carve to different depths, and work at different angles. You will find some 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 while others are better at working designs on three dimensional pieces.

- 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 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 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

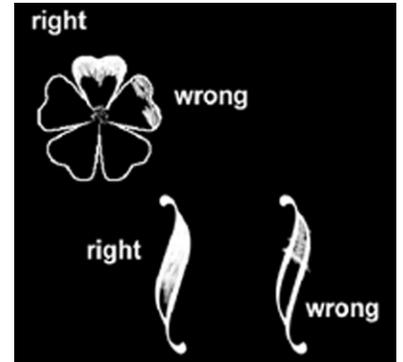
There are different ways to transfer your design to the surface you are engraving. Choose the one that best fits the material being engraved and your comfort level. Keep in mind that etched areas appear lighter and non-etched areas appear darker when working your design. Because of this you will find 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 then 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 before removing it entirely.



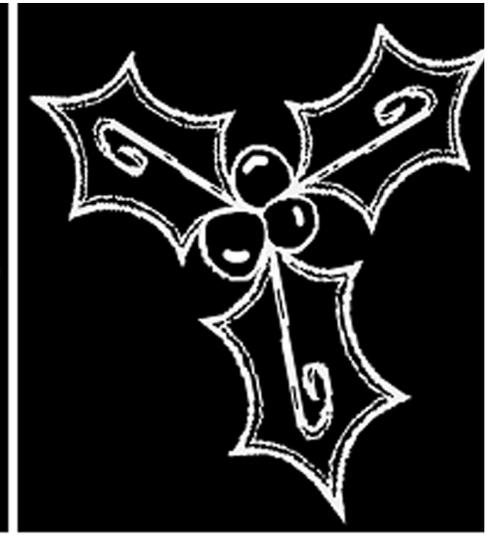
Engraving the Design

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 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!



Some 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! Click the image below for a PDF you can print out with these and other patterns to get you started!



See all free [How To Guides](#) Inland has to offer!

