

Bezel Set Pendant Tutorial

By Jeff Fulkerson

This is a simple bezel-set cabochon pendant with a few little tricks to make your piece stand out from the crowd. I'll show you an "exotic" texturing tool to texture the back of your pendant and a little different use for your riveting hammer to texture the front. Also, if you have a flex shaft and 1/64" cutoff wheels, you can cut grooves in your bezel to add a design element as well as give it a little texture.

Materials List

- Free-form cabochon
- Fine silver bezel wire, 4"
- 22-gauge sterling silver, 2"x2" depending on the size of the cabochon

Tool List – Don't forget Safety Glasses!

- Jeweler's saw
- Soldering setup
- Files
- Flex shaft (optional)
- Riveting hammer
- Dividers
- Ruler
- Sandpaper 400 & 600 grit
- Rawhide mallet
- Assorted Wubbers pliers
- Sharpie marker
- Cutoff wheel & 3M sanding wheel
- Brass mallet
- Awl
- Burnisher
- Liver of sulfur gel



Project Steps

Picture #1: Wrap your bezel wire around your stone, mark the joint, cut it flush and file both ends until you have a good joint. Remember, silver solder will not fill a gap, so the better your prep, the better your joint and the better your piece will turn out. It will also save you frustration in the construction process.



Picture #2: Flux your joint and add a snippet of hard solder. On a large bezel like this one, you can put the piece of solder under the joint and then apply your heat. You'll know when your solder flows because the bezel will fall flush with your soldering board. Be sure to place the joint directly over the solder. Rinse, pickle, and dry.



Picture #3: Since we're going to have a wide border on this pendant, use your Sharpie to draw a rough outline of the finished piece so you can cut out your backing plate.



Picture #4: With your jeweler's saw, cut out your rough shape. Sand front and back with 400 grit sandpaper.



Picture #5: If you're an egomaniac like me, now is the time to put your maker stamp on the back of your piece. I also stamp ".925" so people will know it's sterling silver. Always use a brass mallet when using steel stamps. The danger of putting your stamp on now with a stone that isn't symmetrical is that you may not get your stamp perfectly straight.



Picture #6: Here are our finished maker stamps.



Picture #7: We're going to texture the front of our pendant with a riveting hammer. So we don't have to texture more than necessary, mark the outline of your stone with the bezel on. Be sure to center the stone before you mark the plate.



Picture #8: By striking the metal at an angle with the riveting hammer, we get a nice line impression. You could achieve the same look with a line stamp, but this is a little easier and faster. Once you've textured all the way around the piece, you're ready to texture the back with my exotic texturing tool.



Picture #9: Before you can proceed, go out in the back yard or into the street and find your very own “exotic” texturing rock. Practice on a piece of scrap copper, as each rock is different. You don’t want your rock to crumble each time you strike your metal. When you are happy with your new “tool,” texture the back of your pendant with it.



Picture #10: After you’re finished texturing both front and back, you’ll need to flatten your plate, as we’ve stretched the metal in a very uneven fashion, which will cause the edges to distort. Take your rawhide mallet and flatten on your steel block. If your metal is resistant, go ahead and anneal the metal and then flatten. Once it’s flat, you’re ready to solder the bezel down.



Picture #11: Apply flux to the top of your plate and to the joint between the plate and the bezel. Use medium solder and space your pieces evenly around the bezel. As you can see in the picture, I didn’t do a good job of flattening my bezel so I have a gap on the back side. If you’re an old pro at soldering, you can use your solder pick to push that end down when your solder flows. If not, wash the flux off and make sure your joint fits. Go ahead and solder, pickle, rinse and dry. Always check your joint to make sure your solder flows all the way around the joint. If it hasn’t, flux up your piece, add a piece of solder in the offending area and re-solder. Quench slowly in water to keep the backplate from warping, and pickle.



Picture #12: Now it's time to make the bail for our piece. I wanted to make a bail that would accept this collar, and also be hidden on the back side of the pendant.



Picture #13: I started my bail by taking a scrap piece of 22 gauge silver, using my dividers and scribing a $\frac{1}{4}$ " wide line so I can cut out a strip to form my bail with. I textured one side with my magic rock so it would match the rest of the back.



Picture #14: Take flat-nosed Wubbers and make a right angle bend on one end of your strip, leaving a tail about $\frac{1}{8}$ " long.



Picture #15: Making sure the space would be wide enough for the collar to pass through, in this case about 5/16" of an inch, bend the other side. Now cut off the long tail to match the other side and file flat.



Picture #16: Using a pair of dividers spaced about 1/4" apart, scribe a line around your bezel. Put one side of your dividers inside the bezel and use that as your guide. Now cut out along your scribe line with a jeweler's saw. File the edge, then sand with 400 grit sandpaper.



Picture #17: In order to make the pendant hang evenly, mark the top and bottom centers on the face where you can see where the true centerline is. If you're tempted to put your stone in the bezel to see how it will look, (and I highly DON'T recommend it) put a piece of dental floss under the center of the stone with a generous amount hanging out on either side so that your stone won't get stuck.



Picture #18: Flip your pendant over and transfer your marks to the back side and draw a line between them. You now have the center of your pendant so you can place your bail correctly.



Picture #19: Flux your plate and bail; place a small piece of easy solder on each leg of the bail. Dry the flux and solder, making sure that you get a good joint on both legs. Pickle, rinse, and dry. Check your joints. If one isn't secure, re-solder.



Picture #20: With the bail secure, I wanted to scuff up the bright, shiny bezel. I used a 36 grit 3M wheel on the flex shaft, but you can do this by hand.



Picture #21: As an option to give your bezel a little more interest, you can take a 1/64" cut-off wheel on your flex shaft and cut notches in your bezel. **I recommend wearing a dust mask and eye protection while doing this, as those little wheels will break.** There are a number of ways to lay this out, but I just run my Sharpie around the top to give me a uniform depth to shoot for. You can also measure out the distance between each notch, but I just eyeball it. (Note: I'm left-handed, so the flex shaft is turning away from me. If you're right-handed, you will be grinding right into your face.) I always try to hold the piece secure with my free hand, then brace the flex shaft with my thumb against the piece, and cut straight down. If the wheel binds, it will shatter, sending pieces of the cutting disk flying.



Picture #22: To get a nice color on the metal, I painted the piece, front and back, with liver of sulfur gel. If the color is a little slow in developing, you can gently heat the piece with your torch. This will literally take about 10 seconds. Rinse and give it a good going-over with your brass brush. The brass brushing will give you a nice sheen on the metal. After brass brushing, dry your piece off and sand it front and back with the 600 grit sandpaper to bring out the textures.



Picture #23: Place your stone in the bezel and push the bezel over the stone with a burnisher. Be careful not to scrape the burnisher over your nice patina. If you do, you should be able to sand out any minor damage.



Picture #24: Here's a look at the finished back. Notice how AWESOME the texture from our magic rock turned out.



Picture #25: And here's the finished pendant ready for a night on the town!



Review Questions

- 1) When soldering the bezel with hard solder, where is the piece of solder placed?
 - a) Balance the solder on top of the joint
 - b) Under the joint, between the bezel and solder block
 - c) Neither of these
- 2) What does the “.925” stamp on the back of a piece of jewelry signify?
 - a) That the piece is fine silver
 - b) That the piece is sterling silver
 - c) The weight of the grams of silver in the piece
- 3) What kind of mallet is used for stamping metal with steel stamps?
 - a) Ball peen hammer
 - b) Riveting hammer
 - c) Brass hammer
- 4) What type of hammer is used to flatten the backplate after texturing has warped it?
 - a) Riveting hammer
 - b) Rawhide mallet
 - c) Chasing hammer
- 5) Why do we quench a piece slowly in water after soldering?
 - a) It removes firescale faster
 - b) It cleans the silver
 - c) It keeps the piece from warping