



■ **Diamond Drills** make it easy to insert wire. We laid out a Big Dipper design on our round sodalite cabochon, selected a diamond drill of the appropriate size to accommodate the fine silver wire we planned to insert, then drilled holes in the surface deep enough to secure the wire and of approximately the same depth.

We cut the wire into pieces long enough to protrude above the surface, then epoxied the wires into the holes. Once the epoxy cured, we nipped the protruding wires with wire cutters slightly above the cabochon surface. We then sanded and polished the cabochon

on our Genie until smooth and polished. This is a fairly simple process, but it may take some fine tuning to ensure the holes are drilled to the correct depth and diameter for the selected wire.

Our rhodochrosite strawberry is another take on inserting wire. Here's how to do it. Ball one end of the fine silver wire so that the spheres sit above the surface of the stone rather than being cut flush. Carve out a cup-shaped depression with a mini diamond ball bur at each mark of your design.

Then, drill holes with the appropriate diamond drill in the center of each cup shape to accommodate the wire tail. With a torch, ball up one end of each wire. Fit a balled wire to each hole and cut off the extra wire so that each ball sits firmly in each depression. Epoxy or cement the balled wire into the stone and carefully clean up any excess adhesive with acetone and a soft cloth. The shallow depression provides added protection for the wire balls.

Diamond drills are available from many jewelry suppliers. Our Mini Diamond Drill is 1mm and comes 5 to package, for less than \$15.

ADDITIONAL EMBELLISHMENTS

■ **Inlaid Metal** We have a long list of designs just waiting in the wings. One decorative embellishment to consider is cutting one or more straight grooves using a diamond disc wheel, and then bonding strips of 18ga fine silver sheet into the cabochon with epoxy. Once the epoxy cures, you'd grind and polish the surface smooth. Inserting metal lines creates interest in a plain or solid color cabochon.

■ **Inset Faceted Stone** This black onyx cabochon sparkles with the faceted CZ mounted in the center. For this kind of inset, drill a hole slightly smaller than the CZ through the center of the cabochon. Then use a tapered diamond bur to taper the hole slowly until the CZ girdle rests slightly below the surface of the cab.

Clean the CZ and hole with alcohol. Mix the epoxy and, using a tiny drop on the tip of a toothpick, wipe a thin film onto the inside of the hole. In this situation, less is better. Insert the faceted stone until the girdle touches the epoxy. There should only be a very thin meniscus around the girdle.

Set aside and allow the epoxy to cure thoroughly. It may not look like it will hold up, but it will take a hammer and punch to drive the CZ out!

■ **Stone into Stone** Another favorite embellishment of ours is a much more advanced project in which we insert an opal disc into a cabochon. Our "Full Moon" cabochon, with opal in a lapis sky, is a definite eye catcher!

This process involves using diamond coring drills, tapered or cone shaped diamond burs, and epoxy. Cut an opening in the cabochon using a diamond coring drill. Then grind a round piece of opal to fit securely into the cavity. Use a tapered or cone-shaped diamond bur in the cavity to assist in securing a snug fit. Epoxy the opal into the cabochon, and when the epoxy has cured, grind and polish the surface of the cabochon.

It doesn't have to be a single opal disc: you may wish to add several, or use other stones. The important point is that there should be a contrast between the cabochon and the insert.

