

Bridging the Gap...

You can still ensure a strong cyanoacrylate bond, even if your gem rough is irregular and gaps are inevitable. The trick is to custom fit your dop to the stone. You can do this by applying a blob of hot wax to the dop and creating an impression of the gem rough in the wax before it has cooled. You can then glue the stone to this wax impression. It's a lot easier than it sounds...

Begin by coating the flat dop with shellac-alcohol mixture as described on page 146. Warm a stick of dop wax over an alcohol burner and apply several drops of wax to the flat face of the dop. The exact amount will depend on the size and irregularity of your stone. Once the wax has cooled, place the flat dop in one arm of your transfer fixture and affix the stone to the other with putty. Hold the transfer jig with the dop uppermost and apply heat until the wax softens and begins to sag (Figure 7-9).



Figure 7-9 Heat a small blob of dop wax.

Do not let the wax melt completely and do not heat the gem rough. Bring the dop and stone together briefly and then separate them. This creates an impression of the stone in the wax. Voilà! A custom-fitted dop ready for successful gluing with cyanoacrylate (Figure 7-10). Note that for some rough shapes, a cone dop will work better.

Incidentally, this is a "hybrid" dopping procedure, one that uses both wax and glue to achieve the desired result. Such mixed approaches can offer the best of both worlds, while avoiding the shortcomings of each. In fact, I always use a hybrid dopping technique. See Section 7.4 below.



Figure 7-10 Squeeze the stone and dop together briefly to produce a wax impression. This eliminates gaps for dopping with cyanoacrylate glue.