

Chrysalises Manual #4

Machining Left String Performance Markers

Copyright © 2023 by Cris Forster

Marker Dimensions

Marker length: 0.400 in.

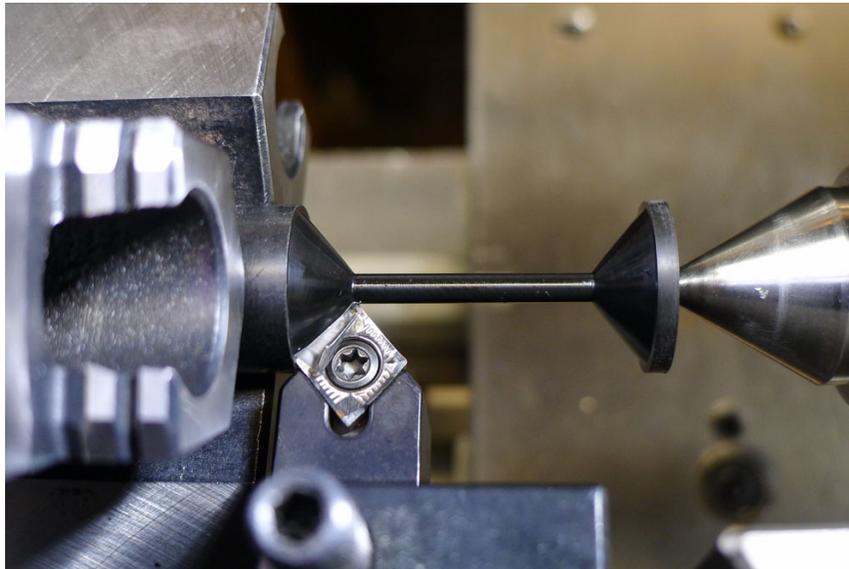
Marker diameter: 0.130 in.

Marker materials for Chrysalis I and II

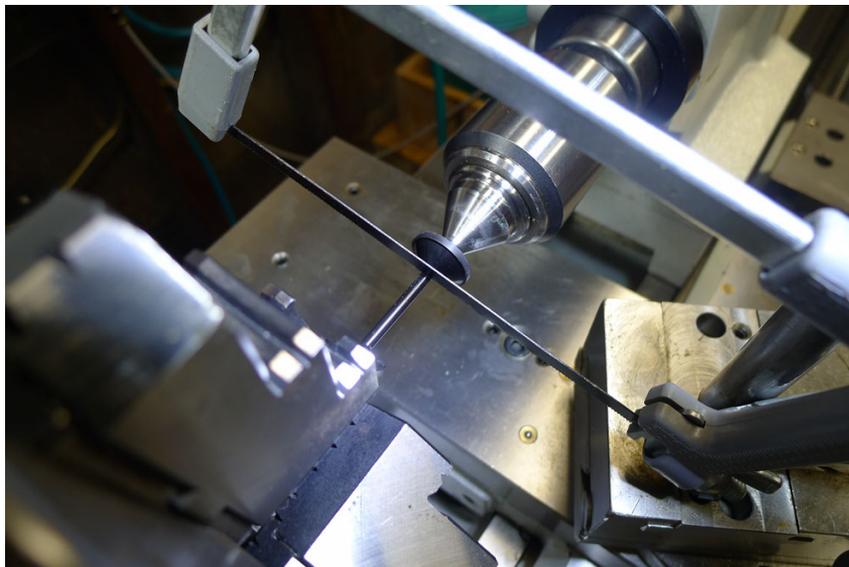
Delrin rods.

Stainless steel pins: $\frac{1}{2}$ in. \times $\frac{1}{16}$ in. MSC #67599605.

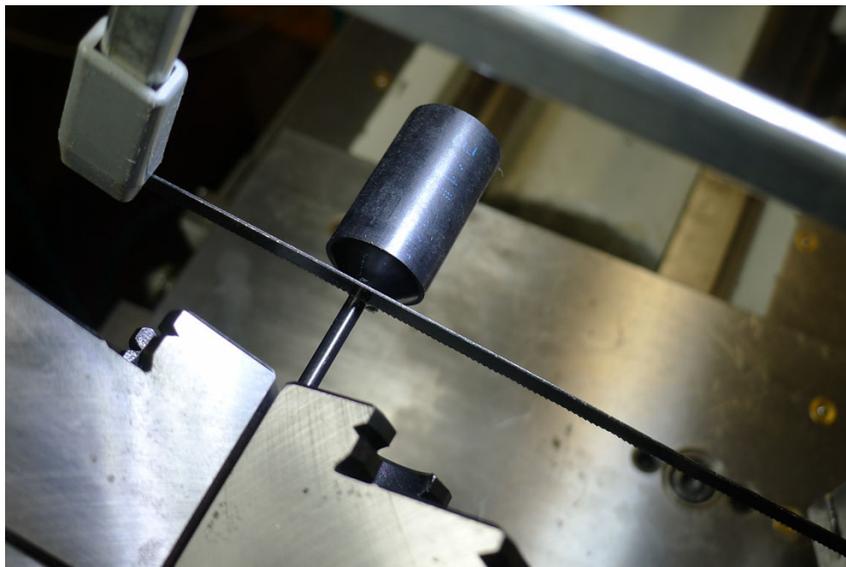
1. Turn a Delrin rod to a diameter of 0.130 in.



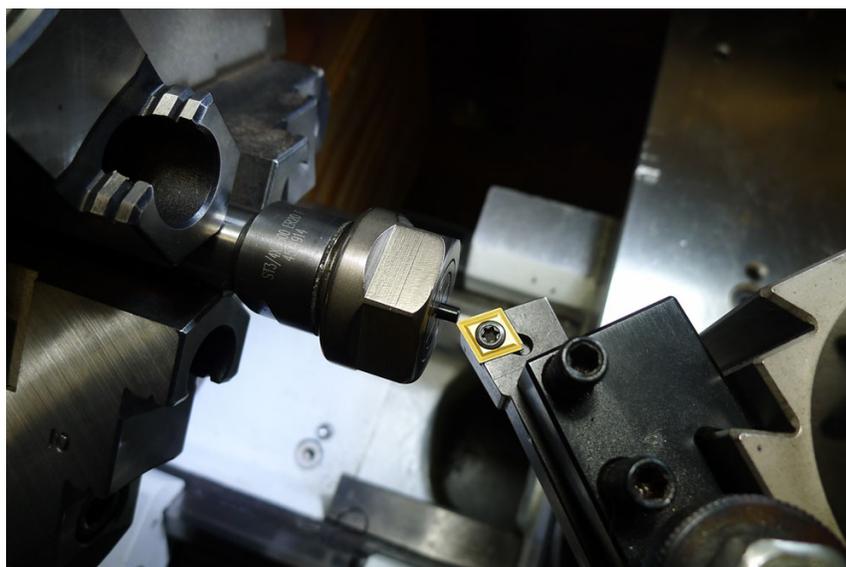
2. Saw off the excess piece on one end.



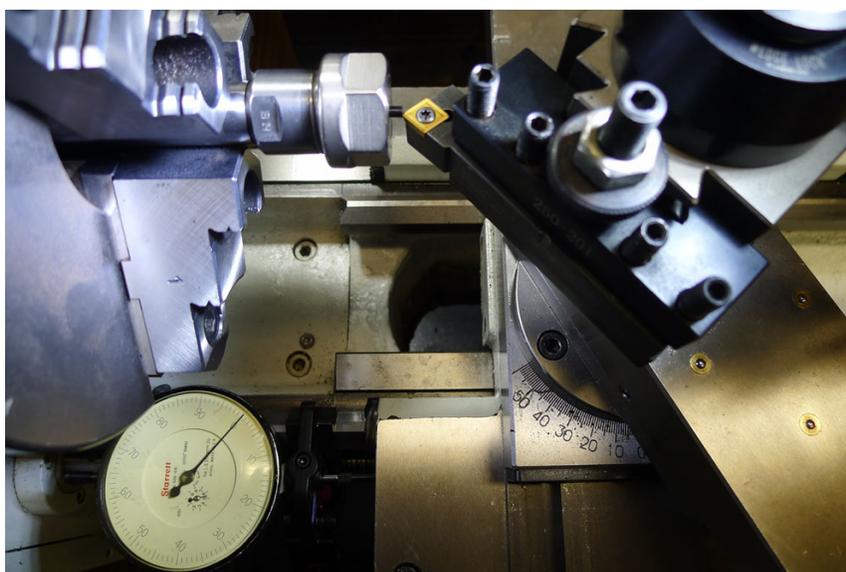
3. Saw off the excess piece on the other end.



4. Mount the marker in a collet chuck and face it on both ends.



5. Shorten the marker to a length of 0.400 in.



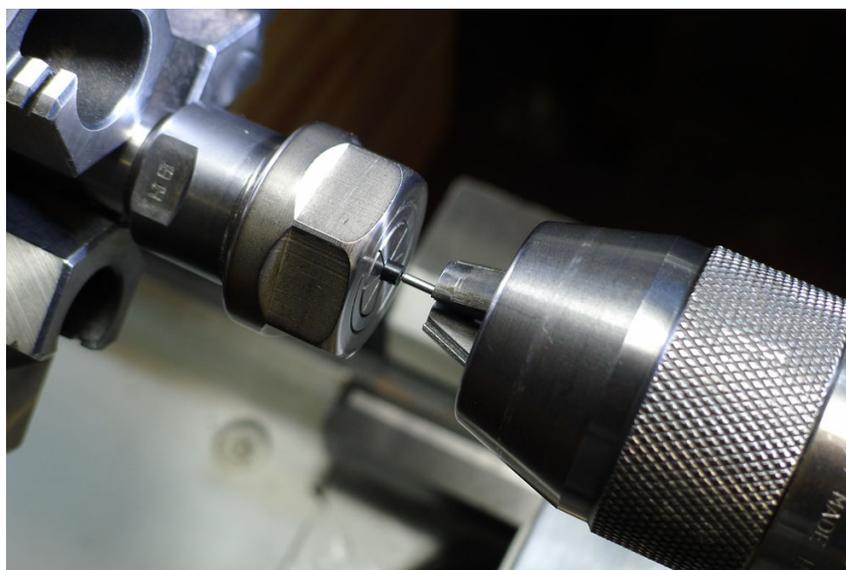
6. Center drill the marker.



7. Drill a $\frac{1}{4}$ -in.-deep hole with a 0.059 in. drill bit.



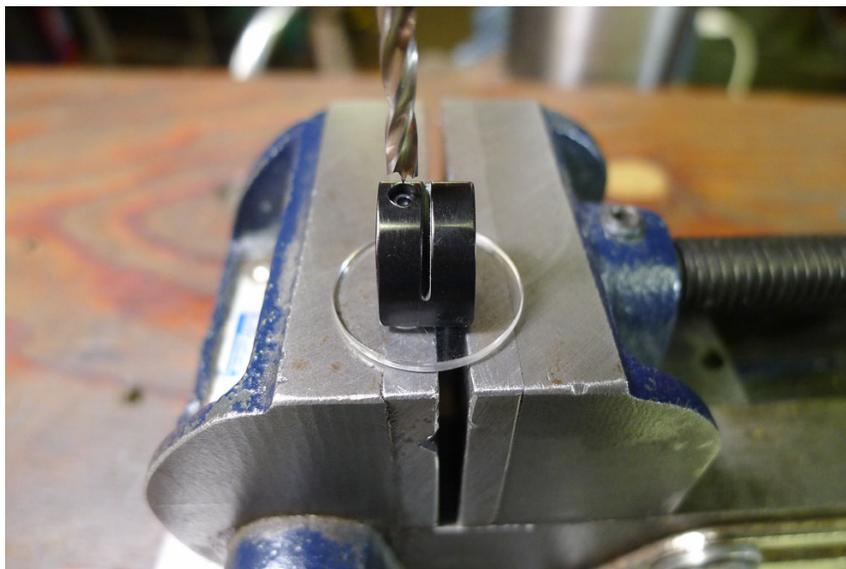
8. Mount a $\frac{1}{2}$ in. \times $\frac{1}{16}$ in. stainless steel pin in the drill chuck and press fit it into the marker.



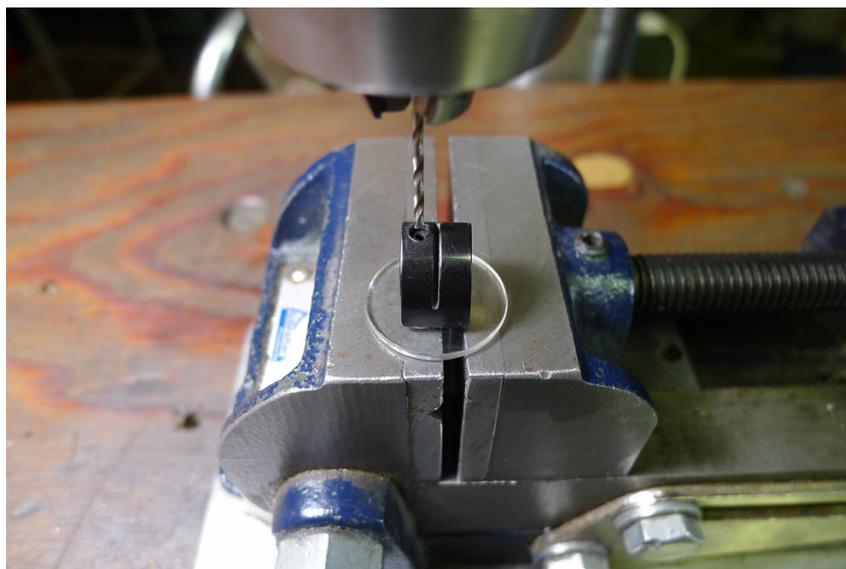
9. Mount the stainless steel pin in a collet chuck and round over the top end of the marker with a fine file. Sand the marker with wet/dry 600- and 1000-grit paper, and polish with a buffing wheel.



10. To seat the marker in a Delrin nut, drill a shallow flat-bottom hole with a 1/8 in. brad-point drill bit.



11. In the center of the hole, drill a 1/4-in.-deep hole with a 0.059 in. drill bit. Sand and polish the top of the nut.



12. Mount the marker in a collet chuck and press fit it into the nut.

