

Elegant Sierra Rollerball/Fountain pen

william wood-write

penblanks.ca



Needed:

Mandrel A; drills 27/64 and V; bushing 72A

Preparing the blanks

1. Cut the blanks the length of each brass tube plus 1/4".
2. Drill the short blank (upper barrel) with the 27/64 bit.
3. Drill the longer blank (lower barrel) with the V bit.
4. Scuff the brass tubes with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
5. Plug the ends of the tubes with baseplate wax to keep the glue from getting into the tube. Just push the ends of the tubes into a thin section of the material to form a plug. This is important: glue inside the tubes is a common cause of pen failure.
6. Roll the shorter tube in the glue and insert it into the shorter blank with a twisting motion until it is equidistant between both ends of the blank. Repeat with the longer tube and blank.
7. Set aside until the glue has had time to reach its maximum strength.
8. When the glue has cured, use a hobby

knife to remove the plugs from the ends.

9. Using barrel trimmers of the corresponding sizes (V drill, for the lower barrel corresponds to a 3/8 pen mill shaft), square off the ends of the blanks until you can see bright brass tube. STOP at this point. This can also be done with the proper jig and a disk sander. *Not having the proper tube length is another common cause of pen failure.*

Turning the blanks



1. Assemble the bushings and barrels onto the mandrel, referring to the image above.
2. Lightly tighten the mandrel and secure. Do not over-tighten as this can cause the mandrel to bend, causing your pen to come out oval. A spacer may be installed to give you more room between the thumbnut (or mandrel saver) and the last bushing.
3. Turn the pen blanks to the desired shape using the bushings as a sizing guide.
4. Sand the surface in progressive steps until

you get to 400 or 600 grit.

5. For a smooth finish, sand with Micro Mesh to 12,000 grit and apply finish of your choice.
6. Remove the blanks from the mandrel.

Assembling the pen

1. Press the 3-piece clip assembly into the smaller end of the upper barrel.
2. Press the 3-piece center band into the larger end of the upper barrel.
3. Press the two threaded couplers into either end of the lower barrel.
4. Press the finial into the threaded coupler on one end of the lower barrel.
5. Rollerball kit:
 - a. Drop the spring, small end up, and the rollerball refill into the lower barrel. Screw on the rollerball nib.
 - b. Twist the cap onto the pen body.

6. Fountain kit:

- a. Push the ink cartridge or ink pump onto the end of the fountain nib until you hear it snap on.
- b. Twist the cap onto the pen body.

