

# Ultra Cigar pen



## Needed:

Mandrel A; 10mm drill; bushing 11A

## Preparing the blanks

1. Cut the blanks approximately  $\frac{1}{4}$ " longer than the length of each brass tube so that you can square the ends off once the tubes are glued in.
2. Drill each blank lengthwise through the center with the 10 mm drill bit.
3. Scuff the brass tubes with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
4. Plug the ends of the tubes with a material of your choice – we recommend base plate 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 major cause of pen failure.*
5. Roll one of the tubes in the glue. Insert the tube with a twisting motion until it is equidistant between both ends of the blank. Repeat with the other tube.
6. Set aside until the glue has had time to reach its maximum strength.
7. When the glue has cured, use a hobby

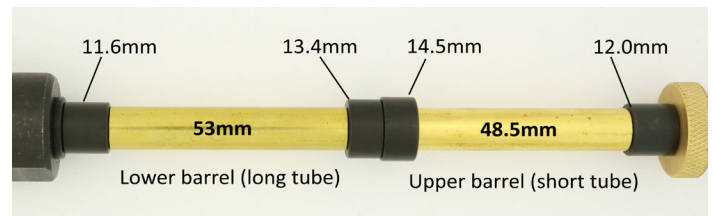
william wood-write

penblanks.ca

knife to remove the plugs from the ends.

8. Using a barrel trimmer of the proper size, 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 blanks on the mandrel as referring to the diagram above.  
*Lower barrel* (long tube): use smallest bushing (11.6mm) and second largest bushing (13.4mm).  
*Upper barrel* (short tube): use largest bushing (14.5mm) and second smallest bushing (12.0mm).
2. Lightly tighten the mandrel and secure. Do not over-tighten or apply excessive force or you risk bending the mandrel, which will cause your pen to come out oval. A spacer may be installed to give you more room between the thumbnut and the last

bushing.

3. Turn the pen blanks to the desired shape using the bushings as a sizing guide.
4. After turning the blanks, sand the surface in progressive steps until you get to 400 or 600 grit. Use a finish of your choice. For a smooth finish, sand with Micro Mesh to 12,000 grit before applying the finish.
5. Remove the blanks from the mandrel.

### **Assembling the pen**

---

1. Screw the small decorative ring onto the nib adaptor. Be sure the taper on the ring matches the taper on the nib. Screw the nib on the nib adaptor.
2. Press the nib assembly into the small end of the lower barrel (long tube).
3. Press the twist holder into the other end

of this tube.

4. Insert the refill. Make sure that the spring is in place on the tip of the refill.
5. Screw the twist mechanism onto the twist holder. Check for proper operation.
6. Slide the decorative ring onto the center band.
7. Press this assembly into the short tube with the largest diameter.
8. Press the clip bushing into the other end. Press it in until the shoulder is flush with the blank. The threads will be sticking out.
9. Slide the clip over the threads.
10. Screw on the finial.
11. Slide the upper barrel onto the twist mechanism.

