

william wood-write

Round Top European 8 mm pen instructions



Needed:

Mandrel B, bushing 3B, Drill 8 mm, wood Size – 3/4" x 3/4"

Preparing the blanks

1. Cut the blanks the length of each brass tube, giving a little extra length for the facing of the blank after the tubes have been glued in.
2. Drill each blank lengthwise with the 8 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 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 kit failure.
5. Prepare your glue. We recommend two part epoxy glue – use a fast drying type, one hour or less. Be sure to mix it thoroughly. Wax or baking paper or even a Post-it notepad all make excellent mixing surfaces. You can also use thick flexible CA glue, but you have to work quickly to get the tube all the way into the blank before the glue dries.
6. Roll one of the tubes in the epoxy.
7. Insert the tube with a twisting motion until it is almost entirely inside the blank. Then use a dowel or small stick to push it until the tube is equidistant between both ends of the blank. Repeat with the other tube.
8. Set aside until the epoxy has had time to reach its maximum strength.
9. When the glue has cured, use a hobby knife to remove the plugs from the ends.
10. 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 following the image above. The upper barrel is pictured on the left, and the lower barrel is shown on the right.
2. Tighten the tailstock before tightening the blanks on the mandrel. This will centre the mandrel first. Then tighten the nut that holds the blanks.

3. Turn the blanks to the desired contour making sure that the area next to the bushing is turned to the size of the adjacent bushing. *Very important: make sure the upper part of the lower barrel is not higher than the bushing. If the wood is too thick here, the centre band of the upper barrel will bind on the wood when you are using the twist mechanism to extend and retract the refill. It is a good idea to test the centre band over the bottom barrel before pressing in the parts.*
4. After turning the blank, sand the surface in progressive steps until you get to 400 or 500 grit.
5. Stop the lathe and measure 1 25/32" (1.7895") from the cap clip end and mark. With a sharp parting tool, remove the wood all the way to the brass tube and all the way to the end of the tube on the cap center band end. Use the extra "tube cover" bushing (shown in the diagram) as a guide for the finished diameter of the wood adjacent to the centre band.
6. If a higher polish finish is desired, continue sanding with Micro Mesh through 12000 grit. Apply the finish of your choice and polish.
7. Remove the blanks from the mandrel.

Assembling the pen



Please refer to the parts diagram. Another common cause of kit failure is the misalignment of the parts when pressing them in place. We recommend using a pen press or small

arbor press, but you can also use a good "C" clamp and much care. Be sure that parts are straight and in line with the blanks when pressing in the various parts – if not, you'll end up with a poor-fitting pen or one that doesn't work at all.

1. Press the nib into the smallest end of the longest blank.
2. Press the twist holder into the other end of this blank.
3. Place the spring onto the ink refill and place it into the longest blank inserting the spring end first through the twist holder.
4. Press the center band onto the exposed tube of the other blank.
5. Do a twist test as follows:
 - a. Use a rolled up piece of rough sand paper or a file to ream out the inside of the tube (centre band end). Be careful not to scratch the gold centre band.
 - b. Insert the brass end of the twist mechanism (in the centre band end), and twist it to see if it turns freely. If it doesn't turn freely, more sanding or filing is required.
 - c. Once you're satisfied that the twist mechanism turns freely, continue to the next step.
6. Press the black finial into the unthreaded end of the twist mechanism.
7. Press the twist assembly, finial, trim ring and clip into the cap clip end of the upper blank.
8. Slide the cap over the refill and screw this cap assembly into place.
9. Check to see that the pen operates properly.