

william wood-write

Longwood pen instructions



Needed:

Mandrel A, drill 3/8,
bushing 84A

Preparing the blank

1. Cut the blank $\frac{1}{4}$ " longer than the brass tube to allow for the facing of the blank after the tubes have been glued in. Drill the blank lengthwise with the 3/8 drill bit.
2. Lightly scuff the brass tubes with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
3. 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. Push the ends of the tubes into a thin section of the material to form a plug. *This is very important – getting glue inside the tubes is a common cause of pen failure.*
4. 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.
5. Roll the tube in the epoxy.
6. Insert the tube into the blank with a twisting motion until it is almost entirely inside the blank. Use a dowel or small stick to push it until the tube is equidistant between both ends of the blank.
7. When the glue has cured, 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. Improper tube length is another common cause of kit failure.

Turning the blank

1. Place one bushing, the blank and the other bushing onto the mandrel. You may need to add some spacers for proper fit.
2. Tighten the tailstock first to centre the mandrel. Then lightly tighten the nut that holds the blanks. Do not over-tighten the brass thumbnut or apply excessive force as this can bend your mandrel and cause your pen to come out oval.
3. Turn the blank to the desired contour, using the bushings as a sizing guide.
4. Sand the surface in progressive steps until you get to 400 or 500 grit, then sand using Micro Mesh 1,500 to 12,000 grit and apply a finish of your choice.
5. Remove the blank from the mandrel.

Assembling the pen

Another common reason for pen failure is misalignment of parts when pressing them in place. You can use a good pen press or small arbor press, but you can also use a bench vise. Go slowly and do not use too much force. Be sure that parts are straight and in line with the blanks when pressing them in – if not, you'll end up with a poor-fitting pen or one that doesn't work at all.



1. Thread the nib coupler into the nib. .
2. Press the nib coupler, stepped end first, into the lower end of the brass tube.
3. Slide the clip onto the click transmission.
4. Slide the cap assembly tool over the click plunger of the transmission. The cap assembly tool (used for assembly only – this is not part of the completed pen) protects the plunger while the parts are being pressed together.
5. With the press tool in place, press the click transmission and clip into the tube. Remove the nib and slide the ink refill into the tip end of the barrel. Replace the nib to complete the pen.