

william wood-write

Flat Top American letter opener instructions



Needed:

Mandrel B, drill 8 mm, bushing 1B – use #1 and #2. You can match them up

with the hardware for size; wood size 3/4" x 3/4"

Preparing the blank

1. Cut the material blank approximately 1/16" shorter than the tube. This is to give enough exposed tube to be pressed into the center band when the letter opener is assembled. You can cut the blank the same size and then part off 1/16" at the lathe if you want. Otherwise, you will need to square up that end of the blank with a skim cut while on the lathe.
2. Drill the blank through the center, lengthwise, with an 8 mm bit.
3. Scuff the brass tube with sandpaper to clean off oxidation 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 inside the tube. Just push the ends of the tubes into a thin section of the material to form a plug.
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 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.
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. Improper tube length is another common cause of pen failure.

Turning the blank

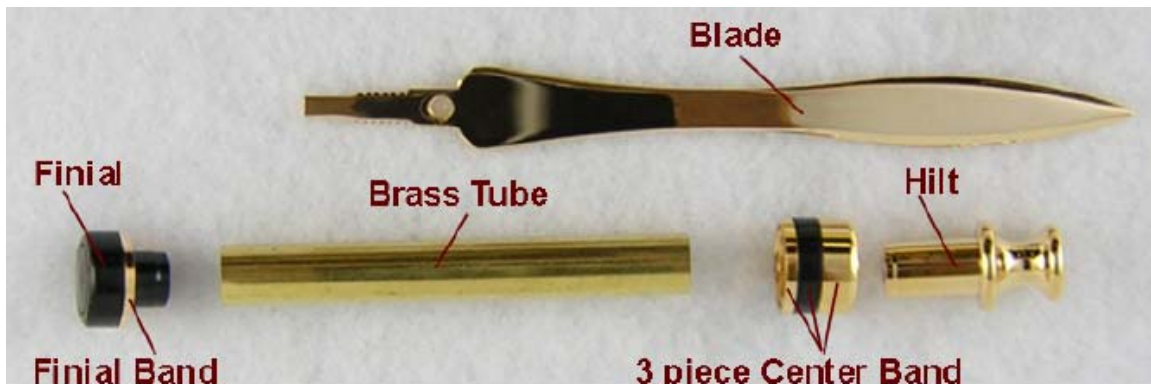


1. Assemble the blank on the mandrel using bushings from the 1B bushing set and following the diagram above. Match the center band diameter with one bushing and the

finial ring to the other bushing. Fill the empty mandrel space with spare bushings or brass tubes.

2. Lightly tighten the mandrel and secure. Do not over-tighten the brass thumbnut as this can bend the mandrel. A spacer may be installed to give you more room between the thumbnut and the last bushing.
3. Turn the blank to the desired contour, ensuring the area next to the bushing is turned to the size of the adjacent bushing.
4. After turning the blank, sand the surface in progressive steps until you get to 400 or 500 grit.
5. For a smooth finish, sand to 12,000 grit with MicroMesh. Apply a finish of your choice.
6. Remove the blank from the mandrel.

Assembling the letter opener



1. Assemble the three ring center band.
2. Push the hilt through the center band assembly.
3. Press this assembly into the end of the finished blank that has the brass tube exposed.
4. Place the finial ring over the finial and press it into the other end of the blank.
5. Screw the blade into the hilt.