

# william wood-write

## Sierra letter opener instructions

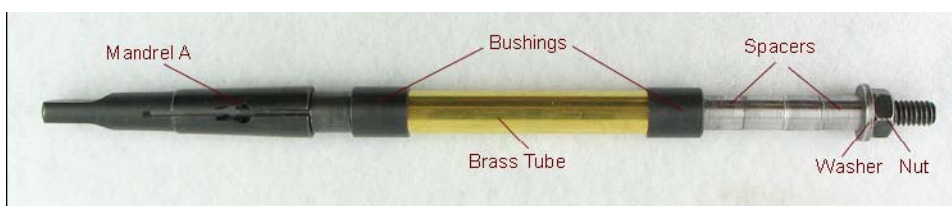


**Needed:**  
Mandrel A;  
bushing 20A; drill  
27/64

### Preparing the blank

1. Only one blank (half of a standard length pen blank) is required for this pencil. Cut the material blank slightly longer than the brass tube so you'll be able to square the ends off once the tubes have been glued in.
2. Drill the blank through the center, lengthwise, with a 27/64" bit.
3. Scuff the brass tube with sandpaper to clean off the oxidation and give the glue a better adhesion surface.
4. Plug the ends of the tube with a material of your choice – we recommend base plate wax – to keep the glue from getting into the tube. Just push the ends into a thin section of the material to form a plug. This is important: glue inside the tube 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 the tube 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 blank 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 kit failure.*

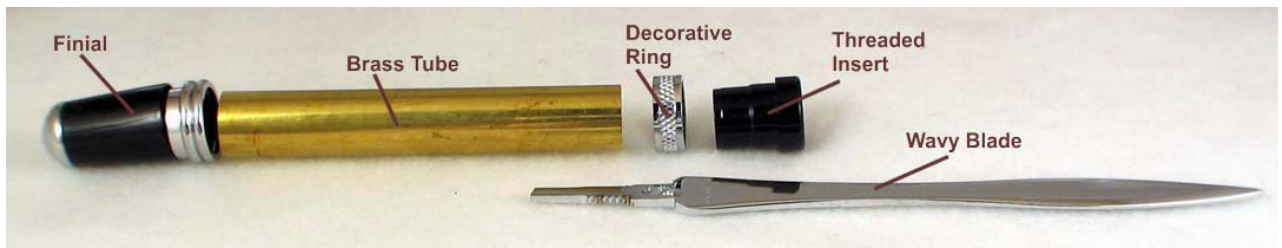
### Turning the blank



1. Assemble the blank on the mandrel using the 20A bushings and following the diagram above. Selection of the bushings is easy since they are all the same size. Put any bushing in any position.

2. As there is only one blank to place on the mandrel, you will have to place spacers on the mandrel in order to tighten the tube for turning. You can drill a 7 mm hole in a piece of wood for a spacer or 7 mm bushings make excellent spacers.
3. Lightly tighten the mandrel and secure. Do not over-tighten the brass thumbnut – this can cause the mandrel to bend, which means your pen will come out oval.
4. Turn the blank to the desired shape using the bushings as a sizing guide.
5. Measure 3/16" from the end that you intend to become the cap end of the letter opener.
6. Using a sharp parting tool, cut a tenon 3/16" long all the way to the brass tube. This must press into the cap, so you don't want to remove any of the brass tube.
7. After turning, sand the surface in progressive steps until you get to 400 or 500 grit.
8. We recommend using Micro Mesh through 12,000 grit to sand, and apply the finish of your choice.
9. Remove the blank from the mandrel.

### Assembling the letter opener



1. Press the finial onto the end where you cut the tenon.
2. Now place the decorative ring on the threaded insert.
3. Press this assembly into the other end of the blank.
4. Carefully, but securely screw the letter opener blade into the treaded insert.
5. Your kit is finished.