

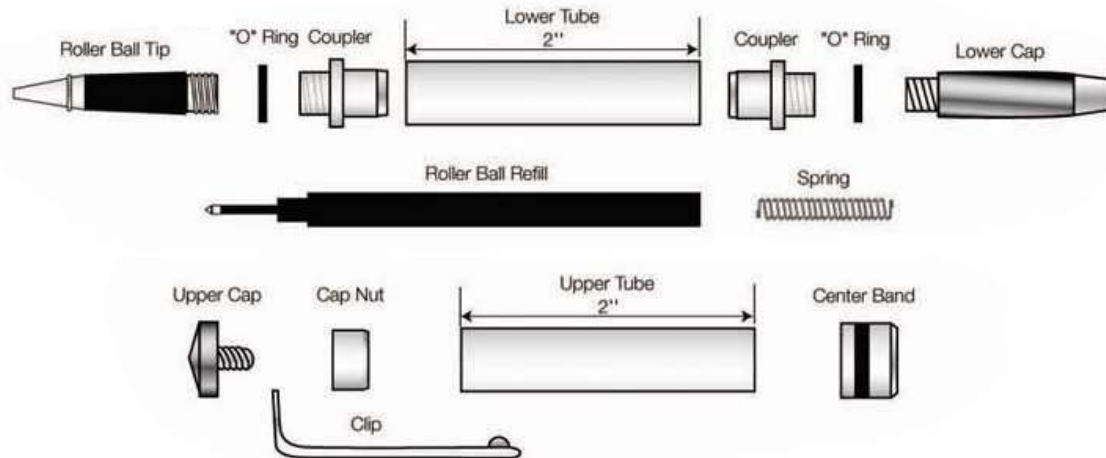
Native Pens

Classic Rollerball Pen Instructions

Required:

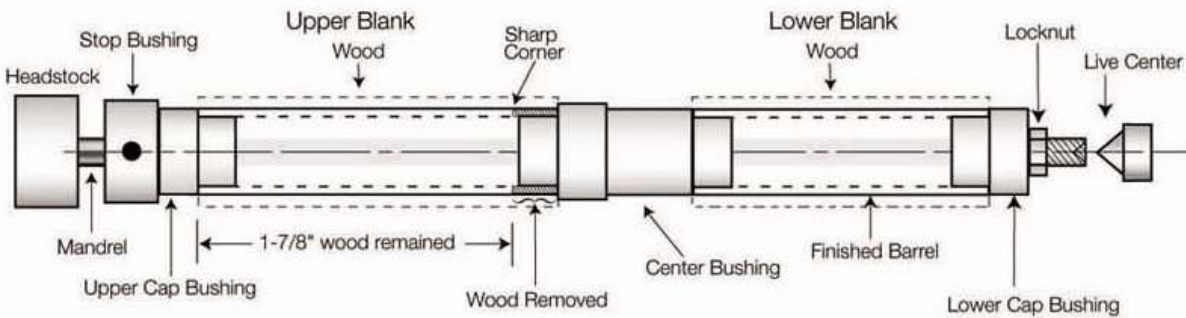
1/4" Mandrel 10mm Drill Bit Pen Mill Classic Rollerball and Fountain Pen Bushings

Pen Kit Parts:



Turning the Pen Barrels.

1. Cut a pen blanks slightly longer than the brass tubes.
2. Drill the blanks through the centre, lengthwise, with a 10mm bit.
3. Sand the surface of the brass tube. This can be done by hand or mounted in the bushes on the lathe. This will clean off any oxidation and roughen the surface for a better glue bond.
4. Bond the tubes into the timber blanks. This can be done with CA or two-part epoxy glue. Insert the tube with a twisting motion then push it in until slightly under flush. About equal distance in from each end of the timber blank.
5. Allow glue to cure as required by glue manufacturer.
6. Clean all the dried glue from inside the brass tube. Not cleaning out all the glue from the tube is the most common cause of pen failure.
7. Using a Pen Mill, face off the ends of the blanks until you can just see the bright brass end of the tube. STOP facing at this point. Another method to square the ends is sanding on a disc sander against a square fence or using a jig to hold the tube square to the disc then lightly touching the end with the Pen Mill to finish them.
8. Once the blanks are square and you can see the ends of the tube brighten you can mount the blanks to the mandrel. Note: the Upper Cap Bushing is the larger cap bushing.



9. Turn the blanks until the desired shape is reached, then sand the blanks down to the bushings.
10. Mark the position of the wood to be removed, 1-7/8" down from the Upper Cap Bushing.
11. Use a very fine parting tool to make the initial cut at the mark. Once done, turn down to the brass tube. Ensure the shoulder of the cut is kept square.
12. Finish the pen to your specifications. Remove the barrels from the mandrel and it is ready for assembly.

Assembly of the pen.

1. Lay out the pen parts as shown in the previous diagram.
2. Slip the "O" rings onto the threaded side of each coupler and into the groove.
3. Press the Couplers into each end of the Lower Barrel.
4. Screw the Rollerball Tip into the Coupler.
5. Place the spring into the Lower Cap, then after removing the cap from the refill; slip the refill into the barrel and screw in the Lower Cap.
6. Press the Upper Cap, Clip and Nut assembly into the flat end of the Upper barrel.
7. Press the Centre Band, square end first, onto the exposed end of the brass tube up the to wood face. You may wish to use a drop of glue here also.
8. Thread the Cap onto the Lower Barrel.
9. You pen is finished.

