

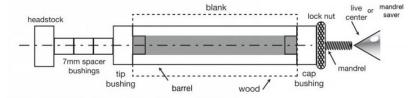
Gear Pen Instructions

Required:

1/4" Mandrel Ø9.5mm Brad Point Drill Bit Pen Mill Gear Bushings

Turning the Pen Barrels.

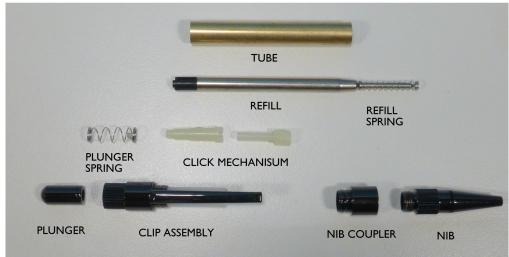
- 1. Cut a pen blanks slightly longer than the brass tube.
- 2. Drill the blank through the centre, lengthwise, with an Ø9.5mm brad point drill bit.
- 3. Sand the surface of the brass tube. This can be done by hand or mounted in the bushes on the lathe. This will clean off any oxidation and roughen the surface for a better glue bond.
- 4. Bond the tubes into the timber blank. 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 and finish the turning until the desired shape is reached.
- Finish the pen to your specifications. Remove the barrel from the mandrel and it is ready for assembly.





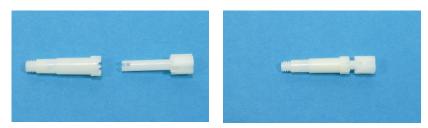
Gear Pen Instructions

Assembly of the pen.



- I. Lay out the parts as shown.
- 2. Assemble the click mechanism as shown.

Step I – Slip Mechanism Parts Step 2 – Mated Parts together



- 3. Press the Clip Assembly into the top of the Pen Barrel.
- 4. Slide the Click Mechanism into the lower end of the Pen Barrel, threaded end first.
- 5. Press the Nib Coupler into the lower end of the Pen Barrel. (Note: Nib and Nib Coupler may be screwed together in the pen kit pack).
- 6. Insert the Refill and Refill Spring, push the Refill in until the threaded end of the Click Mechanism is seen at the clip end.
- 7. Screw the Nib into the Nib Coupler.
- 8. Insert the Plunger Spring into the Clip Assembly then screw the Plunger onto the Click Mechanism.
- 9. Press the plunger to operate the pen.
- 10. Your pen is finished.