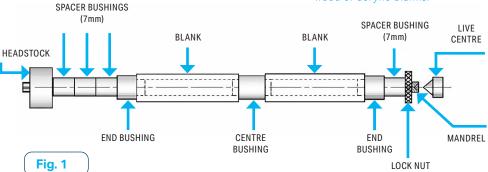


Product Code: PEN-9

## A.REQUIRED TOOLS AND ACCESSORIES

- 7 mm pen mandrel (MAND-92)
- 3 piece bushing set (BUSH-9N)
- 8 mm drill bit (BPD-8MM-PRC)
- 8 mm barrel trimmer
- 2 part epoxy glue or CA super glue (cyanoacrylate)
- Wood or acrylic blank, minimum size 9/16" square
- · Sanding and finishing supplies

The barrels are made out of turned wood or acrylic blanks.

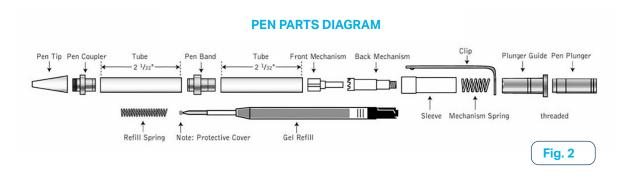


## B. PREPARING THE BLANKS

- Cut 3/4" to 5/8" square blanks, to the length of the brass tubes (add 1/16" for squaring off)
- 2. Drill an 8mm-centered hole lengthwise through each blank.
- 3. Spread glue over the tubes.
- 4. Insert the tubes into the blanks with a twisting motion to spread the glue evenly inside, then center the tubes lengthwise inside the blanks.
- 5. When the glue dries, square the ends of the blanks. Use an 8mm barrel trimmer or belt/disc sander to take the wood down flush to the brass tube.

## C. TURNING THE BLANKS

- Place 3-4 spacer bushings onto the mandrel. Next, place an end bushing onto the mandrel. Then, slide on a blank, insert the center bushing, and follow with the other blank.
- 2. Insert an end bushing. Use standard 7mm bushings to fill the space to the thread if needed. Thread the lock-nut on and hand tighten.
- Bring the tail stock snug with the mandrel (do not over tighten, it could damage the mandrel). Adjust to remove the spaces, then tighten the lock nut and lock the tail stock in place.
- **4.** Turn the wood down, flush with the bushings using a chisel and gradual higher grits of sandpaper.
- 5. Finish with your choice of polish and wax (Shellawax or other).



## C. PEN ASSEMBLY

- 1. Line up the finished parts according to figure 2.
- 2. Press the pen coupler, wide end first into the lower barrel.
- 3. Press the center band short extension first into the opposite end.
- 4. Insert the 3 part plastic mechanism (follow diagram) narrow diameter of the sleeve in first (threaded stub pointing upward) push in until flush with the edge. Slide the lower barrel with the center band longer extension into the upper barrel pushing the mechanism sleeve further inside. Continue by pressing the remaining extension inside.
- 5. Slide the plunger guide, narrow end first, into the clip hole. Press this assembly into the opposite end of the barrel.
- Insert the refill through the coupler, and push the mechanism towards the clip end until the threaded end of the back mechanism is held close to the end of the plunger guide.
- 7. Drop the mechanism spring over the threaded stem, and screw the plunger onto the thread and tighten.
- 8. Slide the refill spring over the threaded the tip of the refill, and screw on the pen tip.
- 9. The pen is now ready to use. Just click the plunger to extend or retract the refill.