

Teacher's Pen Kit Instructions

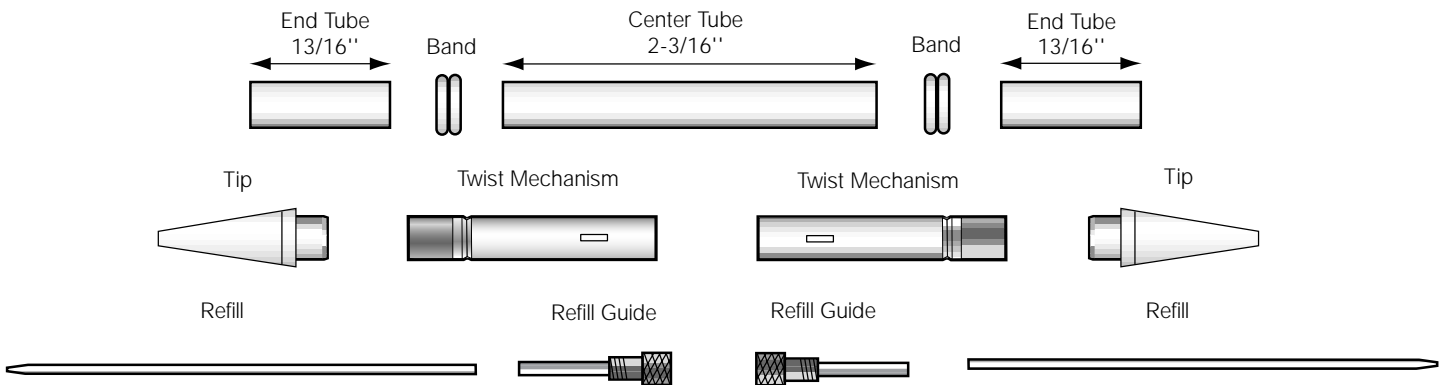
Kit Features:

- Heavy 24kt gold plating with epoxy coating.
- 2 independent ball point twist mechanisms.
- Uses (2) Mini ball point refills (one red & one black)
- Pen body can be turned to an artistic design form.
- Overall length: 5-3/4".

Required Accessories:

- 7mm, long mandrel
- 7mm drill bit
- 4 pcs., 7mm steel bushing (3 plus 1 additional).
- 7mm barrel trimmer
- 2 part epoxy glue or insta-cure (cyanoacrylate)

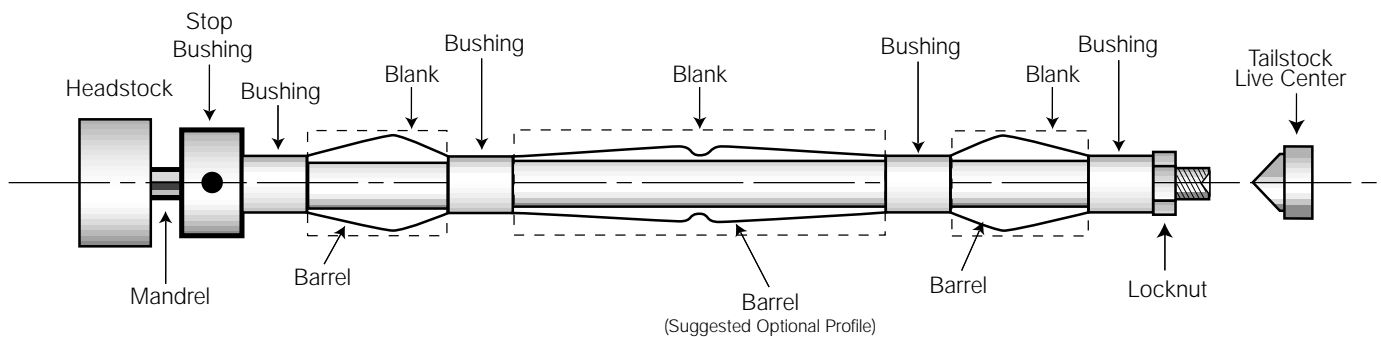
Diagram A / Parts Layout



Preparing the Blanks

- Cut 3/4" to 1/2" square blanks, or use (PSI Quick Blanks or PSI Jumbo Pen Blanks) to the length of the brass tubes (add 1/16" for squaring off). Use different wood species for the ends in order to identify the ink colors.
- Drill 7mm centered hole lengthwise through each blank.
- Spread glue over the tubes. Insert into blanks with a twisting motion to spread the glue evenly inside. Center tubes lengthwise inside the blanks.
- When the glue dries, square the ends of the blanks. Use a 7mm barrel trimmer or belt/disc sander. Take wood down flush to the brass tube ends.

Diagram B / Turning the Wood Blanks



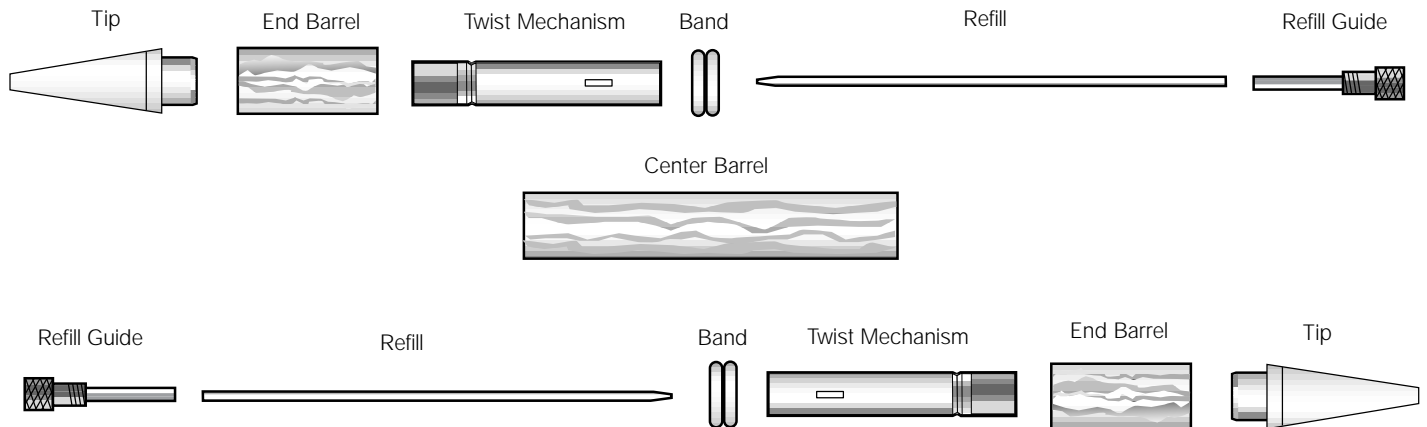
Turning the Blanks

- Place stop bushing onto mandrel. Place one of the (4) bushings next to it. Slide on a short blank. Follow with another bushing then the center blank. Then another bushing then the other short blank. Finally place on the last bushing. Thread the lock nut hand tight. Bring the tailstock snug with the mandrel. (Do not over tighten, it could damage the mandrel). Adjust for space and tighten the stop bushing and lock nut.

- Turn the wood down using a lathe chisel. You may turn either to a straight or artistic design cut. Finish the blank with gradual higher grits of sand paper.
- Try a finish of your choice but be careful if brushing on a poly, etc. You can stick the tube, bushings, and

mandrel together. PSI Liquid Friction Polish #PKFRICT1 or #PKFRICT2 works well on most woods. Shake before using. Apply with a rag or paper towel to the spinning barrel. Apply two coats. You could also use **Hut** Perfect Pen Polish #PK-PF1 or #PK-PF2. To achieve a bright, hard finish.

Diagram C / Assembly



Assembly

- Press the tip into either end of the short end barrel.
- Press the twist mechanism, brass end first into the other end of the barrel to the indentation line.
- Insert the refill into the refill guide and screw into the mechanism, to the end. Twist the mechanism and pen barrel to check the extension of the refill. Press the mechanism further in if necessary. Repeat above steps with the other side of the pen.
- Insert a center band over each of the mechanisms.
- Push the ends into the center barrel.
- The pen is ready to operate. Twist either section of the pen to extend or retract red or black barrel.

Tips

- Line up finished parts according to diagram C.
- To press parts together, use a vice or a clamping instrument with wooden jaws. Press with caution, to avoid scratching gold plated parts.

Bushings 7mm
(Needs 4 bushings to turn complete pen)

