

# Model PK10-FP2 and PK10-RP2 10 mm Fountain Pen and Roller Ball Pen Kit with Cap on End Assembly Instructions

## Features :

- Heavy 24 kt plating
- Oversized (Almost 6 inches in length)

## Step 1 - Cut Wood Blanks

From 5/8" to 3/4" square stock, cut blanks to the length of the tube plus 1/8". Grain should run lengthwise. To maintain the grain pattern continuously over the length of the entire pen, cut one blank long enough to make both parts plus waste. Mark both ends to indicate top and bottom prior to cutting them apart. These blanks must remain identified throughout the process to make sure they are assembled together.

## Step 2 - Drill the Wood Blanks

Drill a centered hole lengthwise through each blank. You may use our drill guide or any other device to help ensure a straight hole. Excessive pressure may cause the drill bit to wander and/or split the blank if not held firmly. Slow the feed rate and back the bit out repeatedly for chip removal. For best results - use a 10 mm drill bit (10mm=.3937 dia.). If not available, use a 25/64" (.3906 dia.) bit - although slightly smaller than the 10 mm bit, you will get acceptable results.

## Step 3 - Glue the tubes into the blanks

Use epoxy or a gap filling cyanoacrylate (super glue), to glue the tube into the blank. Coat the outside of the tube, then insert into the blank with a twisting motion to spread the glue until flush. Allow it to dry.

## Step 4 - Square the ends

With a barrel trimmer, disc or other sanding device, square the ends of the blanks 90 degrees to the ends of the brass tubes as needed.

## Step 5 - Turn the wood blank

Install the blanks on a turning mandrel with a bushing against each end. Tighten the nut snugly and bring the tailstock center firmly against the end of the mandrel. Turn or file the diameter down to slightly larger than the bushings (about 15/32"). As you approach the final size, flush with the bushings, be careful since the wood is only about 1/32" thick.

## Step 6 - Sand

As with any sanding, progress through a range of grits. The type of wood used and the quality of the beginning surface will dictate your selection.

- 80-100 grit if rough surface or additional shaping is needed (overly thick)
- 120-150 grit if fairly smooth and straight
- 220-240 grit for final finish with most domestic woods
- 320-400 grit especially on dense or oily exotic woods

Scotch brite works well and doesn't tend to scratch. Sand with blank spinning. For initial shaping, stick sandpaper on a board wide enough to remove any hills or valleys. The center ring is 29/64" in dia. Do your final sanding with the grain and the lathe off. The final size for a good fit is between 27/64" and 29/64".

## Step 7 - Finish

Try a finish of your choice but be careful if brushing on a poly, etc., you could stick the tube, bushings, and mandrel together. The following friction polish works well on most woods.

1/3 wood alcohol (methanol), 1/3 white/clear shellac, 1/3 boiled linseed oil.

Mix equal parts of the three ingredients in a bottle and shake before using. Apply with a rag to the spinning tube. Apply two coats. Remove the tube from the mandrel.

## Step 8 - Touch up

With tubes off mandrel, lay them end to end to decide which sets will look best when assembled. Remember, they will be .10" apart (due to center ring) so minor differences won't show. If necessary, a light sanding of the tube ends on a block will square them and improve the fit during assembly.

## Step 9 - Notch sleeve

Cut out a small notch in the wooden blank to match the notch in the brass sleeve. This is best accomplished by using the edge of a single cut mill file.

## Fabrication aids

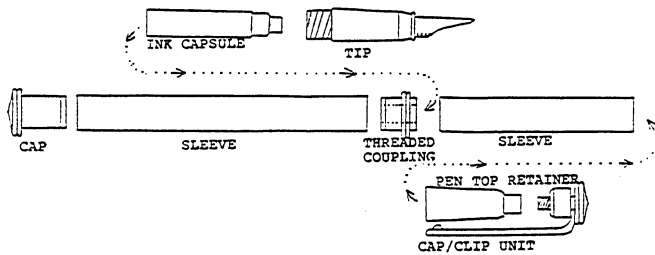
Drill bits, drill guides, and mandrels are available- contact your supplier.

**Please turn page over for Assembly instructions.**

### General Assembly hints:

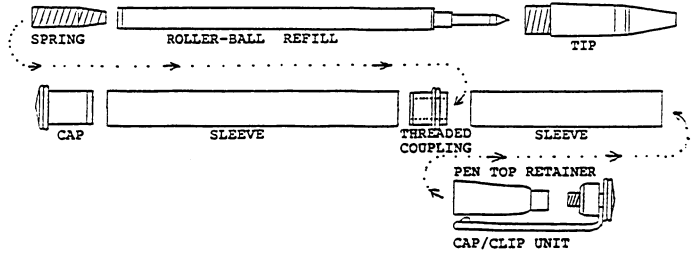
- Use a clamp or vise to press parts together
- Front and rear tubes can be matched to display a continuous grain pattern for added beauty.

### Fountain Pen Assembly



- Line up cap, longer sleeve and threaded coupling. Make sure that the longer shoulder of the coupling is inserted in the sleeve.
- Press components (above) together gently with your vice.
- Screw tip into coupling.
- Line up cap/clip unit with shorter sleeve making sure that the clip is aligned with the notch in the wood.
- Slide the plastic pen top retainer inside the top sleeve closed end first. Use a 5/16 phillips head screw driver inserted into the top sleeve to screw on the pen top retainer.
- Adjust closing mechanism for a tight fit by inserting the screw driver and turning clockwise.
- Insert ink cartridge. A spare cartridge may be stored in the pen barrel placed back to back with the existing cartridge.

### Roller ball Pen Assembly



- Line up cap, longer sleeve and threaded coupling. Make sure that the longer shoulder of the coupling is inserted in the sleeve.
- Press components (above) together gently with your vice.
- Insert spring, flat end first into sleeve. Insert roller ball refill blunt end towards spring. Screw tip into coupling.
- Line up cap/clip unit with shorter sleeve making sure that the clip is aligned with the notch in the wood.
- Slide the plastic pen top retainer inside the top sleeve closed end first. Use a 5/16 phillips head screw driver inserted into the top sleeve to screw on the pen top retainer.
- Adjust closing mechanism for a tight fit by inserting the screw driver and turning clockwise.

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