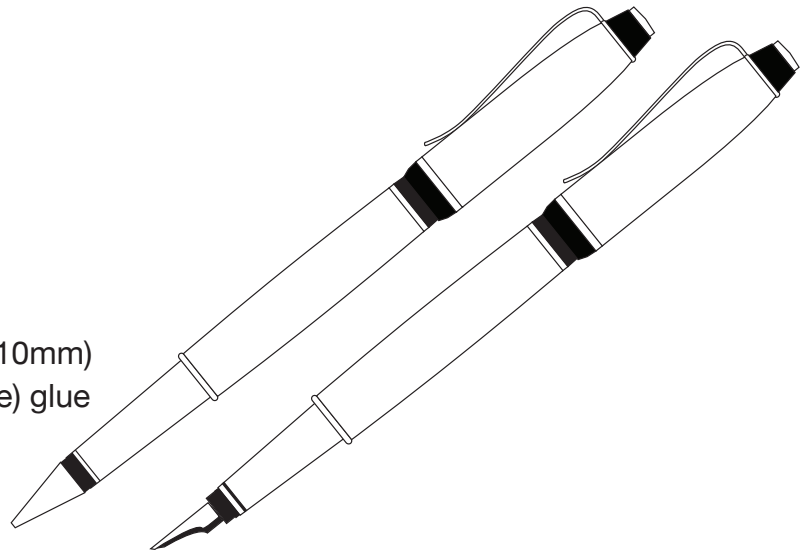


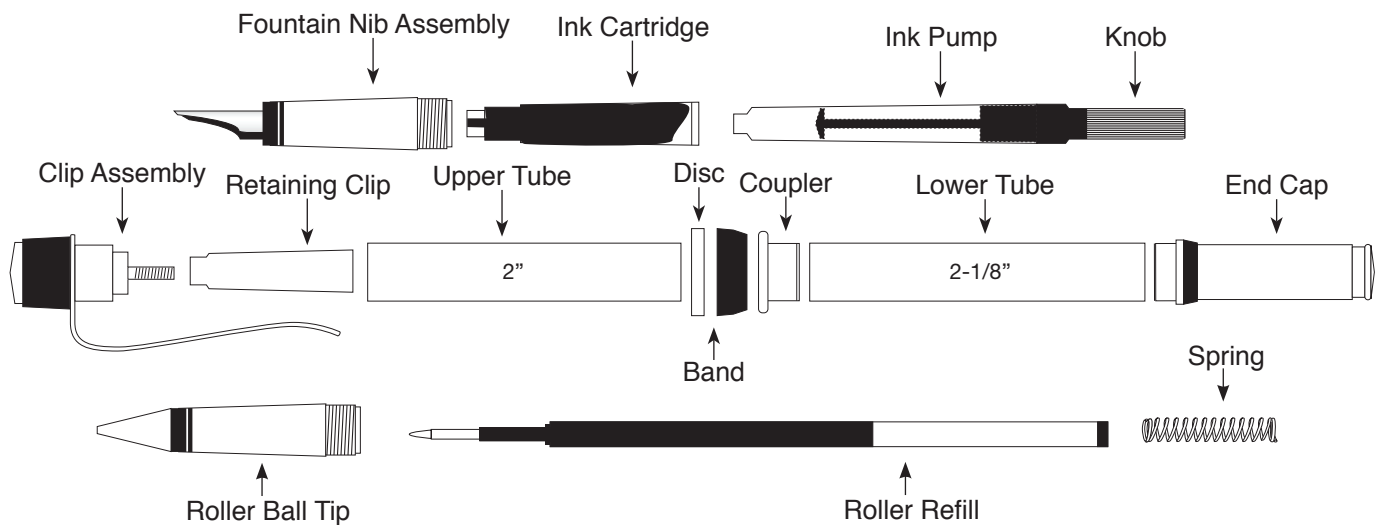
# Big Ben Roller Ball/Fountain

## REQUIRED ACCESSORIES

- 7mm, Pen Mandrel
- 3 pc. Bushing Set #PKBIG-BU
- 10mm Drill Bit #PK10-10
- Universal Barrel Trimming #PKTRIMKIT (Use 10mm)
- 2 Part Epoxy Glue or Insta Cure (cyanoacrylate) glue
- Overall length: 5-7/8"



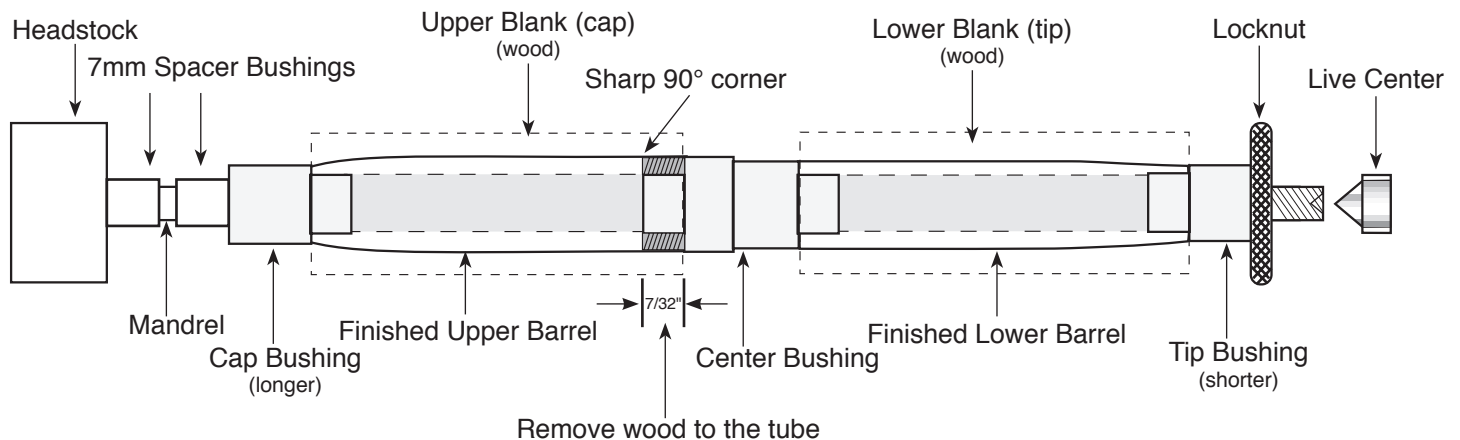
## DIAGRAM A / PART LIST



## PREPARING THE BLANKS

- Cut the blanks to the size of the brass tube (add 1/16" for trimming)
- Drill 10mm hole, through each blank.
- Glue one tube in each blank. Insert with a twisting motion to spread the glue evenly inside the blank.
- When the glue dries, use a universal 10mm barrel trimmer. Trim the wood down, flush to the brass tube.

## DIAGRAM B / Turning the Blanks



**TURNING THE BLANKS**

- Mount the bushings and blanks on the mandrel according to Diagram “B”
- Turn the wood down, close the to size of the bushings. Sand the wood down to the bushing diameter.
- Remove wood for the band:  
Mark a 7/32" line from the wide end of the upper barrel (same thickness as band and disc). Remove the wood to the brass tube  
(see Diagram 'B') keep a sharp, 90 degree corner on the wood.
- Finish the wood with your choice of polish.

**ASSEMBLY Note:** Layout finished parts according to Diagram A

- Press the disc then the band (wider diameter in first) over the exposed brass on the upper barrel.
- Press the end cap into the retaining clip until they “click” together, as shown in Diagram C. Align with the upper tube. Screw the retaining clip onto the post until the distance between #1 and #2 is exactly the same as the length of the upper barrel. This will assure that the retaining clip is in exactly the proper position to click the cap on/off at the nib and posting ends of the pen.
- Remove the end cap from the retaining clip. Press the clip assembly (with retaining clip attached) into the narrow end of the upper barrel (shorter).
- Press the coupler into the wide end of the lower barrel.
- Press the end cap into the opposite end of the lower barrel.

**ROLLER BALL**

- Drop the cushioning spring into the opening at the lower barrel. Follow with the refill.
- Thread on the tip over the refill

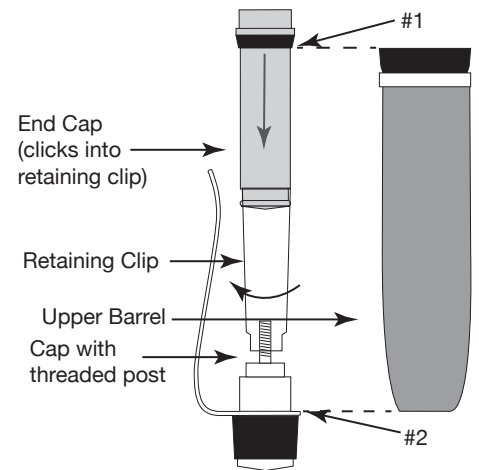
**FOUNTAIN PEN**

- Attach either, the ink cartridge or the ink pump into the back end of the nib assembly. Push in to fit.
- To use the ink pump, a bottle of ink is required.
- Screw the knob counter clockwise until the piston is at the bottom. Insert the nib into the ink bottle; slowly turn the knob clockwise to draw ink up into the pump.
- Insert and screw in either assembly into the opening of the lower barrel.

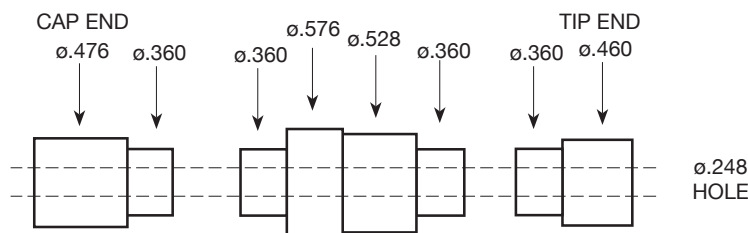
**ADJUSTMENT (only if necessary)**

- Click the cap assembly (upper tube) into either end of the lower tube section. Adjust the retaining clip if the cap does not meet properly as follows:
- Find a narrow Phillips screwdriver about 3/16” wide.
- Push in until it bites into the retainer and screw on the threaded stem inside. Thread clockwise or counter clockwise and test. Stop when there is no space between ends of pen.

**DIAGRAM C**



**DIAGRAM D / PKBIG-BU**



Philadelphia, PA 19115