

# APOLLO ELITE Roller Ball and Fountain Pen Kits

## KIT FEATURES

- Heavy plating with epoxy coating.
- Handsome looking pen with rounded features.
- Oversized designs suit arthritis sufferers.
- #PK10-RPR—Premium Roller Ball Refill (Roller Ball Kit)
- #PK10-FPR—Fountain Refill (Fountain Pen Kit)
- Over all length: 5-1/4"

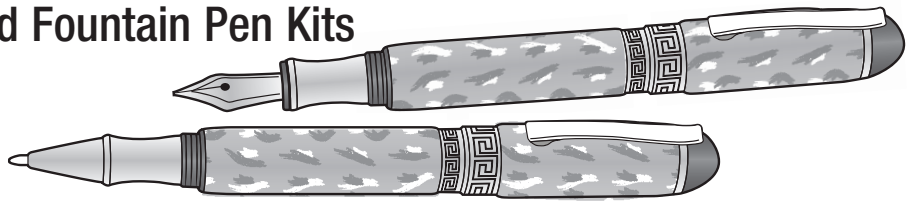
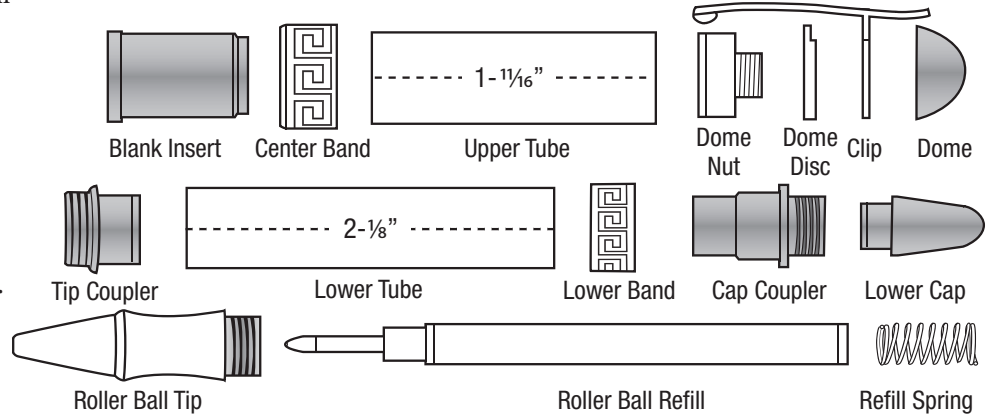


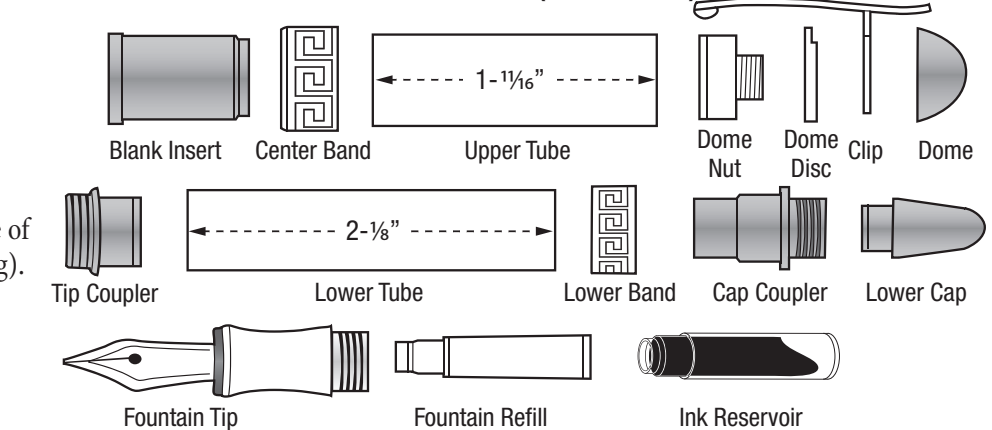
DIAGRAM A-1 • Parts list (Roller Ball)



## REQUIRED ACCESSORIES:

- 7mm pen mandrel
- #PKPLI-DB—Drill Bit .492" diameter.
- #FB916—Drill Bit 9/16" diameter.
- #PKAPRBU—3-piece Bushing Set.
- #PKAPBTS—2-piece Barrel Trimming Sleeve Set.
- #PKTRIMKIT—Universal Barrel Trimmer Kit.
- 2-part epoxy #PKGLUE2 or instacure glue (cyanoacrylate)

DIAGRAM A-1 • Parts list (Fountain Pen)



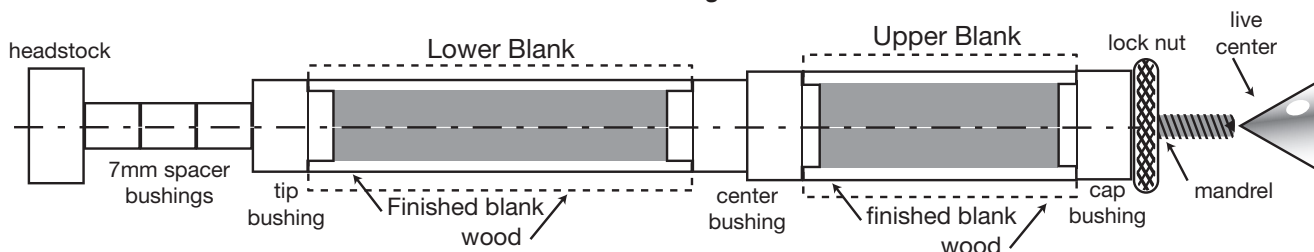
## PREPARING THE BLANKS:

- Cut 3/4" or larger pen blanks to the size of the brass tubes (add 1/16" for trimming).
- Drill a 9/16" diameter hole through the upper blank (shorter).
- Drill a .492" diameter hole through the lower blank (longer).
- Spread glue over tubes. Insert each into the proper barrel with a twisting motion to spread the glue evenly inside.
- When the glue dries, trim the ends of each blank. Use a 7mm barrel trimmer with adapter sleeves (#PKAPBTS). Take the excess wood down to the brass tube.

## TURNING THE BLANKS:

- Slide 7mm spacer bushings onto the mandrel shaft, followed by the tip bushing, wide end in first. Slide on the lower blank (longer). Next, add the center bushing, narrow end first. Place the upper blank (shorter) followed by the cap bushing, smaller diameter first. Add additional spacer bushings as necessary to reach the mandrel threads.
- Thread on the lock-nut handtight. Bring the tailstock in snug to the mandrel, lock in place. Tighten the lock nut for turning. Do not over tighten the lock-nut, it could damage the mandrel.
- Turn the barrels close to the bushing diameter with sharp tools; sand the barrels to match the bushing diameter.
- Finish the wood with your choice of polish.

DIAGRAM B • Turning the blanks



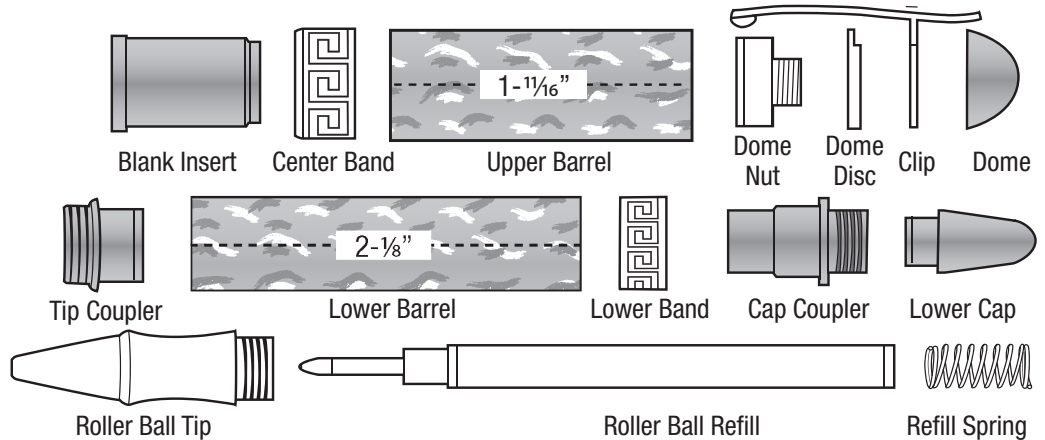
**ASSEMBLY:**

**NOTE:** Line up the components according to **DIAGRAM C-1 (Roller Ball)** or **DIAGRAM C-2 (Fountain Pen)**. To avoid damage to components when assembling the pen, use covered vise jaws or PSI #PENPRESS3.

• **WARNING!** The large center band has two faces—one side tapers and the other side is flat. When assembled the center band taper must match the threaded end of the blank insert.

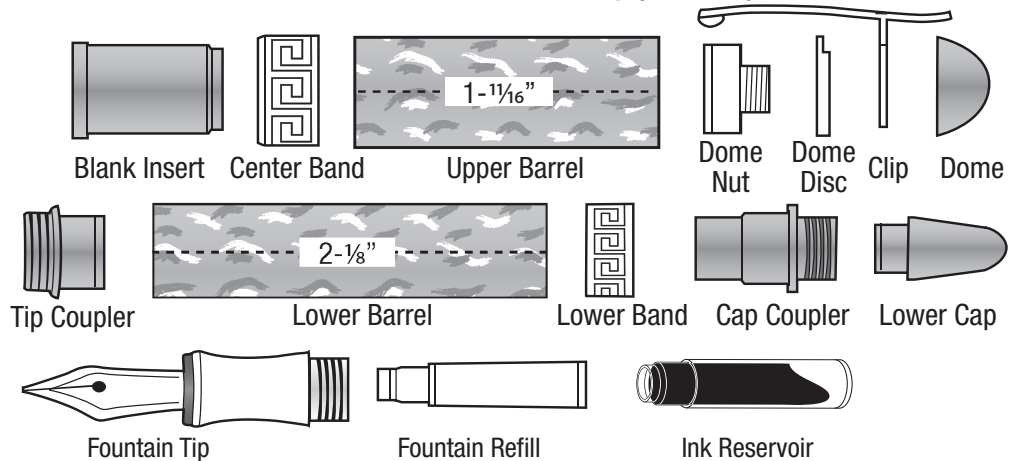
- Put the center band, tapered end first on the blank insert. Gently press the Upper Barrel onto this assembly, putting the band assembly facing a large flat surface to prevent deforming the plastic. Use either the white block on the pen press or a square piece of scrap wood.
- Press the dome nut with its threads pointing out into the other side of the upper barrel—stop when the flat face is square with the barrel.

**DIAGRAM C-1 • Pen Assembly (Roller Ball)**



- Place the dome disc, flat side down, on the threads of the dome nut. Position the clip into the slot of the dome disc.
- Thread the dome tightly onto the clip and dome disc.
- Slide the lower band and coupler together, and press into the lower barrel.
- Press the lower cap into the cap coupler assembly.
- Press the tip coupler, recessed end first into the opposite end of the barrel.

**DIAGRAM C-2 • Pen Assembly (Fountain)**



**ROLLER BALL PEN**

- Drop the refill spring into the barrel.
- Discard the protective cap from the refill. Insert the refill, wide end in first into the opening.
- Thread the roller tip into the coupler.
- The roller ball pen is ready to operate.

**FOUNTAIN PEN**

- Insert the ink cartridge narrow end first into the opening at the rear of the fountain tip assembly. Press the cartridge lightly to advance the ink forward to the nib.
- Thread the fountain tip assembly on to the coupler.
- The fountain pen is ready to operate.

**BUSHINGS**

**DIAGRAM D • PKAPBU**

