

## Rollerball Pen Kits Instructions [PKRB-3]

### KIT FEATURES

- Heavy plating with epoxy coating.
- Elegant features on a lightweight pen.
- Premium fountain pen tip
- Overall length 5-3/8"

### REQUIRED ACCESSORIES:

- 7mm pen mandrel
- **#BUFT-3**-4-piece Bushing Set
- **#DB-10**-10mm Drill Bit
- **#DB-12.5**-12.5mm Drill Bit
- **#BTS-FT3**-2-piece Barrel Trimmer Sleeve Set
- **#BTR-1**-7mm Barrel Trimmer
- 2-part epoxy glue or thick CA glue

### PREPARING THE BLANKS:

- Prepare a master blank of at least 3/4" square. Cut two sections to the length of each tube. (Add 1/16" for trimming) Mark the center of each blank.
- UPPER BLANK (shorter tube)—Drill a 12.5mm hole through the blank LOWER BLANK (longer tube)—Drill a 10mm hole through.

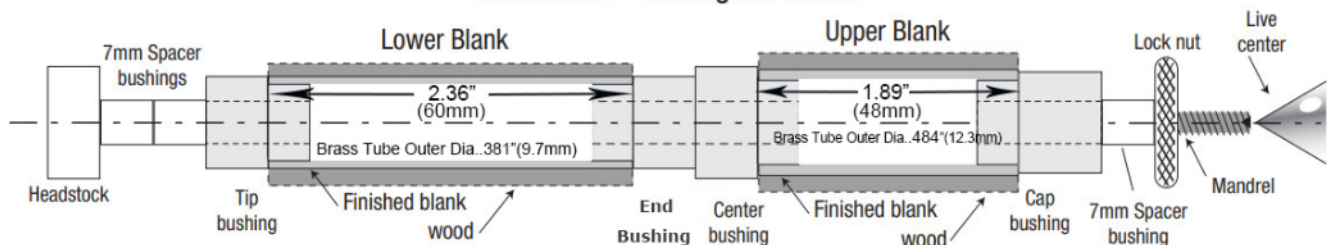
NOTE: Sand the tubes using 240-grit abrasive for better adhesion.

- Glue each tube in the proper blank. Spread the glue over each tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Center each tube lengthwise inside the blank.
- When glue dries; square the ends of each blank. Using a 7mm barrel trimmer with sleeves (#BTS-FT3). Mount the proper sleeve over the 7mm shank (smaller diameter for the longer tube, large diameter for the short tube). Trim the blank down flush with the brass tube.

### TURNING THE BLANKS Please Refer DIAGRAM B

- Mount 7mm spacer bushings on the mandrel followed by the tip bushing (smaller) wide end first. Slide the lower blank (longer) on next. Follow with the end bushing (same as tip bushing), narrow diameter first, and center bushing wide end first. Next, add the upper blank and follow with the cap bushing (same as center bushing), narrow end first. Mount spacer bushings to fill the space to the threads on the mandrel.
- Screw on the lock nut hand tight. Bring the tailstock in snug to the mandrel. Lock in place. Do not over-tighten the lock nut; it may damage the mandrel.
- Turn the blanks down close to the bushings. Follow with abrasives until the tube diameters are flush with the bushings. Finish with your choice of polish.

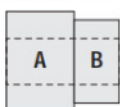
DIAGRAM B • Turning the Blanks



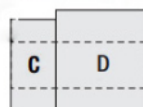
### BUSHINGS

DIAGRAM C • Bushings (#BUFT-3) – Barrel Trimmer Sleeves (#BTS-FT3)

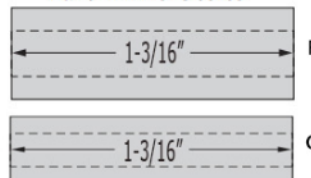
Tip bushing /End Bushing



Cap Bushing /Center Bushing



Barrel Trimmer Sleeves



- Diameter A .492" (12.5mm)
- Diameter B .358" (9.1mm)
- Diameter C .460" (11.7mm)
- Diameter D .570" (14.5mm)

- Diameter F .460"
- Diameter G .358"
- Trimmer Hole Diameter .248"

Bushing Hole Diameter .248"

## TIPS

- To avoid damage to components when assembling pen use vise with covered jaws
- Consider matching the wood grain when assembling the pen.

## ASSEMBLY:

- Line up the components according to DIAGRAM D.
- Press the Center Band assembly into the larger diameter side of the Upper Barrel (shorter tube).
- Press the Cap into the opposite end of the Upper Barrel.
- Press the tip coupler in to lower barrel
- Press the End cap into the opposite end of the barrel.
- Drop the refill spring into the opening at the tip coupler
- Remove the cap off the refill and insert wide end in first into the opening at the coupler.
- Screw the rollerball tip into the tip coupler

## DIAGRAM D - PKRB-3 Rollerball Pen Assembly

