Preparing the Blank:

- 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 .492” hole through.
- Lower blank (longer tube)—drill a 10.5mm hole through.

**NOTE:** Sand the tubes using 220-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 adapter sleeves (#PKMAJJRBTS), mount the proper sleeve (large diameter for the short tube, smaller diameter for the longer tube) over the shank with the brass tube.
Turning the Blank

- Mount 7mm spacer bushings on the mandrel followed by the tip bushing (shorter diameter) wide end first.
- Slide the lower blank (long) on next. Follow with the center bushing, narrow diameter first, Slide on the upper blank (short) and follow with the cap bushing, narrow end first. Add additional spacer bushings as necessary to overlap the mandrel. Tighten the lock-nut hand tight. Bring the tailstock in snug to the mandrel. Tighten the lock-nut for turning. 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.

Assembly

NOTE: Line up the components according to DIAGRAM A.

- Press the center band assembly into the upper barrel (shorter tube).
- Press the end cap and clip into the opposite end of the upper barrel.
- Press both couplers into the either end of the lower barrel.
- Thread the lower cap into the top of the lower barrel.

Tips

- The threads on the pen cap have three starting points so you can quickly close the pen in any of these positions.

Rollerball

- Drop the refill spring into the lower barrel.
- Discard rollerball refill cover. Insert the rollerball refill, flat end first, into the threaded coupler over the spring.
- Thread the rollerball tip over the refill into the threaded coupler.

Fountain Pen

- Press the ink cartridge, narrow end first into the back of the fountain nib. Push in to break the seal (or use PSI refillable reservoirs #PKPUMP5), then press lightly on the nib to advance the ink forward.
- Thread the fountain nib assembly over the threaded coupler.