TRIMLINE — Pen Kit and Assembly Instructions

KIT FEATURES
- Available in 24kt Gold, Chrome and Gun Metal Finish
- Trim profile provides easy writing
- Pen uses Cross® type ball point pen refill.
- Overall Length: 5-3/8”

REQUIRED ACCESSORIES
- 7mm Pen Mandrel
- 7mm Drill Bit #PK-7MM
- 3 Piece Bushing Set #PKXMBU
- 7mm Barrel Trimmer #PK-TRIM7 or Universal Barrel Trimmer #PKTRIMKIT
- 2 Part Epoxy Glue or Insta-Cure (cyanoacrylate)

PREPARING THE BLANKS
- From 5/8” square stock, cut two wood or acrylic blanks to the length of the brass tubes plus 1/16” for squaring off. Grain should run lengthwise.
- Drill a 7mm centered hole lengthwise through each blank. Excessive pressure will cause the drill bit to wander and/or split the blank. Slow the feed rate and back the bit out repeatedly for chip removal.
- Use an epoxy or a gap filling cyanoacrylate glue to glue the brass tube in the blank. Spread the glue on the tube. Insert into the blank with a twisting motion to spread the glue evenly inside. Center each tube lengthwise in the blank. Allow it to dry.
- After the glue dries, use a 7mm barrel trimmer #PKTRIM7 or other sanding device to square the ends of the blanks 90° (degrees) flush with the ends of the brass tubes.

TURNING THE BLANKS
- Place spacer bushings onto the pen mandrel. Slide the cap bushing (medium diameter) onto the mandrel. Insert a blank and follow with the center bushing (larger diameter). Insert the second blank onto the mandrel and follow with the tip bushing (smaller diameter). Add additional spacer bushings to close the space to the threads on the mandrel. Thread the locknut onto the mandrel handtight. Bring the tailstock in snug with the mandrel. Do not overtighten—this could damage the pen mandrel. Lock the nut and the tailstock in place.
- Turn the blanks down close to the bushings located at the ends of the blanks. Sand the blanks down to the bushings. Create a profile (Follow turned profile of blank in Diagram B as a guide) from the center to either the cap or the tip of the pen.
- Finish the turned barrels with your choice of PSI polish.

DIAGRAM B • Turning The Blanks

[Diagram showing the assembly process with labeled parts and arrows indicating the assembly steps.]
PEN ASSEMBLY

• Line up parts according to DIAGRAM C above.
• Press the pen tip into the narrow end of the lower barrel.
• Press the pen’s twist mechanism—brass end first—into the opposite end (of the lower barrel) to the identification mark. Stop near the mark to check for the desired extension of the refill. Leave the refill screwed in.
• Press the cap through the clip and into the narrow wood end of the upper barrel. The clip tension may be relaxed by bending the clip slightly outward prior to assembly.
• Slip the pen center band over the exposed part of the twist mechanism. Press together both halves to complete the pen.
• The pen operates by twisting the ends to advance or retract the refill.

BUSHINGS

DIAGRAM D • PKXMBU

Cap Bushing A: .347”
Center Bushing B: .440”
Tip Bushing C: .330”
Inner hole: .248”