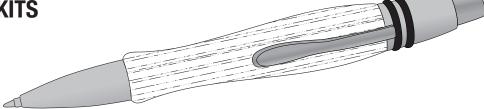
### **POLARIS CLICK PEN KITS**



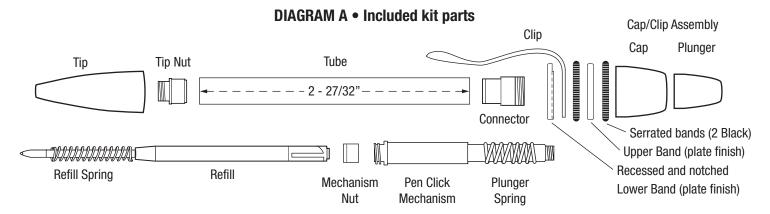
#### **KIT FEATURES:**

- Smooth click operation
- Uses Parker® Style Refills
- Overall length: 5 1/8"

#### **REQUIRED ACCESSORIES:**

- 7 mm, Pen Mandrel
- 2 piece Bushing Set #PKPOLBU
- 3/8" Drill Bit #PKEXEC-3/8
- Universal Trimming Kit #PKTRIMKIT
- 2 part epoxy glue or insta-cure (cyanoacrylate) glue
- 18.5 mm long Brass Sizing Tube (included in kit)

#### **PARTS LIST**

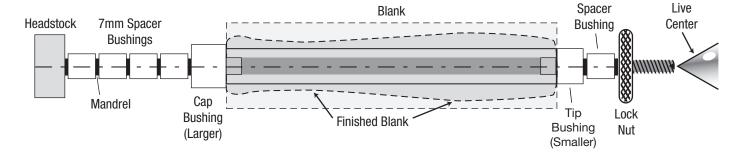


#### PREPARING THE BLANK:

- Cut 3/4" to 5/8" square blank to the length of the brass tube (add 1/16" for squaring off).
- Drill a 3/8" center hole lengthwise through the blank.
- Spread the glue over the tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Center the tube lengthwise in the blank.
- When the glue dries, square the ends of the blank. Use a universal pen blank squaring jig or a belt/disc sander to square the ends. Take the wood down flush to the brass tube.

#### TURNING THE BLANK

#### **DIAGRAM B • Turning the blank**



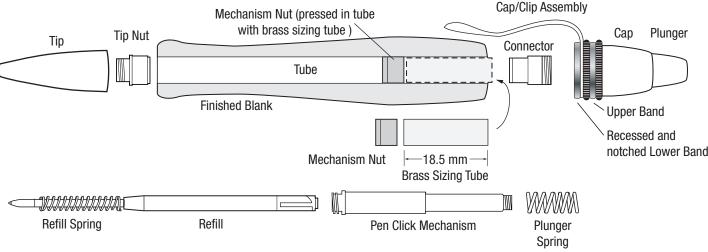
#### **TURNING THE BLANK:**

- Place three or four standard 7 mm bushings onto the mandrel, followed by the larger cap bushing—wide end first—then the wood blank followed by the smaller tip bushing with narrow end first. Use additional spacer bushings to fill the space on the shaft up to the threads.
- Thread on the lock nut and hand tighten to hold all items in place.
- Slide the tailstock to the mandrel shaft, (do not overtighten, it could damage the mandrel). Lock in place.
- Turn the wood down, flush with the bushings using the lathe tools, gradually increasing the grades of sandpaper.
- Finish the wood with friction polish or use PSI clear hi-gloss project finish #HGPF off the lathe for a brilliant finish.

#### PEN ASSEMBLY

- Insert the tip nut, recessed end in first. Press into the lower end of the barrel to the shoulder.
- Using the longer bushing #PKGEMBU, place the 2 black serrated bands (in the kit) over the narrow end of the bushing to use as 4 mm spacing (see Diagram E).
- Insert the mechanism nut, recessed end first, into the barrel tube. Place the 18.5mm long brass sizing tube over the mechanism nut and press both into the barrel tube until the end of the brass sizing tube is flush with the edge of the finished barrel blank. Remove brass sizing tube as it is only used for installation of the mechanism nut. See **Diagram E** for illustration.
- Insert the connector into the tube, recessed end in first. Press into the barrel to the shoulder.
- Insert the Pen Click Mechanism, threaded end in first, through the connector. Screw into the mechanism nut to tighten.
- Insert the refill—wide end first—into the opposite end of the barrel to fit inside the mechanism.
- Place the spring over the refill. Thread the pen tip onto the tip nut to lock in place.
- Insert recessed, notched lower band—recessed end out, over the threads of the connector. Locate the notch on the surface. Insert the clip to nest into the notch. Follow with a black serrated band, the upper band, and the second black serrated band.
- Thread the cap over the bands tight.
- Insert the plunger spring over the extension of the mechanism. Thread the plunger on the exposed mechanism threads.
- The pen is ready to operate by pressing on the plunger.

# DIAGRAM E • ASSEMBLY chanism Nut (pressed in tube



## BUSHINGS DIAGRAM D • Bushing Set #PKPOLBU

