

**Model #PKPOWERPEN  
Power Pen Kit**  
**Model #PKPOWERPCL  
Power Pencil Kit**

**REVISED**  
April 2004

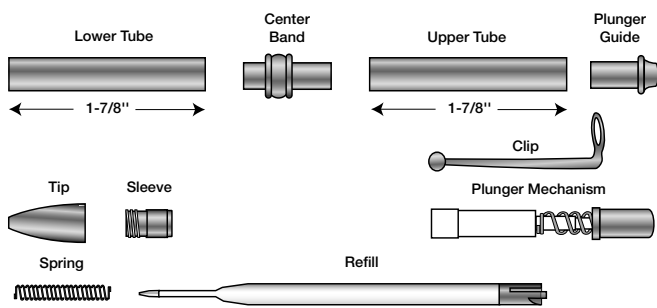
**Kit Features:**

- Heavy 24 kt. Gold-Plating with Epoxy Coating.
- Constructed for easy one hand click, to operate either pen or pencil.
- Designed with similar components, as a matching pen and pencil set
- Pen uses a “Parker” ball point refill #PKPARK-R5
- Pencil uses a 2 mm lead #PKPOWLEAD
- Overall Length: 5-1/2".

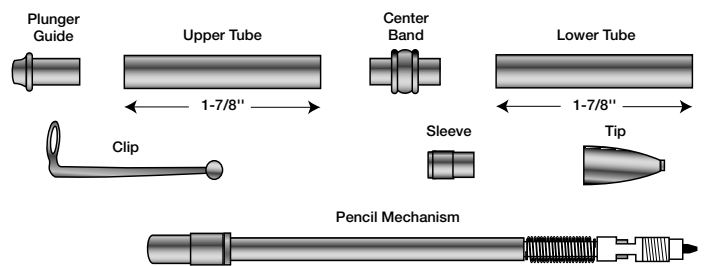
**Required Accessories:**

- 7mm, Long Mandrel.
- 3 Pc. Bushing Set #PKPOWBU.
- 8mm Drill Bit #PKPARK-8MM.
- 8mm Barrel Trimmer #PK-TRIM8 or #PK-TRIMKIT
- 2-part Epoxy Glue, Polyurathane Glue, or Insta-Cure (cyanoacrylate).

**Diagram A - Pen Parts**



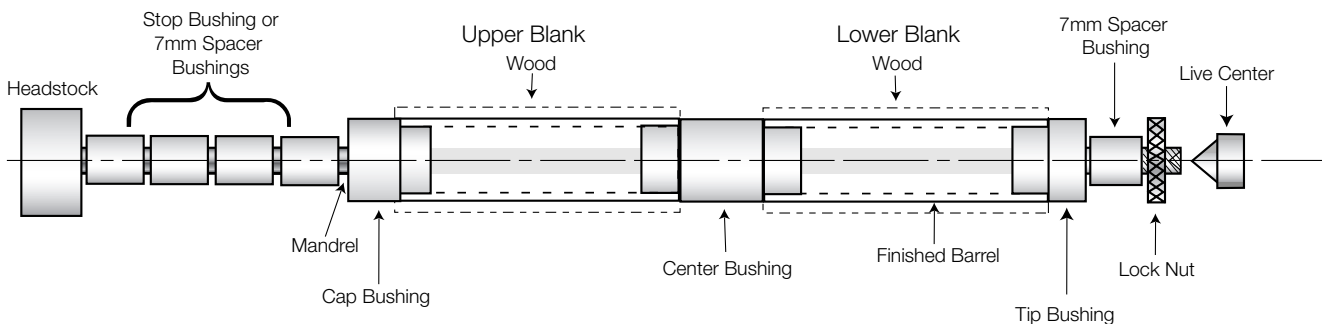
**Diagram B - Pencil Parts**



**Preparing the Blanks**

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

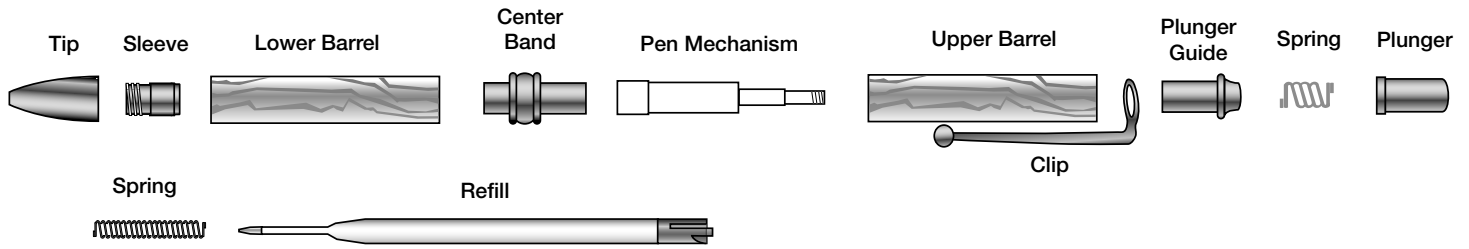
**Diagram C - Turning The Blanks**



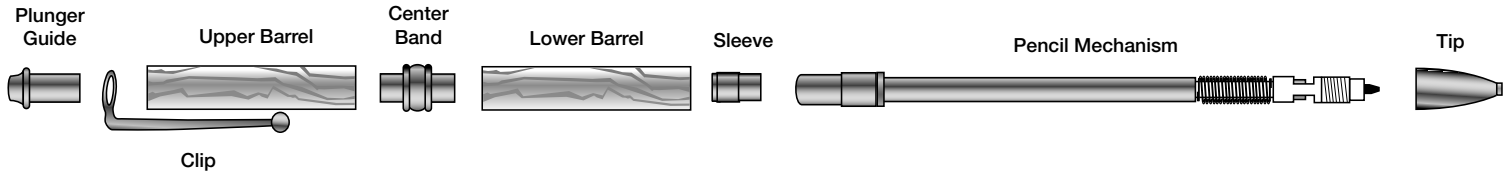
**Turning the Blanks**

- Place blank onto the mandrel, use 4 or 5, 7mm spacer bushings. Place the cap bushing (wider dia. first) on the mandrel. Then slide on either blank. Place the center bushing on the mandrel.
- Slide on the other blank and follow with the tip bushing, (narrow dia. first). Fill any extra space with more spacer bushings so the lock nut will be on the threads. Thread on the lock nut hand tight. Bring the tail stock snug with the mandrel. (Do not overtighten, it could damage the mandrel).
- Turn the wood down flush with the bushings using a lathe chisel and gradual higher grits of sand paper. Final sand both blanks for later finishing.
- Finish the blanks with your choice of polish and waxes. Friction polish and waxes are available from PSI.

## Diagram D - Pen Assembly



## Diagram E - Pencil Assembly



### Assembly Tips

- Line up the finished parts according to the diagram.
- To assemble the parts, use a vise or a clamping instrument with wooden jaws. The PSI #PENPRESS2 is an ideal solution for such an application. Press slowly with caution, keep the parts aligned to avoid cracking the wood or scratching the gold plating.

### Pen Assembly

- Insert the plunger guide into the hole in the clip.
- Press this assembly into the upper barrel.
- Unscrew the plunger of the mechanism and remove the spring. Set them both aside.
- Insert the plastic mechanism, narrow end first, into the opposite side of the upper barrel. Use the black plastic end of the pen refill to push into the end.
- Press the center band, longer end first into the upper barrel, trapping the mechanism inside.
- Press the exposed end of the center band into the lower barrel.
- Insert the sleeve, threaded end out, into the lower barrel. Press to the shoulder **ONLY**.
- Insert the pen refill (plastic end first) into the sleeve opening. Push in until the plastic thread on the mechanism is exposed through the plunger guide.
- Place the refill spring over the refill point and screw the tip over the sleeve.
- Insert the mechanism spring inside the plunger guide and screw the plunger over the thread.
- The pen operates by pushing the plunger to extend or retract the refill tip.

### Pencil Assembly

- Insert the plunger guide into the hole in the clip.
- Press this assembly into the upper barrel.
- Press the center band into the opposite end.
- Press the exposed side of the center band into the lower barrel.
- Insert the sleeve (recessed end in first) into the other end. Press to the shoulder **ONLY**.
- Insert the pencil mechanism into the opening in the plunger guide until the plastic thread on the mechanism is exposed through the sleeve in the other end.
- Thread the tip over the mechanism.
- The pencil operates by pressing on the plunger firmly to advance the lead.
- To retract the lead, press the plunger in firmly and hold. Then press the lead against a solid surface.
- To sharpen the lead, pull the plunger assembly out of the pencil, insert the lead tip into the sharpener and turn.
- To replace the lead, press the plunger to remove the end of the lead. Hold plunger and insert fresh lead.

### Bushings (#PKPOW-BU)

