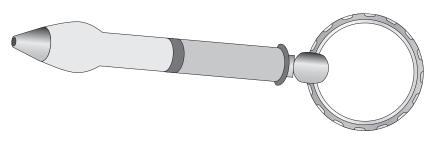
# Mini Key Chain Pen Kit

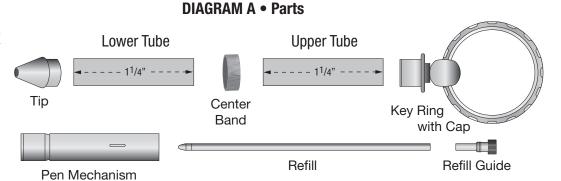
### **KIT FEATURES**

- A clever twist pen/combination key ring
- Smooth operating twist mechanism
- Overall length: 3-1/4"
- Uses refill—#PKMINI-R5
- Available in 24kt Gold, Brushed Satin and Chrome Finish



### **REQUIRED ACCESSORIES**

- 7mm Pen Mandrel
- 7mm Drill Bit—#PK-7MM
- 3-piece Bushing Set #PKMBUSH3
- 7mm Barrel Trimmer **#PKTRIM7** or Universal Barrel Trimmer system **#PKTRIMKIT**
- Insta-cure (cyano acrylate) glue or 2-part epoxy glue



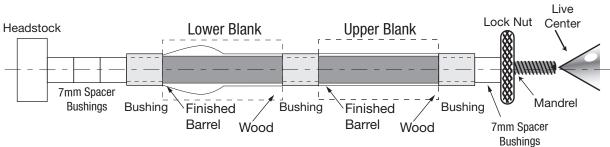
# PREPARING THE BLANKS

- Cut 1/2" (or larger) square blank to the length of the tubes included in the kit. Add 1/16" for squaring off.
- Drill a 7mm hole through each blank lengthwise. Excessive pressure may cause the drill bit to wander and/or split the blank. Slow the feed rate and back the drill bit out repeatedly for chip removal. For best results, use a HSS drill bit.
- Apply epoxy or gap filling cyano acrylate (super glue) to the tubes and insert into the blank with a twisting motion, spreading glue evenly. Center the tube within the blank and allow to dry.
- Trim each blank to the length of the brass tube.

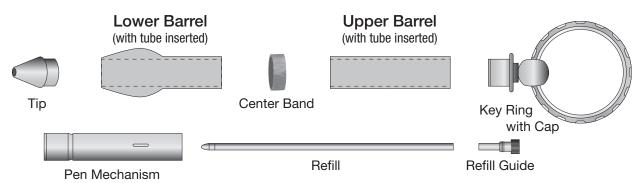
#### TURNING THE BLANKS

- Install 7mm pen-making mandrel on the lathe, and live center onto tailstock. Refer to **DIAGRAM B**.
- Place spacer bushings on the mandrel. Place one bushing on, followed by the lower blank.
- Insert the a second bushing on mandrel, followed by the upper blank. Insert the third bushing.
- Thread the lock nut hand tight onto the 7mm mandrel. Do not overtighten the lock nut, it could damage the mandrel.
- Bring tailstock snug to the mandrel and lock it into place. Tighten the lock nut for turning.
- Using sharp tools, turn the blank down. Sand the blanks to the size of the bushings.
- Finish the blank with your choice of polish.

# **DIAGRAM B • Turning The Blanks**



## **DIAGRAM C • Assembly**



### **ASSEMBLY**

- Line up the parts according to **DIAGRAM C.**
- Press the tip into lower barrel.
- Press the pen mechanism (brass end first) the opposite end of the same tube up to the indentation. Test the twist motion after the refill is inserted. Do not push too far as the pen mechanism cannot be easily removed.
- Slide the center ring over the mechanism to the point where it will come into contact with the front tube.
- Press the cap into the remaining tube and thread the key ring through the hole in the cap.
- Insert the refill guide into the refill and slide this into the front tube screwing the refill guide into the pen mechanism.
- Push the two halves together aligning the wood grain of the blanks as desired.
- Operate the pen by twisting the two halves in opposite directions to extend and retract the pen point.

### **BUSHINGS**

### **DIAGRAM D • PKM-BUSH3**



