# 4 in 1 Multi Function Pen Kit

#### **Kit Features:**

- Four Writing Instruments in One!
- · "Magic" Selection Mechanism
- · Easy to Turn With Straight Tubes
- · Minimal Parts--easy to assemble
- · Available in multiple finishes
- Overall Length: 5-13/16"
- USES REFILLS:

#PKMINI-R5 (Black)

#PKMINI-R5R (Red)

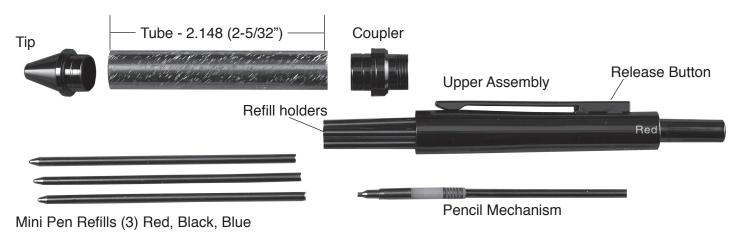
#RF4110 (Blue)

· Lead Size: 0.7mm

## **Required Accessories:**

- 7mm Pen Mandrel
- Drill Bit:10mm #PK10-10 for wood, #PK-10MMSGfor plastic
- Bushing Set (2 pc): #PKVESBU
- Barrel Trimming set: #PKTRIM10 or 10mm sleeve from PKTRIMSET.
- Live Tailstock or Mandrel Saver
- 2 part Epoxy or Thick CA (Cyanoacrylate) Glue
- Pen Blank Minimum Size: 5/8" x 5/8" x 2-3/16"L

### **DIAGRAM A / PARTS LAYOUT**



# **Preparing the Blank:**

- Cut blank to the to the length of the tube, adding 1/16" for squaring off.
- Drill 10mm hole lengthwise through the blank.
- Spread glue over tube, insert the tube into the blank with a twisting motion to spread the glue evenly inside.
- · Center the tube lengthwise inside the blank.
- When the glue is dry, square the ends of the blanks, making sure the trimmed ends are 90° to the tube. Use a 10mm barrel trimmer, or a pen blank squaring jig with a 10mm sleeve on a disc sander. Take the excess material down flush to the ends of the tubes. Do not trim past the end of the tube since this may interfere with the operation of the mechanism and assembly. Use a barrel trimmer to clean the inside of the tube.



#### **DIAGRAM B / TURNING THE BLANKS**



## **Turning the Blank**

- · Mount the bushings and blanks according to diagram B.
- Thread on the knurled nut and hand tighten to hold all components in place.
- Slide the Tailstock up snugly against the Mandrel shaft, inserting the live center point into the Mandrel dimple. Lock Tailstock.
- Hand tighten the quill adjustment on the tailstock to steady the mandrel. Do not over tighten, it could damage the mandrel shaft.
- When using Mandrel Saver, there is no need for extra spacer bushings or the knurled nut. Slide tailstock directly against bushings and tighten until blank and bushings are secure.
- Using sharp tools, turn the blank down close to the bushing diameter. Turn the barrel straight or to a profile of your choice.
- · Sand the blank down to be flush with the bushings, gradually increasing sandpaper grits.
- Finish the barrel using your choice of polish. Allow Sufficient time for the polish to cure—refer to polish instructions.

## **Assembly**

- · Press Tip into either end of Barrel.
- · Press Coupler into opposite end of Barrel.
- · Remove plastic collar from refills.
- If Bottom of mechanism is sticking out from Upper Assembly, press Release Button and push it back in.
- · Thread Upper Assembly onto Coupler.
- To select Refill, tilt pen to the side and turn the entire pen until desired selection is pointing up.
- Press Plunger to extend refill, press Release Button to retract.
- When using Pencil, the first press will extend pencil tip, following presses will extend lead. Press and hold Plunger to push lead back in. It is recommended to press lead back in before retracting to prevent lead breakage.
- To Change Refill: Refill should be retracted before proceeding.
- · Unthread Upper Assembly to expose refills.
- · Refills correspond to Selection marks on opposite side of Assembly, e.g. Red refill is on left, "RED" Mark will be on right
- Grab refill that needs to be changed. Hold base of refill holders and pull selected refill out.
- It is very important not to pull entire mechanism from the assembly. Very small parts may become lost. Do not press release button while
  pulling refills.
- · Insert new Refill into empty holder and push back until it is fully seated. Re-thread Assembly onto Coupler.
- New 0.7mm lead can be added to pencil by pulling Pencil Mechanism out of Holder and inserting lead into opening in back.

# Diagram C / Bushings #PKVESBU

