

Ms Crystal Pen Kits Assembly Instructions

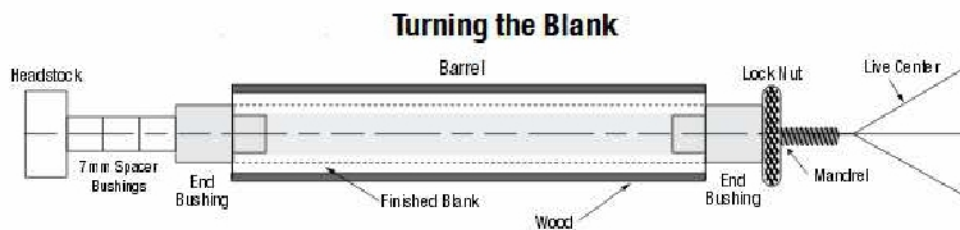
REQUIRED ACCESSORIES:

- 7mm Pen Mandrel
- 3/8" Drill Bit
- 2 pc Bushing Set
- 3/8" Barrel Trimmer (Use 3/8" shaft)
- Glue (Thick CA or Epoxy)



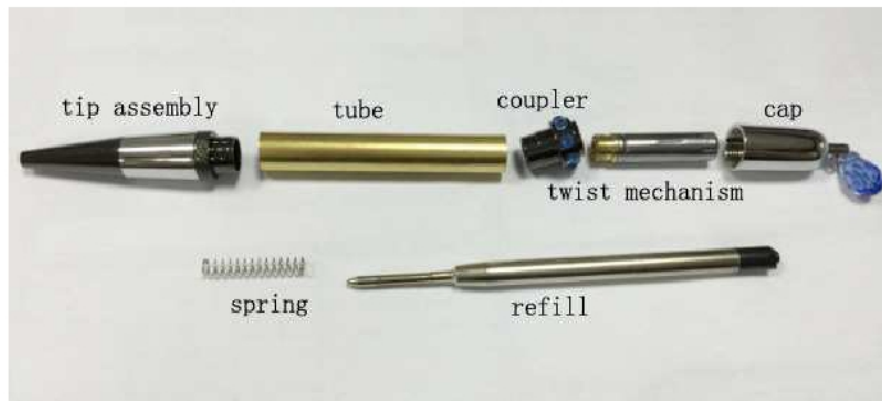
PREPARING THE BLANK

- From 5/8" square pen blank (wood or acrylic) cut to the length of the brass tube. Add 1/16" for squaring off.
- Drill 3/8" center hole lengthwise through the blank.
- 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 the tube lengthwise in the blank. Allow it to dry.
- After the glue dries, use a 3/8" Barrel Trimmer to square the ends of the blank to flush with the ends of the brass tube.



TURNING THE BLANK

- Place spacer bushings onto the pen mandrel. Slide an end bushing onto the mandrel, wide end first. Insert the blank and follow with the second bushing (narrow end first). Add additional spacer bushings to close the space to the threads on the mandrel. Thread the lock-nut onto the mandrel hand-tight. Bring the tailstock in snug with the mandrel. Do not overtighten- this could damage the pen mandrel. Lock the nut and the tail stock in place.
- Turn the blanks down close to the bushings located at the ends of the blanks. Sand the blanks down to the bushings.
- Finish the barrel with your choice of polish.



PEN ASSEMBLY

- Line up finished parts according to above.
- Press the tip assembly into the pen barrel.
- Press the coupler into the opposite end of the barrel.
- Insert the spring over the refill.
- Insert the refill into the opening at the coupler. Follow with the twist mechanism. Screw into bottom.
- Press cap over the mechanism. This is permanent.
- The pen is ready to operate. Just twist the cap from one position to another to extend or retract the refill.