

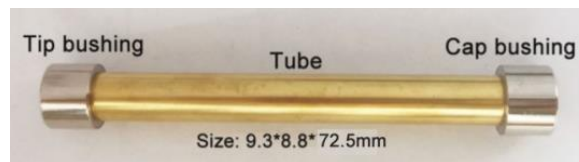
Lighthouse Pen Kits Assembly Instructions

Required Accessories:

- 7mm pen mandrel
- 2piece Bushing Set
- 3/8" Drill bit
- Universal Barrel Trimmer
- Live Tailstock Centre
- 2-part epoxy glue or instacure glue
- Minimum Blank size: 3/4" x 3/4" x 2-5/32"

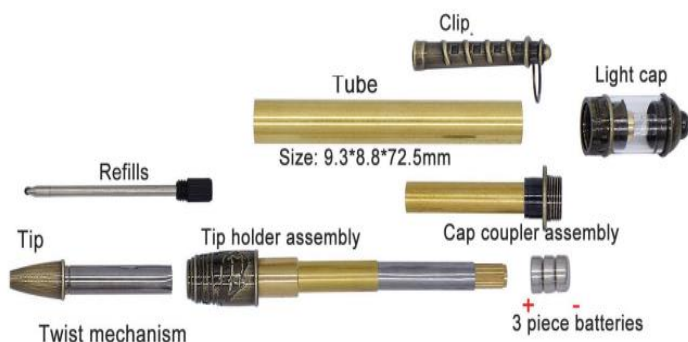
Preparing the Blanks:

- Cut one pen blank to the length of the brass tube (add 1/16" for trimming).
- Drill a 3/8" 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.
- Centre the tube lengthwise in the blank.
- When the glue dries, square the end of each blank. Use a Barrel trimmer with 10mm shaft or a universal pen blank squaring jig with a power disc sander.
- Take the wood down to the brass tube. Do not trim beyond the length of the tube since this may interfere with operation of the mechanism and assembly.
- Use the barrel trimmer shaft to clean the inside of the tube.



Turning the Blanks:

- Mount the bushings and blanks on the mandrel according to the Diagram above.
- 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 centre point into the mandrel dimple, lock in place.
- Hand tighten the quill adjustment to firm up the mandrel. (DO NOT overtighten, it could damage the mandrel.)
- 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 the sandpaper grits.
- Finish the barrel with your choice of polish. Allow sufficient time for the polish to cure.



Pen Assembly

NOTE: Line up the components according to the above picture.

- Screw the Refill into the twist mechanism, push the tip and twist mechanism into the tip holder assembly.
- Press the cap coupler assembly with pen clip into either end of the barrel.
- Push the whole tip assembly into the opposite end of the barrel.
- In order to screw the light cap RIGHTLY, please be sure to screw the metal part to the lowest point in advance through the tip holder, see the above picture.
- Everything is ok, you could insert the batteries now and screw the light cap.
- Rotating the light cap, you could see the flashing lights.
- The pen operates by twisting the tip to advance or retract the refill for writing.