

Model #PKPLI "PSI PENLIGHT" KIT

Kit Includes:

- 2 Brass Tubes (Size: 1/2" O.D. x 2-1/16" L)
- Center Coupling
- Brass Bulb Holder
- 2.2 Watt Bulb
- Threaded Coupling
- Plastic Retainer
- Clip & Light Bulb
- Threaded End Cap
- Spring
- Spring Ring

Note: These instructions assume the use of a 7mm PSI mandrel, and a 3 piece bushing set (PSI #PKPLI-BU).

Requires 2 AAA Batteries (*Not Included*)

Completed Penlight

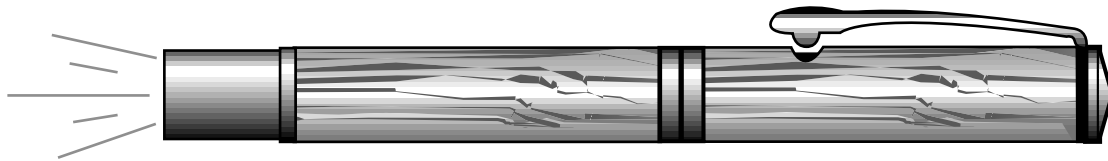
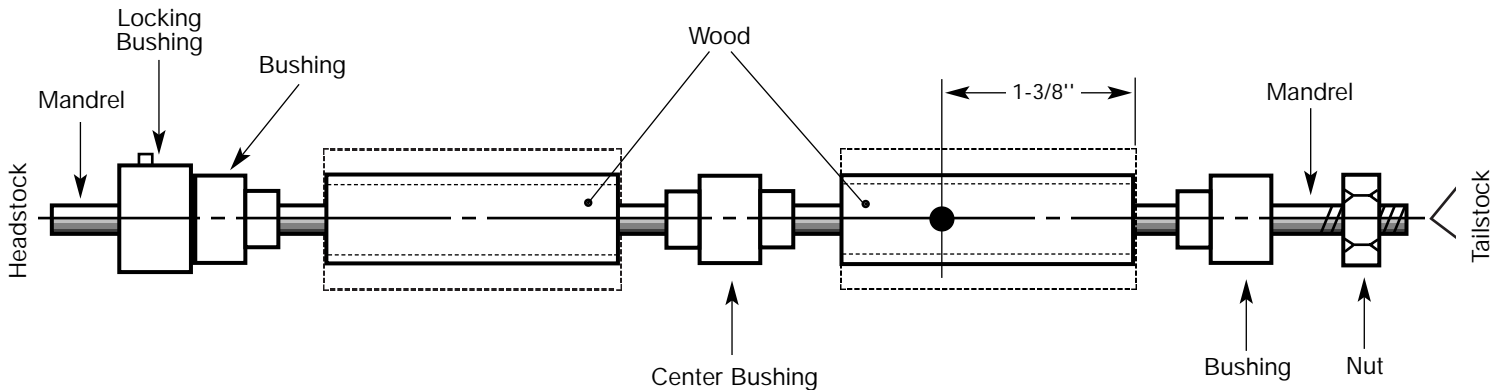


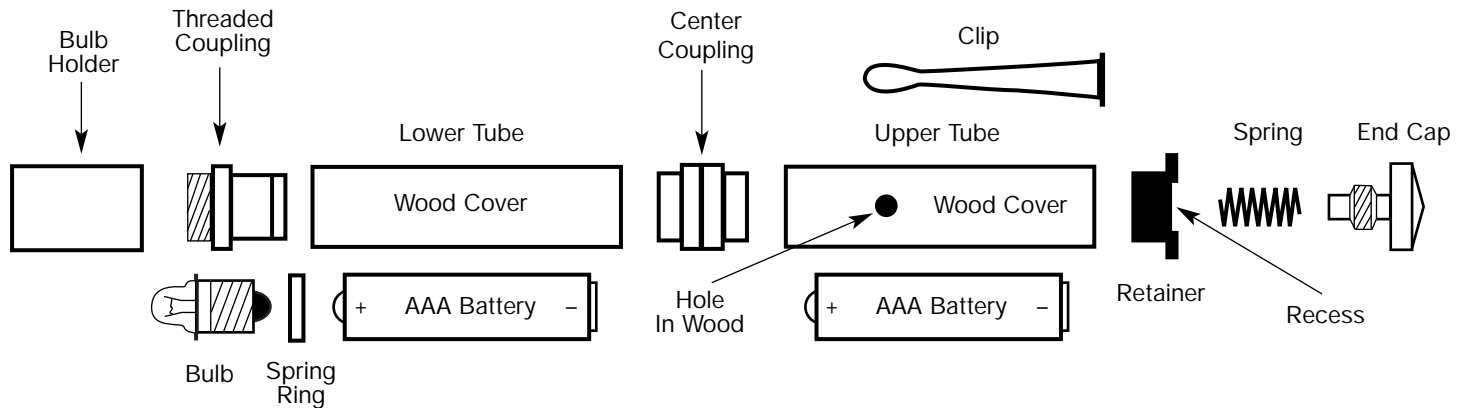
Diagram A



Cutting, Drilling, Gluing & Turning:

- Cut 1" square blanks the exact length of the brass tubes.
- Drill 1/2" hole lengthwise, in the center of each blank.
- Drill a 1/8" hole on the centerline in one of the wood blanks, 1-3/8" from one end to meet the inside hole. (this will serve as a contact hole to complete the electrical circuit).
- Glue tubes inside blanks using a 2-part epoxy glue. Use a liberal amount of glue. Push tubes inside with a twisting motion. Be sure glue is spread evenly, coating the tubes. **Be sure to scrape all traces of glue from the tube visible in the hole.**
- Wood must be square with the tube ends to insure that you get a good finished fit. If not square, face-off wood ends with sandpaper before turning. Do not shorten brass tube length.
- Mount bushings and blanks on the recommended mandrel as shown in diagram "A". Slide all components together, tighten locking bushing then nut. Turn wood blank straight to match the outside diameter of the bushings. **Do not under cut, it may weaken the wood.**
- Sand, finish and polish the wood as your project requires.

Diagram B



Assembly:

- Identify and line-up parts according to diagram "B".
- Push finished wood tubes over center coupling. Use a drop of 2-part epoxy glue for a good bond.
- Push threaded coupling into lower tube. Use a drop of glue for a good bond.
- Position the plastic retainer so that the recess on the top lines up with the electrical contact hole in the upper tube. Use a small drop of epoxy glue to secure the retainer in place. Push in.
- Mount spring tightly over the stem of the brass end cap.
- Insert clip in recess of the retainer (lined up with the hole) and screw end cap inside plastic retainer. Be sure clip stays in position, then screw in tightly.
- Allow adhesive enough time to dry before proceeding.
- Insert 2 AAA batteries in chamber - as shown. Place spring ring on bulb, and insert bulb in holder and screw the bulb holder with bulb into the tube. (See *Caution Statement*)
- The Penlight operates by pressing the clip into the tube through the hole in the wood, thus completing the electrical circuit.

CAUTION:

If during final assembly, the bulb holder does not screw in flush with the tube end, DO NOT force it. A slight adjustment in the length of the spring may be necessary.