

MEDICAL PEN

Kit Features

- Easy to Turn
- Minimal Parts--easy to assemble
- Available in multiple finishes
- Overall Length: 5-3/8"

Required Accessories

- 7mm Pen Mandrel
- Drill Bit: #PK-38BP for Wood, #PKEXEC-38 for Plastic
- Bushing Set(pc): #PKMEDBU
- Barrel Trimming: #PKTRIM38 or 3/8" sleeve from #PKTRIM-SET with squaring jig on disc sander
- Live Tailstock or Mandrel Saver
- 2 part Epoxy or Thick CA (Cyanoacrylate) Glue
- Pen Blank Minimum Size: 3/4" x 3/4" x 2-15/16"L

Preparing the Blank:

- Prior to cutting and gluing, always verify tube length is correct (see parts diagram on back page)
- Cut blank to the length of the tube, adding 1/16" for squaring off.
- Drill hole lengthwise through the blank.
- Spread glue over tube, insert the tube into the blank while twisting 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 3/8" Barrel Trimmer or 3/8" barrel trimming sleeve with a pen blank squaring jig 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 assembly and the operation of the mechanism. Use a barrel trimmer to clean the inside of the tube.



DIAGRAM B / TURNING THE BLANK



Turning the Blank:

- Mount the bushings and blanks according to diagram B.
- When using Mandrel Saver, there is no need for extra spacer bushings or the knurled nut. Slide and lock tailstock directly against bushings and tighten quill until blank and bushings are secure.
- To use Knurled Nut Setup (right), add spacer bushings until past the threads on the end of the Mandrel Shaft.
- 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 and hand tighten the quill adjustment with wheel to steady the mandrel. Do not over-tighten, it could damage mandrel shaft.
- 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 manufacturer's instructions.

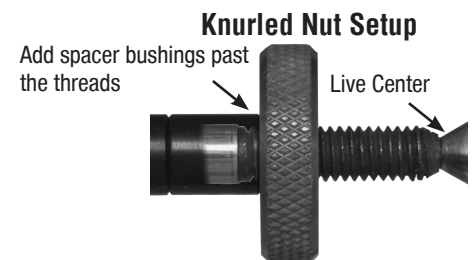


Diagram C / Bushing #PKMEDBU

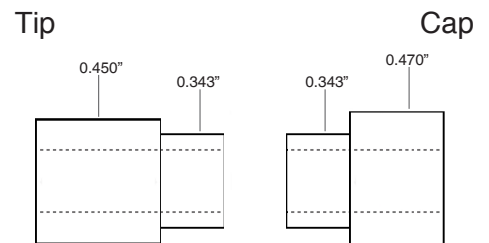
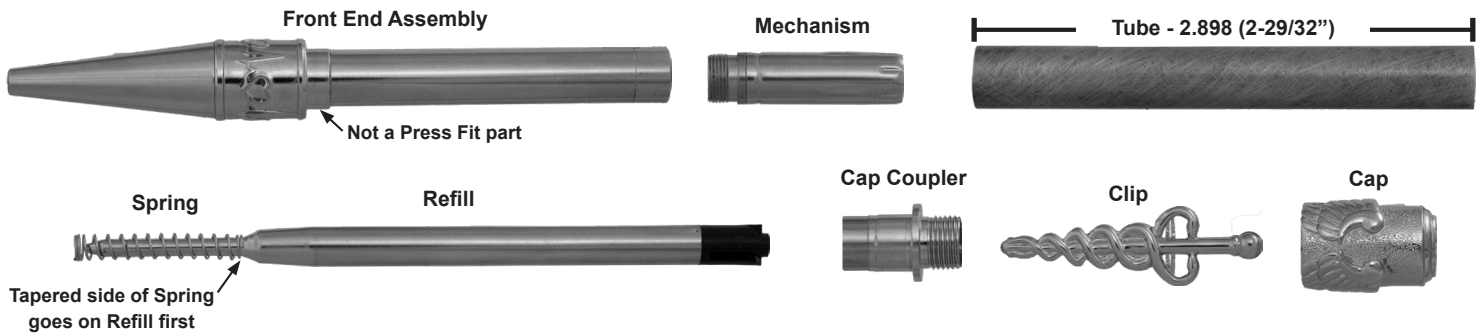


Diagram D / Parts Layout

**Assembly:**

- Layout parts according to Diagram D. Notice that Front End Assembly is not a press fit part.
- Affix the Spring over the Refill shaft. Make sure tapered side of spring is on the shaft first—it should grip the refill and not accidentally fall off.
- Insert the Refill into the opening at the back of Front End Assembly.
- Thread the Mechanism over the refill into the back of the Front End Assembly.
- Slide the Clip over the Threads on the Cap Coupler and line up the rod tip with the gap between the wings on the Cap.
- Thread the Cap onto the Cap Coupler. Important: Make sure the rod sits in the gap between the wings on the cap when the parts are fully tightned.
- Press this assembly into the larger diameter end of the barrel. Put Cap on the softer side of the press to prevent possible damage to the Cap design.
- Push the Front End Assembly into the smaller diameter, open end of the Barrel by hand (do not use Press!). Continue pushing until the Front End Assembly seats flush against the Barrel.
- The pen operates by twisting the tip to advance or retract the Refill.
To replace the refill, unthread the Front End Assembly. Remember to switch Spring to new Refill.
- **Note: When replacing Front End after refill change, do not push in. Simply insert until it hits the mechanism and then thread onto mechanism. Pushing on mechanism may make it slide further in to the point that the Assembly cannot reach it. If this happens, cap can be unthreaded to push Mechanism back down. Be sure to re-align rod to wings when re-threading.**

