

## REQUIRED ACCESSORIES

- Pen Mandrel 8mm Drill bit
- Guardian Bushes Universal barrel trimmer

## PREPARING THE BLANK

- Cut 3/4" or larger pen blank to the length of the brass tube {add 3mm for trimming}.
- Drill an 8mm hole through the blank.

NOTE sand the tubes with 120g abrasive for better adhesion.

- Spread glue in the drilled hole and insert the tube into the hole twisting and moving the tube in and out to spread the glue in the blank and also get good coverage over the tube, do this at both ends of the blank for even coverage.
- When glue dries trim the ends of the blank. Trim the excess wood down to the brass tube and no more.

## TURNING THE BLANKS

- Place the 7mm spacer bushes onto the mandrel, followed by the tip bushing, wide end on first. Place the barrel over the bushing. Slide on the cap bushing, narrow end first. Add spare bushings if necessary. {If using the adjustable mandrel extra bushings are not required}. Thread on the lock nut hand tight over the mandrel shaft. Bring the tailstock up snug to the mandrel and lock in place. Tighten not over tighten the nut as it could damage the mandrel.
- Turn the wood down to a straight profile and sand to the bushing diameter.
- Finish the wood to your choice of polish.

## PEN ASSEMBLY

NOTE: Line up the components according to diagram C. To avoid damage to the components when assembling the pen use a vice with covered jaws or the pen press.

- Press the plunger guide into the top of the barrel.
- Insert the 3 part plastic mechanism, threaded end in first into the bottom of the barrel. Follow with the support tube.
- Press the connector into the barrel after the support tube.
- Press the front tube into the connector.
- Press the front coupler into the opposite end of the front tube.
- Wrap the grip bands around the ribbed tube.
- Insert the front cap over the un-ribbed end of the ribbed tube.
- Insert the above assembly over the front tube, uncapped side in first.
- Insert the refill and spring, black end in first into the opening. Thread the tip over refill until it bottoms.
- Insert the mechanism spring into the opening at the top of the pen. Insert the plunger, open end first and thread over the plastic threads until tight.
- Insert the clip ring, flat end first, over the threads. Place the clip into the slot in the clip ring.
- Thread the upper nut and tighten.
- Operate the pen by clicking on the plunger.

# GUARDIAN CHROME CLICK PEN

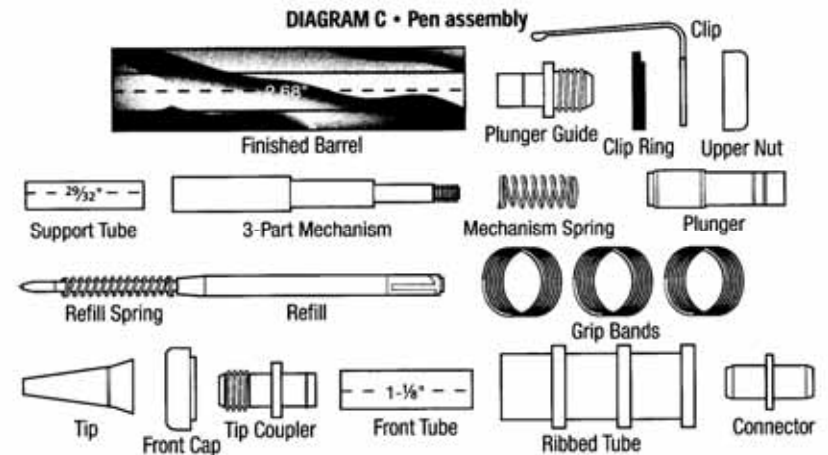


DIAGRAM D - PKGD PENBU

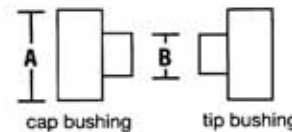
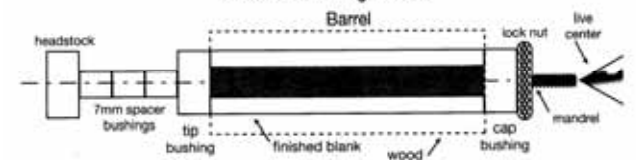


DIAGRAM B - Turning the blank



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