

GUARDIAN ROLLER BALL PEN KIT

KIT FEATURES

- Impressive, robust and easy to grip
- Contemporary Design.
- Premium roller ball refill
- Optional fountain pen conversion kit available
- German made premium fountain pen nib with an iridium tip
- Overall size: 5-1/2"

REQUIRED ACCESSORIES:

- 7mm pen mandrel
- 3pc bushing set #PKGDRBBU
- 2 pc trimming sleeves set #PKGDRBTS
- 7mm basic barrel trimmer #PKTRIM7
- 2-part epoxy glue or insta-cure (cyanoacrylate) glue.

PREPARING THE BLANK

- Cut 3/4" or larger square blank to the size of the brass tubes (add 1/16" for trimming off).
- Drill a 9/16" hole through the upper blank (shorter).
- Drill a 27/64" hole through the lower blank (longer).
- Spread the glue over the tubes. Insert each into proper barrel with a twisting motion to spread the glue evenly inside.
- When the glue dries, trim the ends of each blank. Use a 7mm barrel trimmer with adapter sleeves (#PKGDRBTS).

Take the excess wood down to the brass tube.

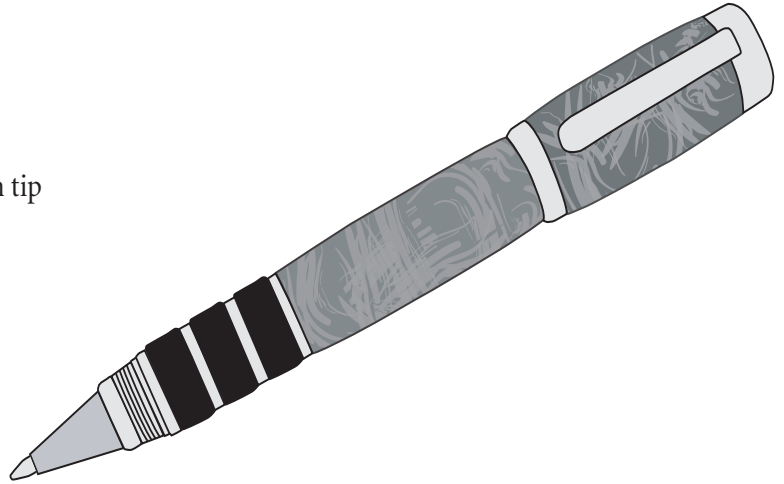


DIAGRAM A / Parts list

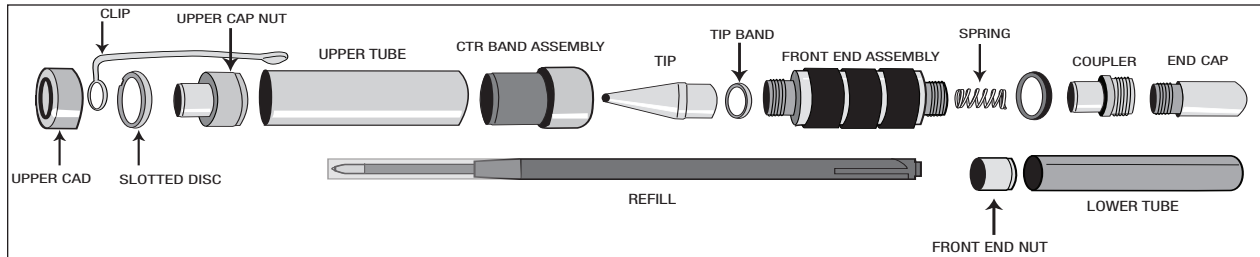
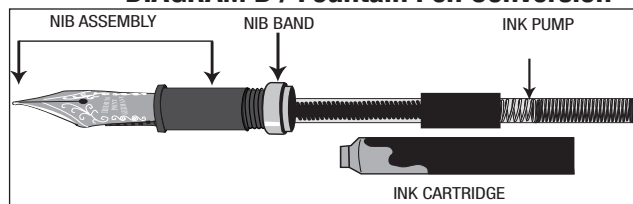


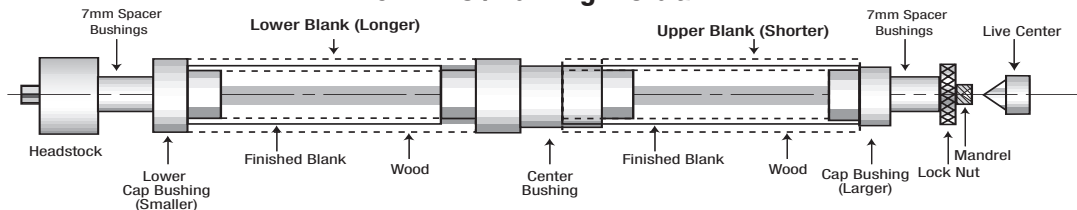
DIAGRAM B / Fountain Pen Conversion

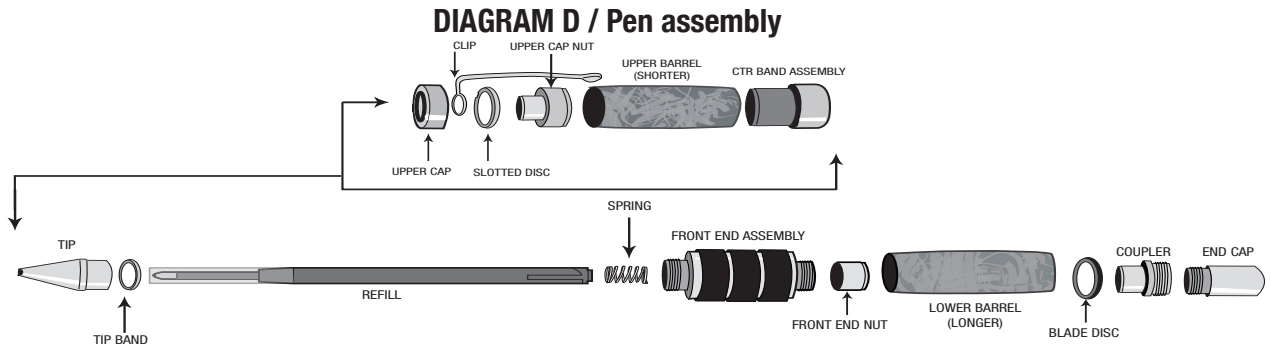


TURNING THE BLANK

- Slide 7mm spacer bushings onto the mandrel shaft, followed by the lower cap bushing, wide end first. Slide on the lower blank (longer). Next, add the center bushing, narrow end in first. Place the upper blank (shorter) followed by the upper cap bushing, smaller diameter first. Add additional spacer bushings as necessary to reach the mandrel threads.
- Thread on the lock-but hand tight. Bring the tailstock in snug to the mandrel, lock in place. Tighten the lock nut for turning. Do not overtighten the lock nut, it could damage the mandrel.
- Turn the barrels close to the bushing diameter with sharp tools. Sand the barrels to match the bushing diameter.
- Finish the wood with your choice of polish.

DIAGRAM C / Turning the blank





PEN ASSEMBLY

NOTE: Line up pen components according to Diagram 'D' for the Roller Ball and 'B' for the Fountain Pen. See separate notes for Fountain Pen assembly.

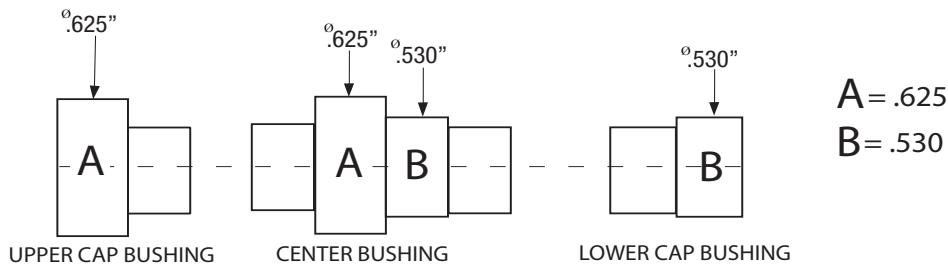
- Insert the center band assembly into the upper barrel, press gently.
- Press the upper cap nut, recess end in first into the opposite end of the upper barrel. Press to the shoulder.
- Place the slotted disc over the threads of the upper cap nut. Place the clip into the slot on the disc over the threads. Screw on the upper cap to tighten the clip assembly.
- Press the front-end nut, recessed end first, into the lower barrel flush with the wood.
- Mount the black disc over the smooth end of the coupler and press into the opposite side of the barrel.
- Screw the end cap into the coupler.
- Screw the front-end assembly into the lower barrel.
- Drop the spring into the opening of the front end.
- Insert the tip band, rounded end in first over the threads of the tip.
- Place the refill into the front end up against the spring. Remove the tip cover.
- Screw in the tip assembly over the refill.
- Engage the two halves of the pen. Screw together.

FOUNTAIN PEN CONVERSION KIT

- Use the optional conversion kit (not included, -either #PKGDXTN or #PKGDXC).
- Remove the roller ball tip and refill. Place the nib band, rounded end on first over the nib assembly.
- Attach the ink pump onto the nib assembly. Turn the knob counter-clockwise to lower the piston inside. Dip the nib into an ink bottle. Turn knob clockwise to fill with ink.
- Screw the nib assembly into place.
- Engage the two halves of the pen. Screw together.

DIAGRAM E • BUSHINGS

#PKGDREBBU, # (PKGDRBTN/BC) GUARDIAN ROLLER & FOUNTAIN
3 PCS BUSHING SET



Philadelphia, PA 19115