

COMFORT PEN & PENCIL

Instructions

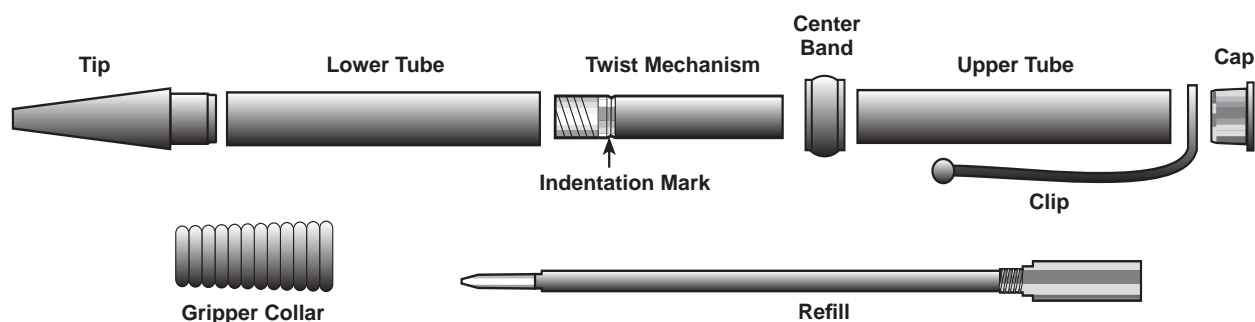
Kit Features

- Heavy 24k gold plating with epoxy coating
- Non-slip silicone collar sleeve for sure grip holding
- Both products are designed to match as a set
- Pen uses Cross® style ballpoint pen refill (RE-CROSS)
- Pencil uses heavier .7 mm lead

Required Accessories & Materials

- 7 mm mandrel
- 3-pc. Comfort bushing set (COMFBU)
- 7mm drill bit (DB7MM or DB7MMCT)
- 7mm barrel trimmer (PK-TRIM7--optional)
- Glue (We recommend the thick "gel" CA glue—GTHICK2)
- Sanding and finishing supplies

Diagram A - Pen Assembly



BLANK PREPARATION

Cut your blanks approximately 1/16" longer than the tube to allow for squaring with the barrel trimmer. If using wood blanks, mark the blanks so it is easier to keep the grain running in the same direction when you place them on the mandrel for turning. Use a medium drill speed to **drill** the blanks. Raise the bit from the blank every 1/4" to 1/2" to allow the chips to clear from the flutes of the drill bit. Don't force the drill bit; use an even pressure and let the bit do the work. After drilling the blanks, **sand** the exterior of the brass tubes to roughen their surface and use **CA glue** to glue the tubes inside the blanks. Sand or barrel trim to **square** the ends of the blanks.

TURNING THE PEN

Set up the mandrel as shown in Diagram C.

Lower Blank: Turn down the blank to the size of the bushings. Make a pencil mark 1" from the tip end of the lower blank (see Diagram C). Use a parting tool to remove the wood or acrylic down to the brass tube. Keep a sharp 90° edge on the blank.

Upper Blank: Turn this blank similar to the lower blank but *gradually taper* the end toward the smaller cap bushing.

Sand with abrasives and **finish** with your choice of polish.

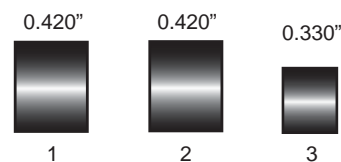
PEN ASSEMBLY

(Line up finished parts according to Diagram A)

To avoid damage to components when assembling, use a vise with covered jaws or one of WoodTurningz' pen presses.

1. Slip the gripper collar, wide end first, over the exposed end of the brass tube.
2. Press the pen tip into the tube against the gripper.
3. Press the pen mechanism, brass end first, into the opposite end checking as you go for proper depth. Stop near the mark to check for the desired extension of the refill. Leave the refill screwed in.
4. Press the cap through the clip and into the narrow end of the upper barrel. The clip tension may be relaxed by bending it slightly outward prior to assembly.
5. Slip the pen center band over the exposed mechanism. Slide the upper barrel over the upper part of the twist mechanism to complete the pen.
6. The pen operates by twisting the ends to advance or retract the refill.

Diagram B - Bushings



PENCIL ASSEMBLY

(Line up finished parts according to Diagram A1)

1. Press the cap through the clip and into the narrow end of the upper barrel. The clip tension may be relaxed by bending it slightly outward prior to assembly.
2. Place the pencil's center band into the upper barrel; press in. Press other side into the unexposed side of the lower barrel.
3. Press the sleeve, wider end first, into the lower end against the gripper.
4. Slip the gripper collar, wide end first, over the exposed end of the brass tube.
5. Insert the pencil mechanism through the open cap until the thread is showing at the other end of the pencil. Thread the tip onto the mechanism.
6. Click the plunger to advance the lead.
7. To fill the pencil with lead, pull out the plunger and eraser and drop the lead inside the storage compartment. Plunge until the lead comes through the tip. **Note:** If lead does not advance properly or retracts when writing, gently pull exposed short piece of lead out of mechanism. Continue to pump pencil plunger until a new piece of lead is exposed. The completed tube assembly must be straight or else the mechanism will bind.

Diagram A1 - Pencil Assembly

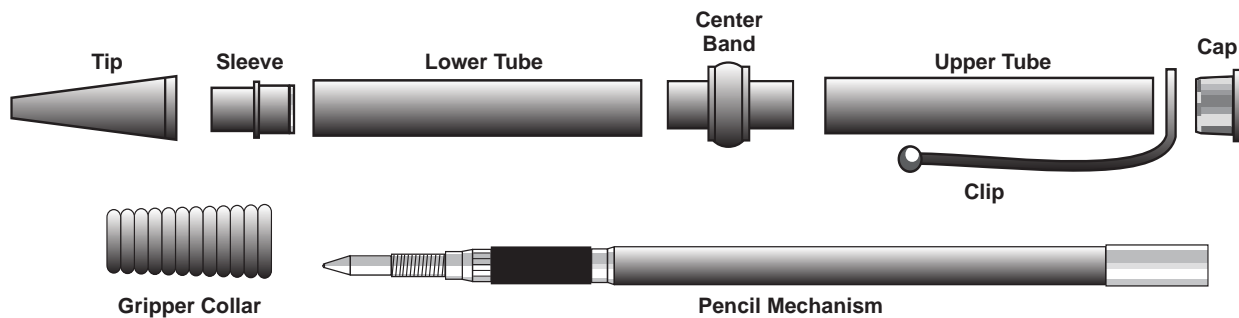


Diagram C - Turning the Pen & Pencil

