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COMMANDER, VOYAGER, SCUBA, PIRATE, TRAIN & GOLFER ROLLERBALL AND FOUNTAIN PEN KITS

Instructions

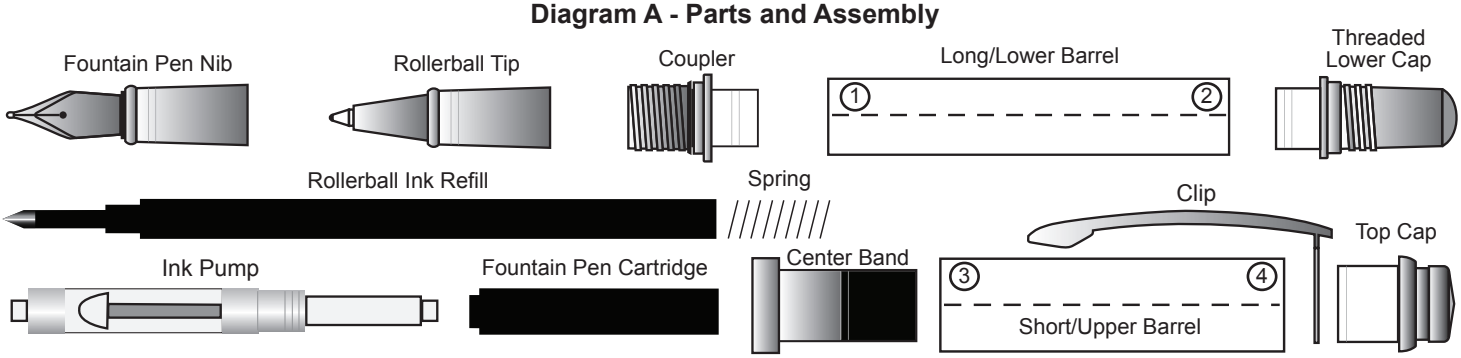
Kit Features

- Shows off the wood in a way a smaller pen can not
- Rollerball uses smooth-writing rollerball refill (RE-RB-SCHN3) and Fountain Pen uses cartridge refill (RE-FP10)
- Fountain nib made in Germany

Required Accessories & Materials

- 7mm mandrel
- 4-pc. Commander bushing set (PKCMDR-BU)
- 10.5mm and 12.5mm drill bits (DB10.5mm) (DB.492)
- Glue (We recommend the thick “gel” CA glue—GTHICK2)
- Sanding and finishing supplies
- Barrel trimmers, sizing sleeve, and/or belt sander for squaring the tubes
- Optional Barrel Trimmer Sleeves: PKMAJJRBTS

Diagram A - Parts and Assembly



BLANK PREPARATION

The tubes in this pen kit are of different lengths and diameter. Make sure that, as you cut the blanks for the tubes, you orient them so that the longer tube will be used as the lower pen barrel (2-3/32" for Commander and Voyager, 1-31/32" long for the Pirate, Scuba, Train & Golfer). The upper tube is shorter one: (1-29/32" long for the Commander and Voyager, 1-23/32" long for the Pirate, Scuba & Train). **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. This pen has four bushings, so proper orientation is critical. In setting up your bushings, you will slide on one of the smaller bushings (bushing 1) first. Then slide the lower barrel onto the mandrel followed by the other small bushing (bushing 2). Next, place one of the larger bushings (bushing 3) on the mandrel followed by the upper barrel and then the last large bushing (bushing 4). Keep in mind which pen barrel you are turning as the top and bottom. **Turn** the blanks down to the bushings, then **sand** with abrasives and **finish** with your choice of polish.

ROLLERBALL and FOUNTAIN 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.

Assemble the four-piece upper barrel, which consists of the top cap, the center band, clip, and short barrel. Slide the clip over the cap and press it into the barrel (4) end. Take bushing #1 and place the large end into the center band, then use your pen press to press the center band into the bottom of the short barrel (3) end.

Final Steps for Rollerball: Carefully press the coupler into (1) end of the long barrel. Press the Threaded Lower Cap into the other (2) end of the long barrel. Drop the spring into the barrel and follow with the ink refill; screw the tip into the coupler.

Final Steps for Fountain Pen: Press the coupler without the nib into the long barrel (1), and then press the Threaded Lower Cap into the other end (2) of the long barrel. Press the cartridge onto the nib assembly. Screw the nib on the coupler.

Diagram B - Bushings

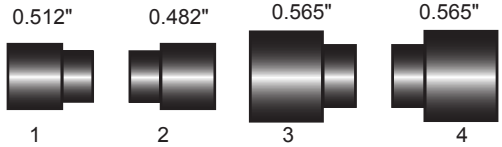
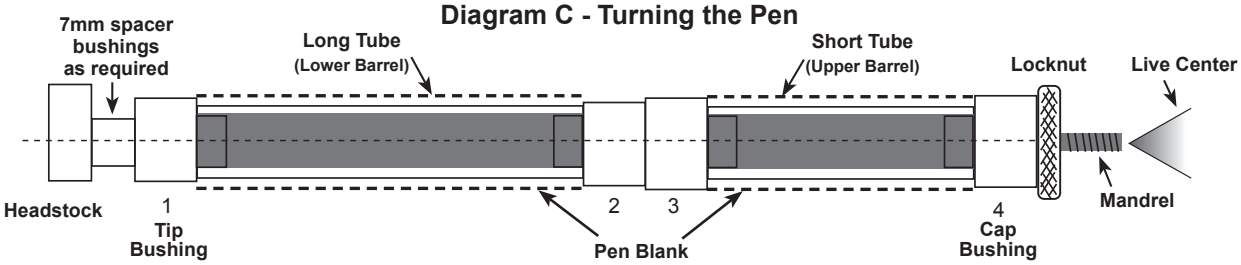


Diagram C - Turning the Pen



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