

308 cal. SINGLE AND DOUBLE BULLET CARTRIDGE PEN INSTRUCTIONS

Thank you for choosing **Bear Tooth Woods** for your authentic bullet cartridge pen kit. This pen is made using a real, once fired, bullet cartridge(s). There may be small dings or imperfections from having been fired. The cartridge may tarnish over time. Use a metal cleaner to shine/polish if desired. This pen uses a standard CROSS style refill and operates with a twist of the upper and lower barrels/sections.

Choose the instructions below for your bullet pen kit. Start with the LOWER BULLET CARTRIDGE INSTRUCTIONS and then complete your upper pen barrel following the remaining instructions for either the DOUBLE BULLET CARTRIDGE INSTRUCTIONS (2 bullet cartridges in your kit) or the SINGLE BULLET CARTRIDGE INSTRUCTIONS (1 bullet cartridge in your kit). If you are not familiar with the components of a SLIM style pen kit, refer to the SLIM instructions on the Bear Tooth Woods website in the FAQ/Instructions tab for a parts photo/identification.

You must properly align the parts as you press them in. Damage will result if the components are not properly aligned and the parts go in crooked. An arbor press is preferred although a pen press or other means such as a drill press or lathe can be used to press the parts together. The center band in the kit is not used.

LOWER BULLET CARTRIDGE INSTRUCTIONS - FOR ALL BULLET PENS

1. If your kit has 1 bullet cartridge for the lower section, skip this step and start with the next step (#2). If your kit has 2 bullet cartridges IDENTIFY THE UPPER AND LOWER CARTRIDGES – THEY ARE NOT THE SAME! The UPPER CARTRIDGE has a RED mark inside the neck (small end). Do not use the cartridge with the red mark on the lower part of the pen – it is for the upper cartridge.
2. Press the nib (writing tip) in the neck (slim) end of the lower cartridge (no red mark). A dab of CA glue is optional.
3. Press the brass colored end of the transmission into the wide end of the bullet cartridge opposite the nib (writing tip). If the parts are not lined up straight as you press them together you could damage the transmission. IMPORTANT – press the transmission in partially and stop before the indent line. Screw in and try the ink refill. If it does not extend out far enough when the transmission is turned, remove the refill and press the transmission in a little more and re-try the ink refill. Continue this process until the ink refill extends the desired amount. Pressing the transmission in too far will look odd and the ink refill will not retract into the pen thus leaving the ballpoint exposed.

The lower cartridge is complete. Continue with the instructions below for the upper part of your pen.

DOUBLE BULLET CARTRIDGE INSTRUCTIONS – UPPER CARTRIDGE (BULLET CARTRIDGE ON BOTH PEN SECTIONS)

The double bullet cartridge pen has cartridges on both the upper and lower ends of the pen and requires no turning. You only need to press the remaining parts together to complete the upper cartridge assembly.

UPPER CARTRIDGE ASSEMBLY - There are 2 cartridges in this kit. One has a **RED** mark inside the cartridge at the neck (thin) end. This is machined for the **UPPER** part of the pen. Press the FINIAL and CLIP into either side of the upper cartridge. A small dab of medium CA glue will help keep the parts together over time.

NOTE - If you press the FINIAL and CLIP into the cartridge neck (thin end), the cartridge necks (small ends) will face opposite directions with both cartridge heads (wide ends) in the middle of the pen. If you press the FINIAL and CLIP into the wide end of the cartridge, the two cartridges will face the same direction with the necks (slim ends) both facing the writing nib. This is for just a matter of preference in how you want your finished pen to look. Before pressing in the FINIAL and CLIP, place the parts next to the cartridges to see how you want your finished pen to look.

Push the upper and lower sections together and test.

SINGLE BULLET CARTRIDGE INSTRUCTIONS (ONE BULLET CARTRIDGE - TURNED TOP BARREL)

Follow these instructions if your kit contains 1 bullet cartridge and a plain brass tube for you to make your own upper barrel section. You will need a section of material (wood, acrylic, etc.) slightly longer than the brass tube and about 5/8" square or larger, a lathe with turning tools, 7mm drill, glue (CA or epoxy works), some manner to drill a hole in your material such as a drill press, slim 7mm bushing, bushing for the 30 Cal bullet pen (available to order), sandpaper and finish of your choice. The following instructions are a guide. Other techniques can be used for making a turned pen barrel.

1. Cut your wood, acrylic or other material of your choice about 1/8" longer than the brass tube length.
2. Drill the center of the material with the 7mm drill bit.
3. Scuff the brass tube with 150 grit or so sandpaper
4. Glue the tube with thick CA (superglue) or epoxy into the barrel material by putting glue on the tube and twisting it to spread the glue as you insert it in the barrel material. Try not to get glue in the tube. Or, you can plug the tube, pour several drops of glue into the barrel material and insert the tube while twisting to spread the glue. Be sure the entire tube has adequate glue to adhere to the material. Other glue types and gluing techniques may also work. Let dry/cure.
5. Disk / belt sand or use an end mill to square and remove the barrel material down to the tube. Make sure it is square and do not shorten the tube length. Clean the inside of the tube of any residue (wax / glue).
6. Use a reamer or similar tool to remove and de-burr the ends of the tube.
7. Mount a Slim 7mm bushing on your lathe mandrel, the barrel material and then a 30 Cal pen bushing.
8. Turn to shape leaving a fraction larger than the bushings to allow for sanding.
9. Sand as appropriate for your barrel material.
10. Finish/polish as desired.
11. Press the finial and clip into the smaller end of the upper barrel. A little CA glue helps hold them in.
12. Push the upper and lower sections together and test the twist operation.