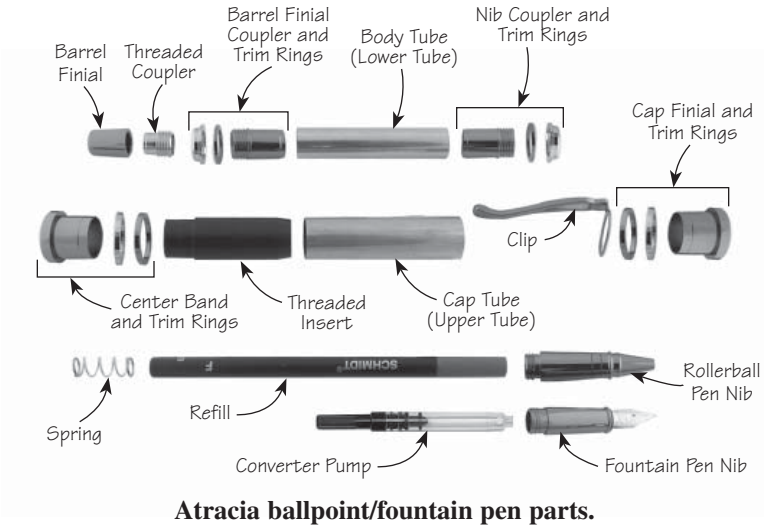
Atracia Rollerball or Fountain Pen Hardware Kit

Requires standard A mandrel, bushings for Atracia rollerball/ fountain pen (88K83.56), 10.5 mm and 12.5 mm drill bits, and minimum 3/4″ square × 5″ blank.

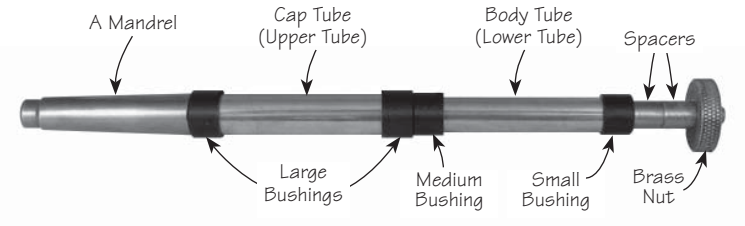


Atracia ballpoint/fountain pen parts.

Preparing the Material Blanks

1. Two material blanks are required for this pen. Cut the blanks slightly longer than the length of the brass tubes.
2. Drill each blank through the center, lengthwise. Drill the cap blank with the 12.5 mm drill bit, and the body blank with the 10.5 mm drill bit.
3. Polish the brass tubes with sandpaper. This can be done by hand or on a power machine such as a belt sander. The purpose of the sanding is to clean off the oxidation and roughen the tubes so that the glue will have a better adhesion surface.
4. Plug the ends of the tubes with the material of your choice. Some use base wax (a dental product), or play dough, or even a slice of potato. Just push the ends of the tubes into a thin section of the material. This will form a plug to keep the glue from getting into the tubes.
5. Clean the tubes, after plugging, with acetone or alcohol on a rag.
6. Prepare your glue. You can use a fast-drying, two-part epoxy, one hour or less. Be sure to mix it thoroughly. (A Post-it® Note pad makes an excellent mixing place. When you are finished just tear it off and throw it away.) Polyurethanes and thick flexible cyanoacrylates (CAs) can also be used. (If not using epoxy, go to step 9.)
7. Place some of the epoxy into the blank using a small piece of dowel or other small stick.
8. Roll the appropriate tube in the epoxy.
9. Insert the tube with a twisting motion until it is almost all the way into the material blank. Then use the dowel to push it in until the end is flush with the blank. Use the dowel to rake off the excess glue even with the blank and the tube.
10. Push the brass tube through the blank until the other end is flush with the blank. Then rake the glue flush with that end. Now push the tube back into the blank until the tube ends are equidistant from the ends of the blank.
11. Set these aside for 60 minutes until the epoxy has had time to reach its maximum strength.
12. If you are using CA glue, the wait is only about 60 seconds. When using polyurethane the wait will be about 24 hours.
13. When the glue has cured, use a hobby knife to remove the plugs from the ends. It is also a good idea to clean the tubes with a brass gun-cleaning brush or a rolled up piece of sandpaper to remove any glue that may have gotten into the tubes.
14. Not cleaning out all glue from the tubes is the most common cause of pen failure. **Be certain** that all dried glue is removed from inside the tubes before proceeding.
15. Using a barrel trimmer of the proper size, face off each end of the blank until it just touches the brass end of the tube. **Stop** facing at this point. Your pen's proper operation is dependent on having the proper length tubes. This facing operation can also be done with the proper jig and a disc or belt sander.
16. Not having the proper tube length is the #2 cause of pen failure. Sanding, on a disc sander, using a jig to hold the tube square with the disc, is a more sure way of getting the proper length. It should be tried if you have any doubt as to your abilities to square the material with the barrel trimmer.
17. Another good method of squaring the ends of the blank is to turn the blank until it is just round. Using a miter gauge to maintain the blank perpendicular to the sanding disc, just touch the ends to the disc. Once the blanks are square and you can see the ends of the tubes brighten, then return the blanks to the mandrel and finish the turning until the desired contour is accomplished.

Turning the Blanks



1. Assemble the blanks on the mandrel with the right bushings in the right place. The larger bushings are placed at each end of the cap blank. The medium bushing is placed at the nib end of the body blank, and the small bushing at the other end of this blank.
2. Tighten the tailstock before tightening the blanks on the mandrel. This will center the mandrel first. Then tighten the nut that holds the blanks.
3. Turn the blanks to the desired contour, making sure that the area next to the bushing is turned to the size of the adjacent bushing.
4. After turning the blanks, sand the surface in progressive steps until you get to 400 or 500 grit.
5. After sanding, stop the lathe.
6. Apply the finish of your choice and polish.
7. Remove the blanks from the mandrel.

Note: *Mark the inside of the larger end of the barrel blank, since there is only a slight difference in size.*

Assembling the Pen

Please refer to the pen parts photograph.

The third most common error resulting in a non-functional or damaged pen is the misalignment of the parts when pressing them in place. The use of a good pen press or small arbor press is recommended, but it can be accomplished with a good C-clamp and much care. When pressing in the various parts, by any means, **be sure** that the parts are straight and in line with the blanks. If a part is cocked or otherwise misaligned, at the very least, a poor fitting pen will result. At the worst, you may have a pen that is not usable. Exercise caution here!

Occasionally, you will encounter parts that are a little loose fitting. This can be corrected by using a **small** spot of glue, usually CA, on these parts before pressing them home.

Important Note: *The trim rings are not all the same size. The largest trim rings are for the center band and finial on the cap. Those for the nib coupler are larger than the trim rings for the barrel finial coupler. Ensure the narrow end of the ring faces the threaded end of the coupler.*

1. Slide the trim rings onto the center band and place this assembly over the small threaded end of the threaded insert.
2. Press this assembly into one end of the cap blank. Make sure you choose the appropriate end of the blank to preserve the pattern or grain on your pen.
3. Slide the trim rings and the clip on the cap finial, and orient the clip to your preference before pressing this assembly into the other end of the cap blank.
4. Slide the larger of the remaining trim rings onto the nib coupler, ensuring the narrow end of the trim ring faces the threaded end of the coupler.
5. Press this assembly into the nib end of the body blank.
6. Slide the remaining trim rings onto the barrel finial coupler, ensuring the narrow end of the trim ring faces the threaded end of the coupler.
7. Press this assembly into the other end of the body blank.
8. Press the non-threaded end of the threaded coupler into the barrel finial, and screw this assembly into the barrel finial coupler.
9. a) For the rollerball pen, drop the spring into the barrel, insert the refill, and screw the rollerball pen nib into place.

   b) For the fountain pen, secure the ink cartridge or the converter pump onto the fountain pen nib, then screw the fountain pen nib onto the nib coupler. (The fountain pen does not require the spring.)
10. Screw on the cap.

The rollerball pen uses a rollerball pen refill (88K78.58, pkg. of 5). The fountain pen uses fountain pen refills (88K78.57, pkg. of 5).

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