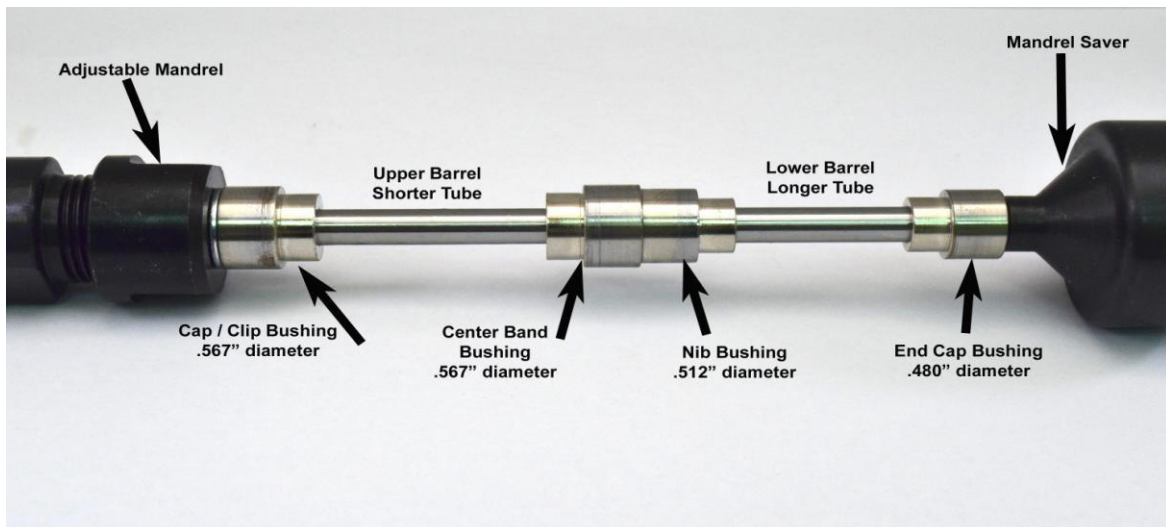




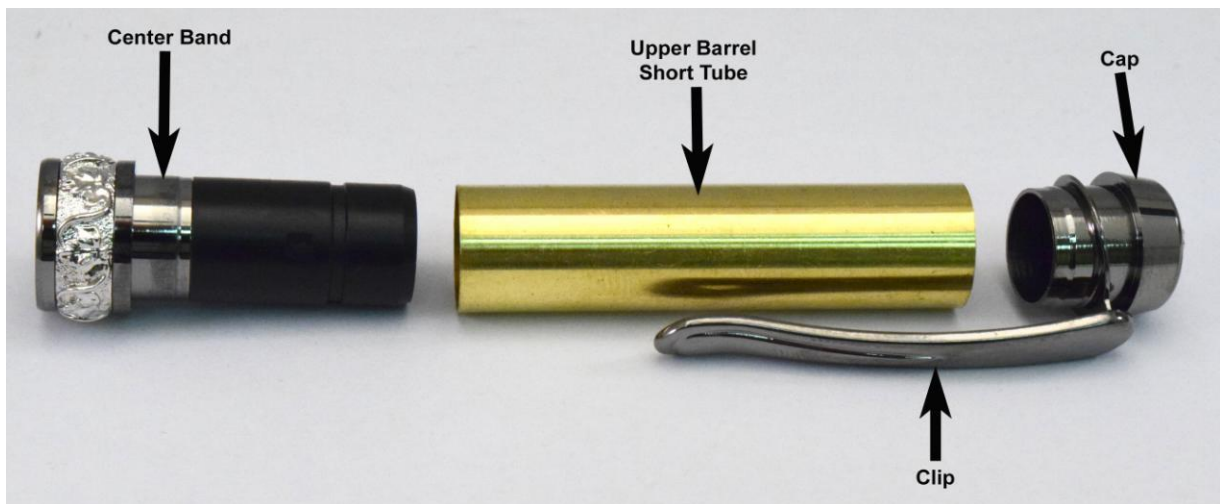
## Assembly Instructions for Arcadia, Harmony and Venetian Rollerball & Fountain Pen Kits

### Pen Blank Preparation:

1. Place the lower & upper pen tubes on the pen blank of your choice and mark the blank so that it is at least 1/8" longer than the pen tube. This will allow for trimming the blank at a later stage. Make sure to mark each tube, upper & lower and place a mark in the middle of the blank for proper grain orientation (if using wood).
2. Mark the center of the lower blank and secure it in a drilling vice if using a drill press. If drilling on the lathe (my method of choice) then secure the blank in a drilling chuck. Spray the 10.5mm drill with BladeCote (or some drill bit lubricant) and drill the lower blank clearing the chips frequently. Using a 12.5mm drill bit for the upper blank, repeat the same steps for the upper blank as you did previously for the lower blank.
3. Rough up the pen tubes with 80 grit sandpaper so the glue will adhere better. Glue the lower pen tube (the longer one) into the pen blank marked lower using 5 minute epoxy or medium CA glue. Repeat this procedure with the upper pen tube and blank. Allow the glue to thoroughly dry.
4. If using a barrel trimmer to square the ends of the tubes, lightly take off the excess material until the brass tube just is starting to shine. If you are using a squaring jig and a disc sander (my method of choice) make sure that you do not remove too much of the brass tube. **NOTE: if too much of the brass tube is removed, this may result in an improper fit when you assemble the pen!**
5. Place the cap/clip bushing (.567" diameter), the center band bushing (.567") and Nib (.512" diameter) & end (.480" diameter) cap bushings on an mandrel as displayed below:



6. The above diagram in step six (6) shows both barrels being turned at one time. My method is to turn only one barrel at a time. By turning one barrel at a time you will get closer to the head stock and get a more concentric turn. Also do not over tighten or put too much pressure on the tailstock or mandrel nut, this may cause the mandrel to flex, producing an egg shaped pen barrel.
7. Turn the barrels down to the bushings carefully or stop turning just proud of the bushings and then sand down to the bushings. Make sure you get all the dust off your blank and then apply the finish of your choice.
8. **Upper Barrel Assembly:** Make sure you follow the assembly instructions by laying out the pen parts for the upper barrel according to the image below. Make sure that when you line up your finished barrels they are in the proper orientation like you turned them on the mandrel. ***Hint: I mark the inside of the pen tube which is the top or the center with a marker on the inside of the pen tube.***  
 Note: Arcadia parts are shown, the Harmony & Venetian parts are similar.



9. Start the assembly process by sliding the clip onto the cap and completely press them into the top of the upper (short) barrel. Press the center band coupler **delrin end first** into the other end of the short, upper barrel. The top section of the pen is now assembled.
10. **Lower barrel Assembly:** Press the end cap and trim ring (which is the smaller .480" of the two trim pieces) into the end of the lower (longer) barrel. Press the (nib section) into the other end of the lower barrel. Make sure that the **flat sides** of the trims ring are pressed against the pen blank as shown. ***Hint: Please make sure that you have the correct end as the back (the smaller end) of your pen and the larger end is the writing or front section of the pen.*** Arcadia pen parts are shown, the Harmony & Venetian parts are similar.



11. Once both the front and end sections are securely pressed into the lower barrel now insert the refill and screw on the nib section. The spring for the rollerball is already inside of the end cap. Note: The Arcadia and Harmony uses a metal Schmidt refill 5888 and the Venetian uses a plastic Schmidt refill #888.
12. If you are assembling a fountain pen, follow the instructions in step 10 by securely pressing both the front and end cap sections into the lower barrel. **Hint: Please make sure that you have the correct trim rings in the proper position – smaller trim ring for the back and the larger one for the front.** Now securely insert either an ink cartridge or a converter into the 6mm JoWo nib.



13. Enjoy your finished pen!

