

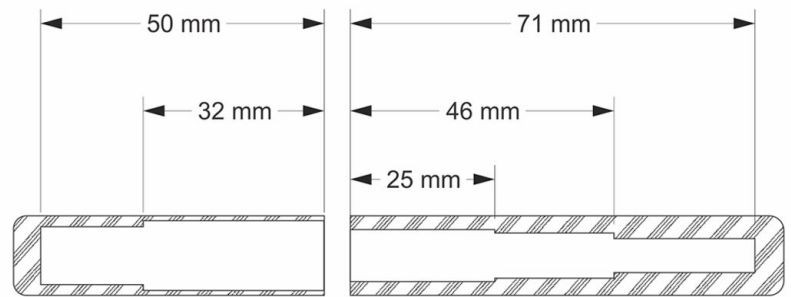
Bullseye Turning Supply

Apollo Fountain & Rollerball Kits

Recommended Supplies:

- Drill Bits: 3/8", 29/64", 23/64", 21/64", 1/4"
- Collet Chuck with 3/8" Collet
- Live Center
- Pen Jaws Or Collets To Drill On The Lathe
- Artemis Kit & Mandrel Set
- 19mm x 19mm x 15.25cm Blank
- 5 Min Epoxy
- Acetone
- Calipers
- Personal Protective Equipment

Metric



Prepping Your Blanks

1. Mark & cut your 15.25cm *Blank* at 63.5mm for the *Cap* & 89mm for the *Body*. The kerf is negligible for our purposes.
2. Chuck the blank for the *Body* of the pen in your lathe. Clean up the cut edge with a tool and/or sandpaper.
3. Drill the *Body Blank* using the following bits:
 - A. 1/4" drill bit @ 71mm depth
 - B. 21/64" drill bit @ 46mm depth
 - C. 23/64" drill bit @ 25mm depth
4. Check the fit to make sure the *Body Insert* seats in the *Body Blank*. If there are any issues, make sure your drill depths are correct.
5. Chuck up the *Cap Blank* & clean up the cut edge like you did with the body blank. Drill the *Cap Blank* using the following bits:
 - A. 3/8" bit @ 32mm depth
 - B. 29/64" bit @ 50mm depth
6. Check fit of the *Cap Insert* in the *Cap Blank*. The *Cap Mandrel* makes a good handle for getting it out.



Cap Insert



Fountain Section & Nib



Schmidt K5 Ink Converter



Gluing The Components:

1. Use 5 min epoxy to lightly coat the outside of the *Body Insert*. If you can, it also helps to lightly coat the inside of the blank with epoxy.
2. Press the *Body Insert* into the *Body Blank*. Wipe off epoxy squeeze out.
3. Once the epoxy has begun to set up & get tacky, thread the *Cap Insert* onto the *Body Insert*.
4. Coat the *Cap Insert* in fresh epoxy and lightly coat the inside of the *Cap Blank* as well. Press the *Cap Blank* onto the *Cap Insert*, & line up your two blanks. Wipe any epoxy squeeze out.
5. Once the second mix of epoxy is tacky, unscrew the *Cap* and *Body* so they don't glue themselves together.
6. Clean excess epoxy with acetone.
7. Let cure for the full cure time of the epoxy.

Rollerball Section



Rollerball Ink



Spring



Turning Your Pen

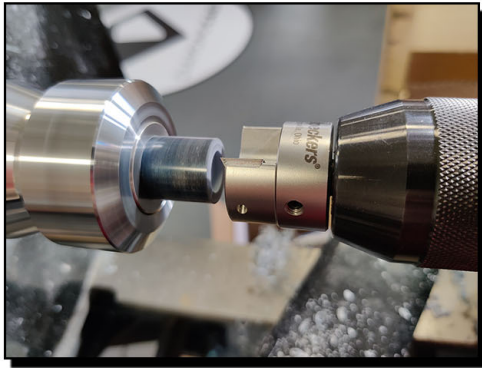
1. Using a collet chuck with a 3/8" collet, insert the *Body Mandrel* into the collet & tighten snugly.
2. Thread *Pen Body* onto *mandrel*. Use live center in tailstock to apply gentle pressure. This will leave a dimple in the end of the blank.
3. Turn blank to desired shape. Use the built in bushings on the mandrel to make the pen skinny or go freeform – That's up to you!
4. Use a parting tool or skew to gently part off dimple. You may need to apply support to the blank while making this cut.
5. Sand & finish with your desired method. Repeat for the *Cap Blank*.

Assemble the pen section onto the body blank & enjoy the fruits of your labor!

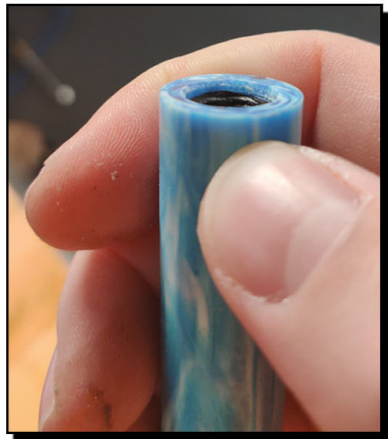
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Apollo & Artemis Closed End Kits Tips & Tricks

- Mark your bits with a sharpie or some nail polish so that you don't have to measure the depth you need to drill every time
- For rollerballs, drilling a little extra depth creates a squishy writing experience. Less depth will keep the refill very tight.
- If you have a blank you want to use that isn't long enough, accent finials or a center band is a great way to gain some extra length on the blank



- If you have a sharp barrel trimmer, using it in the tailstock to square the ends of the blanks before gluing works great.
- Do a test drill before you drill your cap blank. Sloppier tailstocks should use a 7/16" drill bit. Tailstocks that run true are dead on with 29/64.



- You do not want the cap insert to sit flush with the end of the blank. You should have a little bit of overhang that will cover the hardware that sits proud of the body blank. This is probably the easiest thing to mess up with these kits. If you do mess this part up, it's very easy to part off the end of your cap blank down to

the threaded insert and glue on an accent band. Then just turn the accent band down flush, apply your finish of choice, and no one will be the wiser.



Get Creative & Have Fun! Don't forget to share photos of your finished pens with us!