

CLICK MECHANISM PEN ASSEMBLY

This guide is for kits that have a separate multi-piece click mechanisms. It does not apply to “silent clicks” that are integrated into the clip assembly.

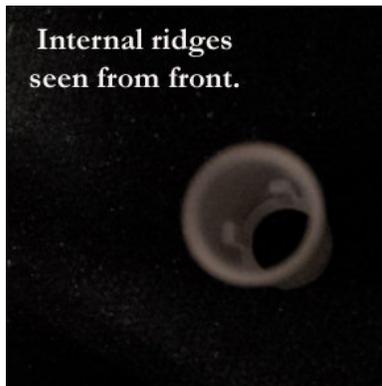
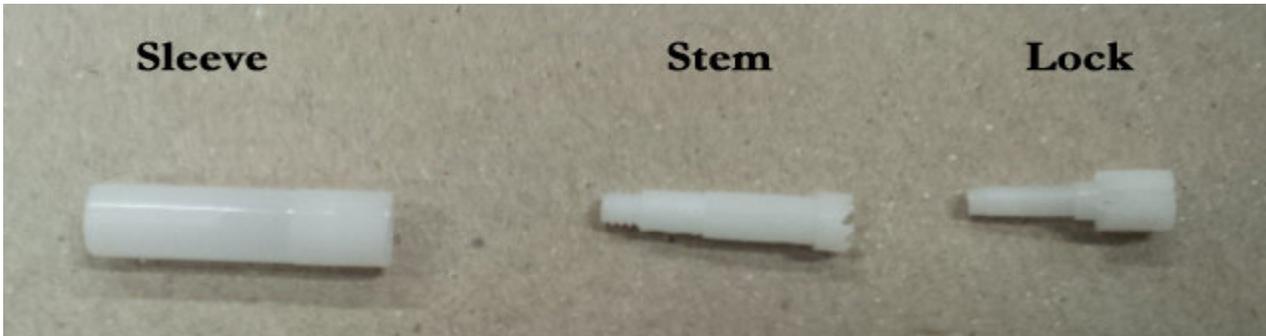
The upper tube is just long enough to fit the parts and mechanism. DO NOT OVERTRIM (hit the brass when trimming) a click pen! It will shorten the barrel, which will break the mechanism and make the pen useless.

The following method was developed to assemble click mechanism pens reliably. Steps 1 through 4 are for testing the mechanism and should **always** be performed. The basic principle can be applied to a variety of click pens.

In addition to the pen kit you will need one of the end bushings for the pen or a jig which is detailed later (Step 9C) as well as a device for pressing the parts together such as the PSI Pen Press.

Assembling the Click Mechanism

The click mechanism has 3 parts, illustrated below for reference.

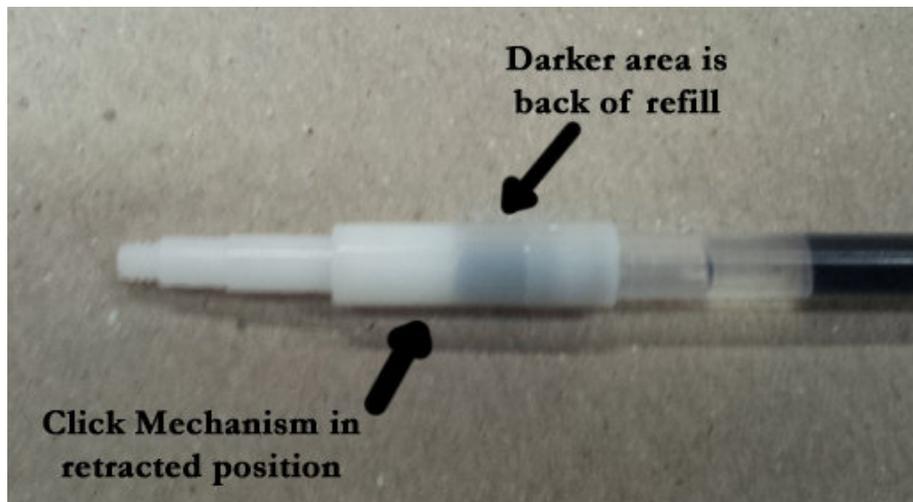


Internal ridges
seen from front.

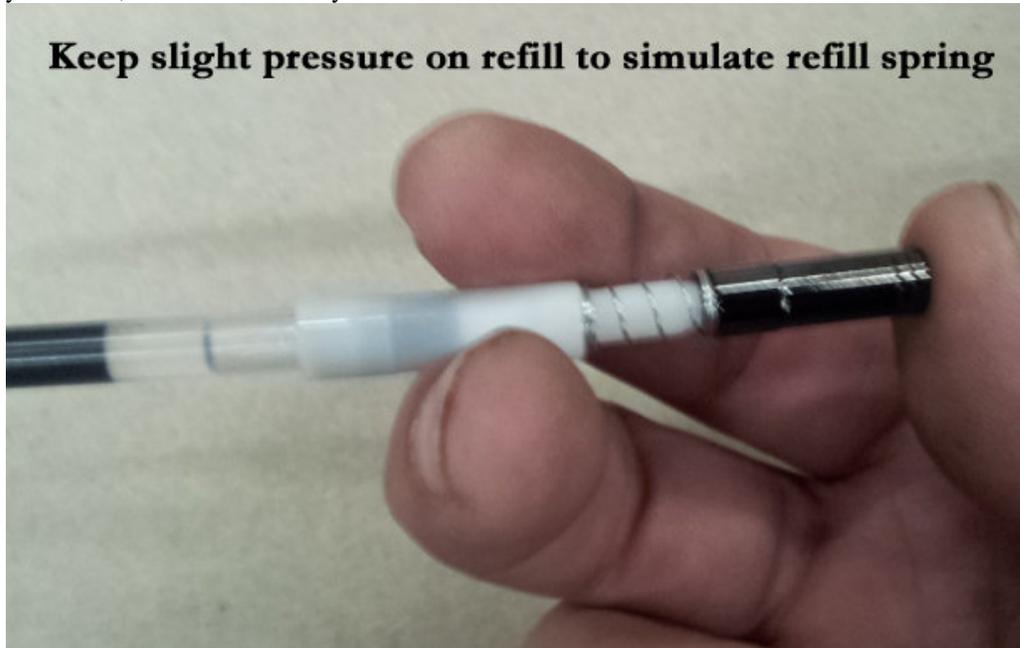
1. Make sure both internal parts of mechanism are correctly inside the sleeve. The sleeve has internal ridges on one side that prevent the parts from coming out of the assembled pen. We will refer to the ridged end as the back end. The threaded stem should be inserted into the front end, threaded side first, and followed by the lock.

2. Hold the mechanism with the threaded end of the stem downwards. Insert the back of the ink refill into the mechanism and push down gently to make sure all the parts are as far in as possible. If the lock sticks in the middle of the sleeve push on the stem, while still maintain pressure on the refill with your other hand and then release. The lock should now move all the way in. This is the “retracted” position (see picture).

3. Still maintaining pressure with the refill, turn the entire assembly over. Put the larger spring over the stem and screw on the plunger. You are ready to test.



4. You can now test the mechanism. This is easily done by holding the mechanism between your first and second finger with your thumb on the plunger. While pushing gently in the refill as in step 3, press and release the plunger several times. **Note: do not push the plunger too far or the lock may jam, which will require re-assembly to correct.** You should notice a clicking sound as the lock engages and releases and the refill extends and retracts. If you do not, the mechanism may be defective.

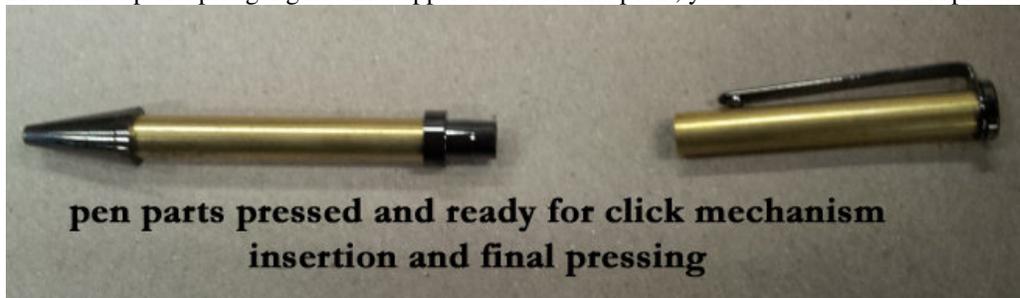


Keep the mechanism fully assembled for best results

Put the mechanism and refill aside and proceed with the next step.

Assembling the Pen

5. Press the coupler into the lower barrel, taking care that it is pressed in straight.
6. **Screw tip onto pen coupler before pressing.** Otherwise coupler threads can be damaged. Press the pen tip into the opposite side of the lower barrel.
7. Press the clip and plunger guide into upper barrel. At this point, you should have what is pictured below

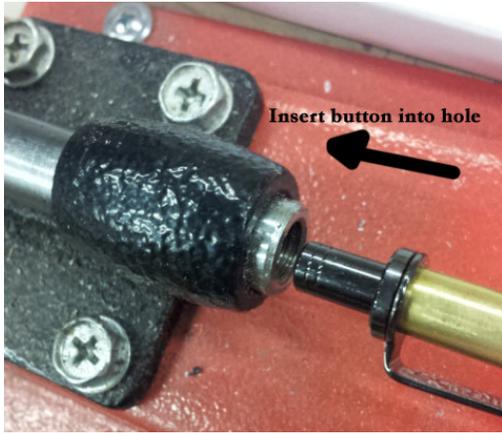


8. Insert the click mechanism into the lower end of upper barrel, plunger side first. Use the refill to push the mechanism in until it is against the plunger guide.



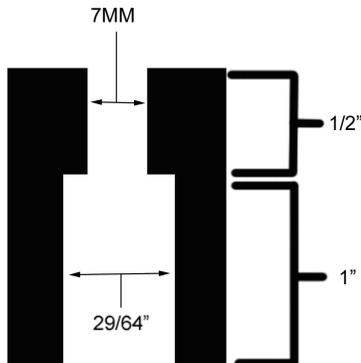
9. At this point you have to press the two barrels together with the fully assembled mechanism plus the refill and smaller spring inside the pen. The mechanism must remain in the “retracted position” during pressing. In order for this to occur you need to press the two sides together without pushing on the plunger. There are three ways to do this.

- a. If you are using a PSI Pen Press, unscrew the metal plunger head from the lever side of the press. Use the lever side for the upper barrel, inserting the plunger into the hole and press the two halves together.



- b. If you do not have a PSI Pen Press, place one of the end bushings over the plunger and press the two halves together. This requires 6 1/4” opening in press.

- c. The jig pictured below was built with a 1 1/2”x7/8” piece of acrylic with a 7mm hole drilled through. The second hole was done by widening the 7mm pilot hole with a 29/64” bit (width of the press rod on PSI pen press). The depth of 1” was used to provide stability on the rod, leaving 1/2” for the plunger. The final piece was rough turned with jam chucks, which is optional--as is the label. This jig can quickly replace the nylon press stop when pressing click pens. This design can be modified to work with your particular press.



The pen fully assembled:

