

## 300 WinMag Cartridge Cigar Pen Instructions

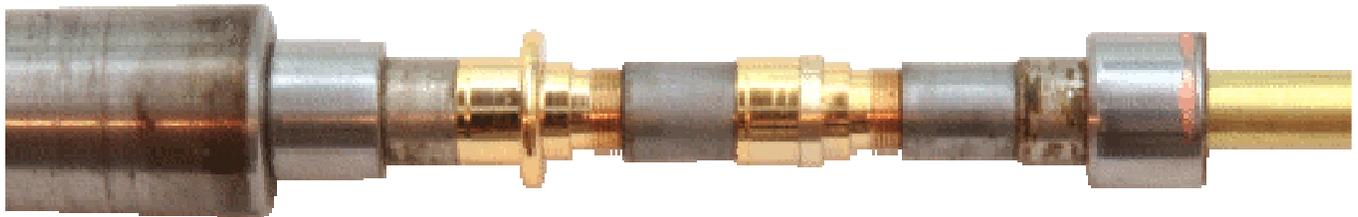
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These instructions guide you through the creation of a Cigar Pen using a Little River Crafts 300 Winchester Magnum Cartridge. The bullet is drilled out to accept a Parker-style refill. The case is drilled for a 10mm cigar tube, and the two are press-fit to dimensions matching the cigar pen kit. The kit requires a simple modification that is easily accomplished without any special tooling.

These cartridges are available for purchase on the Little River Crafts website at:  
<http://littlerivercrafts.home.mindspring.com/Supplies>

### Step 1: Turn down the coupler.

The picture below shows two cigar pen couplers mounted on a standard ¼ inch mandrel. The coupler on the left is unmodified. The one on the right has been turned down to the outside diameter of a cigar pen tube (approximately 0.385 inches). The exact diameter is not critical, but should be between 0.375 and 0.390 inches. Mount the coupler on a mandrel and turn at low speed. Remove the unwanted brass with a scraper or parting tool. Leave enough of a shoulder so that the tube will stop against it, but not be above flush with the outside of the tube.



### Step 2: Press the modified coupler into the lower barrel tube.

Press the coupler into the lower tube (the longer one).



Note that the tube seats against the ring, which is flush (or just below flush) with the outside of the tube.

### Step 3: Test-fit the cartridge.

Attach the transmission to the coupler. There are at least four different cigar pen transmissions produced by different manufacturers, so yours might not look exactly like this. Make sure it is screwed on all the way.



Insert a refill into the transmission and slide the entire assembly all the way into the cartridge through the hole in the case head. Note that the coupler is completely inside the cartridge. Extend the refill and check the fit.



The refill should extend the desired amount beyond the point of the bullet. If it extends a little too far, that is ok – just don't glue the tube all the way in. If it does not extend far enough, shorten the tube slightly - a file or disk sander works well.

### Step 3: Glue the tube in place.

Take the parts out of the cartridge. Take the spring off the refill. Put a small bead of thick CA glue around the tube about ½ inch from the coupler and reinsert everything (with refill extended) back into the cartridge. Be very careful with the glue. Use only enough to coat the tube. Do not let glue squeeze out and reach the transmission. Hold the tube at the desired location (based on the test fit) until the glue sets. Correct placement is critical to pen operation, so be as precise as possible with this step. If the tip extends too far, the only recourse is to shorten the refill. If it doesn't extend far enough, you can shorten the transmission. Just unscrew it and sand down the threaded end until you reach the desired fit.

### Step 4: Make the rest of the pen.

When the glue has cured, unscrew the transmission and remove the refill. Place the spring back on the refill and reassemble it.

Turn the upper barrel from the material of your choice and finish the pen according to the regular instructions. Be careful when joining the two halves together. Do not press against the tip of the bullet. The copper jacket is thin and easily damaged.

Because the 300 Winchester Magnum cartridge is slightly longer than a regular cigar pen lower barrel, the finished pen will be longer as well. That is not a problem, as the exact upper barrel length of a cigar pen is not critical to pen operation. If you desire, you can shorten the upper barrel by omitting the metal trim ring. Or, you can make it longer yet.

Good luck, be creative, and have fun!