

A fellow LVW member showed me an article from the Feb 2014 AAW magazine about a "Mini live centre". The idea is about supporting the tip of a finial as you are turning. A normal live centre may require too much force to turn the heavy duty bearings. This idea was to use a router bit bearing which is designed for high speeds and does not take much force to turn.

The article gave Victor Machinery Exchange as the source of the machinable MT2 arbor. The price of \$5.40 is inexpensive. **Just be aware the site requires minimum order of \$25.**

<http://www.victornet.com/cgi-bin/vic...per+arbors:275>

The article showed mounting the blank arbor in the headstock of the wood lathe and drilling on the wood lathe. I have more slop in my tailstock and quill than I like on my wood lathe, so I mounted this in the 3 jaw chuck of my metal lathe, gripping on the blank parallel sides.

I started the hole with a 1/4in centre drill, then followed with 1/2in drill. If I had used my wood lathe, I think the hole would have been slightly oversize due to the slop in the machine. This is a nice tight fit for the 1/2in OD router bit.

In case you do not know what a centre drill is, I am taking a page from metal workers work process to drill metal. First they start with a centre drill. A very short drill with a smaller end to drill a hole which will be hollow in the middle where a normal twist drill does not cut well.

I have found this is also a good way to start drilling in wood. These short drills do not wander. Hence if the surface is not exactly flat, they will still start the hole where you want without wandering to the low spot.



Not expensive. Highly recommend you get a set. This is the 82 deg set for screw countersinking.

<http://www.grizzly.com/products/4-pc-Center-Drill-Set-82-/H5931>

I made a final pass with the 1/4in centre drill to make a deeper hole in the middle to allow for long finial tip.



The article stated to glue the router bearing into the hole. I made the hole deep enough for this, but then had second thoughts. If the router bearing seizes, I did not want to have to part off a length of the arbor. I decided I wanted to have the bearing to protrude from the arbor so it can be gripped with a pair of pliers to remove.

I could have machined off some of the end of the arbor on the metal lathe. I decided to insert a washer from a kit of faucet washers.



The bearing mounted in the end. I then used some gel (thick) CA glue to hold this in place. No picture of this part since it looks about the same with some CA glue at the end.



I used a 1/2in OD x 3/16in ID router bearing from an old router bearing kit.

I am surprised at the cost of the router bearings. The cheapest I have found is \$3.75 + shipping. Happy if anyone knows of a cheaper source.

<http://www.amazon.com/Whiteside-Rout.../dp/B0012JCWPE>

I gave this to my local wood turning friend. He gave it a try on a test finial and he said it does help to prevent vibration of the tip of the finial.

He did note that he needs to be careful on the pressure from the tailstock. At first he applied too much pressure and the edge of the bearing created a ridge on the tip.

I hope someone finds this useful.