Morse #0 Arbor for Sherline Tailstock

Current prices are on our website.

Product: Damages your tailstock spindle? Well, that can happen. This manual is for your new Sherline Mosre #0 tailstock spindle. You can still use the old tailstock feed screw (if not damages) which should be 1/4-20 Left hand.

Read this – specs and mounting

- Spindle length 2.4",
- spindle diameter 5/8",
- feed screw 1/4-20 LH (included in some package offers),
- keyway 1/8" x 2.4" x ~0.0625" are similar to Sherline's standard size.
- Note that the diameter of tailstock spindles we have seen is within the range of 0.618” to 0.624” (approx. 16 mm, but not really) opposed to our 5/8" (0.625") size. Therefore, you need to sandpaper the spindle down to the exact size of your tailstock housing. Therefore, we offer the spindle typically cut in LeadLoy (simple to sandpaper). We also have C302 (stainless) or A2 (tool steel) typically in stock. Other option is to ream out the tailstock housing to 5/8". We can do that for you (for free) if you send it in. (Shipping costs are up to you.)
- Similarly, MT1 spindles (O.D. 5/8”, reduced length) are available at about the same price as the MT0 spindle. Contact us at sales@lathecity.com

Mounting the new spindle: Disassemble your old tailstock (and remember how you do it - ☺, don’t lose parts -☺ -☺). Proceed in reversed order to mount the new spindle – that’s it, assuming you sandpapered it down to the correct diameter. One basically needs to remove the hand wheel. See Figures below. A 1/32” space should be between the hand wheel and the backend of the tailstock housing.

Technical notes & FAQ

What is Morse..? For the novice: If you read descriptions (specs) of lathes than you may come across the term Morse taper #2 .. Äh – Morse … what? No, that's not about SOS - beep beep … It refers to the type/shape of the lathe spindle. Morse taper (name of a guy) are standardized slopes either cut in the outside of a round (Morse taper) or a sloped boring (Morse arbor). If the angle cut is small (1-2°), then the taper/arbor combination is self-holding. That pair fits quite tight together without bolts or glue. Therefore, a Morse arbor is use in the headstock and tailstock spindle of a lathe. (Your drill press may also have one – here is it typically a Jacobs (another guy) taper.) Morse taper are numbered from zero to seven depending on the diameter of the large end. Sherlines lathe has a Morse #1 in the headstock and Morse #0 in the tailstock, for example. Most Chinese imported lathes have Morse #2 spindles. Some other benchtop systems just have a straight through hole as an arbor, such as the UNIMAT lathes (7.2 mm boring).

Do I need a new feed screw, hand wheel etc.? No, you don't, you can save the costs for that. Your old tailstock feed screw and tailstock hand wheel will fit and need to be used. Our spindle does NOT come with a new feed screw or hand wheel, since it's not required, unless you got a package offer.

Safety/Disclaimer: Adapters are not cutting tools in themselves. Still, general safety rules for machine tools are in place. For an extended list of safety notes, consult the literature or go to our website for a free download of a safety booklet (http://www.lathecity.com/Books/Safety-Booklet-Lathe-City.pdf). We do not warrant that any accessories can be used for any particular application. Damage on equipment (particularly damage on the spindles and feed screws by over tightened screws) caused by usage of accessories is the customer's responsibility. Hobby machinists tend to stick their nose too close to the machinery. Use safety glasses and protective clothing. This manual does not replace books about metal working and/or proper training. Morse adapter/accessories may start to rotate when, for example, a drill bit gets stuck in the work piece. In any case, switch the lathe off. Do not try to stop the rotating adapter with your hands. Make sure that the adapter is

properly inserted in the Morse arbor – the quill typically needs to be moved out somewhat. Using a dead center can result in over-heating the work piece and the adapter. Switch the lathe off, and cool down the pieces. Don't overdo it with the size of and accessories used on a mini lathe such as Sherline's lathe. Too large accessories can result in unstable machining operations. Read the safety notes and follow these and other relevant safety procedures. Neither LatheCity nor its owner shall be liable for damage arising from unprofessional use or misuse of LatheCity accessories. Max RPM 1800 for most accessories, some accessories have max RPM of 100! Replace set screws with Nyclock screws in case that heavy vibration can be expected. Any legal action brought against LatheCity/Uwe Burghaus shall be tried in the State of North Dakota in Fargo, USA. WARRANTY: we do not provide any warranty for our products. In no event shall LaheCity's liability exceed the purchase price paid for the product. We shall in no event be liable for death, injuries to persons or property or incidental, contingent, special or consequential damage arising from the use of our products.

Returns in resalable condition accepted within 30 days (Factory direct) or 14 days (eBay), no questions asked. However, we do NOT reimburse shipping costs, credit card fees, broker fees, taxes, etc. We will charge the respective shipping costs to customers for products that were offered as free shipping when returned. Customer covers all shipping costs and credit card fees (2-3%) raised by e.g. PayPal also when reimbursing payments. Note that the return rate of LatheCity products is below 1%.

Design details may deviate from the image shown which does not affect the function of the accessory.

Some of the images show Sherline's lathe tailstock.

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