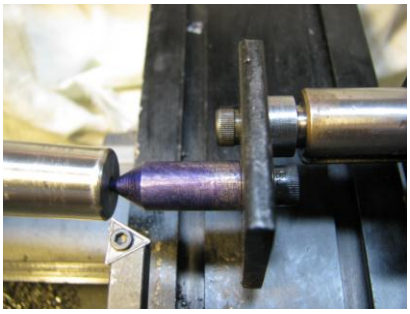
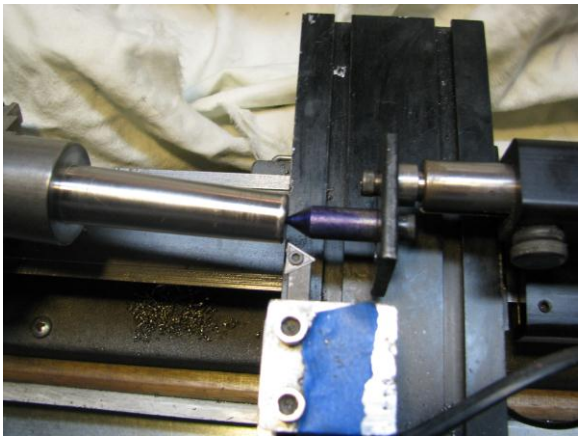


Benchtop Tailstock Accessories

Morse #0 Adjustable Tailstock Center

$30 (Steel)

Tailstock accessories for benchtop lathes: the steel adapter has a Morse #0 taper on one side and a dead center on the other side. Both are mounted on a steel pate in order to adjust the dead center to tailstock spindle distance.

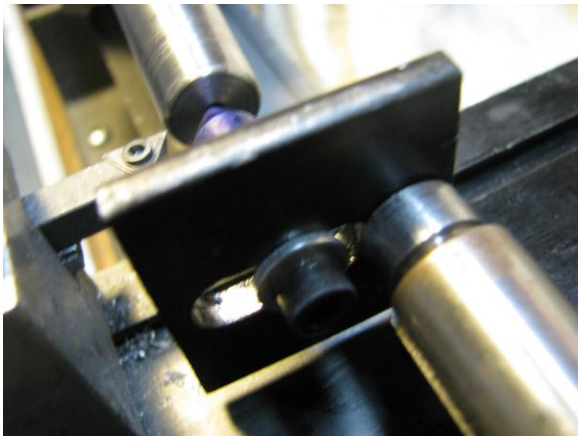


Typical application: Accessory for benchtop / tabletop lathes. Adapter mounts in a Morse #0 arbor, e.g., in the tailstock spindle of a small tabletop lathe and connects to a dead center (pin).

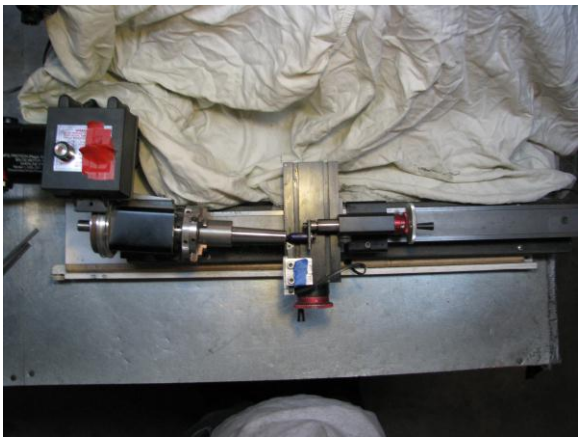
Cutting taper in longer and/or larger diameter stock without a center is dangerous and basically impossible. This adjustable tailstock center compensates for the offset when cutting taper by rotating the headstock. One may shim the plate to square it with the backend of the work piece – typically not required. Note that this accessory is designed for cutting small taper angle as those common on machine taper.

Assembling the tool. To save on shipping costs, this tool is shipped disassembled. For mounting it, two screws need to be tightened, see images.

Procedure: Extend the tailstock spindle by about ¼". For best fit, *slightly* (and carefully) slam the taper in the spindle *by hand*. To remove the taper, pull back the spindle. Typically, taper arbors/spindles have an internal draw bar, which will push out the taper.



Slide the dead center along the keyway until it aligns with the center hole of your work piece. Tighten the two bolts of the adjustable dead center.



Safety Notes, Trouble Shooting, Limitations, and Disclaimer: General safety rules for machine/power tools are in place. For an extended list of safety notes, consult the literature or go to our website. You can download free of charge a safety booklet, which is also typically included (free of charge) for first-time customers.

Use protective closing including, most importantly, safety glasses for metal work.

The adapter may start to rotate in the tailstock spindle. 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. The tailstock needs to be locked.

This accessory is designed for small taper angle as those common on machine taper. For large angle settings (>5°) unstable and dangerous working conditions may appear. Don't use this accessory for large taper angles.

Similarly, this tool will not work for very small angle settings on short metal rods, since the dead center cannot be moved into the centerline of the lathe. An accessory of this kind can be made as a custom design. A typical application may be machining MT2 or MT1 ends in longer stock rods.

The pate used to mount the dead center cannot be tilted, i.e., use this design for small taper angles on not too long metal rods.

Be aware of that you may generate significant side forces on the tailstock. The MT0 used to mount that plate in the tailstock is only 0.7". Therefore, don't overdo it with the size of the work pieces. In addition, working on hard to machine materials such as stainless steel will generate larger forces and is in any case not recommended on a small benchtop lathe. Similarly, the screws holding the dead center and MT0 must be tight. Large forces on the adapter may loosen these screws which may result in a sudden change of the position of the dead center.

RPM maximum are 2800. The adapter is tested only on Sherline standard lathes.

We do not warrant that any accessories can be used for any particular application. Usage of accessories or damage caused by unprofessional use is at the risk of the customer. Neither LatheCity nor its owner shall be liable for damage arising from unprofessional use or misuse of LatheCity accessories.

Returns in resalable conditions are accepted within 30 days after shipment. All shipping costs will be covered by the customer.

No restocking fees, no questions asked. No returns of custom designs or customized designs. No returns of bulk orders. General sells and business terms as given on our web site are active.

Further technical notes

Morse taper: Please note the length and end style of Morse taper varies, depending on application and lathe model. Our version is tailored towards small benchtop lathes. The standard version we offer has a taper length of ~0.7" for short benchtop tailstock spindles. Other sizes are available on request as custom designs. A Morse #0 taper has per definition a larger end with an O.D. of ~0.36".

Uwe Burghaus
(LatheCity)

Fargo, North Dakota, USA
www.LatheCity.com
sales@lathecity.com