



Watch Makers Live Center for Morse #0 Tailstock Sherline compatible

Purpose of that tool Miniature lathe tailstock live center for model work. Sherline's standard live center has a diameter of an inch or so and is as such too bulky for mostly any work, in our opinion. Therefore, we made a really small and handy one. In contrast to dead centers, live centers don't need cutting oil and rotate with the work piece in order to machine delicate parts.

Size and details The bearings we use have an outer diameter (O.D.) of only $\frac{1}{4}$ " and an inner shaft diameter of $\frac{1}{8}$ ". A $\frac{1}{4}$ " O.D. tool steel pin (60° included angle) is pressed in the bearings. The bearing is mounted deep inside of a steel arbor that has a Morse #0 taper (reduced length ~ 0.8 " no tang) at the other end. The entire accessory has a total length of ~ 2 with largest O.D. of $\frac{1}{2}$ ". The live center was tested up to 2800 RPM on a Sherline mini lathe.

Bearings The manufacturer of the bearings, which are offered as hobby type bearings, provides the following data: shielded $\frac{1}{4}$ " miniature ball bearings made of Chrome steel; bearing has 2 metal shields to protect from contamination; pre-lubricated with grease; dynamic load rating

Cr: 190 N; static load rating Cor: 60; limiting speed: 98,000 RPM; KOYO: W682ZZX; NSK: 682ZZ; NMB: L-520ZZ What the lifetime of these bearings is: we don't know.

Included: One Morse #0 miniature live center, this manual, and a safety booklet.

First test: Use a #1 center drill and center drill a work piece. Mount live center in tailstock and push towards the center drilled work piece. The live center should start to rotate which is best seen at low RPM. Use a marker pin and place a dot on the pin end of the live center.

Craftsman 109 lathe: You may need to mount the knock out screw pin at the small diameter end of the Morse taper.

Pricing: This is a simple, but smart design, as we believe. Compare the price with, for example, Sherline's bulky version. Our pricing is fair and reasonable, in our opinion.

Safety Notes, Trouble Shooting, 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 clothing including, most importantly, safety glasses for metal work. Use accessory for light lathe work on miniatures. Max RPM 2800 The tool steel pin has an end segment (shaft) with an O.D. of only 1/8" and can break off under heavy (side) loads. Broken bearing may result in the front pin getting stuck in the work piece which can in turn over heat. In that case, switch off the lathe, cool down work piece, and replace cooled down bearing. Note that bearings are not designed to take large side forces. Note also that no live center will be as ridged as a dead center pin. 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. 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 LatheCity'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.

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costs, credit card fees, broker fees, currency exchange fees, taxes, whatever fee, etc. We will charge the respective shipping costs to customers for products that were offered as free shipping when returned. We charge up to \$5 for manuals and booklet that may need to be reprinted. Note that the return rate of LatheCity products is below 1% (see eBay rating).



Uwe Burghaus
(LatheCity)

Fargo, North Dakota, USA

www.LatheCity.com

sales@lathecity.com

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