

Tailstock Feed Screw Troubleshooting

Instructions for How to Tighten the Tailstock Feed Screw

If you turn the handwheel on your tailstock and the tailstock spindle is not moving, the most likely cause for this is that the 5-40 screw (P/N 40310) that holds the screw adapter (P/N 40290) onto the end of the feed screw has come loose.

Below is an exploded view showing how your tailstock screw is assembled.

Leadscrew End Detail

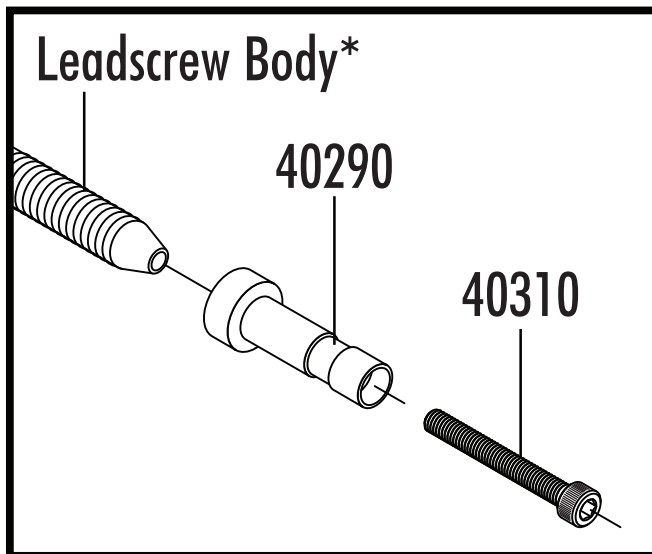


FIGURE 1— Leadscrew End Details

*LEADSCREW BODY PART NUMBERS

Tailstock Feed Screw Body—40221 (41221)

Crossslide Slide Screw Body—44211 (44221)

If you have a standard handwheel P/N 40080, you can gain access to the 5-40 screw (P/N 40310) directly at the handwheel's center face. All you do is hold the handwheel and tighten the 5-40 screw (see Figure 2).



FIGURE 2—Standard 1-5/8" X-axis handwheel, P/N 40080/41040.

If you have a Zero adjustable handwheel, there is no direct access to the 5-40 screw without removing the handwheel.

Watch the *Removing and Adjusting Machine Handwheels* YouTube video and it will show you how to remove an adjustable handwheel. (<https://youtu.be/tZYQ3qv6R5U>)



FIGURE 3—Zero adjustable 2" X-axis handwheel, P/N 3428/3429.

Once the handwheel is removed, loosen the spindle locking screw about six turns (P/N 40870, see Figure 4, blue outline).

Then push the end of the tailstock feed screw into the tailstock body (P/N 40290, see Figure 4, red arrow).

Then you should be able to pull the entire tailstock spindle assembly out of the tailstock (P/Ns 40270 & 40220, see Figure 4, green arrow). If the spindle binds when it is most of the way out, you will need to remove the locking screw (P/N 40870) entirely.

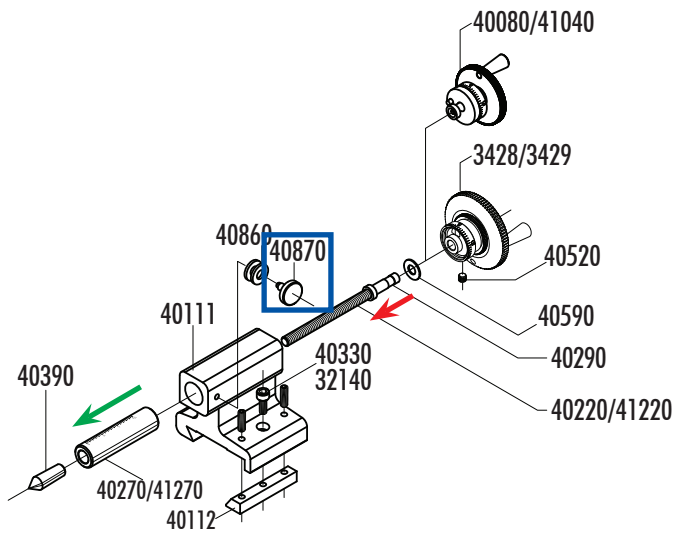


FIGURE 4—Blue square: Locking screw, P/N 40870
 Red arrow: Leadscrew adapter, P/N 40290
 Green arrow: Tailstock spindle assembly, P/Ns 40270 & 40220

Once the spindle assembly is removed, hold the spindle adapter (P/N 40290) with a pair of pliers with a rag on the jaws, so you don't damage the surface. Then tighten the 5-40 screw (P/N 40310) that holds the spindle adapter onto the feed screw (P/N 40220).

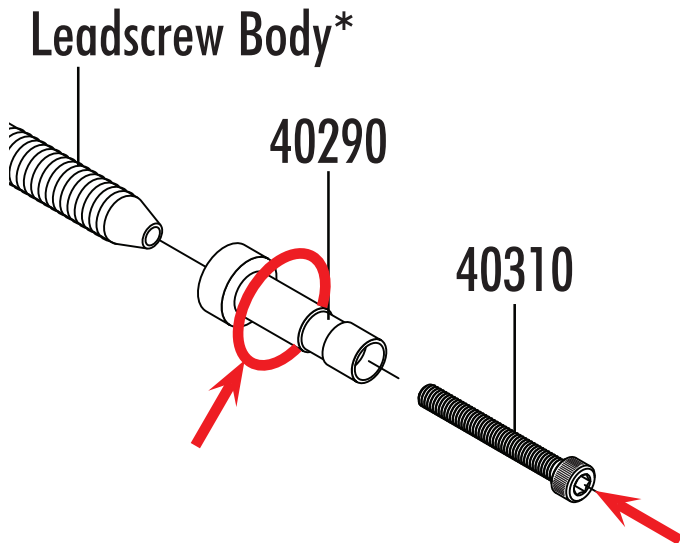


FIGURE 5—Hold the adapter with pliers using a rag as shown by the red oval, so you don't damage the surface of the adapter.

Then reassemble the spindle assembly into the tailstock body.

Apply force to hold the tailstock feed screw to the bottom of the spindle hole. Then put the handwheel back onto the screw adapter (P/N 40290). Apply force to the handwheel towards the back of the tailstock body. By applying force to both the spindle and the handwheel, you are sandwiching the end of the tailstock body between the shoulder on P/N 40290 and the handwheel. This will help keep the amount of end play to a minimum. With pressure applied from both ends, tighten the set screw (P/N 40520) on the handwheel.

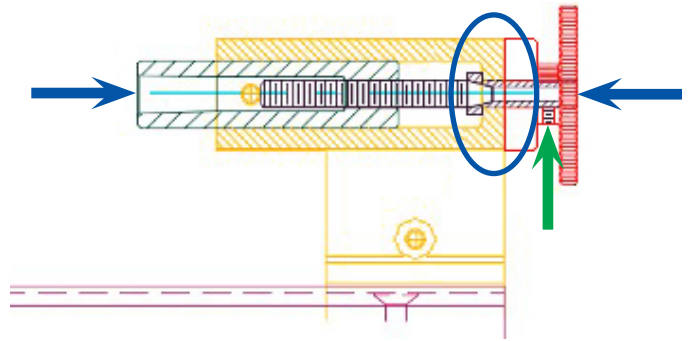


FIGURE 6—The blue arrows show the opposing forces needed to keep end play to a minimum. The green arrow shows the location of the 10-32 x 3/16" Cup Point Set Screw (P/N 40520).

Thank you,
 Sherline Products Inc.