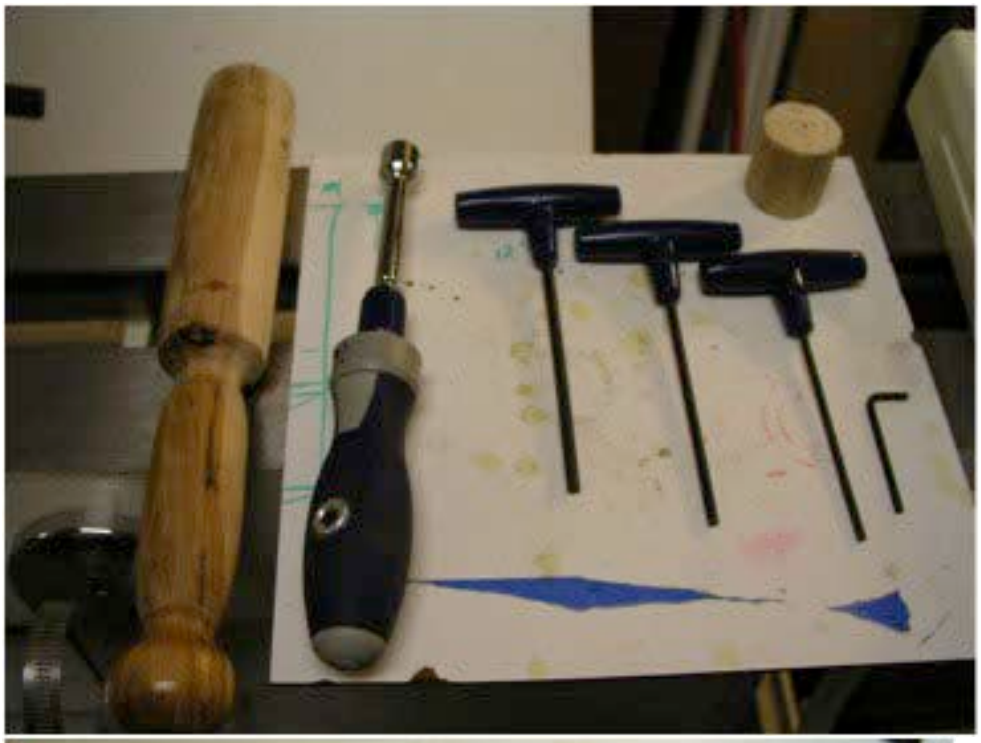
Jet 1642 Bearing Replacement

Tools Needed:



1/8” Allen Key
3/16” Allen Key
5/32” Allen Key
4mm Allen Key
½” socket

Bonker of some ilk
Dowl
New Bearings (on right)

Jet 1642 Bearing Replacement

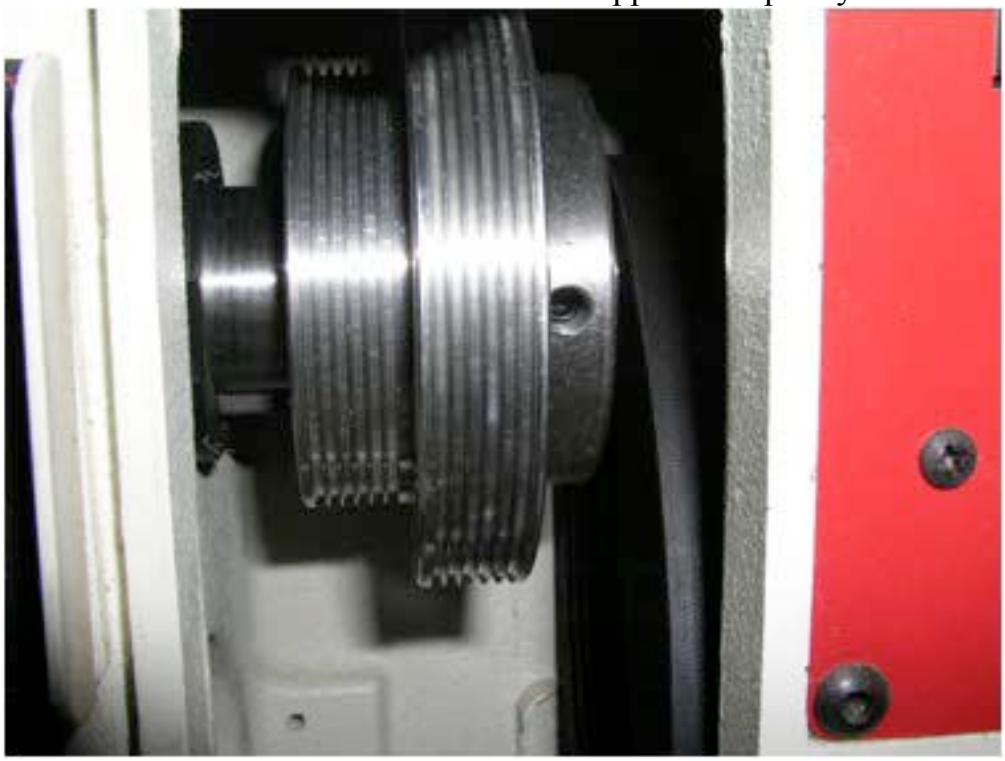
Removal:

1. Unplug the lathe.

2. Loosen the 2ea 4mm set screws in hand wheel, then unscrew hand wheel off.

3. Loosen the 3/16” screw in clamping nut on back of headstock (thing next to handle)

4. Raise the motor up to loosen tension on the belt, and tighten in place.
5. Open access door. Remove belt off of lower motor pulley.
6. Loosen the 2ea 5/32” set screws in the upper shaft pulley.



7. If you can reach it, loosen the setscrew in the locking collar, if not able, wait until step 10.

8. Remove the 4ea 1/8” outer corner screws holding the LCD panel in. Gently pull the panel out and let it hang in front of the on/off switch. This gives you some needed room, and protects the sensor.

9. Now you want to get a wooden dowel or a wood square piece (pen blank size) that is just smaller than the hand wheel side of the spindle shaft.

10. Place dowel at the hand wheel end of the spindle shaft and tap with a dead blow hammer, or wooden mallet to force the spindle out the work side. You want to tap it until the end of the shaft is inside the headstock clear of the bearing. NOTE: If you weren't able to loosen the setscrew in the locking collar, now is the time to do so.

11. At this point you should be able to pull from the work side of the shaft. You want to slowly pull the shaft out, but at the same time remove the locking collar and pulley and locking key on the inside of the headstock.

12. Once you have the collar and pulley off the shaft, pull the shaft completely out.

13. Remove the rear bearing being careful not to loose the wave washer behind it.

14. Now remove the 4ea ½" bolts from the shaft.

15. If you were lucky like me, the front bearing started to slide down the shaft as I banged it out. If not you will need to get it started down the shaft. A bearing splitter would be the easiest way, but you may find a flat head screwdriver with a few taps will work as well.

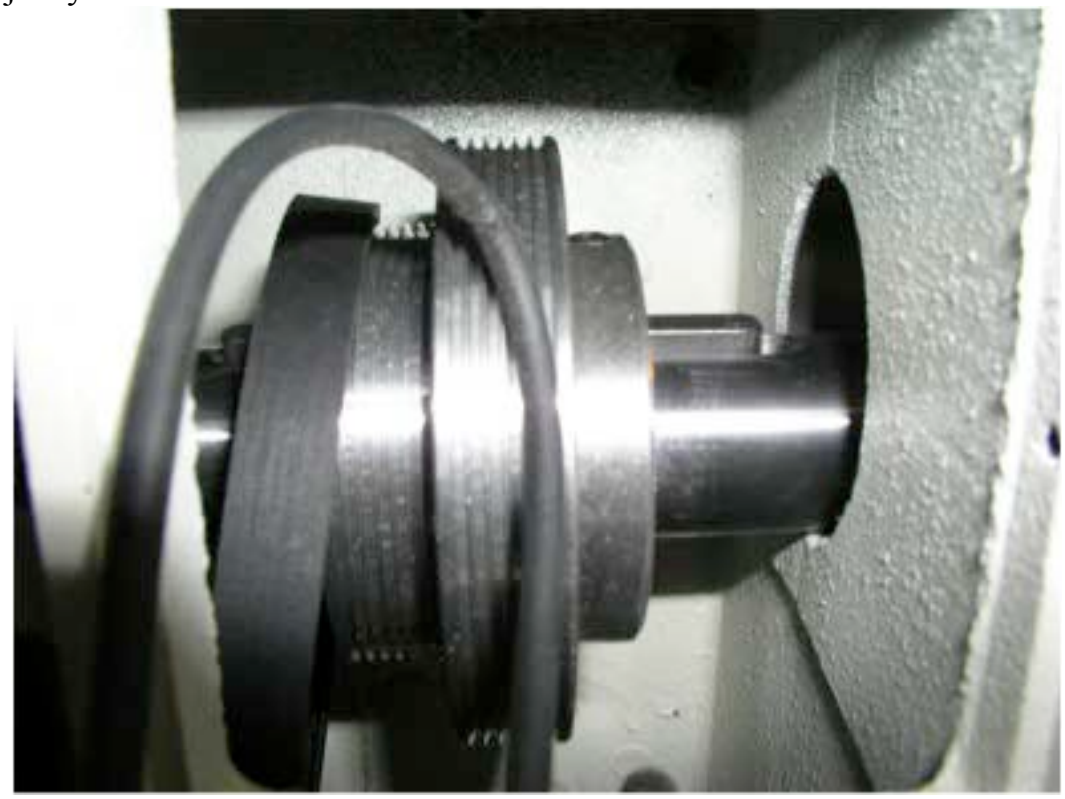
Reinstallation:

(Not pictured as it is the opposite of Removal)

1. Slide new front bearing down the shaft. It's going to be tight at the bottom; here a bearing press would come in handy. I just set my bench vice too slightly over the shaft diameter, and set the bearing down on top of it (bearing already started on the shaft). Then I place a block of wood at the work end and tap gently to set it home against the flange. Using the ways of the lather is also on option.

2. Now reinsert the 4ea ½" bolts and tighten till they are snug.

3. Insert the handle end back into the headstock and slide the locking key, pulley and lock collar back on. Don't worry about setting the screws on them just yet.



4. Now slip the belt over the shaft and pass the handle end though the motor side of the headstock.

5. Place the wave washer on, and then the rear bearing. If you need to tap the bearing a bit, just make sure you didn't push the front one back out.

6. Before putting the clamping nut back on, line up the locking collar and tighten down the set screw. If needed, you can get it in place, make a mark for reference and back the shaft back out a tad so you can reach the set screw.

7. With the shaft fully inserted from the work side, thread the locking clamp back on hand tight and then back off about a 1⁄4 of a turn. Tighten the clamp screw.

8. Thread the hand wheel back on and tighten the 2 set screws.

9. Now Place the belt on the high position on both pulleys. Take up slack in belt. Belt should be at a 90^{o} angle to both pulleys and then tighten 2ea 5/32” set screws on the shaft pulley.
10. Carefully place the LCD panel back in and tighten the 4ea 1/8” screws. I found if I didn’t tighten them fairly snug the sensor did not function properly.
11. Plug lathe in and start turning again!