

# LATHE SPINDLE REPLACEMENT

## GN1300 SERIES

### NOTE:

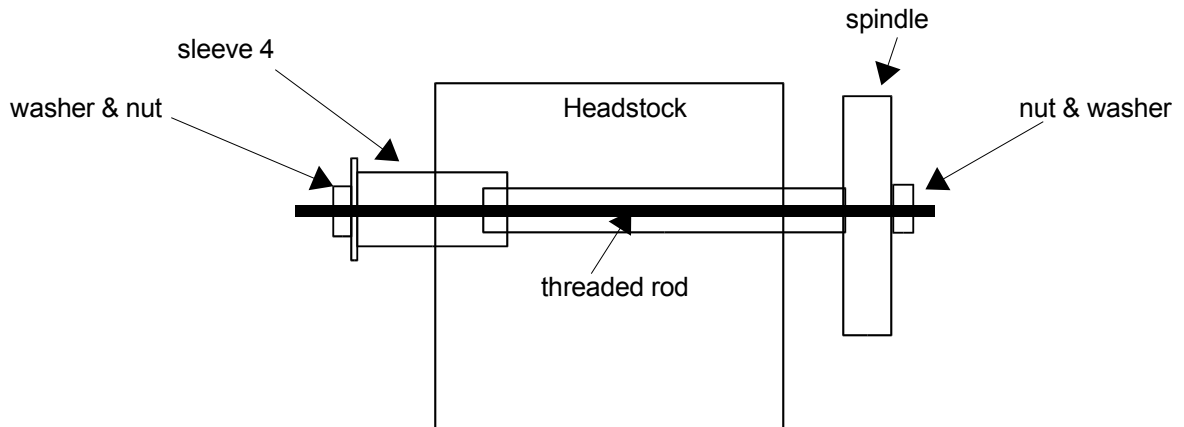
**It is almost impossible to remove the bearing 41 without destroying the bearing cover 42. It is recommended that a new bearing cover 42 be ordered when replacing the spindle assembly.**

This set of instructions will allow you to get the end of the spindle loose. You will need to remove the mill head assembly and the plate 33 on the rear of the lathe head to gain access to the internal gears of the machine. Refer to page 84 of your owner's manual for the parts diagram..

- Once the mill head and the rear cover plate are removed, remove the two setscrews 22 in the spacer 38 that can be accessed through the top of the lathe head. There is a wire around the spacer that locks the two setscrews in place. Cut the wire and remove the screws.
- Slide the spacer 38 and the gear 40 toward the chuck end of the spindle and remove the key 16 that was under the gear 40.
- Remove the chuck to gain access to the 3 screws #34 that hold the front bearing cover in place. These screws can be removed by going through the chuck mounting stud holes in the end of the spindle. Bearing 41 will come out with spindle while bearing #28 will remain in the head.
- Remove the locking screw 8 from the locknut 9 on the pulley end of the spindle.
- Using a hammer and a small punch, loosen and remove the locking nut 9.
- Pull off the left coupler 10B, the key 16 and the spacer 89.
- Remove the sleeve 4.
- Place the plug made earlier in the end of the spindle and start to drive the spindle out of the machine. As the spindle begins to move, keep an eye on the #40 gear. There is a key under the gear that will need to be removed as soon as it is exposed. Drive the spindle out of the head. Keep track of the items that come off the shaft so they can be installed on the new shaft in the reverse order of how they were removed.

### ASSEMBLY

- Install the bearing cover and bearing on the new spindle and put the spindle into the head.
- Install the gear, spacer and key in the reverse order of which they were removed.
- An easy way to pull the spindle into place is to use a long threaded rod that will go all the way through the spindle. You will also need sleeve 4 with nuts and washers that can be assembled as shown below.



- Pull the spindle slowly into the head. Make sure the internal parts are going into place.
- When the end of the spindle is far enough through you should be able to use the #9 nut to pull the spindle and bearings all the way into place.
- Remove the nut 9 and install the spacer 89, key 16, and left coupler 10B. Reinstall the nut and tighten according to the instruction sheet "Spindle Bearing Adjustment".
- Check all the headstock controls for proper operation before closing up the unit and installing the mill head.