

Install the outer race first, then push the tool post stop (2186) into place, making sure that one tool post stop eccentric from each spindle enters the notch in the flange of the outer race. Next replace the five hollow hexagon cap screws securing the tool post to the revolving head. Next step, insert an 836-A #10-32 x 3/8 screw into the threaded hole. Bring down snug against the housing to prevent the bearing from chugging. Back screw off 1/6 of a turn as too much pressure will distort the bearing cage. Use an 836-A #10-32 x 3/8 screw to lock this screw.

To install a new bearing on an old spindle, remove the inner sleeve from the spindle; the sleeve is removed by applying a flame to the sleeve only. It should expand and slide off. The inner sleeve of the new bearing should be put in a controlled electric oven and heated between 150°F to 170°F then very quickly be pushed by hand over the spindle to within approximately 3/32 from the spindle nose. If the sleeve closes on the 1.6725 diameter do not pound with a hammer, use a steel washer and very carefully push with arbor press to position. The end of the sleeve to the hub on the spindle nose should be approximately 3/32. NOTE - Machines being rebuilt with needle bearings do not have to be run in. But, the head must be indexed to lubricate these bearings.

LUBRICATION

Lubricating the machine is done with the Automatic Lubricating Unit and an oil gun. NOTE - The gun supplied is an oil gun, not a grease gun. CAUTION - Do not grease any of the fittings on the machine, use oil of the same grade used in the lubricator. Use a good grade of SAE #20W. In climates of extreme heat, 85°F or more, use SAE #30W. All the oil fittings should be serviced before starting the machine to run daily. The machine must be indexed a minimum of five times to insure oil to reach the bearings on the work spindle, as the work spindle is only lubricated in the fourth position. On new machines, this bearing is lubricated from a constant flow line, on the old machines, the spindle was on a cyclic line, and the flush button on the lubricator must be depressed. CAUTION - Do not run the machine if the low pressure gauge reads less than five pounds, the high pressure gauge less than fifty pounds. The system is a Dual-Purpose Lubricator. High pressure periodically forces a measured volume of oil through a cyclic line (copper or brass) and a constant flow of oil through a low pressure line (chrome plated). The lubricator is driven by a pulley on the Drive Shaft to a pulley on the Lubricator. On the 75 cycle machine with the Drive Shaft 1501 R.P.M. the pump shaft will run 1007 R.P.M. On a 60 cycle machine drive shafts 1217 R.P.M. the pump shaft will run 817 R.P.M. On a 45 cycle machine with the drive shaft 933 R.P.M. the pump shaft will run 626 R.P.M. It is recommended if the machine is going to be run for an extensive length of time at a cycle other than 75 cycle, that another pump pulley be purchased to have the pump run approximately 1000 R.P.M. NOTE - If there is too little oil at the bearings on the cyclic line check for low oil level, broken or cracked lines, loose connections, flattened lubrication outlet lines or clogged filter. If all is