

Hints and cautions regarding Airhead rocker arm needle bearing replacement:

Instructions, courtesy of John Wagner:

Removal of old needle bearings:

Before proceeding, measure and note the depth that your old needle bearings are recessed to in the rocker bores.

The bearings are a light interference fit and therefore a vice or small press can be used, along with a socket of sufficient length that is just under the I.D. of the rocker, and with another socket that has enough internal capacity to catch the old bearing(s) as they are pressed out of the rocker. Be careful not to mar either face of the rocker during the removal process.

You will be pressing both bearings out at the same time, but a vice should be sufficient to accomplish this. If the bearings seem overly tight, you may use a heat gun to warm the rocker.

Installation of new needle bearings:

Orientation:

Please note that the two rolled edges of the replacement Ei bearings are different. The new needle bearing's smooth rolled edge is installed first or inward, leaving the bearing's rolled & stepped edge visible once installed.

Pressing in new bearings:

Deburring or gently chamfering the sharp leading edge on the rocker's bore may ease getting the new bearing started. Be sure that the bearing does not cock before using force to press the bearing home. Bearings may be placed in a freezer to shrink them and make installation easier, although this is usually not necessary.

Do NOT use a hammer as this is likely to cause damage to the outer shell of the bearing. A washer (preferable hardened) that is 1mm (.040") thick and a bit larger than the rocker's bore can be ground to a loose fit just smaller than the rocker's bore. This is useful to set the 1mm depth and can be stacked with other spacers to make the 7mm (.275") depth as well as seen on the 85-on type rockers.

Rockers, (especially at the upper and lower machined surfaces), should be protected from the vice's jaws by either soft-jaw covers of aluminum, copper, or brass. Lacking soft-jaws, a large O.D. body washer can also be used for protection against the vice's jaws.

Install new bearings to the same depth as the factory installed bearings that were removed. This depth should have been noted before the old bearings were pressed out. For reference, those depths should be as follows:

On early rockers from 1974-1984, both bearings should be 1mm (.040") below surface.

On later model rockers (1985 & later), where a stepped plastic bushing is used between the upper support block & the rocker, the upper bearing should be installed deeper @ 7mm (.275") so that clearance remains for the oiling hole in the rocker shaft. The opposite bearing only needs to be 1mm deep.