

Camshaft Bushing Installation On Cummins C-Series 8.3L Engines

The AERA Technical Committee offers the following information regarding camshaft bearing installation on Cummins C-Series 8.3L Engines. The camshaft bushing on the front and the rear could be installed incorrectly causing a camshaft failure.

Cummins supplied bushings have two holes in them along with a groove on the back of the bushing and making sure that the correct oil hole is lined up is critical during assembly. Mark the camshaft bushing and cylinder block to aid in alignment during installation as shown in Figure 1.

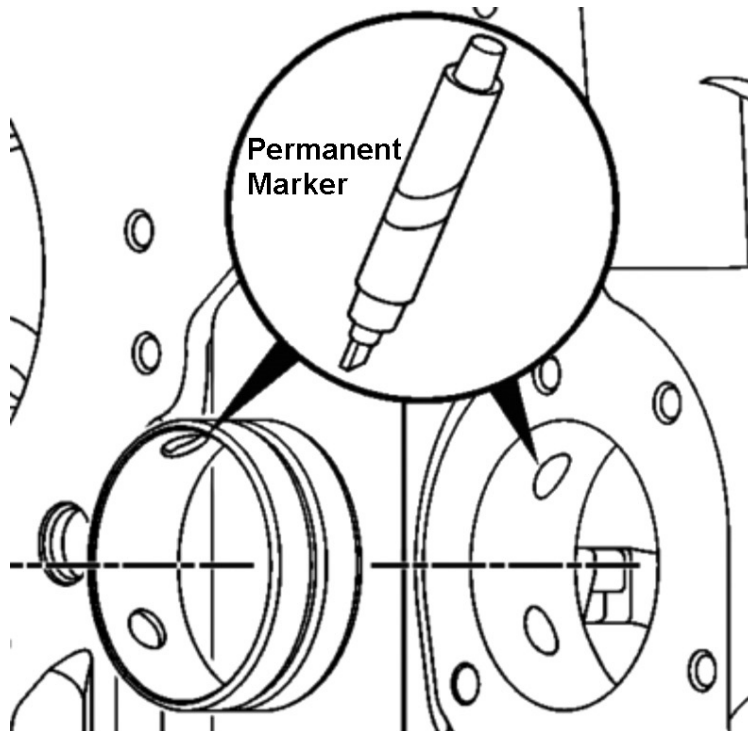


Figure 1: Marking Bearing & Cylinder Block

To properly install the bushing in the front and rear locations, the oil holes will be at the 12:00 o'clock position and the 8:00 o'clock position. NOTE: The hole at the 12:00 o'clock position on the front and rear camshaft bushings will not line up with the top hole of the cylinder block, only the hole in the 8:00 o'clock position will be aligned.

The front camshaft bushing should be installed to a depth of .177" (4.500 mm) below the front face of the cylinder block. All other bushing locations must be installed even with the web of the camshaft bores.

To verify that the front and rear camshaft bushings are installed correctly, the use of a .128" (3.200 mm) rod can be used to insert into the oil hole and should pass through freely as shown in Figure 2.

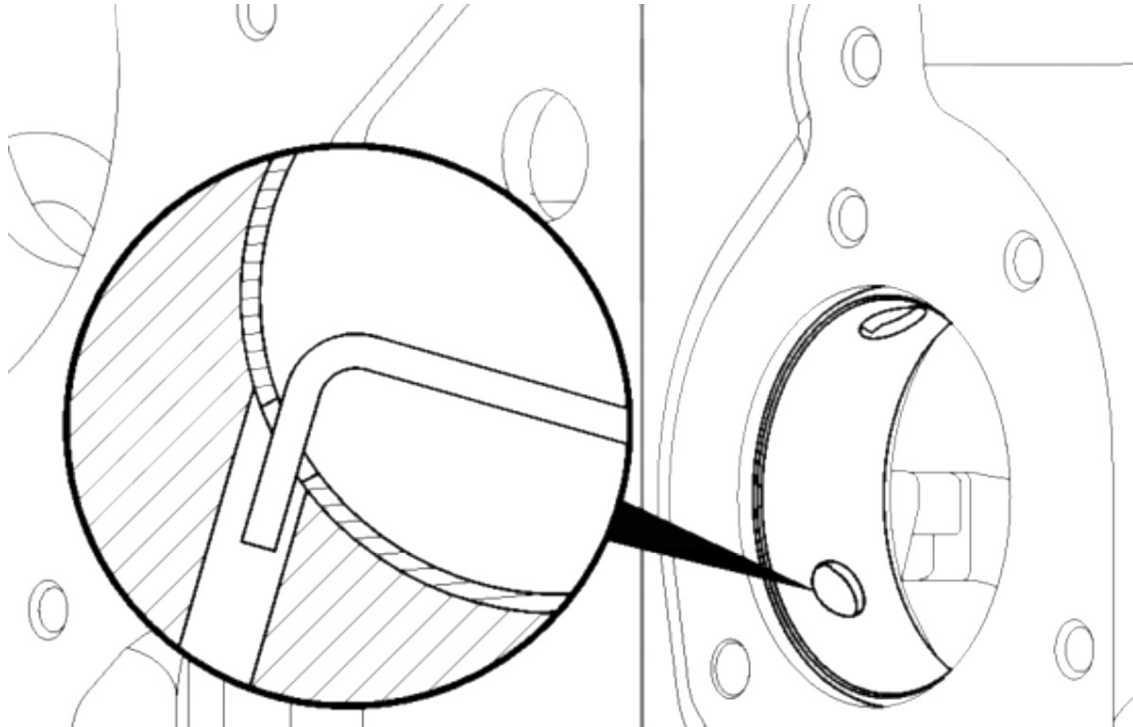


Figure 2: Checking Oil Hole Alignment