



## **Oversize Main Bearing Housing Bores on Caterpillar C15 – C32 Diesel Engines**

The AERA Technical Committee offers the following information regarding oversized main bearing housing bores for Caterpillar C15 – C32 diesel engines. This information should be referenced anytime the main bearing housing bores are being assessed.

Oversize main bearing bores have been reported during engine rebuilding on the above engines. The main bearings are available in a standard outside diameter (OD) and an oversize OD of .025" (.635 mm).

To determine if a block you're checking has the oversize bores follow the procedure listed below.

1. Install main bearing caps in original positions.
2. Lubricate cap bolt threads and bolt head contact surfaces with a small quantity of thread lubricant 2P2506.
3. Install and tighten main cap bolts on the left side to 180-200 FT/LBS (246-274 Nm).
4. Install and tighten main cap bolts on the right side to 180-200 FT/LBS (246-274 Nm).
5. Tighten the main cap bolts on the right side by rotating them additional 120°.
6. Tighten the main cap bolts on the left side by rotating them an additional 120°.
7. Measure bores with a dial bore gauge which has a dial indicator calibration in .0001" increments.
8. Record your measurements and compare to the standard main bore diameter specification of 5.1133-5.1143" (129.878-129.903mm).

If the block you are checking is larger than the above standard specification, compare it to the oversize dimension of 5.1383-5.1393" (130.513-130.538mm). If there is a need to resize the standard OD bore, it is recommended to go to the oversize rather than repairing by align boring back to standard dimensions.