

Cam Bearing Installation for 3412 Caterpillar Engines

The AERA Technical Committee offers the following information regarding camshaft bearing installation on Caterpillar 3412 engines. This information should be considered to determine the correct location of the bearing inserts within the cylinder block and pertains to “all fuel” engines.

As described previously in TB2817, this bearing has a continuous outside diameter groove, the correct bearing location within the cylinder block insures optimum bearing lubrication and assists in preventing engine damage. It is now acceptable to place the bearing oiling hole approximately 90° from vertical. It is also critical to install these bearings to the proper distance from the front face of the block.

Refer to the Illustration and chart below to reference while installing cam bearings in these engines.

- Dimension from the front surface of the cylinder block to install camshaft bearings.

Dimension A271-.311" (6.900-7.900 MM)
Dimension B ...	8.299-8.339" (210.80-211.80 MM)
Dimension C ...	15.551 -15.591" 395.000-.396.000 MM)
Dimension D ...	22.799-22.839" (579.100-580.100 MM)
Dimension E ...	30.051-30.091" (763.300-764.300 MM)
Dimension F ...	37.299-37.339" (947.400-948.400 MM)
Dimension G ...	45.031-45.071" (1143.800-1144.800 MM)

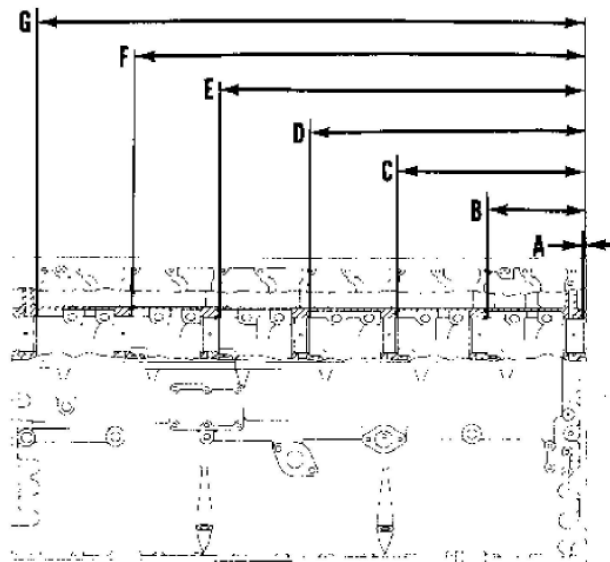


Figure 1. Distance From Front of Block

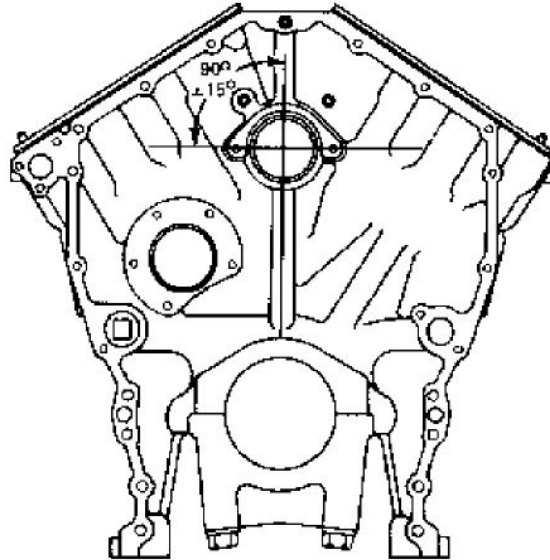


Figure 2. Bearing Hole Location $90^\circ \pm 15^\circ$ From a Vertical Line as Shown