Balance Shaft Bushing Repair on 2008-2015 Audi 2.0L CAEB Engines

The AERA Technical Committee offers the following information on a balance shaft bushing repair for 2008-2015 Audi 2.0L, CAEB engines. This repair offers a salvage operation that is not considered by Audi as they supply no replacement bushings.

These engines utilize left and right side balance shafts which are supported by bushings on each side of the block. Those locations may be a loss of oil area if the bushings become worn. Audi supplies no dimensional specification for those bushings or the balance shafts. Although they give no reasons, Audi also states to replace either balance shaft if removed.

AERA shops report that obtaining bushings for other applications will help salvage blocks for reuse when balance shaft oil clearances are excessive. Generally, since no specifications are supplied, for the shaft sizes on these locations .003-.0035" (.076-.090 MM) would be considered excessive.

Readily available transmission bushings have been used on these engines to successfully re-establish bushing oil clearance to approximately .0015-.0020" (.038-.051 MM). Using bushings from Durabond #26934B and Transtar #73037G with only slight modifications will help restore oil clearance for the balance shafts on these engines. Modifications include drilling an oil hole and reducing the bushing outside diameter on a lathe slightly. Audi’s repair would be a complete short block to restore oil pressure.

Figure 1. Front View Balance Shafts