



Head Saver Shim for 2005-2017 Isuzu/GMC 7.8L 6HK1 Engines

The AERA Technical Committee offers the following information on a head saver shim for 2005-2017 Isuzu/GMC 7.8L 6HK1 diesel engines. This information should be considered anytime the cylinder head is warped and possible deck machining operations are being considered.

This engine is an overhead cam design and the cam gear drive prevents head deck surfacing as the cam gear is non-adjustable by normal means. The original head thickness is listed as 4.6850" (119.000 MM) and reducing that amount by decking may eliminate cam gear backlash.

Some machine shops have reported successful machining of minimal amounts of material and using the existing cam and idler gears. It is important to note that this procedure may not work in all situations. As an alternative to allow additional surfacing of this head, a .020" (.500 MM) head saver shim is now available from several aftermarket suppliers. Machine shops are now surfacing these heads to a height of 4.6650" (118.500 MM) and using the head saver shim along with the standard head gasket.

During installation of the shim, it is recommended to follow shim manufacturers installation procedures. It is important to note, some shops report it is advantageous to use a cold sealing compound, such as Hi-Tack, during installation of the shim.