



Head Bolt and Thread Repair Caution for 1991-2010 Cadillac 4.6L Engines

The AERA Technical Committee offers the following information concerning cylinder head bolt thread repair or replacement for 1991-2010 GM 4.6L VIN A, 9 & Y engines. This information should be considered anytime the cylinder heads are removed from the block.

During production of the 2005-year model, the thread pitch of the cylinder head threaded holes changed from 1.5 mm to 2.0 mm. The amount of threads and bolt lengths also changed. As these engines are commonly known for stripping head bolt threads, it now becomes important to know which thread pitch you're dealing with. The original repair kits offered by GM were for the 1.5 mm bolts and individual tools are now available for the 2.0 mm as well.

Notice: Ensure the cylinder head bolts that are being used are the proper pitch or engine damage will occur. Do not assume the engine has not been exchanged as many engine replacements have been reported.

The thread pitch on the M11 cylinder head bolts and the engine block cylinder head bolt holes have been revised. In order to prevent thread damage, it is important to identify which thread pitch is being used. Cylinder head bolts with a pitch of 1.5 mm have thread length of about 1.890" (48 mm) long. Cylinder head bolts with a pitch of 2.0 mm have a thread length of about 2.638" (67 mm) long.

It is also important to note that the cylinder head bolt torque values remain unchanged for either bolt.