Glow Plug Repair on 2001-2016 GM 6.6L Duramax Diesel

The AERA Technical Committee offers the following information on glow plug thread repair for 2001-2016 GM 6.6L Duramax diesel engines. Often times, the threads for the glow plugs on these engines become damaged during the glow plug removal process. There is a repair tooling kit now available to restore the thread to better than new condition.

There are tools available for the different heads and both use a M10x1.25 metric thread fitting all Duramax 6.6L engines. The kit is available from Timesert with Part #5000 and will repair either style cylinder head using the appropriate tools.

Early version: Glow plug thread starts approximately 1/4" or (6.000 mm) below hex of plug and is used in 2001–2004.5 Duramax engines.

Later version: Glow plug thread starts approximately 1.00" (25.000 mm) below hex of plug and is used in 2005–2016 Duramax engines.

Of course, knowing the appropriate glow used before repairs speeds up the repair operation. Repair instructions are included with the tooling and should be read and followed before attempting repairs.

P5000 Repair Kit
If glow plug replacement is attempted on the vehicle and removal is successful, there is also a tool available to aid in re-installation of the glow plug. Carbon tends to build-up in glow plug opening where it enters the combustion chamber. It has also been reported that replacing glow plugs on a vehicle may be difficult because of the carbon build-up in the bore. To aid in installation a new carbon cleaning tool has been developed. This tool is shown below and available from GM with Part #EN-51249.

GM Glow Plug & Reamer EN-51246

The reamer is non-threaded and can be used on either old or new series cylinder heads. Follow the steps below to remove the carbon from the bore opening.

1. Apply wheel bearing grease to the inside of the flutes of the reamer to retain carbon.

2. Install the reamer into the glow plug bore and turn with a ratchet while applying slight pressure in the bore.

3. Remove the reamer occasionally to clean any carbon from the flutes and re-apply grease.

4. Repeat steps 2 and 3 until the reamer's hex drive is at the same height as the hex drive of a fully installed glow plug.