



## Broken Main Bearing Bolts on 2002-2009 GM 4.2L Engines

The AERA Technical Committee offers the following information on a broken bolt caution for 2002-2009 GM 4.2L engines. Many instances of broken bolts have been reported on these engines and is usually associated with a deep knock noise in the lower block. That condition may also be felt while holding a solid metal rod against the side of the lower block.

Reports have been made that the main bearing bolts may also break during engine disassembly. Replacing these bolts is now common as aftermarket suppliers offer a direct replacement bolt for the GM Part #11569841 or #11569944.

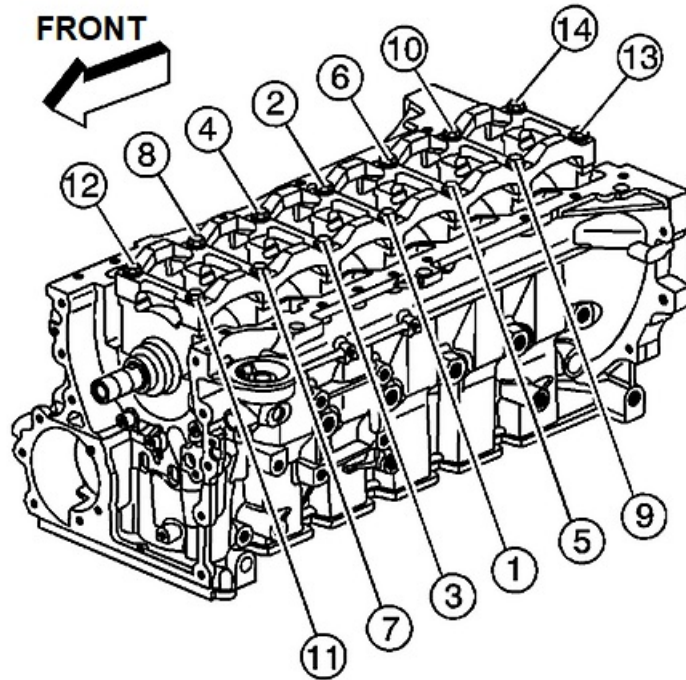


**Figure 1. Main Bolt 5&7/8" Long GM Part #11569841**

GM in their service information has recognized the one-time use bolt and recommends replacing them anytime they've been removed. Many instances of USED bolt breakage has also been reported, emphasizing the need for prompt replacement.

The proper torque for new bolts is also important and the use of a J45059 angle meter is suggested. The bolt tightening sequence and process is a 2-step procedure shown below.

- Torque all Bolts in Sequence to 18 FT/LBS
- Rotate all Bolts in Sequence an additional 180° in one Movement



**Figure 2. Main Bearing Bolt Torque Sequence**