Piston Oil Nozzle Bolt Installation on 2009-2018 GM LS Engines

The AERA Technical Committee offers the following information concerning piston oil nozzle installation on 2009-2018 GM LS Engines. Beginning with the 2009 model year, General Motors started using piston cooling oil nozzles on select LS engines. The installation of these nozzles is critical during engine building.

Locating the correct assembly torque value may prove somewhat difficult as it may not be listed in the fastener tightening specifications. Instead, it is listed in the block plug installation procedures. The thread size of these unique hollowed bolts would seemingly take more torque than the correct specification of 15 FT/LBS (20 NM). It has been reported the bolt will snap and break if additional torque is applied.

1. PISTON OIL NOZZLE = 15 FT/LBS
2. KNOCK SENSOR BOLT = 15 FT/LBS
3. KNOCK SENSOR
4. BLOCK RIGHT SIDE

Figure 1. Block Right Side View