Valve Train Noise on 2001-2017 GM 2.0. 2.2 & 2.4L Ecotech Engines

The AERA Technical Committee offers the following information regarding valve train noise on 2001-2017 GM 2.0, 2.2 & 2.4L Ecotech Engines. Valve train noise of varying degrees has been reported on these engines. Regardless of the levels of the noise, in most instances it increases in intensity with additional mileage. Most often the noise is heard at all engine temperatures.

These engines use an oil feed restrictor to the cylinder head oiling system and a restriction to that orifice may limit the amount of oil to the sixteen hydraulic lifters. The cylinder head is equipped with oil feed orifice (2 in Figure 1 below) that may become plugged with debris. Such as excessive RTV/sealer or broken-down material from inadequate oil change intervals. If this occurs, this noise may occur because of limited oil pressure to the train.

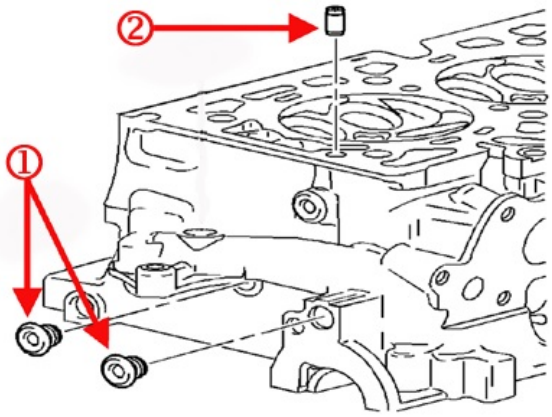

Figure 1. Cylinder Head Plugs & Restrictor

Comparing the oil pressure in the upper cylinder head to the oil pressure on the lower engine in the cylinder block will give an indication if the values taken at 1 in the Figure 1 are lower.

The oil gallery plug port threads (1) on the back of the cylinder head are M12x1.75 and it is unlikely that a related oil pressure gauge adapter will be found at a hardware or auto parts store. The 509376 Kent Moore Fitting that comes with the engine pre-luber kit (EN-45299/J-45299) will screw into the head and may be adapted to some oil pressure gauges. There are also several online retailers that can supply a fitting that will work as an adapter - the male end has to be M12x1.75 while the female end has to be 1/8"x27 NPTF so a standard oil pressure gauge hose can screw into it. Some technicians have also reported success in making a temporary fitting out of an oil pressure sender body.