



Low Oil Pressure on 2005-2016 GM LS Engines with Active Fuel Management

The AERA Technical Committee offers the following information on low oil pressure on 2005-2016 GM LS design engines with Active Fuel Management (AFM). This AFM system is also referred to as displacement on demand (DOD) and is used on many GM engines.

Low oil pressure conditions have been reported on these aluminum block engines and each situation may vary on reported observations. Here is a short list of comments made before resolving complaints on these engines.

- Noisy lifters/rocker arms
- Quite when engine is cold, noisy after it warms up
- Good oil pressure cold, low after it warms up
- Engine doesn't run as good as it used to
- If I change oil pressure is better for a period of time

These engines use 8 unique lifters on the cylinder numbers 1, 4, 6 & 7 rockers and valves to cancel out valve operation which disables those cylinders contribution during cruise drive conditions. Apparently, the hydraulically a pin that connects the inner and outer lifter bodies can extend and contact the bottom of the lifter bore causing excessive wear, as shown in Figure 1 on following page.



Figure 1. Lower Lifter Bore Wear

Multiple locations of affected bores have been reported on some blocks and the more affected the number of locations the lower the engine idle oil pressure will be. GM has stated low oil pressure to the VLOM can also cause AFM lifter damage. Generally most known good vehicles will have around 25 PSI or greater oil pressure at hot idle with new engine oil. Also if hot, oil pressure is 21 PSI or below with new engine oil, then damage could occur to the AFM lifters.

Although a lifer bore repair is certainly possible, most customers have elected for block replacement as it appears to be a faster repair.