Low Oil Pressure on 2007-2017 GM LS Engines with AFM

The AERA Technical Committee offers the following information on low oil pressure on 2007-2017 GM LS engines with Automatic Fuel Management (AFM). These LS engines are designed to use a different oil pump than the standard engines used by GM. This AFM system is also referred to as displacement on demand (DOD) and is used on many GM engines.

With the addition of this feature on the LS engine the extended oiling demands of the AFM oiling system requires additional pressure to maintain a properly operating system. Inadvertently installing a standard oil pump on an AFM engine may lead to engine noise and no AFM operation at cruising speeds. GM has stated low oil pressure to the Valve Lifter Oil Manifold (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.

The high-pressure pump is GM Part #12612289 and it is also available from aftermarket suppliers, one supplier uses Part #M365.

![Figure 1. GM Part #12612289](image)