File in Section:

Bulletin No.: PIP4765A

Date: October, 2013

## PRELIMINARY INFORMATION

Subject: Engine Misfire and No Compression due to Piston Damage

Models: 2007-2014 Cadillac Escalade

2007-2014 Chevrolet Avalanche, Silverado, Suburban, Tahoe

2014 Chevrolet Silverado 1500 2007-2014 GMC Sierra, Yukon

2014 GMC Sierra 1500 2007-2010 Hummer H2

with Any of the Following V8 Engine RPO Codes:

L76, L77, L83, L86, L92, L94, L9H, LC9, LFA, LH6, LH8, LH9, LMG, LV3, LY2, LY5, LY6,

or LZ1

This PI was superseded to update model years. Please discard PIP4765.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

## Condition/Concern

Some customers may complain of a SES light and a constant engine misfire. In some cases, they may also complain of an engine tick/knock noise. During diagnosis, the technician will find no compression on the misfiring cylinder(s) with 100% leakage into the crankcase.

This may be the result of aftermarket ECM calibrations/components and detonation that lead to a melted piston.

## Recommendation/Instructions

If SI diagnosis isolates no compression on the misfiring cylinder(s) with 100% leakage into the crankcase, perform the following steps as necessary before disassembling the engine:

- 1. If a lighted bore scope is available, inspect the top of the related piston(s) through the spark plug hole to determine if any of the pistons are melted as shown below. These photos all show examples of pistons that were damaged/melted due to detonation that was induced from aftermarket calibrations and/or components. If this type of piston damage is noted, it is most likely the result of aftermarket ECM calibrations and/or components. Follow the remaining steps to determine if this is a warrantable repair. If this type of piston damage is present and aftermarket items are found during steps 2 or 3, this should not be considered a warrantable repair.
- 2. Inspect for aftermarket components, such as an exhaust, ignition, high performance air filter (K&N style), or air intake system. Take photos and document accordingly if anything is found.
- 3. Determine if factory ECM calibration numbers and CVNs are present by following the latest version of 09-06-04-026.









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Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.