

Service Bulletin

File in Section: -Bulletin No.: PIP5038 Date: July, 2012

PRELIMINARY INFORMATION

Subject: SES Light Engine Misfire And/Or Shudder - Inspect Ignition Coils

Models: 2009 Buick Enclave 2008 - 2009 Cadillac CTS, STS 2009 Chevrolet Traverse 2009 GMC Acadia 2009 Saturn Outlook With Direct Injected 3.6L V6 Engine (RPO LLT)

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

Condition/Concern:

Some customers may experience a SES light, misfire and/or a shudder on acceleration. Upon inspection, any of the following DTCs may be present: P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0351, P0352, P0353, P0354, P0355, P0356.

This may be the result of a heat stressed/damaged ignition coil.

In some cases with misfires on one bank, the related ignition coil fuse in the UBEC may be open as well.

Recommendation/Instructions:

If SI diagnosis does not isolate the cause of this concern or if it leads to an ignition coil concern, usually a REPEAT Ign coil concern, follow the steps below:

- 1. Document all DTCs and history misfires for each cylinder on the repair order. This is important because single cylinder misfires may have preceded multiple cylinder misfires.
- 2. Refer to SI and inspect the related ignition coil power, ground, and control circuits to ensure that none of them are open or shorted. If any wiring concerns are noted, repair as necessary by following SI procedures.
- 3. Visually inspect the sides of the top of the related ignition coil for any sign of damage due to voltage/heat stress. Traces or Lines under the epoxy is not damage from voltage/heat stress.
 - 3.1. If there is no sign of ignition coil damage, this PI does not apply.
 - 3.2. If any ignition coil is damaged due to voltage/heat stress, follow the remaining steps below.

4. Mark the cylinder location on the top of all 6 ignition coils with a paint pen.

Important: Do not start the engine until steps 5-7 are completed or the new ECM could be damaged.

- 5. Replace all 6 ignition coils.
- 6. Replace the ECM.
- 7. If there were misfires on one bank of the engine, inspect the related ignition coil fuse and replace it if open.
- 8. Inspect the related catalytic converter for obvious damage/overheating and replace as necessary.

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.