

Service Bulletin

PRELIMINARY INFORMATION

Subject: SES Light Due to a P0171 - Possibly Due to Unmetered Air

Models: 2006 Buick Rainier 2006 Chevrolet TrailBlazer 2006 GMC Envoy 2006 Saab 9-7x With 4.2L Engine (VIN S - RPO LL8)

This PI has been superseded to updated content. Please discard PIP3711A.

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

Condition/Concern:

On rare occasions, a SES light may be encountered with a DTC P0171 and no engine performance concerns. Upon inspection, low MAF sensor grams and excessive long term fuel trims may be noted at a hot idle. This may be the result of unmetered air entering the engine due to an air intake leak, air filter concern, or air outlet duct screen damage.

Recommendation/Instructions:

If the SI diagnostics do not isolate a cause for this concern, inspect the following areas, which can cause a P0171 DTC due to unmetered air entering the engine:

- 1. Inspect the AIR intake system for rolled connections, cracks, or loose clamps between the MAF sensor and throttle body and repair as necessary.
- 2. Inspect the screen that is on the inlet side of the air outlet duct for obvious damage. The air outlet duct is #3 in the artwork below.



3. If the Long Term Fuel Trim is consistently above 10%, temporarily remove the air filter element, reset the fuel trims, and evaluate the Long Term Fuel Trim. If the Long Term Fuel Trim remains around 0% with the air filter temporarily removed, there is an issue with the air filter that is causing lower than

normal MAF readings. To correct this concern, replace the air filter using the existing part number listed in the parts catalog.

Important: Use care when reassembling the air cleaner assembly to ensure that the air cleaner lid is properly engaged with the opening on top of the air outlet duct.

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.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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