



# Service Bulletin

## PRELIMINARY INFORMATION

**Subject:** MIL due to DTC P0128 and/or P0171 and No Engine Performance Concerns

**Models:** 2011 Buick Lacrosse, Regal  
2011 Chevrolet Equinox  
2011 GMC Terrain  
with 2.4L Engine (RPO LAF)

*This PI was superseded to update recommended fields. Please discard PIP5028B.*

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 MIL due to a DTC P0128 and/or P0171 DTC but no engine performance concerns will be noted.

### Recommendation/Instructions

If this concern is experienced, perform SI diagnosis and repair as necessary. If SI diagnosis does not isolate the cause of this concern, reprogram the ECM with the latest calibrations from TIS2Web, which contain improvements that may repair this concern. At this time, the updated Engine Diagnostic calibration is titled: "New Calibration with Diagnostic Enhancements for DTCs P0128 and P0171."

If SI diagnosis does not isolate the cause of a P0171 DTC and the updated ECM calibration mentioned above does not repair it, perform the following suggestions as necessary.

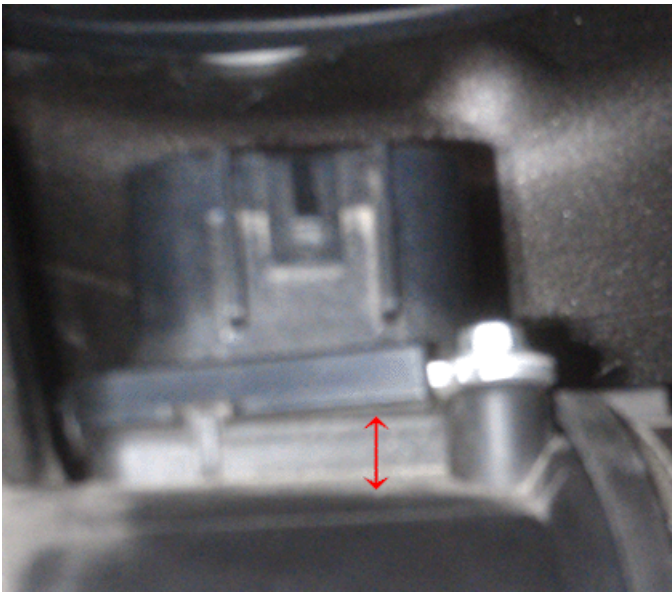
1. Inspect the engine for any obvious oil leaks, which may allow the engine to draw in unmetered air through the PCV system. Repair any obvious oil leaks and re-evaluate the concern.
2. If this happened shortly after an oil change, closely inspect the oil fill cap/neck and oil dipstick to ensure that they are seated properly.
3. Use the CH-44175-1 handheld tester to test the ethanol content of the fuel. As outlined in the Alcohol / Contaminants-in-Fuel Diagnosis Procedure in SI it should be 15% or less.
4. Check for unmetered air/vacuum leaks by using the EVAP smoke machine to induce smoke into the engine, exhaust, and air intake system as outlined in the latest version of PIP4925. Please note that it is normal to see a small amount of EVAP smoke escape from the AIR pump during this test. If EVAP smoke is noted in any other location, repair as necessary and re-evaluate the concern.
5. Inspect the air filter condition to ensure that it is a factory filter and that none of the pleats are damaged, etc. If a concern is found, replace the air filter and re-evaluate the concern.
6. Inspect the inside of the air cleaner opening before the MAF sensor for any sign of casting flash, etc., that may cause turbulence and skew the MAF sensor input. If flashing is found, trim and remove it as necessary, and re-evaluate the concern.
7. If the concern is currently happening (LT Fuel Trims in the Mid-Teens or Greater) while at a hot idle, plug all vacuum lines (brake booster, EVAP purge pipe, etc.), and re-evaluate the LT fuel trims while at a hot idle. If the LT fuel trims decrease to 10% or less, the engine may be drawing in unmetered air through the related component and replacement of that component (brake booster, brake booster check valve, EVAP purge valve, etc.) may be required.
8. For Equinox and Terrain Models Only, also inspect the air cleaner lid to ensure that it is correct by confirming the height of the MAF sensor as shown below. If the correct air cleaner lid is installed, you should be able to place a 6 mm allen wrench/bit between the MAF sensor and air cleaner housing as shown below to feel a slight drag or if you use a 7/32" allen wrench/bit you will feel a small amount of play/clearance. If the incorrect air cleaner lid is installed, it will be obvious when the allen wrench/bit is installed because there will be about an additional 1/8" of clearance present. If an incorrect air cleaner lid is found, replace the air cleaner assembly using the correct part number listed in the parts catalog, re-evaluate the concern, and submit a

product report with photos by following the latest version of 07-00-89-036.

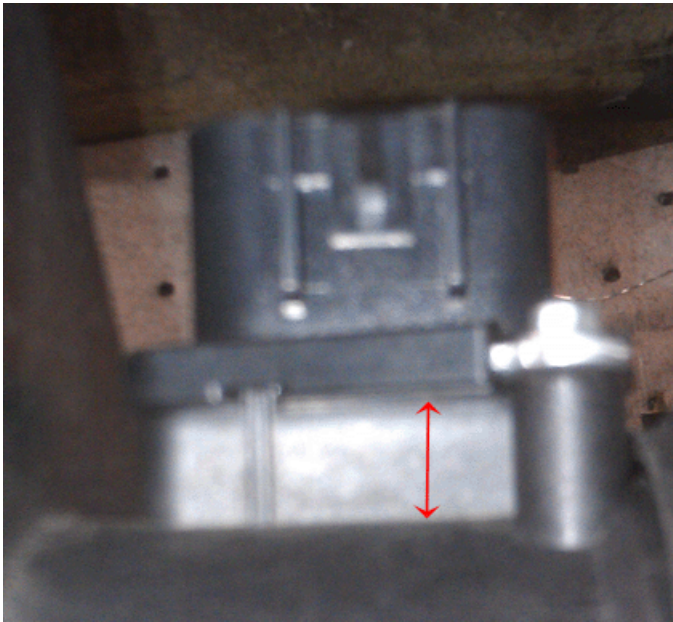
**Correct Air Cleaner Lid with a 6 mm Allen Wrench Installed for Reference**



**Correct Air Cleaner Lid**



**Incorrect Air Cleaner Lid**



## Warranty Information

The correction for this concern may be one of several repairs described in the diagnostic tips above. Please use the appropriate warranty labor operation based on the actual cause and repair.

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.

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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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