File in Section:

Bulletin No.: PIP5025F

Date: April, 2013

## PRELIMINARY INFORMATION

Subject: Excessive Oil Consumption - Install Updated ECM Calibration and Perform Oil

**Consumption Test** 

Models: 2010-2011 Buick Lacrosse

2011 Buick Regal

2010-2011 Chevrolet Equinox 2010-2011 GMC Terrain with 2.4L Engine (RPO LAF)

This PI was superseded to update admin details and add warranty information. Please discard PIP5025E.

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

## Condition/Concern

Some customers may complain of excessive oil consumption and/or that they have to add oil between oil changes.

## Recommendation/Instructions

If this complaint is encountered, perform an oil consumption test by following the latest version of bulletin 01-06-01-011. Before starting the oil consumption test, reprogram the ECM with the latest TIS2web calibrations to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 KM), inspect for any obvious oil leaks that may explain the oil consumption complaint, and repair as necessary.

**Important:** When checking the oil level with the oil dipstick design shown below, please note that the oil volume per notch is not linear due to the shape of the block. The upper notches (relative to the top of the handle) equal .24 quart (.227 L) between each notch while the lower notches only equal .14 quart (.132 L) between each notch. As a result, no oil will appear on the dipstick if it is low on oil by approximately 1.25 quarts (1.18L) or more. When determining the oil consumption rate, the oil volume added to return it to the starting location is the total amount of oil consumed. The consumption rate must be documented on a repair order.



If the oil consumption test indicates that the rate of consumption is greater than 1 quart (.946 L) of oil every 2,000 miles (3,200 KM) and there are no obvious oil leaks that would explain the excessive oil consumption complaint, this is most likely the result of a ring sealing concern due to worn piston ring lands and rings. As a result, a detailed service procedure is being developed and will be published in a separate bulletin/PI once sufficient parts are available in CCA parts stock to support the upcoming service procedure.

In the meantime, engine replacement is suggested so it is important to note the oil consumption rate, the date that the ECM was reprogrammed, results of the oil leak inspection, and any other repairs/diagnosis that you have performed on the repair order. It is no longer necessary to disassemble the engine to inspect for "zebra" striped cylinder walls as this PI had suggested several months/versions ago. After careful evaluation, GM Powertrain has determined that the "zebra" striped cylinder wall appearance that was previously referenced does not affect ring sealing. Dealers who are required to contact PQC for engine replacement authorization should also call PQC with this PI number, the engine unit numbers, and engine replacement cost as outlined in the latest version of 02-07-30-029 to determine if engine replacement is required. The engine unit numbers should be located on a white bar code sticker on the front of the engine and/or stamped near the engine oil filter.

**Important:** If engine replacement is required, it may or may not be necessary to swap/replace the intake camshaft and intake camshaft actuator sprocket on 2010 models depending on the engine part number received. As a result, it is suggested to review the latest version of PI0865 and/or follow the related instruction sheet that should be attached to the engine crate to determine if additional parts need to be installed or swapped from the original engine to the replacement engine before it is installed. To complete the repairs, ensure that the latest ECM calibrations have been installed to adjust the engine oil life monitor to a maximum of 7,500 miles (12,070 KM) as well.

## **Warranty Information**

For vehicles repaired under warranty use:

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.