



Service Bulletin

File in Section: -

Bulletin No.: PIP5036E

Date: February, 2013

PRELIMINARY INFORMATION

Subject: Possible Oil Consumption Or Blue Smoke From The Exhaust CEL Or Fuel Trim Codes

Models: 2013 Buick Encore
2011-2013 Chevrolet Cruze
2012-2013 Chevrolet Sonic
2013 Chevrolet Trax
With 1.4L (RPO LUJ or LUV)
With one or more of the following DTCs P0106 P0171 P0299 P0507 P1101 P2096

This PI was superseded to update model list. Please discard PIP5036D.

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

Condition/Concern

You may encounter a customer concern of oil consumption or blue smoke from the exhaust, CEL or fuel trim codes.

Recommendation/Instructions

If all diagnostics have been followed without isolating the concern, check the engine oil level and inspect the PCV hoses, Turbo housing, spark plugs, cylinders, intake manifold and air ducts for signs of excessive oil.

If the engine oil level is normal and excessive oil is not found in the intake, PCV system or cylinders, then verify that the oil consumption is greater than 0.946 L (1 qt) in 3,200 km (2000 mi).

If the engine oil level is low or excessive oil is found in the intake, PCV system or cylinders, then check the PCV orifice (the PCV orifice is an integral part of the camshaft cover) for leaking oil or drawing vacuum at idle thru its external port.

Perform PI0552 to check the engine oil dipstick and oil fill cap for proper sealing.

Perform PIP4925 to check for any air leaks to the intake system.

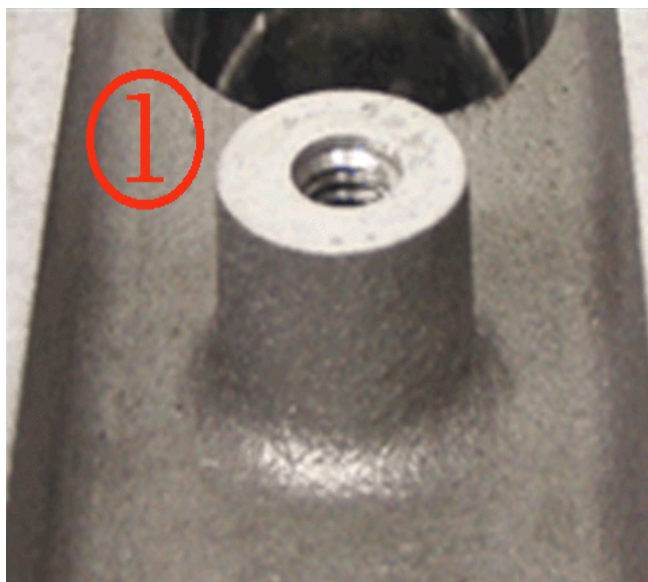
If no air leaks are found, remove all pistons and inspect ring condition and for cracks between the number 1 and 2 compression ring lands. See photo below:



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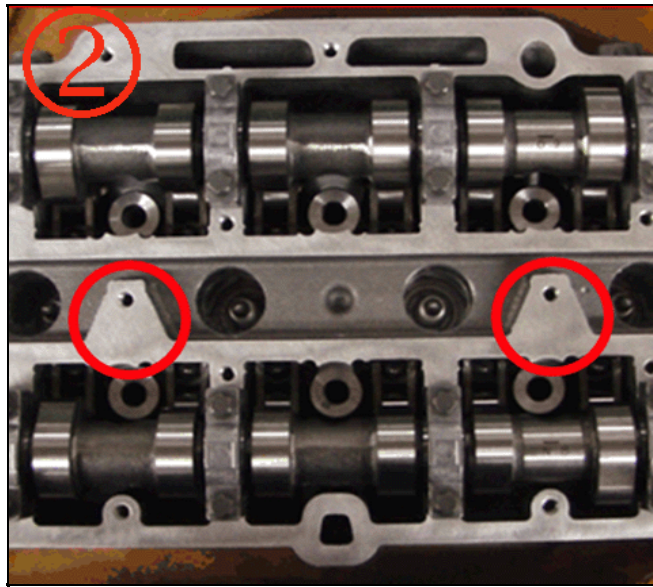
If cracked piston ring lands are found, then inspect the cylinder head to determine first or second design. See photos below:

First design (call out #1)



3281196

Second design (call out #2)



3281207



3281206

If the cylinder head is first design, then replace the cylinder head using the latest part number in the catalog.
 Replace the pistons including new rings as needed using the latest part numbers in the catalog.
 Do not replace the engine for this concern unless cylinder wall or block damage is found.

Warranty Information

The correction for this concern may be one of several repairs described above. For vehicles repaired under warranty, 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.