

Service Bulletin

PRELIMINARY INFORMATION

Subject: MIL On With DTC P0016 And/Or P0017 Setting On A Properly Timed Engine Or Crank No Start

Models: 2011-2015 Buick Regal

2010-2014 Buick LaCrosse 2013-2015 Buick Verano 2013-2014 Chevrolet Captiva 2006-2010 Chevrolet Cobalt 2010-2015 Chevrolet Equinox 2006-2011 Chevrolet HHR 2014 Chevrolet Impala 2007-2013 Chevrolet Malibu 2010-2015 GMC Terrain 2007-2010 Pontiac G5 2006-2010 Pontiac G6 2006 Pontiac Pursuit (Canada Only) 2006-2010 Pontiac Solstice 2007-2010 Saturn Aura 2006-2007 Saturn Ion 2007-2010 Saturn Sky 2007-2010 Saturn Vue Equipped with the following engines 2.0L (LNF) 2.2L (L61 LAP LE8) 2.4L (LAT LAF LE5 LE9 LEA LUK)

This PI was superseded to update Model Years, and symptom. Please discard PIP4548C.

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

Condition/Concern

Some customers may comment of a Service Engine Soon light being illuminated or a crank no start concern. Upon inspection, DTCs P0016 and/or P0017 will be stored.

This may be the result of a camshaft reluctor that has moved on the camshaft. The reluctor is a press fit and is not indexed/keyed to the camshaft--it is an interference type fit. An overheat condition may contribute to the concern, causing the reluctor to spin on the camshaft when hot. If the reluctor spins far enough, it can create a crank no start condition.

Recommendation/Instructions

Important: The procedure below was developed for 2006 and newer 2.4L LE5 engines. The reluctor position on other engine RPOs may vary. As a result, it may be necessary to compare the reluctor position of other engine RPOs to a known good engine with the same RPO code. If the engine is timed properly and SI diagnosis does not isolate the cause of this concern, perform the suggestions below:

To check the Exhaust Cam reluctor position LE5 ONLY:

With the exhaust camshaft positioned so that the valves for #4 cylinder are at maximum lift (fully opened valves), the reluctor should be flush/parallel to the rocker cover gasket surface as shown in the photo below. If the reluctor position does not line up correctly, the exhaust camshaft must be replaced. To check



To check the Intake Cam reluctor position LE5 ONLY:

With the Intake camshaft positioned so that the valves for #1 cylinder are at maximum lift (fully opened valves), the reluctor should be flush/parallel to the rocker cover gasket surface as shown in the photo below. If the reluctor position does not line up correctly, the intake camshaft must be replaced.



Notice: Each of the procedures above may not detect a small movement in the reluctor, it may be necessary to compare to a known good engine if in doubt. Also note that the cam cover gasket surface does not line up with the same face/slot on the intake and exhaust reluctor.

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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