



Preliminary Information

PIP3423N DTC P0016 P0017 P0018 P0019 P0008 P0009

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Allure (Canada Only)	2005 - 2016	ALL	ALL	3.0 LF1, 3.6 LY7, 3.6 LLT	ALL
Buick	Enclave	2007 - 2018	ALL	ALL	3.6 LY7, 3.6 LLT, 3.6 LFY	ALL
Buick	LaCrosse	2005 - 2016	ALL	ALL	3.0 LF1, 3.6 LY7, 3.6 LLT	ALL
Cadillac	ATS	2013 - 2018	ALL	ALL	3.6 LFX, 3.6 LF4	ALL
Cadillac	CTS	2004 - 2018	ALL	ALL	2.8 LP13.0 LF1, 3.0 LFW, 3.6 LY7, 3.6 LLT, 3.6 LF3 3.6 LFX	ALL
Cadillac	SRX	2004 - 2016	ALL	ALL	2.8 LP1, 2.8 LAU, 3.0 LF1, 3.6 LY7, 3.6 LLT, 3.6 LFX	ALL
Cadillac	STS	2004 - 2011	ALL	ALL	3.6 LY7, 3, 6 LLT	ALL
Chevrolet	Camaro	2010 - 2015	All	All	3.6 LLT, 3.6 LFX	All
Chevrolet	Colorado	2015 - 2016	All	All	3.6 LFX	All
Chevrolet	Equinox	2008 - 2016	All	All	3.0 LF1, 3.0 LFW, 3.6 LFX	All
Chevrolet	Impala	2012 - 2016	All	All	3.6 LFX	All
Chevrolet	Malibu	2008 - 2012	All	All	3.6 LY7	All
Chevrolet	Traverse	2009 - 2016	All	All	3.6 LLT	All
GMC	Acadia	2007 - 2016	All	All	3.6 LLT	All
GMC	Canyon	2015 - 2016	All	All	3.6 LFX	All
GMC	Terrain	2010 - 2016	All	All	3.0 LF1, 3.0 LFW, 3.6 LFX	All
Pontiac	G6	2007 - 2009	All	All	3.6 LY7	All
Pontiac	G8	2008 - 2009	All	All	3.6 LY7	All
Pontiac	Torrent	2008 - 2009	All	All	3.6 LY7	All
Saturn	Aura	2007 - 2010	All	All	3.6 LY7	All
Saturn	Outlook	2007 - 2010	All	All	3.6 LY7, 3.6 LLT	All
Saturn	Vue	2008 - 2010	All	All	3.6 LY7	All

Supersession Statement

This PI was superseded to update Model Years. Please discard PIP3423M.

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

Condition / Concern

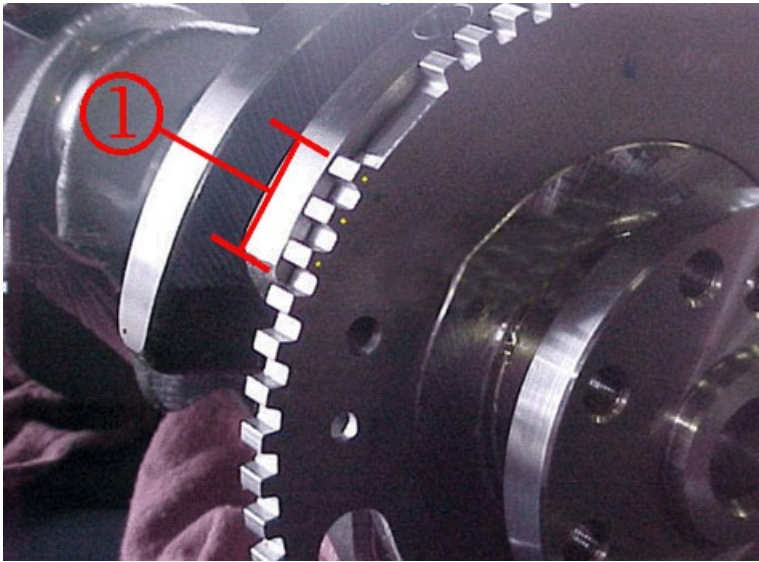
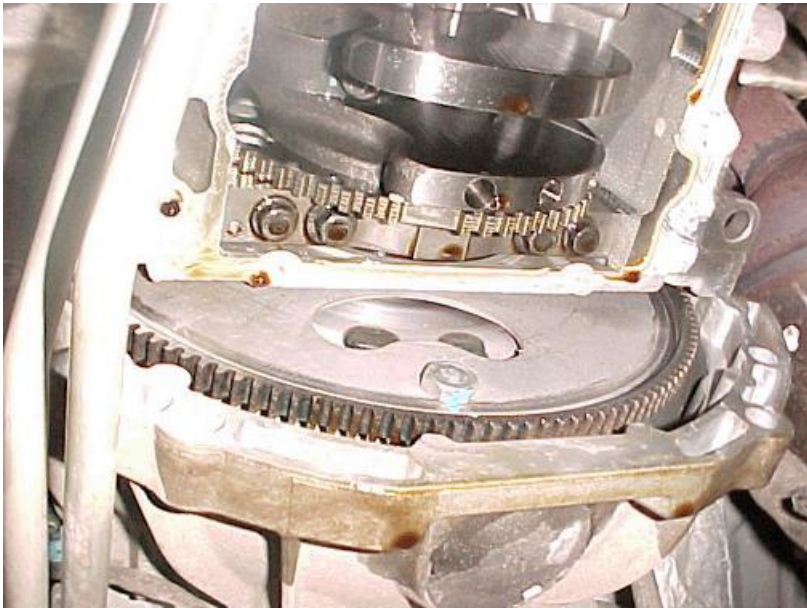
Vehicles equipped with 2.8 LP1, 2.8 LAU, 3.0 LF1, 3.0 LFW, 3.6 LFX, 3.6 LLT, or 3.6 LY7 HFV6 engines may exhibit two or more of the following DTCs: P0016, P0017, P0018, P0019, P0008 or P0009.

Recommendations / Instructions

If the above concern is present, check for loose timing chains or tensioners.
If after following SI diagnostics the root cause is not found, the following may be helpful.

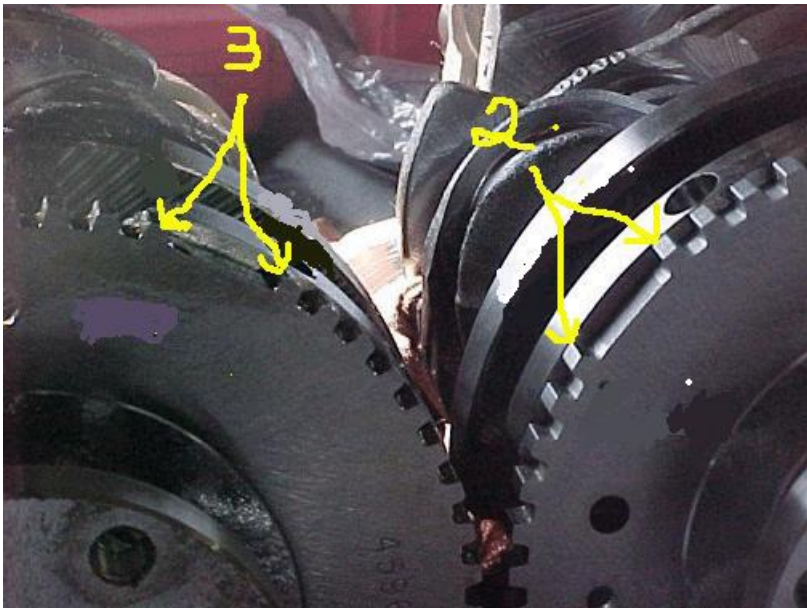
The reluctor for the crankshaft sensor pressed onto the rear of the crankshaft may have moved.
Refer to attached photographs for exact location.
(It is possible on some applications to view this with a bore scope through the crank sensor hole without removing the oil pan)
If the reluctor has moved then replace crankshaft.

NOTE: If There Is Doubt About Movement or Not, Compare to a New Crank Prior to Dis-Assembly.



1= The actual measurement of a good Reluctor wheel.

25 to 26 mm This measurement is from the end of the machined surface of the crankshaft throw to the edge of the open space in the reluctor. (approximately 3 1/2 teeth)



2 and 3 = Show a good reluctor next to a bad reluctor.



Crankshaft with bad reluctor wheel.

NOTE: The distance can be offset either clockwise or counter clockwise. Both will result in these codes.

NOTE: The balance hole does not come into play when determining if the reluctor has slipped or not.

Warranty Information

For Vehicles Repaired Under Warranty Use:

4066750	Crankshaft Replacement	Use Published Labor Operation Time
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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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