



Service Bulletin

Bulletin No.: 21-NA-268

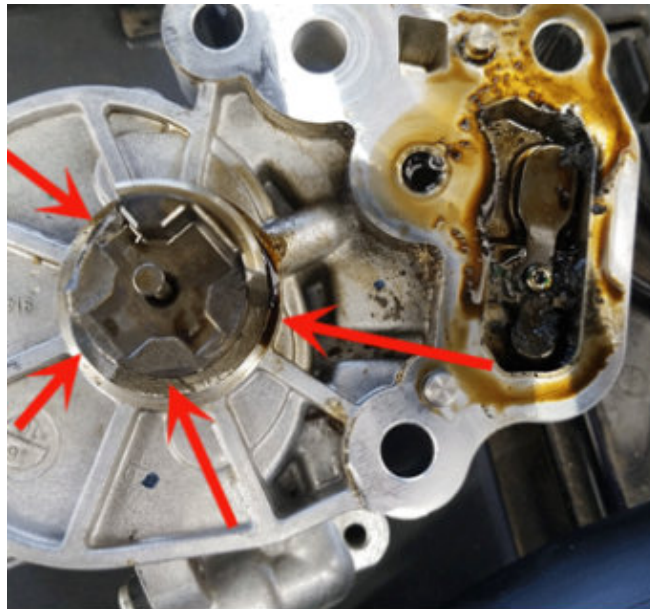
Date: June, 2024

INFORMATION

Subject: Information on Crank No Start or Extended Crank, Malfunction Indicator Lamp (MIL) Illuminated, Possible Increased Brake Pedal Effort – DTC P0014, P0017, P0365 and/or P0366 Set

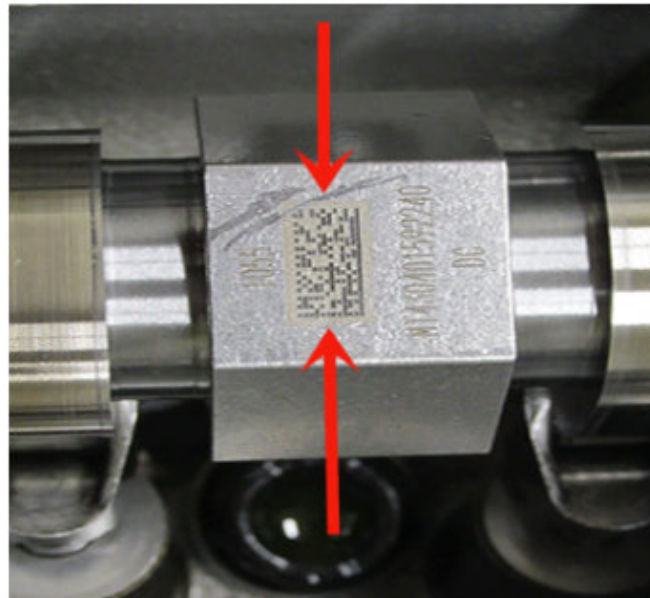
Brand:	Model:	Model Year:		VIN:		Engine: (1.4L, 1.5L)	Transmission:															
		from	to	from	to																	
Buick	Encore	2016	2022	—	—	LE2	—															
Chevrolet	Cruze	2016	2019			—		—	LE2	—												
	Cruze (VIN II Gen B)	2016	2019						—		—	LYX	—									
	Equinox	2018	2022									—		—	LFV	—						
	Malibu	2016	2024												—		—	LV7	—			
	Spark	2016	2022															—		—	LE2	—
	Trax	2019	2022																		—	
GMC	Terrain	2018	2022			—		—		LYX												
Holden	Equinox	2018	2020						—	—	LE2		—									
	Astra Sedan NB4	2017	2018								—	—		LYX		—						
	Astra-K Hatch HB5 and Wagon	2017	2020	—	—		LE2							—								

Involved Region or Country	North America, Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Middle East, Iraq, Israel, Palestine, Venezuela, GM Korea Company, China, Thailand, Singapore, Egypt, Other Africa, Australia/New Zealand
Condition	<p>Some customers may comment on one or more of the following conditions:</p> <ul style="list-style-type: none"> • Crank no start • Extended crank • MIL illuminated • Possible increased brake pedal effort <p>Technicians may find one or more of the following DTCs set in the Engine Control Module:</p> <ul style="list-style-type: none"> • P0014 • P0017 • P0365 • P0366
Cause	This condition may be caused by exhaust camshaft reluctor out-of-phase.
Information	<p>Complete latest diagnostics in Service Information (SI) for <i>Engine Cranks but Does Not Run</i>.</p> <p>If unable to determine the root cause of no start condition using published SI diagnostics, proceed with the following steps:</p> <p>⇒ Remove the cam cover assembly and perform steps below to confirm exhaust camshaft reluctor orientation.</p>



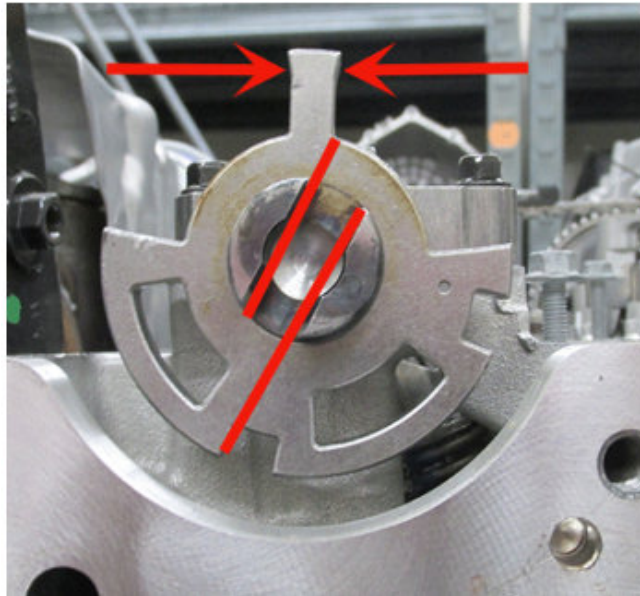
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⇒ During disassembly, the vacuum pump drive lugs should also be inspected for damage (Photo above shows damaged vacuum pump drive lugs).



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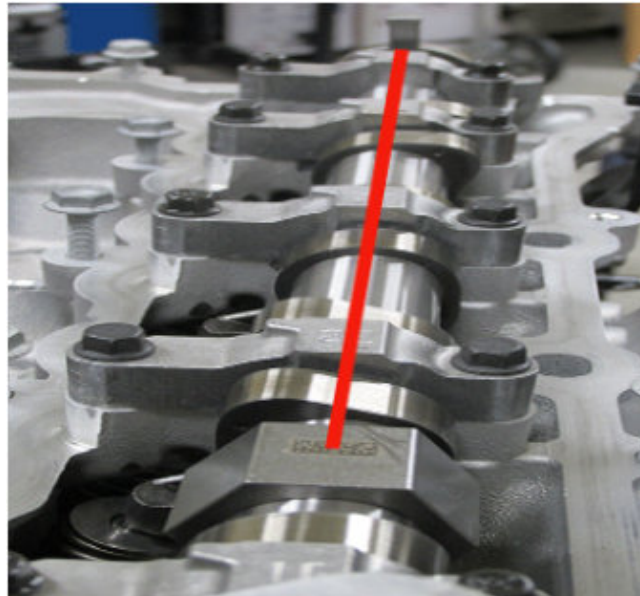
⇒ Rotate the exhaust camshaft to position the 2D matrix marking on the camshaft hex in the 12 o'clock position (Reference the graphic above for 2D marking).



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⇒ Once the exhaust camshaft 2D matrix has been positioned at 12 o'clock, verify the small tang located on the camshaft reluctor ring (Arrows above showing tang on reluctor) is in-line with the 2D matrix marking.

Important: If the reluctor is out-of-phase, inspect the exhaust camshaft position actuator dowel pin for damage.



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Also shown are additional reference points used to verify exhaust cam reluctor orientation to camshaft.

Proper relationship between the 2D matrix marking and the small tang on exhaust cam reluctor wheel.

If you find the vacuum pump drive lugs are broken and/or the exhaust camshaft reluctor is out of position, then replacement of the exhaust camshaft and vacuum pump will be required.

Note: If needed, it will also be necessary to locate and remove the broken vacuum pump drive lugs and other metal debris during repairs.

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying,

packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

Version	3
Modified	Released November 16, 2021 Revised April 27, 2023 – Added an Important statement to the Information section. Revised June 28, 2024 – Added the 2022 Model Year to certain vehicles and possible increased brake pedal effort condition.

