



# Service Bulletin

Bulletin No.: 21-NA-268

Date: May, 2023

## INFORMATION

**Subject:** Information on Crank No Start or Extended Crank, Malfunction Indicator Lamp (MIL) Illuminated - DTC P0014, P0017, P0365 and/or P0366 Set

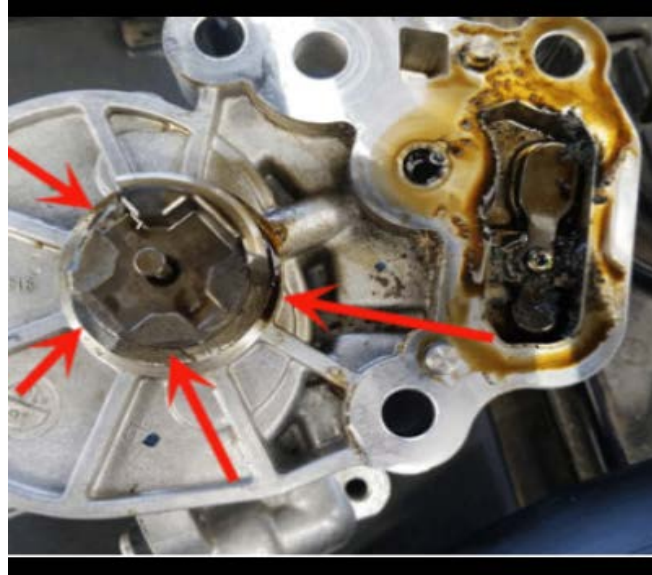
Brand:	Model:	Model Year:		VIN:		Engine: (1.4L, 1.5L)	Transmission:															
		from	to	from	to																	
Buick	Encore	2016	2019	—	—	LE2	—															
Chevrolet	Cruze	2016	2019			—		—	LE2	—												
	Cruze (VIN II Gen B)	2016	2019						—		—	LYX	—									
	Equinox	2018	2021									—		—	LFV	—						
	Malibu	2016	2021												—		—	LV7	—			
	Spark	2016	2021															—		—	LE2	—
	Trax	2019	2021																		—	
GMC	Terrain	2018	2021			—		—		LYX												
Holden	Equinox	2018	2020						—	—	LE2		—									
	Astra Sedan NB4	2017	2018								—	—		LE2		—						
	Astra-K Hatch HB5 and Wagon	2017	2020	—	—		LE2							—								

<b>Involved Region or Country</b>	North America, Middle East, Iraq, Israel, Palestine, Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Australia/New Zealand, Venezuela, GM Korea Company, China, Thailand, Singapore, Egypt, Other Africa
<b>Condition</b>	<p>Some customers may comment on one or more of the following conditions:</p> <ul style="list-style-type: none"> <li>• Crank no start</li> <li>• Extended crank</li> <li>• MIL illuminated</li> </ul> <p>Technicians may find one or more of the following DTCs set in the Engine Control Module:</p> <ul style="list-style-type: none"> <li>• P0014</li> <li>• P0017</li> <li>• P0365</li> <li>• P0366</li> </ul>
<b>Cause</b>	This condition may be caused by exhaust camshaft reluctor out of phase.

Complete latest diagnostics in Service Information (SI) for *Engine Cranks But Does Not Run*.

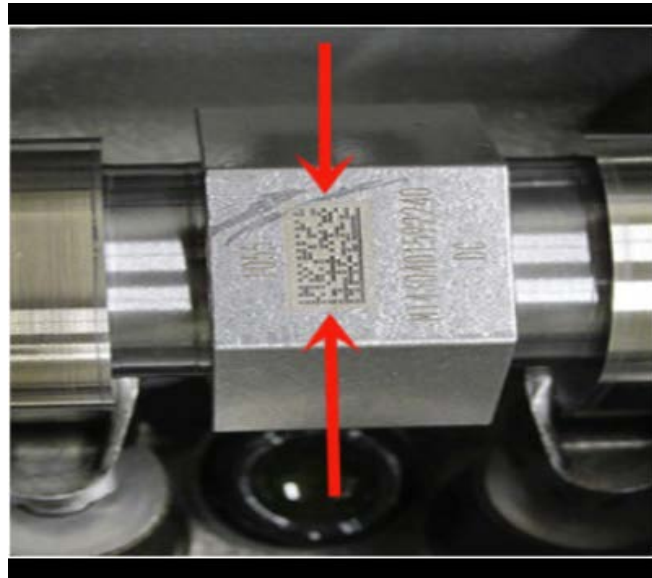
If unable to determine the root cause of no start condition using published SI diagnostics, proceed with the following steps:

- ⇒ Remove the cam cover assembly and perform steps below to confirm exhaust camshaft reluctor orientation.



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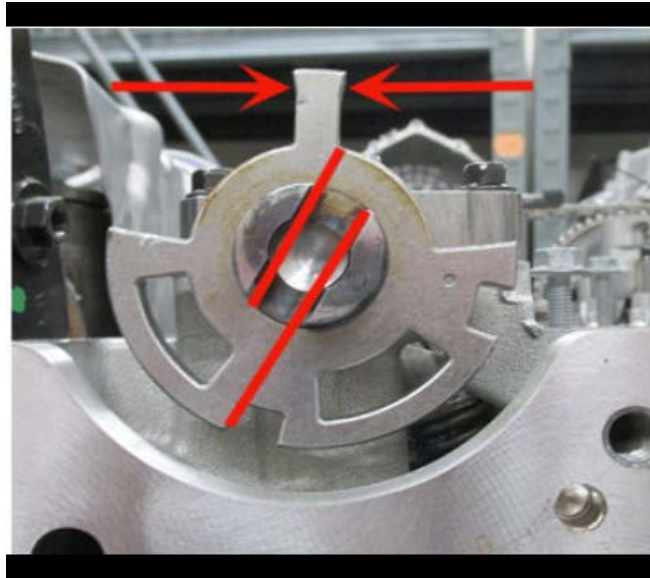
- ⇒ During disassembly, the vacuum pump drive lugs should also be inspected for damage (Photo above shows damaged vacuum pump drive lugs).



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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 below 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.

<b>Version</b>	2
<b>Modified</b>	Released November 16, 2021 Revised April 27, 2023 - Added an Important statement to the Information section.

