



Service Bulletin

File in Section: -

Bulletin No.: 17-NA-221

Date: July, 2017

TECHNICAL

Subject: Poor Engine Performance in Extremely Cold Weather Conditions, Charge Air Cooler (CAC) Icing - Malfunction Indicator Lamp (MIL) Illuminated, DTC P0299, P0236, P2227, P00C7 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Encore	2016	2017			LE2	

Involved Region or Country	North America
Condition	<p>Some customers may comment that when driving short distances and/or slow speed driving cycles, their vehicle experiences one or several of the following conditions within the first 10 to 15 minutes of vehicle operation in extremely cold weather conditions (-18°C or less / 0°F or less):</p> <ul style="list-style-type: none">• Loss of power.• Smoke out the tail pipe.• Hesitation on acceleration.• Stalling condition.• Burning oil odor possibly caused by oil leak.• May also notice a Malfunction Indicator Lamp illuminated.• After driving for a period of time, the driveability issues seem to diminish.• Malfunction Indicator Light Illuminated. <p>This condition may also cause an increase in crankcase pressure, creating oil leaks at seals and gaskets.</p> <p>The technician may find one or more of the following DTCs set:</p> <ul style="list-style-type: none">• P0299• P0236• P2227• P00C7
Cause	This condition may be caused by ice accumulation in the charge air cooler, restricting air flow to the throttle body.
Correction	<p>If any of the above conditions are present, allow time for possible ice build up in the CAC to melt by allowing the vehicle to thaw in a warm climate.</p> <p>If any of the following conditions are validated to be caused by freezing/icing, replace the CAC.</p> <p>An oil change is necessary to remove any moisture from the engine.</p>

Parts Information

Description	Part Number	Qty
Cooler, Charge Air	42574036	1
Filter, Oil	Refer to the Electronic Parts Catalog (EPC).	
Oil		

Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
4081728*	Charge Air Cooler Replacement	1.1 hrs
Add	Oil Change	0.3 hr
*This is a unique Labor Operation for Bulletin use only.		

Service Procedure

Refer to *Charge Air Cooler Replacement* in SI.

Version	1
Modified	

