



Service Bulletin

Bulletin No.: 18-NA-069

Date: March, 2021

TECHNICAL

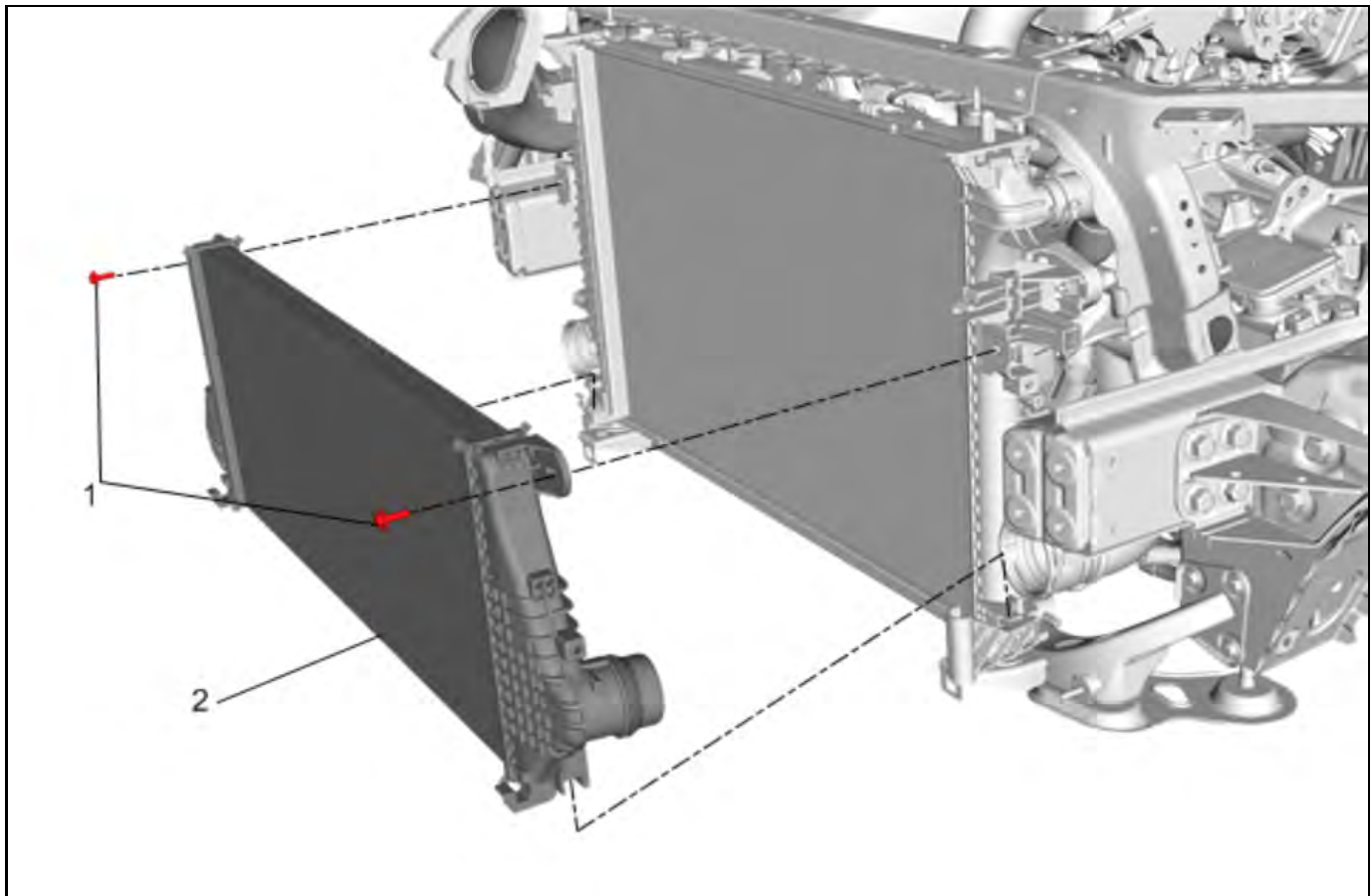
Subject: Poor Engine Performance in Extremely Cold Weather Conditions for LFB Engines, Charge Air Cooler Icing - Malfunction Indicator Lamp (MIL) Illuminated, DTC P0299, P0236, P2227, P00C7 Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Malibu	2016	2021	—	—	1.5L (LFB)	—

Involved Region or Country	North America, China
Condition	<p>Some customers may comment on one or more of the following conditions when driving in extremely cold weather conditions (-18°C or less / 0°F or less):</p> <ul style="list-style-type: none">• Loss of power• Hesitation on acceleration• Stalling condition• MIL Illuminated <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 (CAC), restricting air flow.
Correction	<ul style="list-style-type: none">– 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 environment, and drain the moisture from the CAC. <p>Note: DO NOT replace the CAC if the service part is already installed.</p> <ul style="list-style-type: none">– If any of the above conditions are confirmed to be caused by freezing/icing, replace the original CAC with the new design wide fin service part. Confirmation should include:<ul style="list-style-type: none">• P0299 and/or P0236 present.• >100mL (3.4 oz) moisture drained from thawed CAC.• Confirmed no leaks in CAC / CAC ducts.• Recent vehicle use in extreme cold (-18°C / 0°F or less).– If not recently performed, an oil change may be necessary to remove any moisture from the engine.

Service Procedure

Important: Do Not replace the CAC ducts as part of this repair unless there is evidence of damage and/or a leak from the CAC ducts.

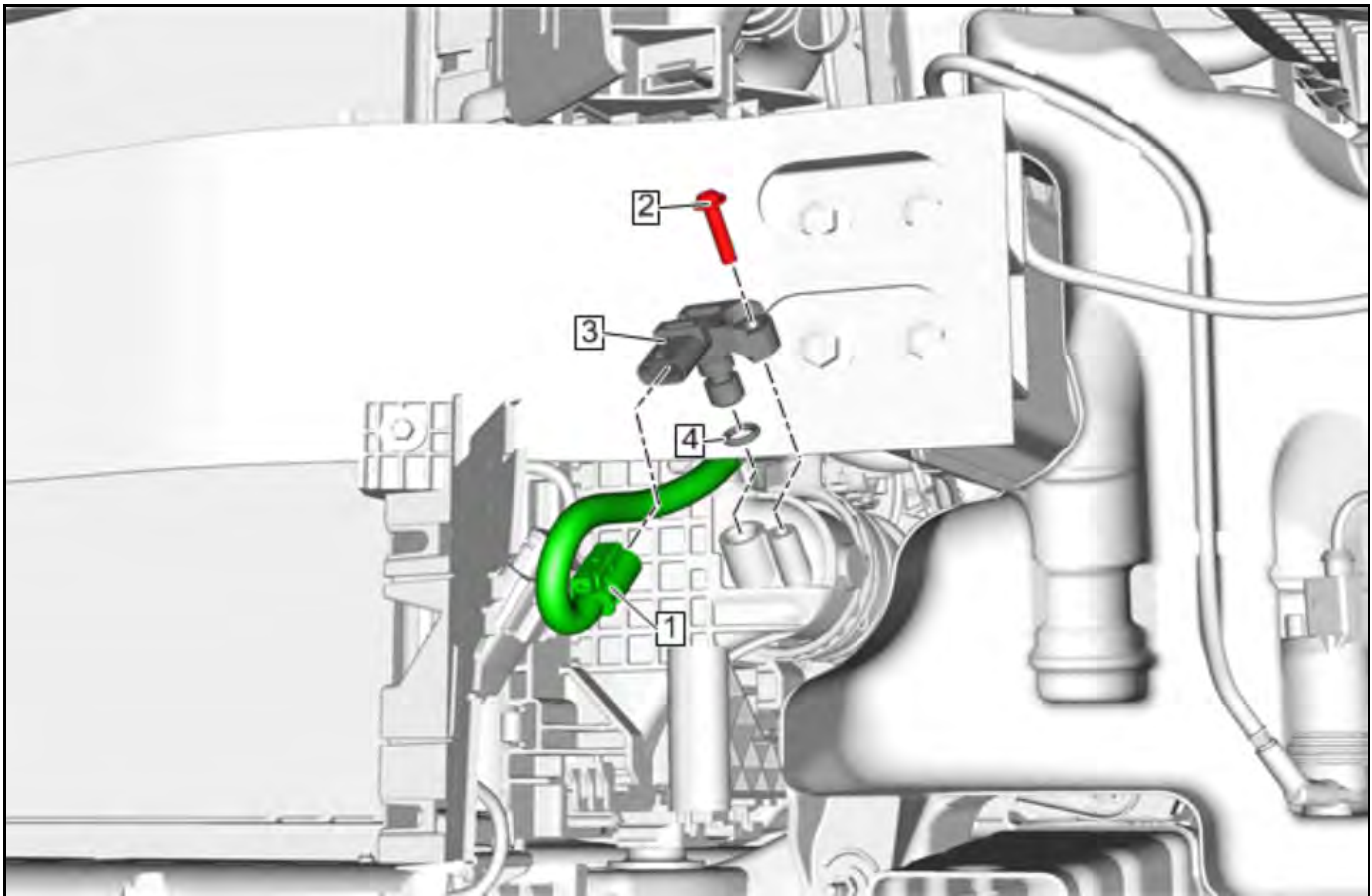


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1. Install the CAC (2). Refer to *Charge Air Cooler Replacement* in SI.

Important: Do Not perform an oil change if the oil change was recently done.

- If the oil change was recently done and no signs of moisture have been confirmed, proceed to step 3.
 - If the oil change was not previously done or moisture has been found in the oil, proceed with procedure.
2. If required, perform an oil change. Refer to *Engine Oil and Oil Filter Replacement* in SI.



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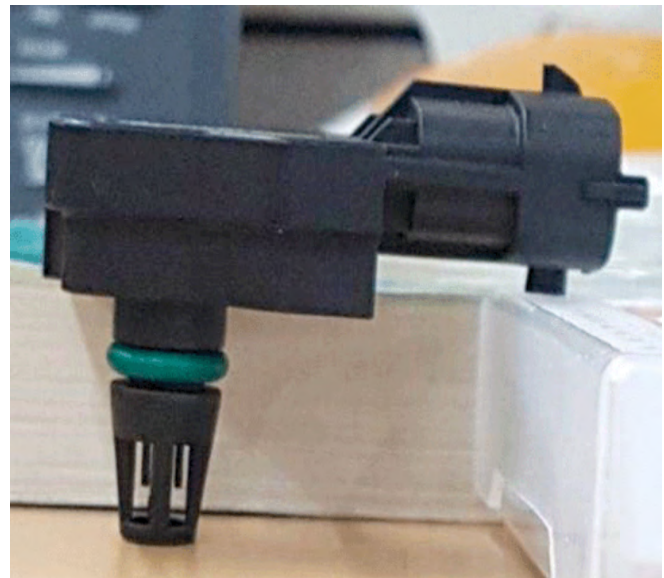
3. Remove the turbocharger air pressure sensor (3). Refer to *Turbocharger Air Pressure Sensor Replacement* in SI.



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Important: Due to the sensitivity of the sensor, **Do Not** use any chemical cleaners including water and **Do Not** use compressed air to remove contaminants.

4. Inspect the sensor of any contaminants.



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5. Allow time for any ice build-up to melt by placing the sensor port down.
6. Clean the sensor with a clean towel.
7. Install the sensor.

Parts Information

Description	Part Number	Qty
COOLER ASM-CHRG AIR	84768953	1
Filter, Oil	Refer to the Electronic Parts Catalog (EPC).	
Oil		

Warranty Information

Important: Emission Warranty coverage codes E (Base Emission Warranty) and E1 (California Emission Related Components 7 years/70,000 mile warranty) apply for this Labor Operation.

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

Labor Operation	Description	Labor Time
4086058*	Charge Air Cooler Replacement	2.6 hrs
Add	To Recover and Recharge R-1234yf A/C System	1.2 hrs
Add	To Recover and Recharge R-134a A/C System	0.3 hr
Add	IAPT Inspection	0.2 hr
Add	Oil Change	0.3 hr

*This is a unique Labor Operation for bulletin use only.

Version	6
Modified	<p>Released March 05, 2018</p> <p>January 24, 2019 – Added the 2019 Model Year, China to Involved Region or Country, updated the Service Procedure and Warranty Information.</p> <p>October 28, 2019 – Updated the Part Number in the Parts Information.</p> <p>February 21, 2020 – Added the 2020 Model Year and updated the Correction information.</p> <p>March 12, 2020 – Added an Important statement at the beginning of the Service Procedure advising not to replace the CAC ducts.</p> <p>March 02, 2021 – Added the 2021 Model Year and updated the Warranty Information.</p>

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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