### GLOBAL SAFETY FIELD INVESTIGATIONS DCS5456 URGENT - DISTRIBUTE IMMEDIATELY

Date: July 24, 2020

- Subject: A202304840-01 Service Update Camshaft Actuator Oil Control Valve Center Bolt Binding Revised service procedure, parts information, warranty information, and added floor plan.
- Models: 2020 2021 Buick Encore GX 2021 Chevrolet Trailblazer Equipped with 1.3L Turbo Engine(RPO L3T)
- To: All General Motors Dealers

This bulletin has been revised to update the service procedure, add part information, and update the warranty information section, including adding floor plan reimbursement. <u>Please ensure dealer technicians are reading the</u> <u>updated service procedure instructions carefully</u> as the correct repair is determined by which Diagnostic Trouble Code(s) are set during the inspection procedure. Please discard all previous copies of bulletin A202304840.

END OF MESSAGE GLOBAL SAFETY FIELD INVESTIGATIONS

## Service Update A202304840 Camshaft Actuator Oil Control Valve Center Bolt Binding



#### Release Date: June 2020

Revision: 01

**Revision Description:** This bulletin has been revised to update the service procedure, add part information, and update the warranty information section, including adding floor plan reimbursement. Please discard all previous copies of bulletin A202304840.

Attention: On June 12, 2020 an inspection procedure was made available and vehicles that passed the inspection could be delivered and closed using the "Inspect Only – Vehicle Passed Inspection (No Further Action Required)" labor code 9105187. For vehicles which did not pass inspection and were held, parts are now available to complete this repair and floor plan reimbursement has been added to this bulletin.

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

All involved vehicles that are in New <u>and</u> Unsold dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the inspection contained in this bulletin has been performed on the vehicle.

This service update involves vehicles in dealer inventory only and will expire June 30, 2021.

		Model Year			
Make	Model	From	То	RPO	Description
Buick	Encore GX	2020	2021	L3T	1.21 Turbo obcino
Chevrolet	Trailblazer	2021	2021	LOI	1.3L Turbo engine

This service update should be performed on vehicles in dealer inventory only. Involved vehicles are marked "open" on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition	Certain 2020-2021 Buick Encore GX and 2021 Chevrolet Trailblazer vehicles may have a condition where the camshaft actuator oil control valve (OCV) center bolt could stick or bind. If this were to happen, it could cause a MIL light to illuminate on the dash (Service Engine Soon), setting diagnostic trouble codes (DTC's) P0011 or P0014, the engine could run rough and have reduced power.
Correction	Dealers will inspect for these DTC's that could have been set by this condition, and repair vehicles that fail the inspection.

#### Parts

Quantity	Part Name	Part No.	
1	Exhaust OCV Solenoid Service Sleeve Kit	12714592	
1	L3T Exhaust OCV	12703758	
1	L3T Intake OCV	12698402	
1	L3T PCV Tube	12693663	
1	Fuel Pump Housing O-Ring	12645181	
1	Fuel Feed Intermediate Pipe Assembly	12664331	
1	Dielectric Grease	19260901 (US)	
I	Dielectric Grease	19260902 (CA)	
1	Exhaust Manifold Outlet Gasket	12666899	
1	Camshaft Cover Seal	12670503	
1	Camshaft Cover Seal	12669132	
3	Spark Plug Seal	12613249	
1	Camshaft Cover Seal	12671789	
2	Camshaft Position Actuator Magnet Gasket	12698384	
2	Camshaft Position Sensor	12683500	
1	Coolant	12346290 (US)	
	Cooldrit	10953464 (CA)	
1	Engine Oil	88865926 (US)	
I		19353385 (CA)	

Parts required to complete this recall are to be obtained from General Motors Customer Care and Aftersales (GMCCA). There are two different remedies for this fix depending on the DTC code you receive at the time of inspection. Please refer to your "involved vehicles listing" before ordering parts. Parts should be ordered on a CSO = Customer Special Order.



It is estimated that 11% involved vehicles will fail the inspection and require part replacement. **Do not order parts until the inspection has been done on the vehicle and it has failed the inspection.** Due to the small number of vehicles anticipated that will need this fix and the limited initial parts availability, dealers are encouraged not to order these parts for use as shelf stock.

**Reminder**: Parts may be removed from Retail Inventory Management (RIM). Dealers should review the affected parts to confirm RIM managed status. Parts may have quantity limiters in effect.

#### Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9105187	Inspect Only – No Further Action Required - Pass	0.5		
9105211	Intake and Exhaust Camshaft Position Actuator Solenoid Bolts Replacement Add: Inspection	6.5 0.5	ZFAT	N/A
9105212	Exhaust Solenoid Bolt Service Sleeve Kit Replacement Add: Inspection	0.5		
9105216	Floor Plan Reimbursement – NEW INVENTORY ONLY	N/A		*

**IMPORTANT**: If the vehicle originally **DID NOT PASS** the inspection and labor code 9105188 was claimed at 0.5 for the inspection, <u>DO NOT</u> submit for the add time for inspection again against either of the replacement labor codes. Claims submitted with multiple / duplicate inspections will be debited.

#### Floor Plan Reimbursement – NEW INVENTORY ONLY

\* USA & Canada Only – For vehicles eligible for floor plan reimbursement, the amount should be submitted in Net Item/Miscellaneous. This amount should represent the product of the vehicle's average daily interest rate (see table below) multiplied by the actual number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop delivery message (June 12, 2020) to the date the repair is completed, and the vehicle is ready for sale (not to exceed 42 days):

	Floor Plan Reimbursement Amount		
Vehicle	USA	Canada	
2020 Buick Encore GX	\$3.17	\$4.54	
2021 Buick Encore GX	\$3.11	N/A	
2021 Chevrolet Trailblazer	\$3.11	\$4.45	

#### **Service Procedure**

- 1. If the inspection procedure has already been completed, skip to step 1.4 and determine your repair route based on DTCs previously reported.
  - 1.1. Start and idle the engine normally until the oil temperature reaches a minimum of 158°F (70°C).

Important: When performing the following step, the engine RPMs will drop if the ECM sees no change in activity from the accelerator pedal in 3 minutes. If the engine RPMs drop to idle, simply tap the accelerator pedal a couple times and then depress the accelerator pedal to full again.

In addition, the ECM may set High-Pressure Fuel Pump related DTCs during this test – that is normal, and the codes should simply be cleared after the test - no parts should be replaced.

- 1.2. With the oil temperature already at or above 158°F (70°C), put the transmission in park and set the parking brake. Hold the throttle open at 100%, which will keep the engine at the park/neutral rev limit of 4,000 RPM. Do this for approximately 13 minutes, or until the engine oil temperature reaches a minimum of 230°F(110°C).
- 1.3. With the engine oil temperature still elevated from the previous step, drive the vehicle in a way that includes light to moderate acceleration, and then hold the vehicle at a steady-state cruise condition for a minimum of 5 seconds. This will ensure the camshaft actuators move through their full range of motion.

1.4. Let the vehicle idle for 60 seconds before checking for the presence of DTCs P0011 or P0014.

- If P0011 is set by itself, or with P0014, proceed to step 2.
- If P0014 is set by itself, proceed to step 3.
- If P0011 or P0014 is NOT set, the vehicle has passed the inspection, and the field action may be closed out using the 'pass' labor operation.



- 2. Replace the Camshaft Position Actuator Solenoid Bolts. Refer to Camshaft Position Actuator Valve Solenoid Bolt Replacement in SI.
  - If you are replacing the Camshaft Position Actuator Solenoid Bolts, no further action is required after this step is complete.
- 3. Without disconnecting the ECM, unbolt the ECM bracket and reposition the ECM and bracket out of your way towards the front of the vehicle. Refer to *Engine Control Module Bracket Replacement* in SI for bolt locations.
- 4. Remove the Camshaft Position Actuator Exhaust Magnets. Refer to Camshaft Position Actuator Exhaust Magnet Replacement in SI for bolt locations.



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# Important: Place a workshop towel or a cut dixie or coffee cup in the opening left by the Camshaft Position Actuator Exhaust Magnet so that the circlip cannot accidentally fall into the front cover.

5. Remove the circlip from the end of the camshaft actuator bolt using appropriate circlip pliers.





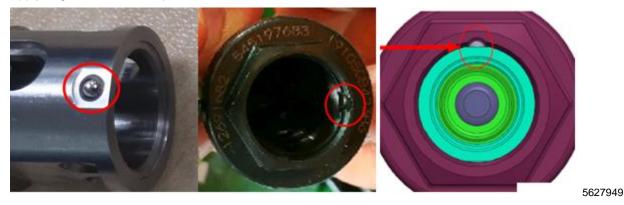
6. Remove the camshaft actuator bolt sleeve from the bolt body using a pair of needle nose pliers as shown.



7. The removed bolt sleeve kit should look as shown – a plastic over molded sleeve.



8. Apply engine oil to the components of the new steel sleeve kit, shown above.



- 9. Install the new steel sleeve into the body of the actuator in the camshaft. Be sure to align the detent with the sleeve with the groove in the actuator body during installation (see circled areas above).
- 10. Reinstall the circlip that was removed.
  - After installing the circlip, spin the circlip using a pick to ensure it is fully seated in the slot in which it is supposed to sit.
- 11. Reinstall the Camshaft Position Actuator Exhaust Magnets. Refer to Camshaft Position Actuator Exhaust Magnet Replacement in SI.
- 12. Reinstall the Engine Control Module Bracket. Refer to Engine Control Module Bracket Replacement in SI.

#### **Dealer Responsibility**

Dealers must take the steps necessary to ensure that the service update correction has been made to all involved vehicles in dealer inventory before selling or dealer-trading the vehicle, but no later than June 30, 2021.

All new, used, GM Certified Used, courtesy transportation vehicles, dealer shuttle vehicles, etc. in dealers' possession and subject to this bulletin <u>must</u> be held and inspected/repaired per the service procedure of this bulletin <u>before</u> customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Used vehicles currently in the dealers' inventory within the Certified Pre-Owned Inventory System (CPOIS) will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting



an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the CPOIS system, or once again be used in the CTP program.

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 tools, equipment, safety instructions, and know-how to do a job properly and safely. If a condition is described, <u>DO NOT</u> assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your dealer for information on whether your vehicle may benefit from the information.



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