



# Service Bulletin

Bulletin No.: 18-NA-083

Date: May, 2019

## TECHNICAL

**Subject:** Service Transmission Message Displayed on Driver Information Center (DIC), Malfunction Indicator Lamp (MIL) Illuminated - DTCs P0722, P0729, P0730, P0731, P0732, P0733, P0734, P0735, P073D, P073E, P07A2, P07E4, P07E5 and/or P1769 Set

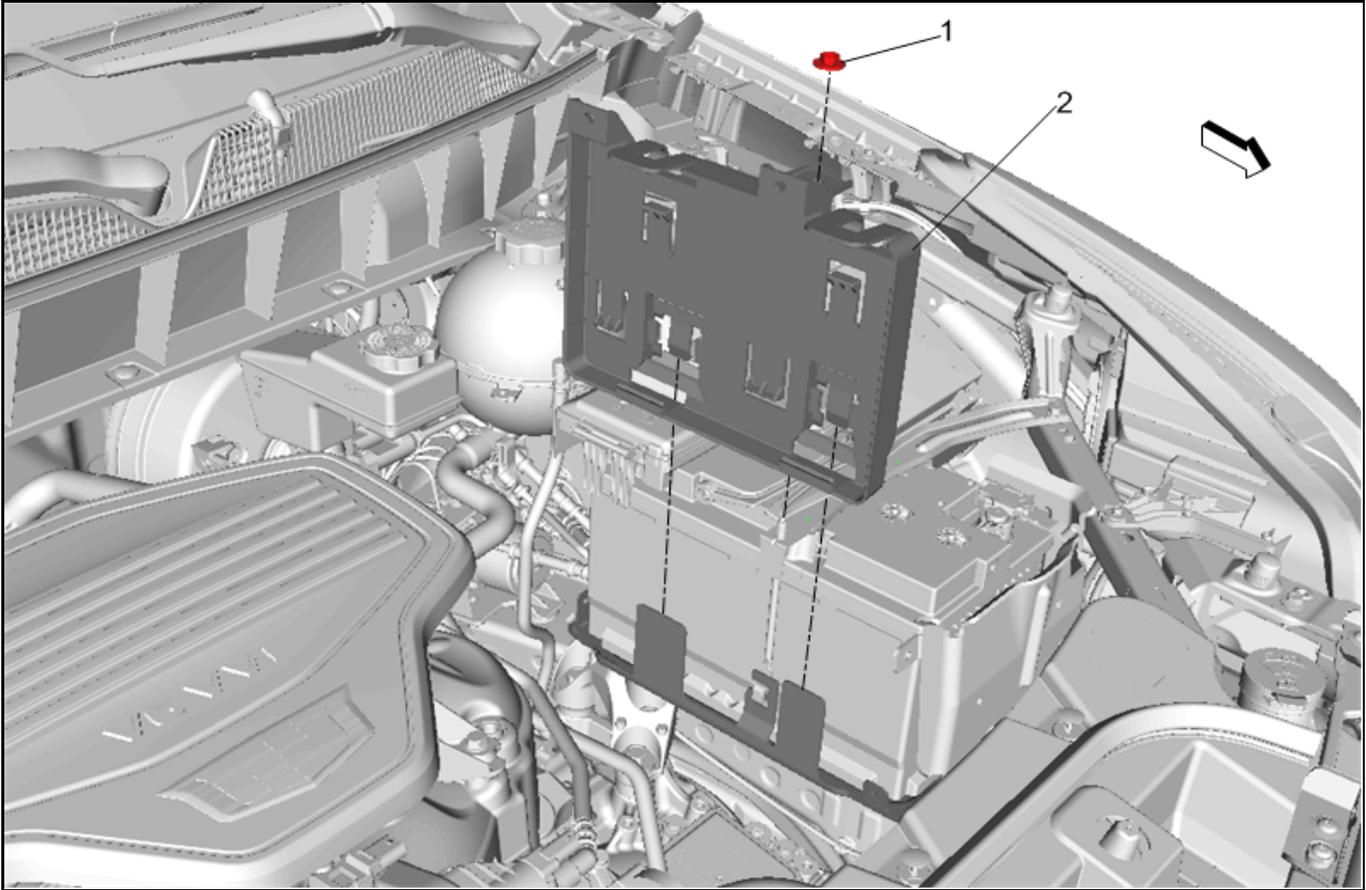
Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	LaCrosse	2017	2017				Automatic (MRC)
Cadillac	XT5	2017	2019				

<b>Involved Region or Country</b>	North America, Europe, South Korea, China, Middle East
<b>Condition</b>	<p>Some customers may comment on the following conditions:</p> <ul style="list-style-type: none"> <li>• MIL is illuminated</li> <li>• Service Transmission message is displayed on the DIC</li> </ul> <p>Some technicians may find one or more of the following DTCs set in history or current:</p> <ul style="list-style-type: none"> <li>• P0722: Output Speed Sensor Circuit No Signal</li> <li>• P0729: 6th Gear Ratio Incorrect</li> <li>• P0730: Gear Ratio Incorrect</li> <li>• P0731: 1st Gear Ratio Incorrect</li> <li>• P0732: 2nd Gear Ratio Incorrect</li> <li>• P0733: 3rd Gear Ratio Incorrect</li> <li>• P0734: 4th Gear Ratio Incorrect</li> <li>• P0735: 5th Gear Ratio Incorrect</li> <li>• P073D: Unable to Engage Neutral set in the Chassis Control Module</li> <li>• P073E: Unable to Engage Reverse set in the Chassis Control Module</li> <li>• P07A2: Transmission Clutch 1 Performance</li> <li>• P07E4: Unable to Engage Park set in the Chassis Control Module</li> <li>• P07E5: Unable to Engage Drive set in the Chassis Control Module</li> <li>• P1769: Transmission Range Sensor TRCM Correlation set in the Chassis Control Module</li> </ul>
<b>Cause</b>	This condition may be caused by the misalignment of the coupler between the Transmission Range Control Module (TRCM) and the transmission.
<b>Correction</b>	If the above DTCs are set in history or current during the service evaluation, the TRCM needs to be re-centered by following the Service Procedure below.

### Service Procedure

1. Inspect the transmission fluid level. Refer to *Transmission Fluid Level and Condition Check* in SI.
  - If the automatic transmission fluid is dark and an overheated odor, internal wear of the automatic transmission is suspected and that should be addressed. Refer to SI for further diagnosis.
  - If the automatic transmission fluid is OK, proceed to the next step.

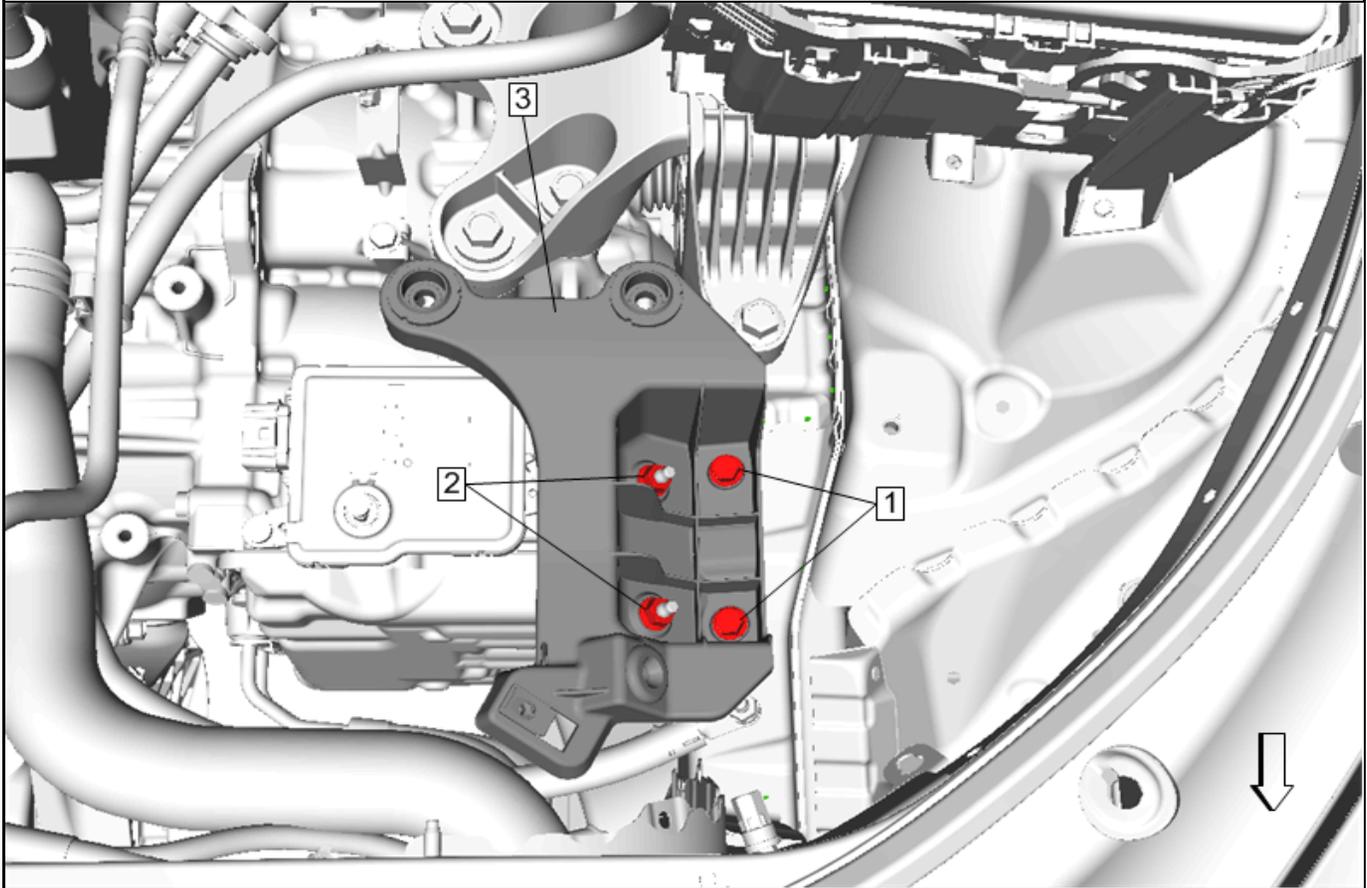
- Note:** To perform the transmission learn procedure, it is recommended that the transmission is warmed up between 10°C to 40°C (50°F to 104°F).
2. Apply the parking brake and place the transmission control assembly in the Park position.
  3. Perform the backup Park lock actuator disarming procedure. Refer to *Backup Park Lock Actuator Disarming* in SI.

**4. For XT5 vehicles:**

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- 4.1. Without disconnecting the electrical connectors, detach the engine control module (ECM) from the bracket assembly and position aside.
- 4.2. Remove the ECM bracket (2).
- 4.3. Proceed to step 5.

For LaCrosse vehicles:

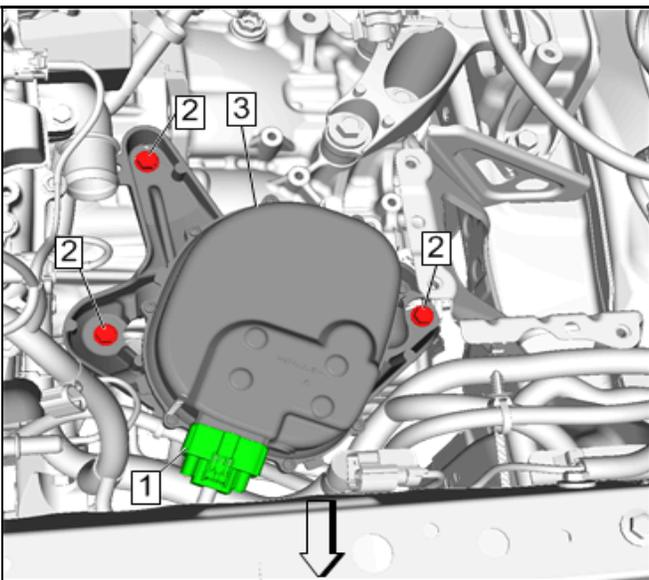


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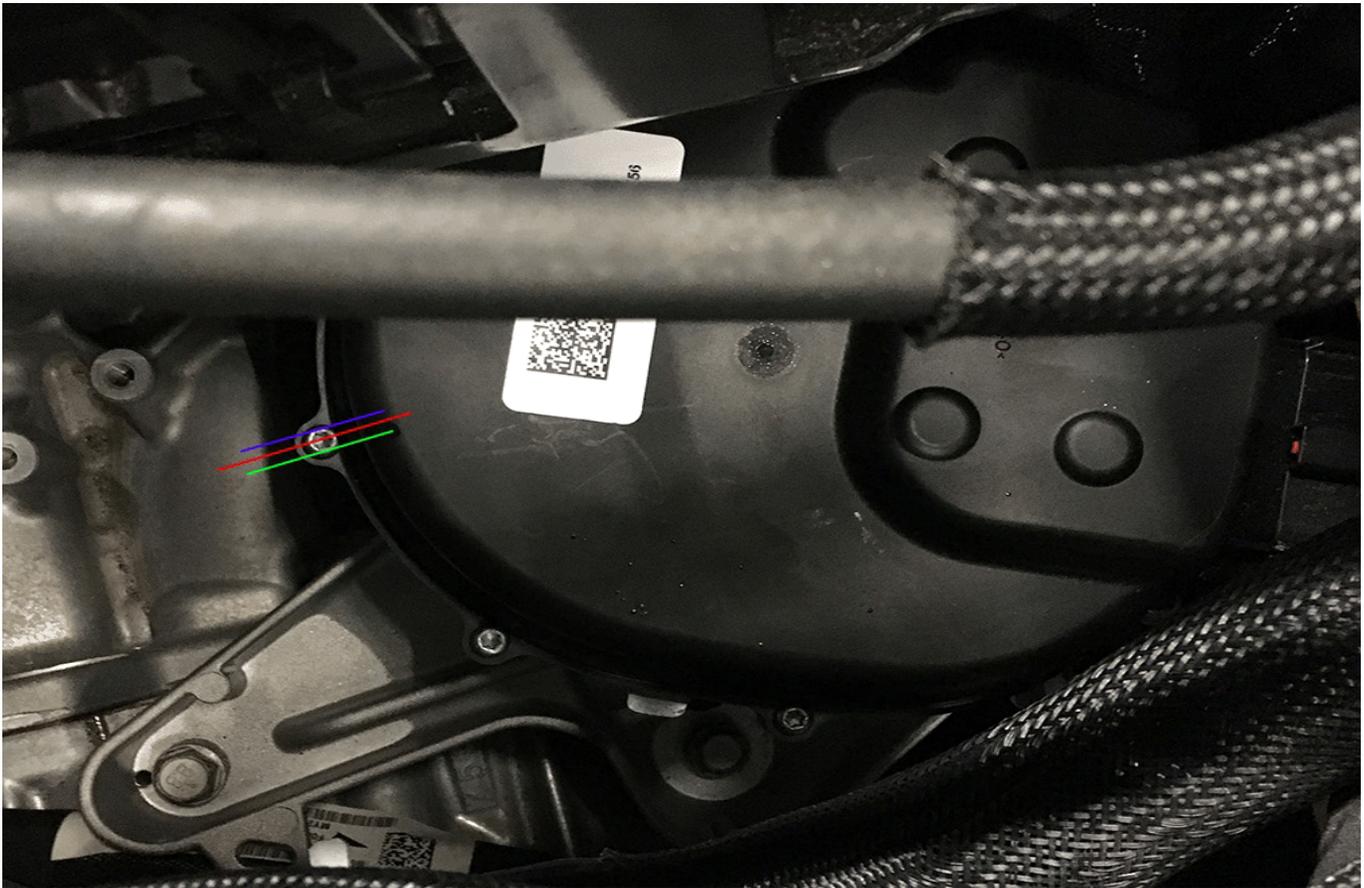
- 4.1. Remove the air cleaner housing assembly. Refer to *Air Cleaner Assembly Replacement* in SI.
- 4.2. Remove the bolt that secures the intake air duct to the core support.
- 4.3. Remove the air cleaner bracket (3).

**Note:** For the XT5, the actuator module bolt located under the battery tray can be accessed without removing the battery tray.

5. Loosen (approximately ¼ in.) the automatic transmission range selector actuator hardware module bolts (2).



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**Note:** The turning radius of the module will be very slight when centering.

6. Rotate the automatic transmission range selector actuator hardware module:
  - 6.1. Rotate clockwise until right lock position, shown with a blue line.
  - 6.2. Rotate counterclockwise until left lock position, shown with a green line.
  - 6.3. Rotate clockwise until it is centered between both full lock positions, shown with a red line.
7. While holding the automatic transmission range selector actuator hardware module with one hand, tighten hardware module bolts to prevent the actuator from moving from the center position.
8. Tighten the automatic transmission range selector actuator hardware module bolts.
  - ⇒ Refer to *Fastener Specifications* in SI.
9. Perform the TRCM learn procedure (Not for new modules). Refer to *Transmission Range Control Module Learn Procedure* in SI.
  - If the test fails, re-adjust the module and retest.
  - If the test fails after re-adjusting the module, refer to SI for further diagnostics on the code set.
  - If the test passes, proceed with procedure.
10. Install previously removed components.
  - ⇒ Tighten the fasteners to specifications. Refer to *Fastener Specifications* in SI.

## Parts Information

No parts are required for this repair.

## Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
8480728*	Automatic Transmission Range Selector Actuator Hardware Module Adjustment	0.5 hr (XT5)
		1.0 hr (LaCrosse)
*This is a unique Labor Operation for Bulletin use only.		

<b>Version</b>	2
<b>Modified</b>	Released March 15, 2018 May 22, 2019 – Added additional DTCs, 2019 to XT5 model and steps to check fluid condition at the beginning of the Service Procedure.

