



## Preliminary Information

### PIP5791 DTC P2B60 Engine Coolant Flow Control Valve Position Sensor Circuit Performance

#### Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	Escalade models	2021	All	All	LM2	All
Chevrolet	Silverado	2020 - 2021	All	All	LM2	All
Chevrolet	Suburban	2021	All	All	LM2	All
Chevrolet	Tahoe	2021	All	All	LM2	All
GMC	Sierra	2020 - 2021	All	All	LM2	All
GMC	Yukon models	2021	All	All	LM2	All

Involved Region or Country	North America
Condition	Customer concern with SES light on. DTC P2B60 may be set
Cause	This condition is currently under investigation by engineering

#### Correction:

Using the GDS2 tool with software levels greater than GM Global v 2021.3.1 : Perform the following process to evaluate if the Engine Coolant Flow Control Valve is responding. With the ignition on and the engine NOT RUNNING, navigate to the Engine Coolant Flow Control Valve control function as illustrated below.

Module Diagnostics

Vehicle Diagnostics

System Diagnostics

Session Manager

Selected Vehicle		
Property	Value	Value Source
Model Year	2021	User
Make	Chevrolet	User

Selected Vehicle Configuration		
Property	Value	Value Source
Engine L.	3.0L (LM2)	User

Navigation Path

Back Home Vehicle Menu Enter

GDS 2 v22.1.01790 Global2021ChevroletSheranoT1XX VIN: 1G1122269955120150 2021ChevroletSherano Module Diagnostics MEX 2 88720712 11.8 V

[K20] Engine Control Module

[K38A] Chassis Control Module - Auxiliary

[K34] Glow Plug Control Module

[K71] Transmission Control Module

[K44] Power Take-Off Control Module

[K69] Transfer Case Control Module

[K214] Trailer Tire Pressure Indicator Module

[K160] Brake System Control Module

[K43] Power Steering Control Module

[B219] Steering Wheel Angle Sensor Module

[K19] Suspension Control Module

Selected Vehicle		
Property	Value	Value Source
Model Year	2021	User
Make	Chevrolet	User

Selected Vehicle Configuration		
Property	Value	Value Source
Engine L.	3.0L (LM2)	User

Navigation Path

Module Diagnostics

Back Home Vehicle Menu Enter

GDS 2 v22.1.01790 Global2021ChevroletSheranoT1XX VIN: 1G1122269955120150 2021ChevroletSherano Module Diagnostics MEX 2 88720712 11.8 V

Diagnostic Trouble Codes (DTC)

Event Information

Identification Information

Data Display

Control Functions

Configuration/Reset Functions

Inspection/Maintenance System Information

Selected Vehicle		
Property	Value	Value Source
Model Year	2021	VIN
Make	GMC	VIN
Model	Tyroler	VIN

Selected Vehicle Configuration		
Property	Value	Value Source
Engine Identifier	3.0L (LM2)	RPO

Navigation Path

Module Diagnostics

Engine Control Module

Back Home Vehicle Menu Enter

GDS 2 v22.1.01790 Global2021ChevroletSheranoT1XX VIN: 1G1122269955120150 2021ChevroletSherano Engine Control Module Diagnostics MEX 2 88720712 11.8 V

A/C Compressor Clutch Relay

Active Grille Air Shutter 1

Active Grille Air Shutter 2

Auxiliary Coolant Pump

Charge Air Cooler Coolant Pump

Cooling Fan

Cooling System

EGR Valve

EGR Valve 2

Exhaust Gas Recirculation

Engine Controls Ignition Relay

Selected Vehicle		
Property	Value	Value Source
Model Year	2021	User
Make	Chevrolet	User

Selected Vehicle Configuration		
Property	Value	Value Source
Engine L.	3.0L (LM2)	User

Navigation Path

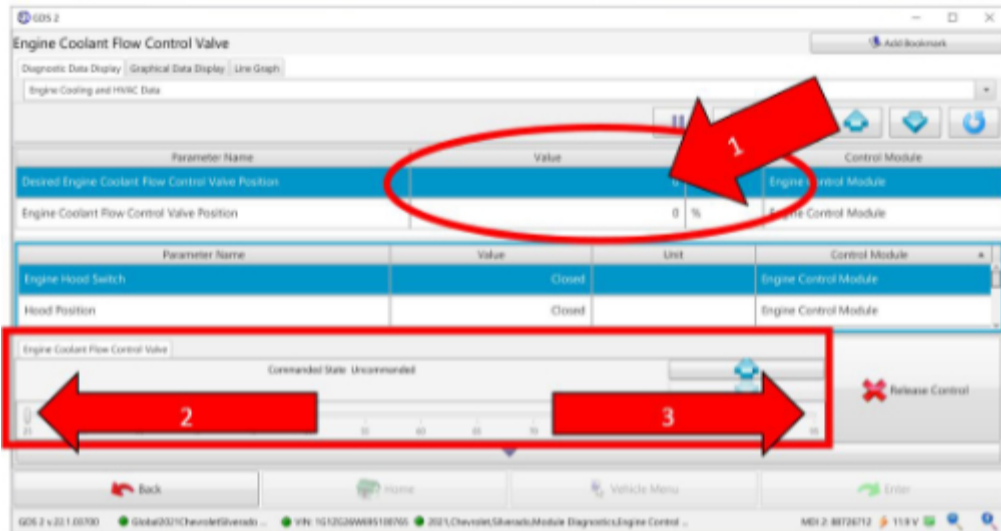
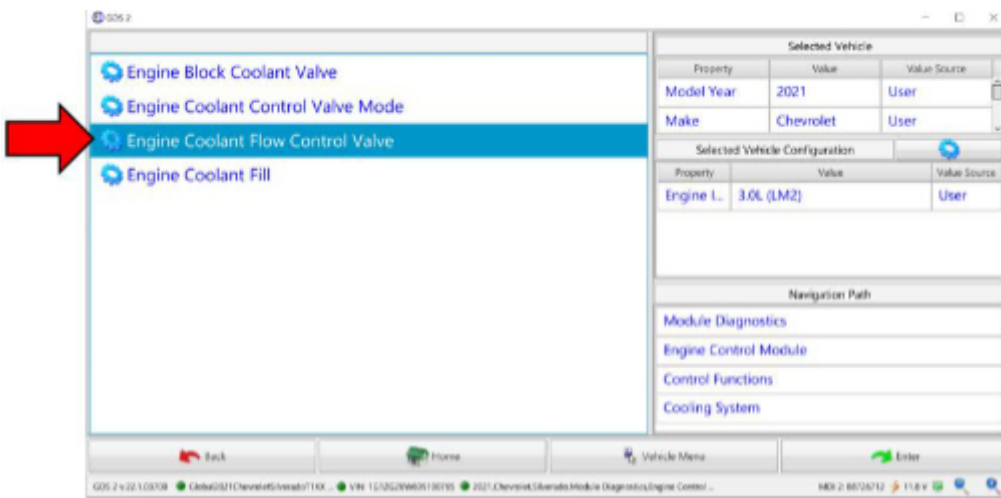
Module Diagnostics

Engine Control Module

Control Functions

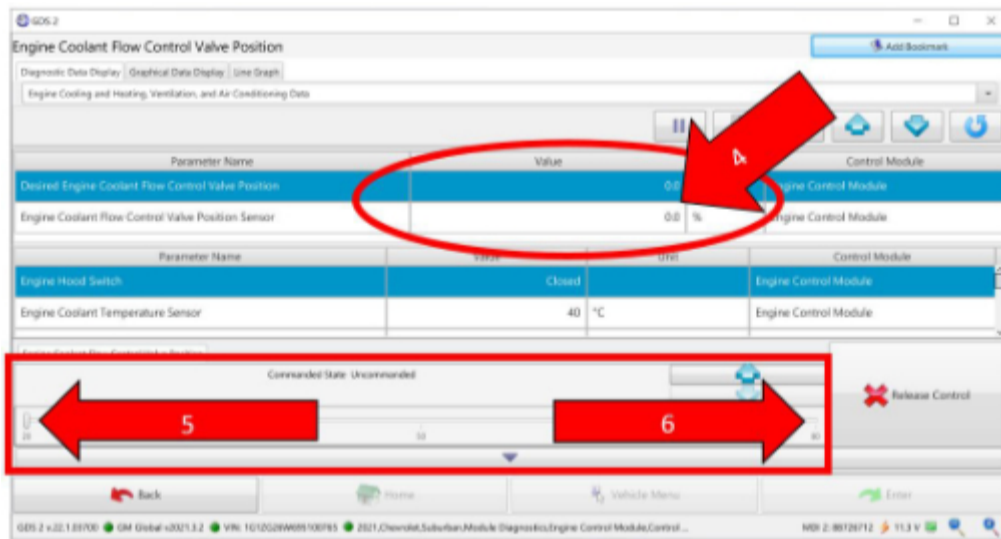
Back Home Vehicle Menu Enter

GDS 2 v22.1.01790 Global2021ChevroletSheranoT1XX VIN: 1G1122269955120150 2021ChevroletSherano Module Diagnostics Engine Control MEX 2 88720712 11.8 V

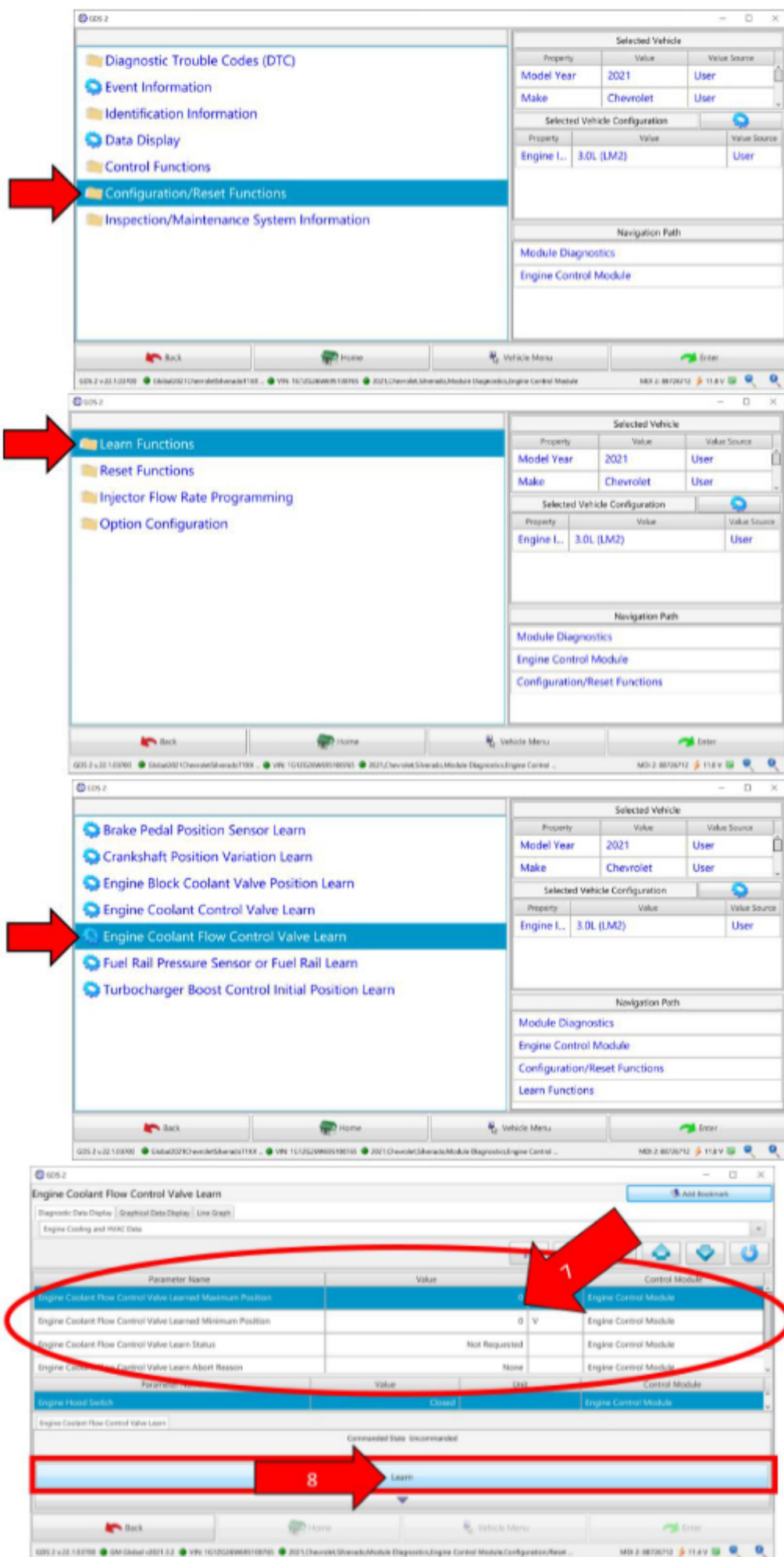


Slide the command from 25% (2) to 95% (3) (for Pickups), making sure to wait until the Engine Coolant Flow Control Position (1) indicates 95% and slide it back to 25% (2). Exercise the valve 3 times to verify it is functional. The “Engine Coolant Flow Control Valve Position” value should move to the desired value just commanded.

The GDS tool will have a slide range of only 20% - 80% (5 and 6) for an SUV. Please perform the same 3-time-slide action for SUV and verify the Coolant Flow Control Valve position parameter (4) matches the desired position you commanded.



If the valve is responding properly to the command, clear the P2B60 code and perform the Engine Coolant Flow Control Valve learn function as illustrated below:

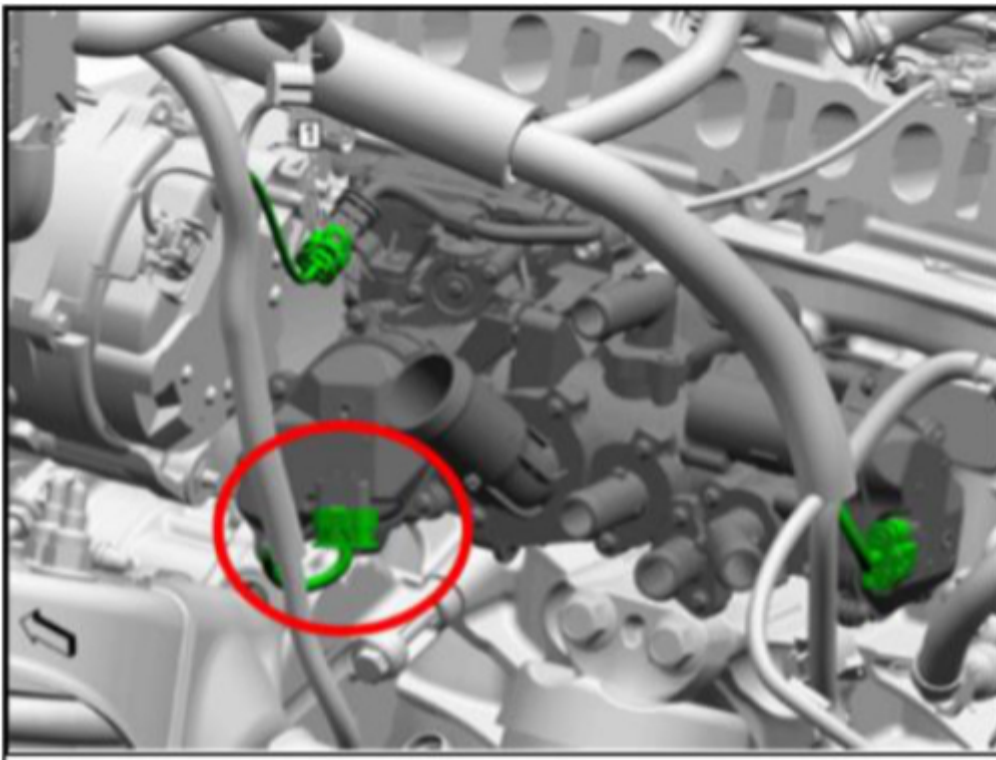


To perform the learn function: Press the “Learn” button and wait until the progress completes.

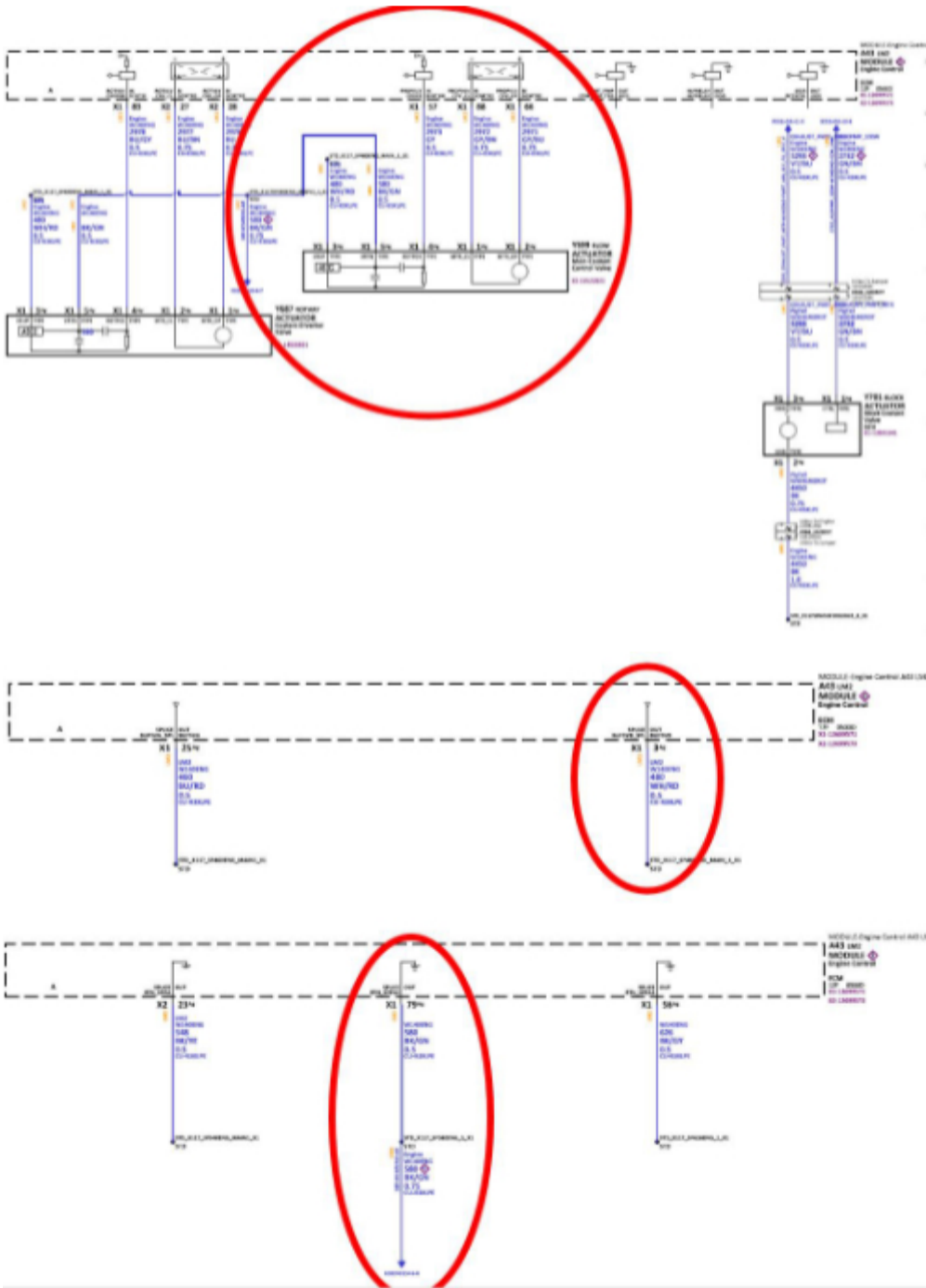
After the learn is completed, clear the codes and return the vehicle to the customer.

**IF** the valve does not move during the “Engine Coolant flow Control Valve” position command, inspect for corroded terminals at the Engine Coolant Flow Control Valve Actuator connector (it's the center actuator circled below).

1. If corrosion on the terminals is found, replace the harness connector and inspect the Flow Control Valve Actuator pins for corrosion damage.
2. If the actuator pins are corroded, replace the connector and terminals, but **DO NOT** replace the Coolant Control Valve.
3. If there is no corrosion on the connector terminals or the pins, continue with normal SI diagnostics (PERFORM A LEARN & CLEAR THE CODES).



If no issue found with the electrical connector, check the Flow Control Valve circuits (circled in red below).



Replace Engine Coolant Flow Control Valve ONLY IF:

1. The valve fails to respond to the control function AND the circuits are NOT found to be faulty.
2. The circuits are NOT found to be faulty AND it is the second customer visit for this condition where the vehicle was previously released after clearing the P2B60 code with no trouble found.

## Warranty Information

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

Labor Operation	Description	Labor Time
4087878	Coolant Flow Control Valve Response Evaluation and Learn Procedure	.4 Hours
*This is a unique Labor Operation for Bulletin use only.		

## Version History

Version	1
Modified	03-22-2021 - Created on.



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