Bulletin No.: PIP5791A
Published date: 01/27/2022

Preliminary Information

PIP5791A DTC P2B60 Engine Coolant Flow Control Valve Position Sensor Circuit Performance

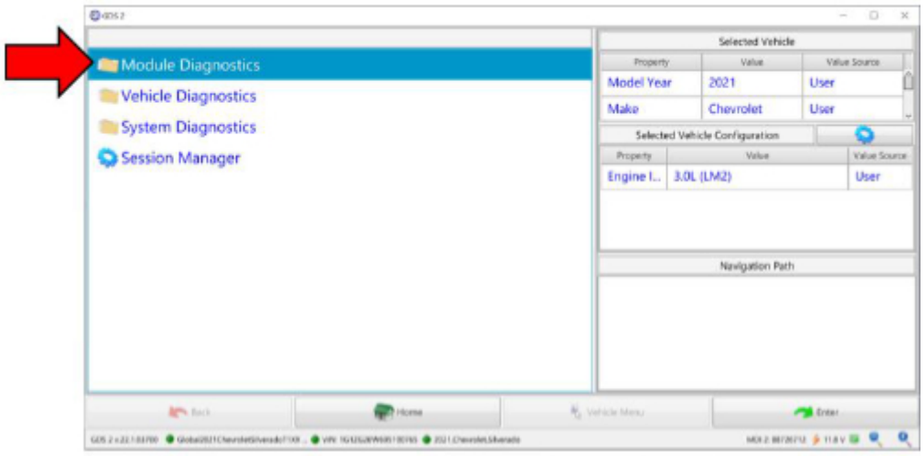
Models

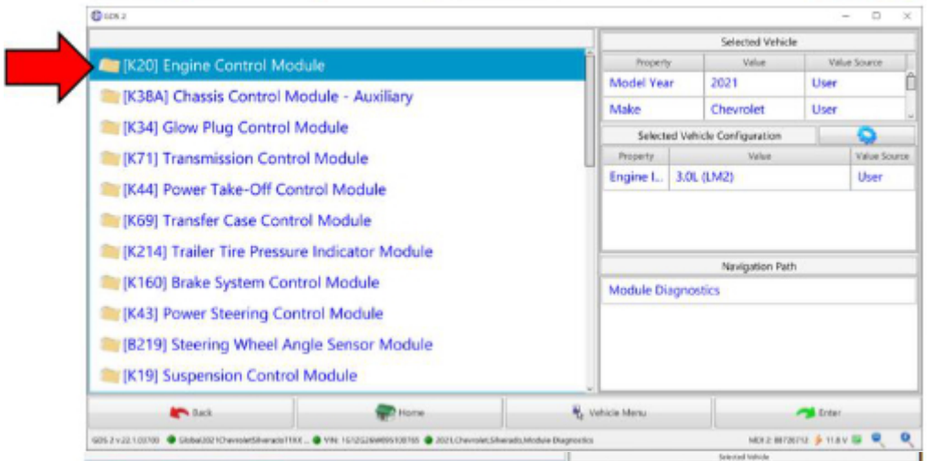
Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	Escalade models	2021 - 2022	All	All	LM2	All
Chevrolet	Silverado	2020 - 2022	All	All	LM2	All
Chevrolet	Suburban	2021 - 2022	All	All	LM2	All
Chevrolet	Tahoe	2021 - 2022	All	All	LM2	All
GMC	Sierra	2020 - 2022	All	All	LM2	All
GMC	Yukon models	2021 - 2022	All	All	LM2	All

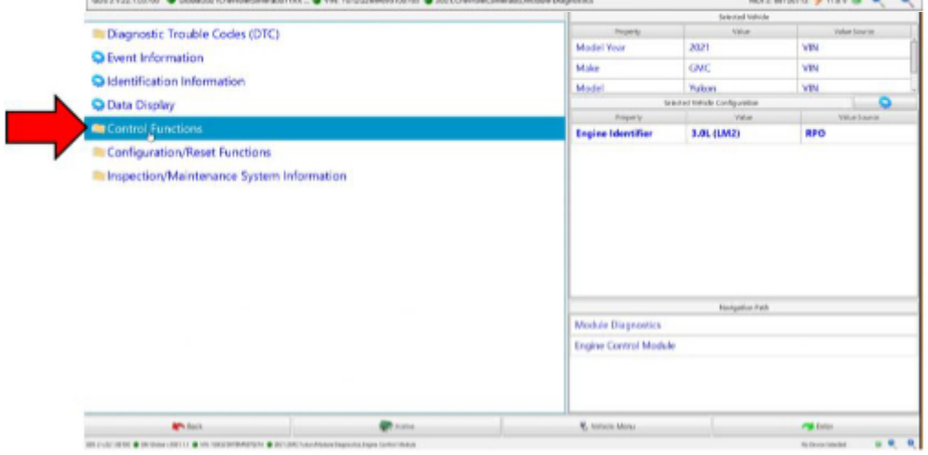
Involved Region or Country	North America
Condition	Customer concern with SES light on. DTC P2B60 may be set
Cause	This condition is currently under investigation by engineering

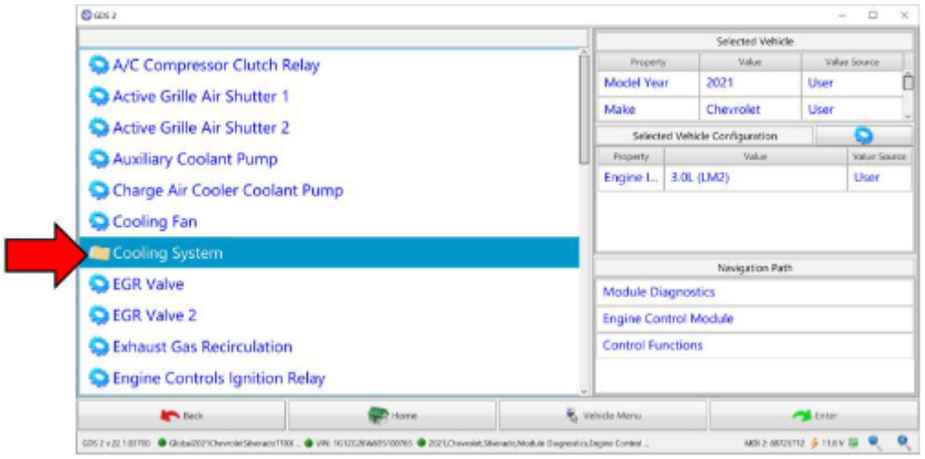
Correction:

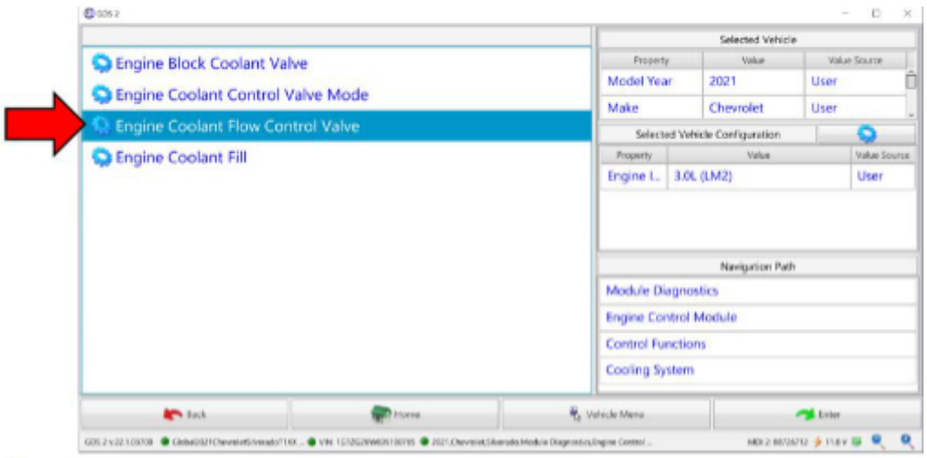
Using the GDS2 tool with software levels greater than GM Global v 2021.3.1 : Perform the following process to evaluate if the Engine Coolant Flow Control Valve is responding. With the ignition on and the engine NOT RUNNING, navigate to the Engine Coolant Flow Control Valve control function as illustrated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

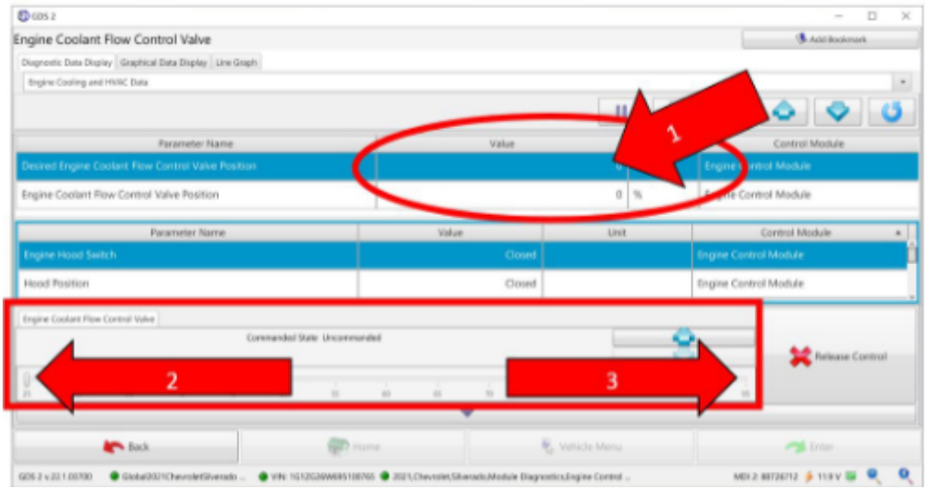

Module Diagnostics
Vehicle Diagnostics
System Diagnostics
Session Manager
Selected Vehicle
Property
Value
Value Source
Model Year
2021
User
Make
Chevrolet
User
Selected Vehicle Configuration
Engine I...
3.0L (LM2)
Navigation Path
Back
Home
Vehicle Menu
Enter


[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
Engine I...
3.0L (LM2)
Navigation Path
Module Diagnostics
Back
Home
Vehicle Menu
Enter


Diagnostic Trouble Codes (DTC)
Event Information
Identification Information
Data Display
Control Functions
Configuration/Reset Functions
Inspection/Maintenance System Information
Selected Vehicle
Model Year
2021
VIN
Make
GMC
VIN
Model
Yukon
VIN
Selected Vehicle Configuration
Property
Value
Value Source
Engine Identifier
3.0L (LM2)
RPO
Navigation Path
Module Diagnostics
Engine Control Module

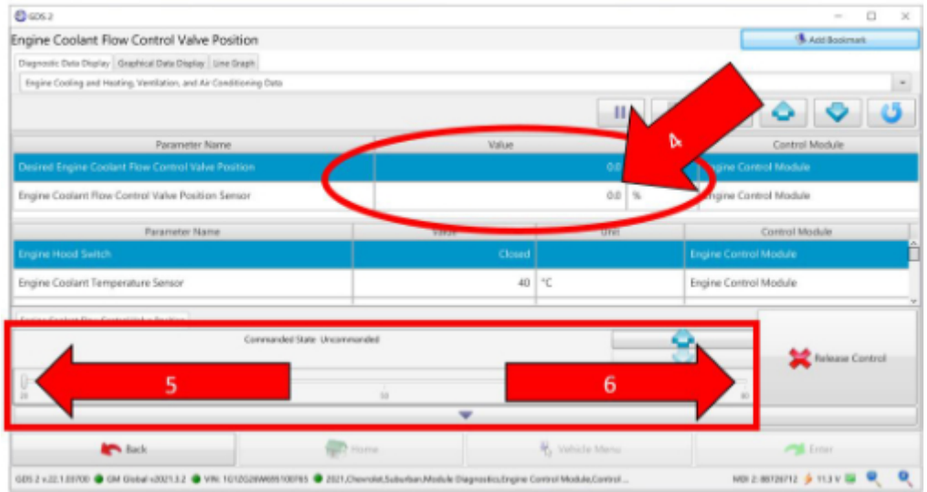

A/C Compressor Clutch Relay
Active Grille Air Shutter 1
Active Grille Air Shutter 2
Auxiliary Coolant Pump
Charge Air Cooler Coolant Pump
Cooling Fan
Cooling System
EGR Valve
EGR Valve 2
Exhaust Gas Recirculation
Engine Controls Ignition Relay
Selected Vehicle
Property
Value
Value Source
Model Year
2021
User
Make
Chevrolet
User
Selected Vehicle Configuration
Engine I...
3.0L (LM2)
Navigation Path
Module Diagnostics
Engine Control Module
Control Functions
Back
Home
Vehicle Menu
Enter



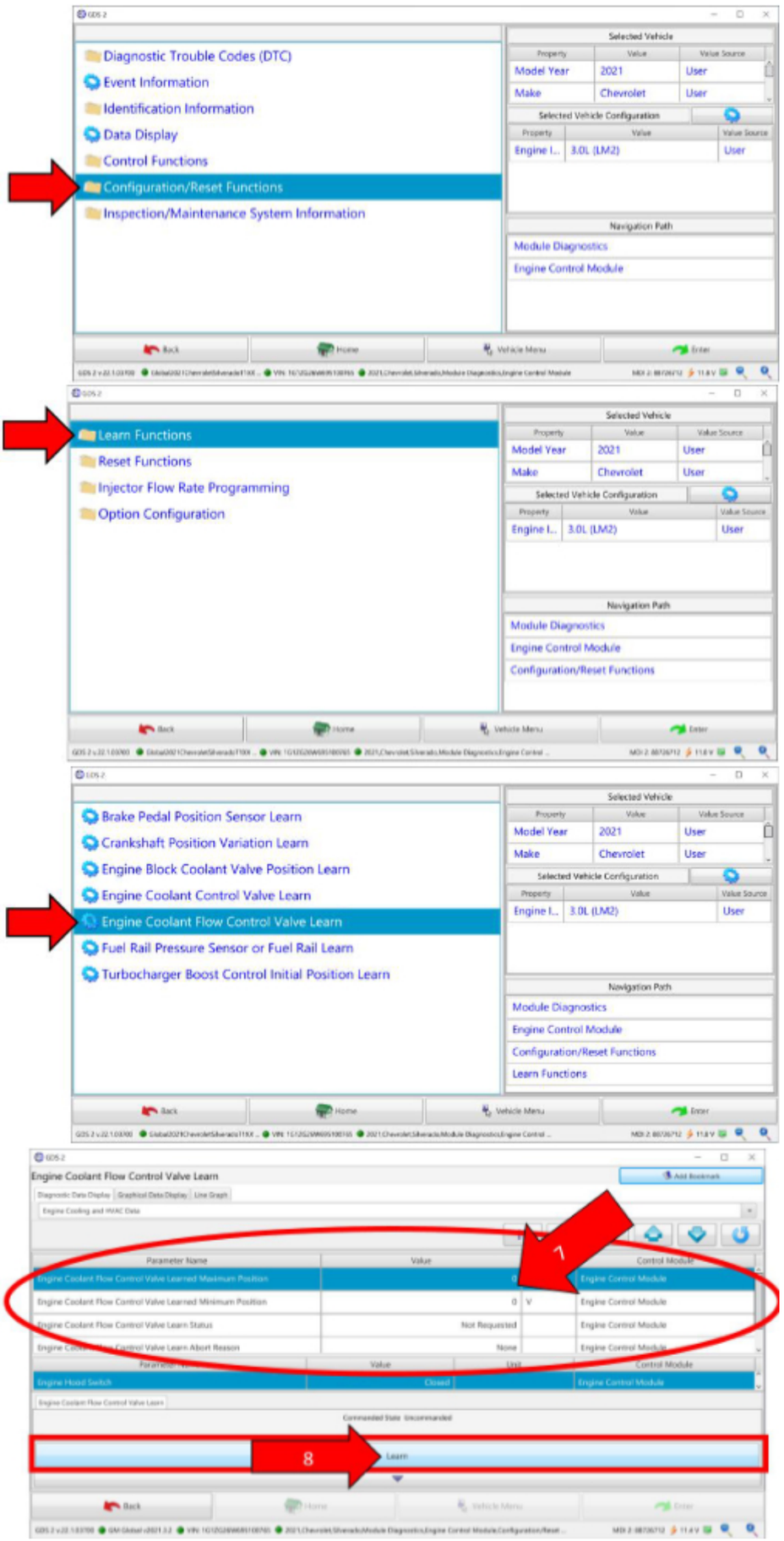


Slide the command from 25% (2) to 95% (3) (for Pickups), making sure to wait until the Engine Coolant Flow Control Position (1) indicates 95% and slide it back to 25% (2). Exercise the valve 3 times to verify it is functional. The "Engine Coolant Flow Control Valve Position" value should move to the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

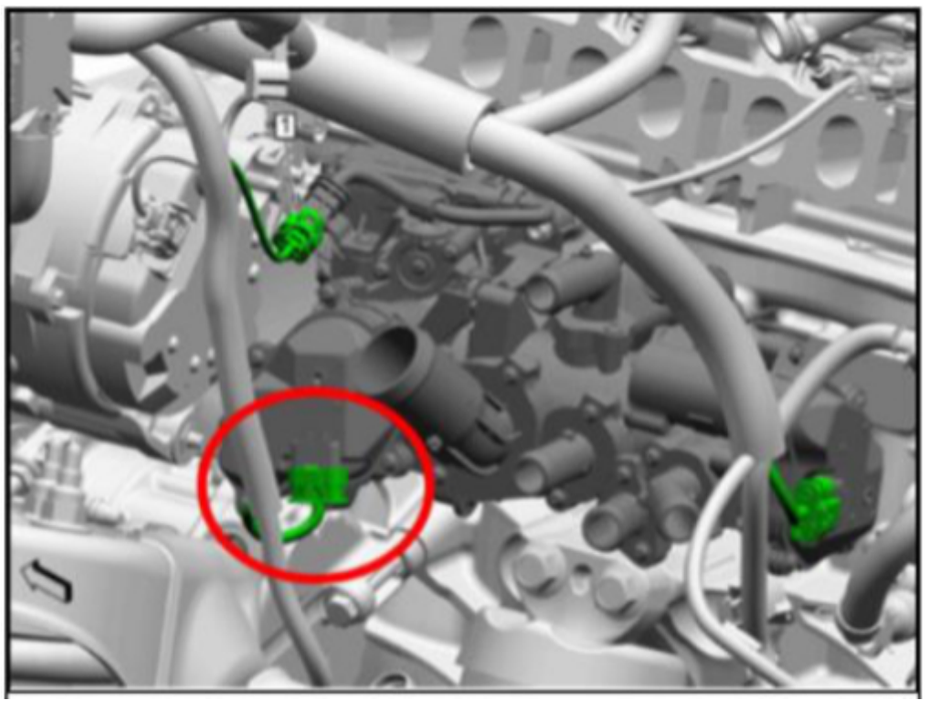


To perform the learn function: Press the “Learn” button and wait until the progress completes.

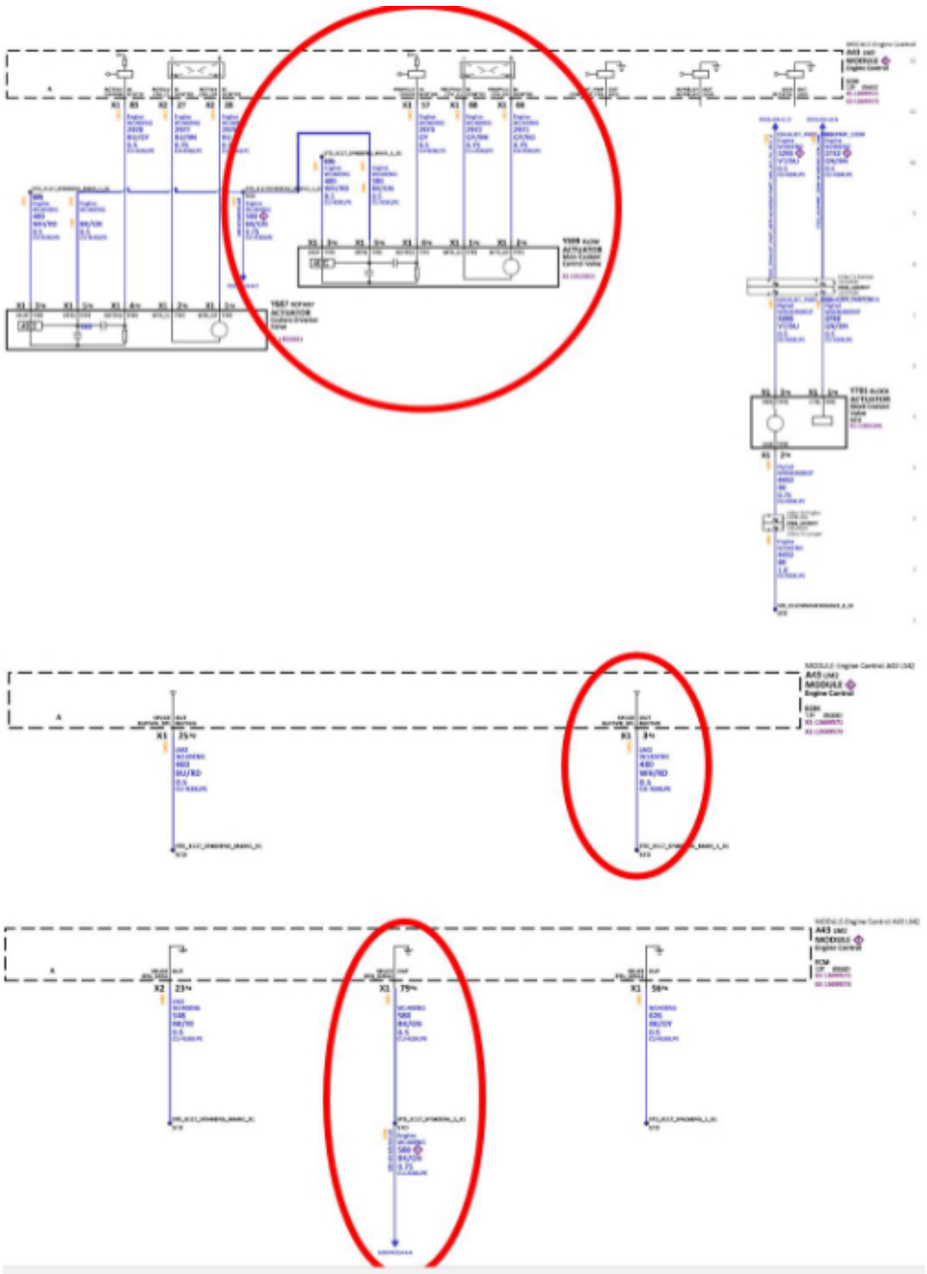
After the learn is completed, clear the codes and return the vehicle to the customer.

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 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	2
Modified	03-22-2021 - Created on. 01/27/2022 - PI updated to include 2022 model year

GENERAL MOTORS