



Service Bulletin

Bulletin No.: 20-NA-113

Date: June, 2020

TECHNICAL

Subject: Action Required Steering Assist is Reduced Drive with Care Or Service Power Steering Message And Or Current Power Steering Control Module DTCs

This bulletin replaces PIT5593B. Please discard all copies of PIT5593B.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 1500	2017-2018		SOP	Plant Code Z*: 9/12/2017, Plant Code F*: 9/13/2017, Plant Code G*: 9/15/2017	4.3L RPO LV3 / 5.3L RPO L83 / 6.2L RPO L86	All
	Suburban	2017-2018		SOP	Plant Code R*: 9/12/2017	All	All
	Tahoe	2017-2018		SOP	Plant Code R*: 9/12/2017	All	All
GMC	Sierra 1500	2017-2018		SOP	Plant Code Z*: 9/12/2017, Plant Code F*: 9/13/2017, Plant Code G*: 9/15/2017	4.3L RPO LV3 / 5.3L RPO L83 / 6.2L RPO L86	All
	Yukon	2017-2018		SOP	Plant Code R*: 9/12/2017	All	All

*For Plant Code See 11th Position of VIN

Involved Region or Country	North America
Additional Options (RPO)	Without RPO UHX Lane Keep Assist Without RPO NV8 Variable Assist Power Steering
Condition	<p>Note: This bulletin does NOT apply to 2500/3500 HD Trucks.</p> <p>Some customers may comment that every time the vehicle is started an "Action Required Steering Assist is Reduced Drive with Care" Or "Service Power Steering" Message is displayed. In most cases, there will be no steering related issues and if the message is dismissed it will remain off the entire ignition cycle.</p> <p>When checking for DTC's the Power Steering Control Module (PSCM) will have current DTC's set. The most common DTC's which may set are:</p> <ul style="list-style-type: none"> • C0176 • C0544 • U0100 • U0101 • U0140 • U0121 • U0073 • U0126 • U0428 71 • U0415 • U0401
Cause	A Power Steering Control Module (PSCM) calibration error has been found, which does not allow its DTC's to transition to history and they stay current. Even when the issue that caused the DTC's to set originally, is no longer present, the PSCM will retain the DTC(s) as current.
Correction	<p>This calibration error can mislead technicians, because the initial steps in normal strategy based diagnosis is to verify the customer complaint and follow current DTC's. To help avoid misdiagnosis, follow the steps below:</p> <ol style="list-style-type: none"> 1. Check and record all DTC's in all modules. 2. Clear all DTC's. If all DTC's can be cleared, go to step 3. If DTC's will not clear, the vehicle is experiencing a current fault, which will need to be diagnosed and repaired before continuing to step 3. 3. Reprogram the PSCM with the latest calibrations currently available in TIS2WEB, and clear any DTC's which may have set during the programming event. 4. Let the vehicle go to sleep, then restart the engine and check for DTC's. If any DTC's reset, perform normal diagnosis and repair as necessary. 5. If no DTC's reset, it will be necessary to look at all recorded DTC's in step 1 to help determine the original root cause. See additional information/example below.

Service Procedure

Additional Information and Example:

Remember, this PSCM calibration error only causes the DTC's to stay current, which then causes the PSCM messages to appear at each start up.

After reprogramming the PSCM with the latest calibrations, the original root cause of the DTC's may still need to be addressed. See example below.

- Customer brings the vehicle in for an "Action Required Steering Assist is Reduced Drive with Care" message that is displayed each ignition cycle. See DIC message below.



- When checking for DTC's the following codes are found: See also the GDS2 screen print of the DTC's below.

PSCM has two current DTC's U0415 and U0401

EBCM has two history DTC's C0035 and C0045

GDS2			
Stored Data Review			
DTC Details System Information Selected Vehicle Configuration RPO			
Control Module	DTC	Description	Status
Power Steering Control Module	U0415	Invalid Data Received From Electronic Brake Control Module	Current
Power Steering Control Module	U0401	Invalid Data Received From Engine Control Module	Current
Electronic Brake Control Module	C0035	Left Front Wheel Speed Sensor Circuit	History
Electronic Brake Control Module	C0040	Right Front Wheel Speed Sensor Circuit	History

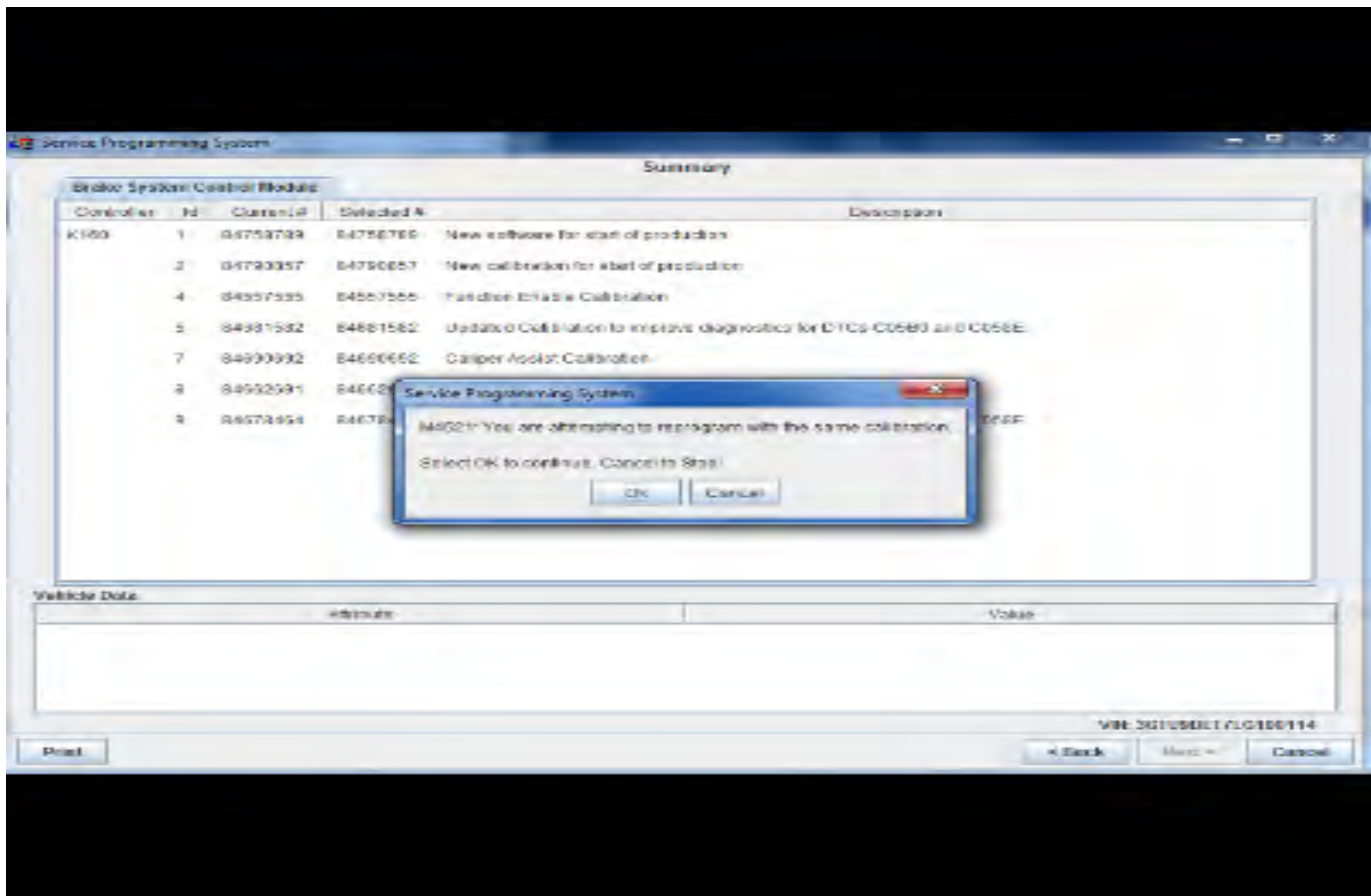
Category		Result
This Ignition Cycle	Passed	
Last Test	Failed Current DTC	
Since DTC Clear	Passed	
DTC History Status	History	
MIL Status	Not Requested	

- When performing normal strategy based diagnosis, a technician would start the vehicle and verify the customer's complaint of the "Action Required Steering Assist is Reduced Drive with Care" message, he or she would find current DTC's set in the PSCM. Finding these current codes may lead a technician down the wrong path, which is why it is important to follow the steps listed above.
- In this example, all the DTC's cleared out and the PSCM was reprogrammed with the latest calibrations available in TIS2WEB.
- Looking back at all the DTC's recorded, the EBCM had two wheel speed sensor DTC's set: C0035 and C0040. These two DTC's would be the original root cause and would need to be addressed.
- If the vehicle was returned to the customer without addressing the EBCM DTC's, he or she may return for service but would be a different complaint, such as, an intermittent ABS MIL and/or Service Stabilitrak message. The same DTC's will be found in the PSCM and EBCM, but now the new PSCM calibration will allow the DTC's to transition to history and there will no longer be a PSCM DIC message displayed at each ignition cycle.

Caution: Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

Note: Carefully read and follow the instructions below.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.



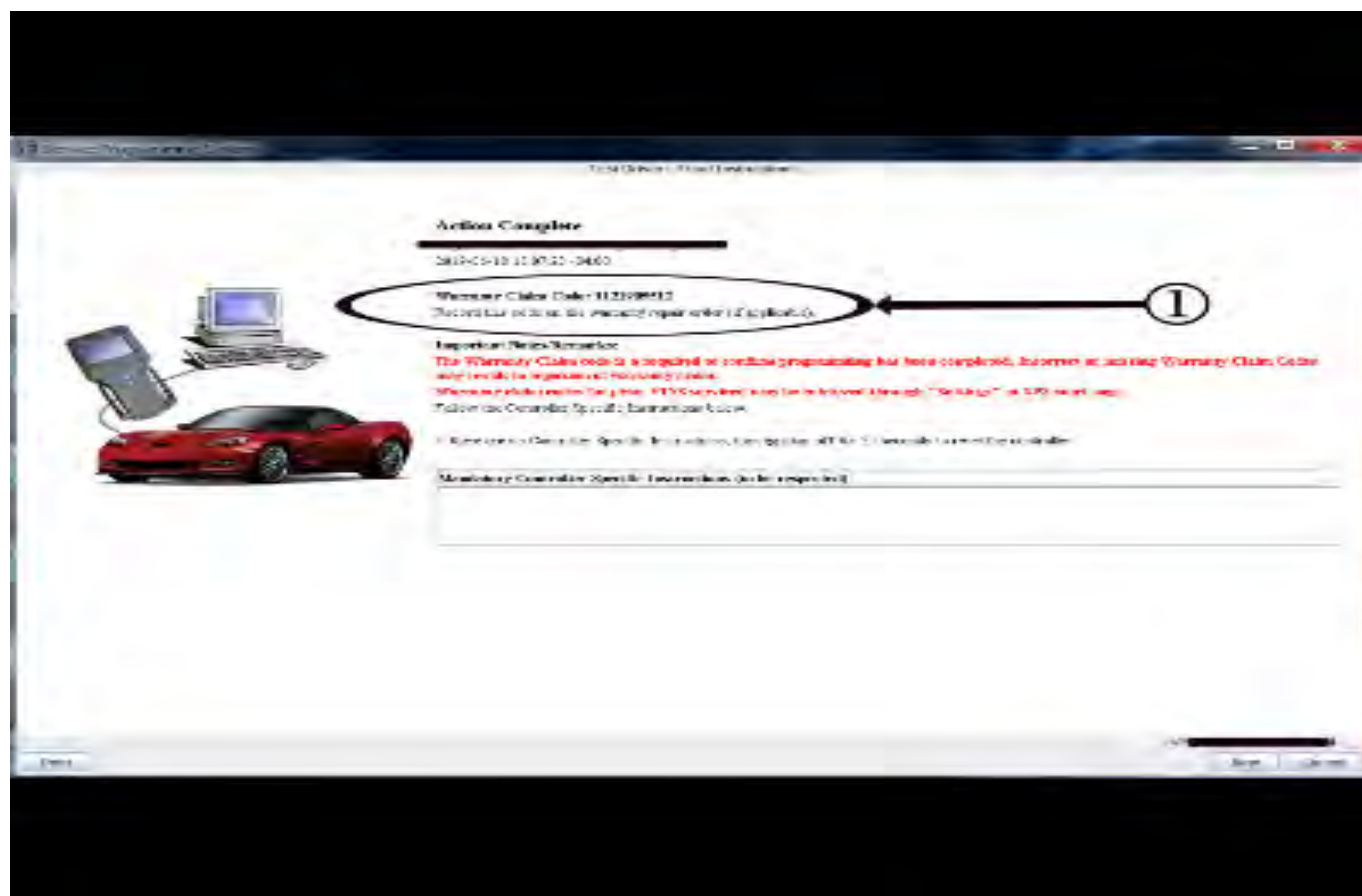
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Important: TIS2WEB screen shown. Techline Connect screen is similar and will be included soon.

Important: If the Same Calibration/Software Warning is noted on the SPS screen, select OK and follow screen instructions. After a successful programming event, the WCC is located in the Service Programming

System dialogue box of the SPS Summary screen. No further action is required. Refer to the Warranty section of the bulletin.

1. Reprogram the Power Steering Control Module. Refer to *K43 Power Steering Control Module: Programming and Setup* in SI.



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Important: TIS2WEB screen shown. Techline Connect screen is similar and will be included soon.

Important: To avoid warranty transaction rejections, you **MUST** record the warranty claim code provided on the SPS Warranty Claim Code (WCC) screen on the job card. Refer to callout 1 above for the location of the WCC on the SPS screen

2. Record SPS Warranty Claim Code on job card for warranty transaction submission.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
*2810625	Power Steering Control Module Reprogramming with SPS	Use Published Labor Operation Time
Important: *To avoid warranty transaction rejections, carefully read and follow the instructions below: <ul style="list-style-type: none"> The SPS Warranty Claim Code must be accurately entered in the "SPS Warranty Claim Code" field of the transaction. When more than one Warranty Claim Code is generated for a programming event, it is required to document all Warranty Claim Codes in the "Correction" field on the job card. Dealers must also enter one of the codes in the "SPS Warranty Claim Code" field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS. 		

Warranty Claim Code Information Retrieval

If the SPS Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

1. Open TIS on the computer used to program the vehicle.
2. Select and start SPS.
3. Select Settings.
4. Select the Warranty Claim Code tab.

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Additional SI Keywords

C0176 C0475 c0544 c0545 C056D C0045 C0050 U0100 U0101 U0140 U0121 U0126 U0131

Version	1
Modified	Released May 28, 2020

