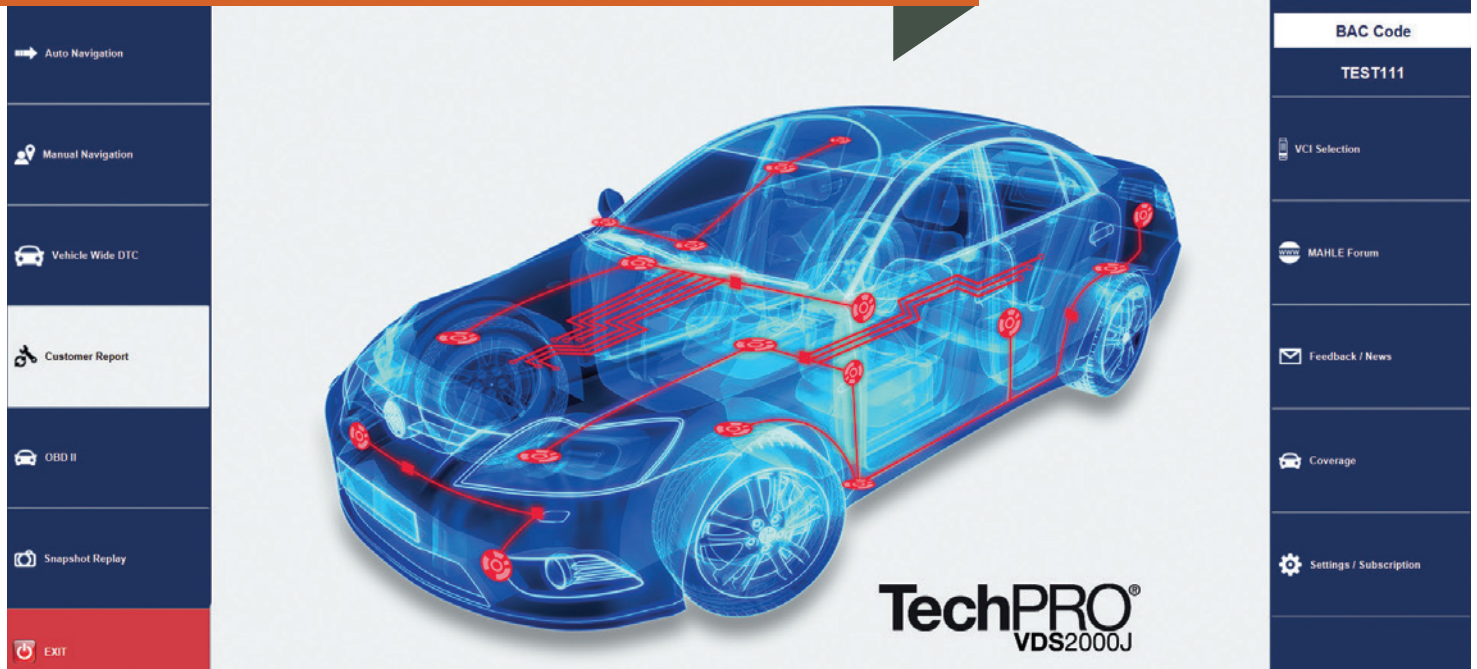
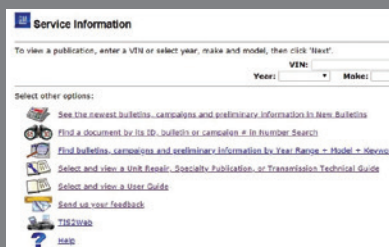


New TechPRO

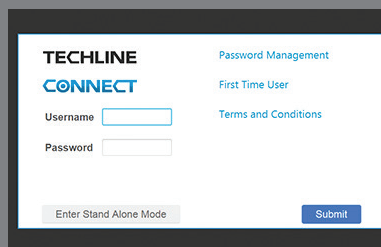


Diagnostic App for Non-GM Vehicles



Check the Service Information Every Time, Every Repair

see page 3



Techline Connect Rollout Complete – Install the App Today

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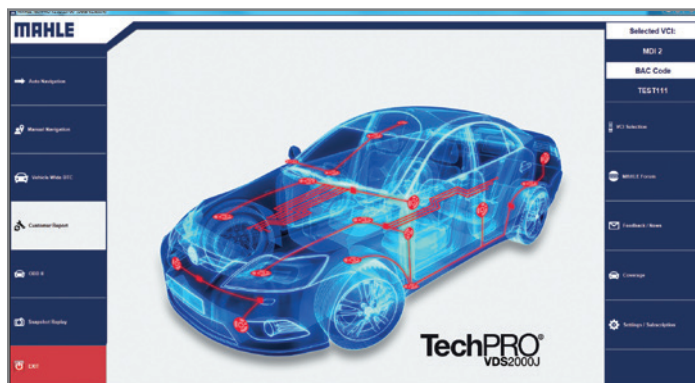
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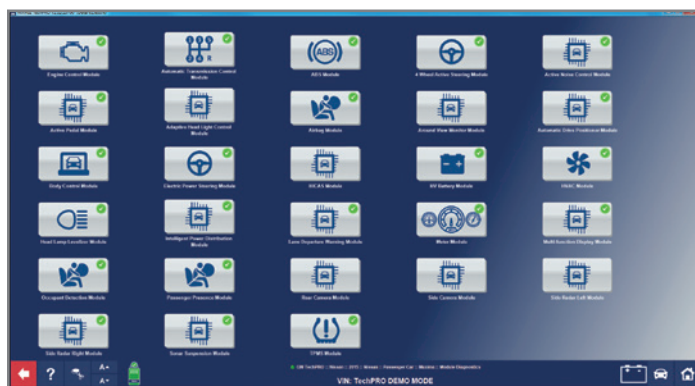
New TechPRO Diagnostic App for Non-GM Vehicles

The used car departments and collision repair centers of GM dealerships (U.S.) now have a new way to diagnose non-GM vehicles — the MAHLE TechPRO Professional Aftermarket Diagnostics. With no new hardware needed, the TechPRO software diagnostics application uses the dealership's current Techline computer and the MDI/MDI 2 to scan, analyze, diagnose and repair most non-GM makes and models.



MAHLE TechPRO Professional Aftermarket Diagnostics

The TechPRO application has functions similar to GDS 2, providing diagnostic data on a number of control modules, including the ECM, BCM, TCM, ABS, HVAC, TPMS and many others. With the application installed on a Techline PC, users can make their VCI Device Selection (MDI or MDI 2) from the menu on the home page and then begin to gather data from the vehicle.



All vehicle control modules are identified.

Once connected to a vehicle, select Auto Navigation to read the VIN or click Manual Navigation to enter the make, model, and year of a vehicle.

To automatically perform an all module DTC check on the vehicle, select the Vehicle Wide DTC option. The software decodes a VIN within seconds and reports all DTCs from the control modules on the vehicle.

The application also has snapshot replay and graphing functions to assist with reviewing and analyzing vehicle data.



Chart and graph data.

GETTING STARTED

Annual subscriptions for the software application cover the entire dealership and can be installed and run on any dealership computer. Downloads are available through mahletechpro.com/gm.

For more information on getting started using the TechPRO application, view the TechPRO Quick Start Guide on the TechLink website. It includes tips on downloading and installing the application, selecting a subscription, and how to use some of the application's features.



TechPRO Quick Start Guide

► Thanks to Chris Henley

Check the Service Information Every Time, Every Repair

The GM Service Information (SI) is updated daily in order to provide technicians with the latest, most accurate information available to diagnose and repair GM vehicles. Since the Service Information is updated regularly, it's important to always review the service procedures before beginning the repair in order to confirm the latest procedures are being followed, even if it's a well-known or common repair.

If a new or updated repair procedure has been published, but it's not known by the technician making the repair, more time may be spent performing additional procedures that aren't necessary.

CONTINUOUS UPDATES

As part of GM's initiative to develop innovative approaches to repairs, service procedures are continuously reviewed to ensure each step provides a safe, effective and efficient repair.

As the best approach to a repair is considered, opportunities to make the repair more efficient and easier for the technician are analyzed, including reducing unnecessary disruption to unaffected components and minimizing parts removal and/or the mandatory replacement of bolts, fasteners, gaskets, etc. These efficiencies lead to a shorter vehicle downtime and reduce the potential for future vehicle issues caused by the disruption of unaffected components.

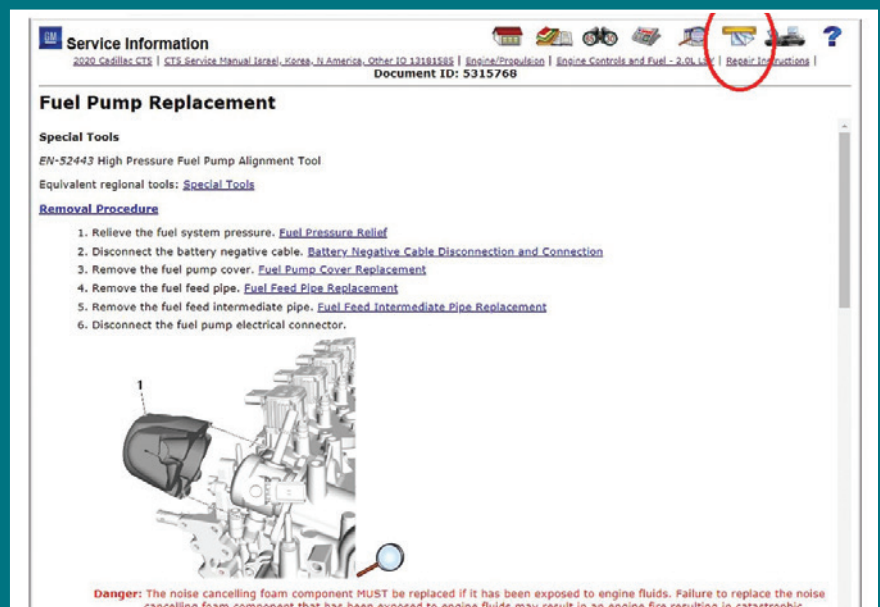
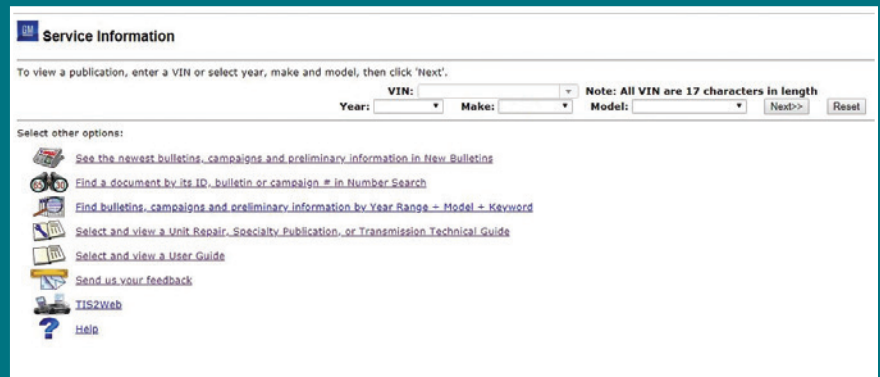
Once any new procedures have been thoroughly developed and tested, the written service manual procedures are updated in the Service Information. New procedures that are developed follow the standard labor time study process of using no power tools, following the service manual procedures step by step, and providing a 21% mark-up at the end of the study.

SI FEEDBACK

Feedback and suggestions for changes on any of the Service Information publications, including the service manuals, bulletins and unit repair manuals, are welcome. Links to the feedback form can be found in several areas to make it easy to provide your comments.

- On the Service Information home page, select the "Send us your feedback" link next to the mailbox icon under the list of options.
- Once a vehicle is built, each menu page has a feedback link in the upper right corner of the page. It's the same mailbox icon. Click the icon to open the feedback form.
- On every document in the Service Information, the same feedback link (mailbox icon) can be found in the upper right corner. When selecting the link from this page, a portion of the form will be auto-filled based on the SI document, making it easy to comment on the information currently being viewed.

► Thanks to Scott Barone



Techline Connect

Rollout Complete – Install the App Today

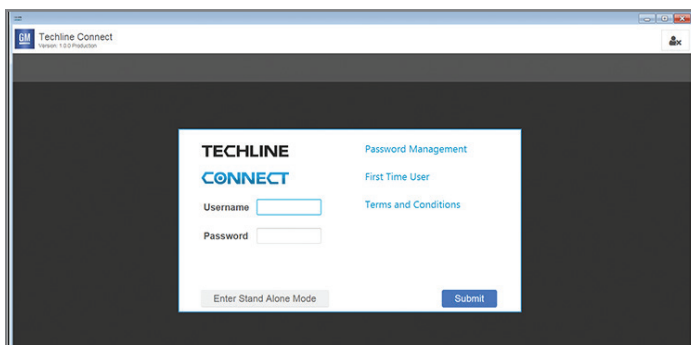
The rollout for Techline Connect (TLC), the replacement application for TIS2Web, is now complete for all U.S. dealerships. The rollout for Canadian dealerships will begin in early December. Technicians that have not downloaded and installed the new application are encouraged to do so now.

Techline Connect is GM's latest service tool developed for and with input by technicians. It brings diagnostic information and vehicle data together in one easy-to-use application, with integration of one-time VIN entry for Service Information, GDS2, Service Programming System (SPS) and Investigate Vehicle History (IVH).

PREPARING FOR DOWNLOAD

Prior to installation of Techline Connect on a PC, ensure it meets the requirement of Windows 10 Professional, 8 GB RAM or more and 100 GB of free drive space.

Use the PC Analyzer in TIS2Web to help determine if a computer is equipped to properly run Techline Connect. The Analyzer will capture the operating system, disk space, memory (RAM), processor type and generation. The results will show how the PC compares to the TLC minimum requirements.



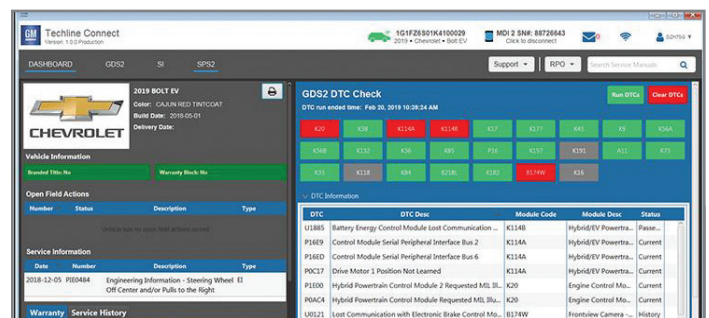
Click the TLC icon to launch the application and enter your GlobalConnect credentials.

After downloading the new application via the TIS home page or from the TLC tab in TIS2Web, an icon will appear on the PC desktop. Click the icon to launch the application. Log in using your GlobalConnect credentials. Plan about 30 minutes for download and installation.

A User Guide and short training video are located on the new TLC tab on TIS2Web. STC course 10040.15V Techline Connect Overview and Installation also is available on the Center of Learning website.

VEHICLE INFORMATION ON THE DASHBOARD

Once connected to a vehicle, all information and applications are available on a technician-friendly dashboard that automatically displays IVH information, Field Actions and Warranty History along with a new Vehicle State-of-Health function — a vehicle-wide system check right from the dashboard that includes an overview of the vehicle being repaired.



Techline Connect dashboard

Technicians can use Techline Connect and TIS2Web concurrently, providing an opportunity to become familiar with the new application and learn its benefits. After a period of time, TIS2Web will be decommissioned. When that date approaches, multiple communications will be distributed.

NEW ENHANCEMENTS

Based on recent Techline Connect feedback from early users, several enhancements have been made to the application. Enhancements to the app will be made on a regular basis, including updates based on user feedback as well as additional features and expanded functions, which may require the app to be reinstalled.

Some of the recent enhancements include:

- Improved dashboard navigation when selecting a VIN or Year/Make/Model. The update simplifies getting started with a vehicle information search.
- Improved DTC Check performance.
- Improved printer selection function that allows the user to print directly to a default printer.

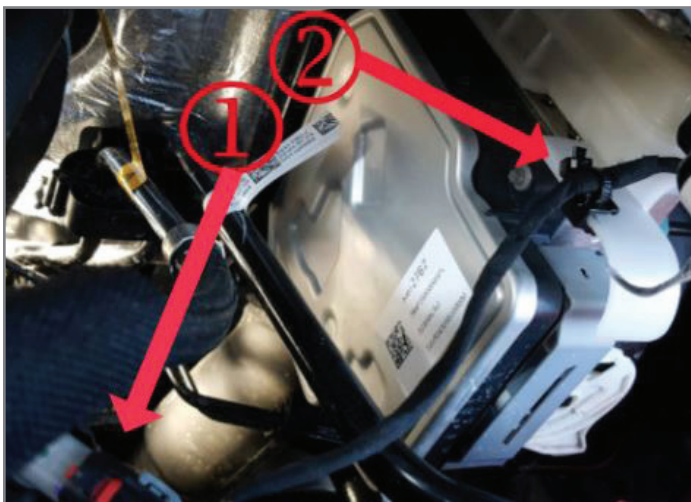
Any questions about Techline Connect can be directed to the Techline Customer Support Center (TCSC) at 1-800-828-6860 or via email to TLC.Support@gm.com.

► Thanks to Mike Waszczenko

Unable to Deactivate Brake Boost System in GDS 2

After the Brake Master Cylinder Assembly has been replaced on 2019-2020 XT4 models, a GDS 2 error message may display when trying to deactivate the brake boost system when performing the hydraulic bleed procedure.

Being unable to deactivate the brake boost system may be caused by the B20 Brake Fluid Level Switch and the B34D Engine Coolant Temperature Sensor 4 Connector being swapped during reassembly. If these connectors are swapped, DTCs C0049 SYM05 (Low Brake Fluid Indicated) will be stored in the Electronic Brake Control Module (EBCM) and a P2AFF SYM (Engine Coolant Temperature Sensor 4 Circuit High Voltage) will be stored in the Engine Control Module (ECM).



Engine Coolant Temperature Sensor 4 (#1)

The Brake Fluid Level Switch Connector and the Engine Coolant Temperature Sensor 4 Connector are identical and can be easily swapped. The harness retainers and the wire colors are different.

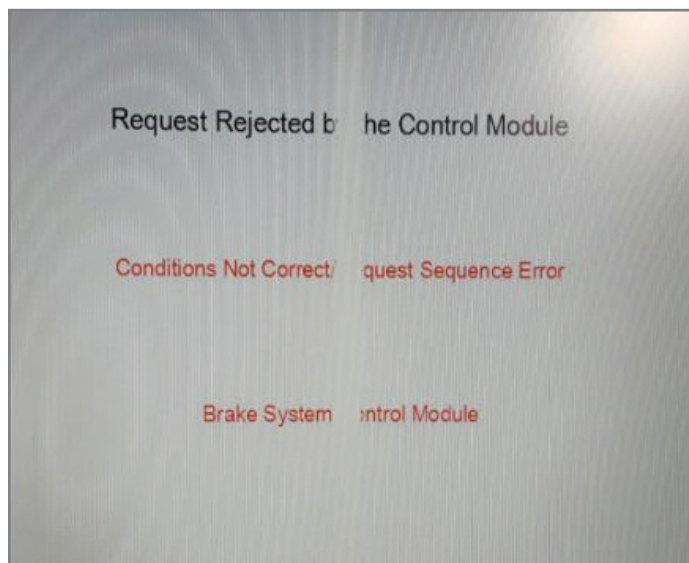
Shown are the correct connections of the Engine Coolant Temperature Sensor 4 (Fig. 1) and Brake Fluid Level Sensor. (Fig. 2)

If the GDS 2 error message is displayed, verify that the connectors are in the correct location.

► Thanks to Christopher Hightower



Brake Fluid Level Sensor

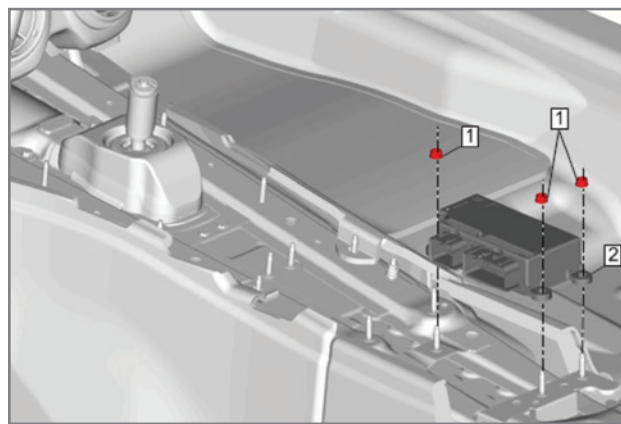


GDS 2 error message

Unwanted Power Door Unlock Command

The power door locks may unlock three times in succession immediately after auto locking, usually at start-up or while driving, on some 2016-2020 Camaro models. The unwanted unlocking may occur after the vehicle has been in an accident where the vehicle's airbags and/or seatbelts have been replaced due to deployment. In addition, it may be found that the Sensing and Diagnostic Module (SDM) may not have been replaced because DTC B0052 (Deployment Commanded Circuit) was cleared successfully in the past.

Using a scan tool, build the vehicle and select "Inflatable Restraint Sensing and Diagnostic Module," followed by "Identification Information." If the value for Software Module 1 Identifier is greater than 0 (zero), the SDM had previously commanded a deployment and it is the source of the door unlock command.



Inflatable Restraint Sensing and Diagnostic Module

The unwanted unlocking source can be confirmed by removing the fuse that provides B+ to the SDM. If the doors no longer unlock three times in succession with the fuse removed, the K36 Inflatable Restraint Sensing and Diagnostic Module will require replacement.

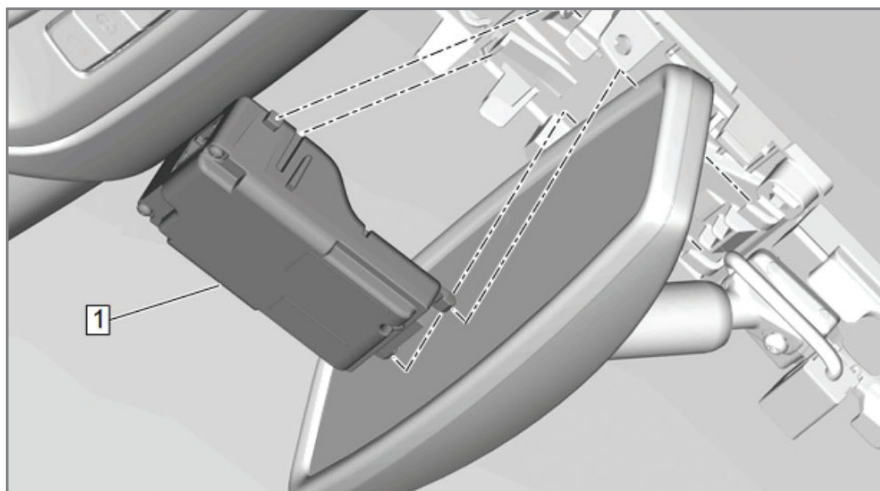
Refer to Repairs and Inspections Required After a Collision in the appropriate Service Information for more information about the actions that must be taken after a vehicle has been in an accident.

► Thanks to Matt Bierlein

Lane Keep Assist Icon Missing from Instrument Cluster

The Lane Keep Assist icon may not appear on the instrument cluster on some 2019-2020 Silverado 1500 and Sierra 1500 models. In addition, the Lane Keep Assist switch LED indicator always stays illuminated, the Forward Collision Alert Gap switch is inoperative. The Forward Collision Alert and Forward Automatic Braking Alert icon (green car) will illuminate properly on the instrument cluster when a vehicle is detected ahead.

The incorrect icon operation and inoperative Forward Collision Alert Gap switch may be caused by the B174W Frontview Camera – Windshield Module not being configured properly after a Service Programming System (SPS) programming event.



Frontview Camera – Windshield Module

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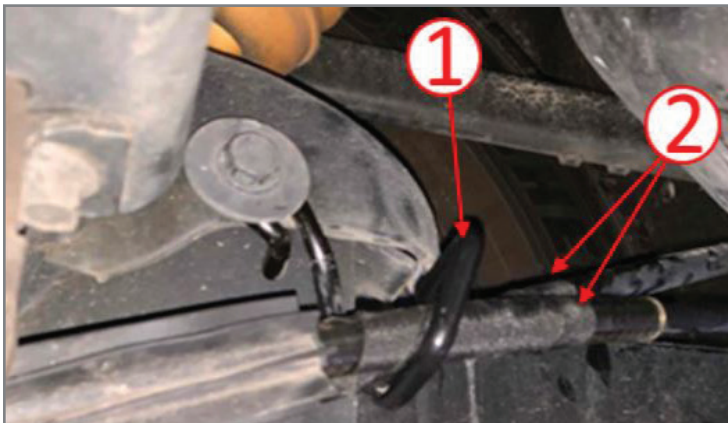
Parking Brake Cable Squeak Sound

Some 2015-2020 Tahoe, Suburban, Yukon and Escalade models may have a squeak sound heard from under the vehicle while driving at slow speeds. The sound may be caused by the parking brake cables rubbing against each other or alongside the body.

If the squeak sound is heard, inspect the location of the parking brake cables near the parking brake cable bracket. Apply woven Polyester Electrical Tape (PET) to both cables in a double layer extending along the cable. Ensure that the tape extends at least 25 mm (1 inch) above and below the rubbing point at the parking brake cable bracket or body.

Follow the parking brake cables alongside the body, checking for any contact with the body. If the cables are contacting the body, apply PET to the cable. Make sure the tape is applied in a double layer extending along the cable.

► Thanks to Hassan Abdallah



1. Parking brake cable bracket
2. Tape both cables



Check for contact between the cable and the body.

CONTINUED FROM PAGE 6

Perform all programming and configuration procedures in the appropriate Service Information using SPS. Also perform the Frontview Camera Module Learn procedure in order to calibrate the Frontview Camera Module.

After programming, a current DTC may be set in the Frontview Camera – Windshield Module that is unable to be cleared. This is normal and an indicator that the Frontview Camera – Windshield Module is in Learn mode.

TIP: Anytime the Frontview Camera – Windshield Module is removed from its mount on the windshield, including replacement of the module as well as any time the module is removed for diagnosis or windshield replacement, the Frontview Camera Module Learn procedure must be performed.

When the correct driving conditions are met, the calibration process can be completed within 3–5 minutes. If conditions are not met, the Frontview Camera will continuously run the calibration until successfully completed. The calibration will work across ignition cycles and is not required to be re-initialized at start up. If the Lane Departure Warning switch is pressed during calibration, the Lane Departure Warning switch indicator will flash momentarily and then remain not illuminated.

The calibration procedure may start automatically after SPS programming is complete. If the calibration does not begin automatically after SPS programming or if any diagnostic procedure requires calibration to be performed, use a scan tool to begin the calibration procedure.

► Thanks to Paul Radzwilowicz



Your Thoughts? Tell Us in the TechLink Survey

From the latest diagnostic and technical repair information to new model features and special tools, our goal at TechLink is to bring you the latest news on GM service topics that affect dealership service departments. The more information available to you, the more quickly and accurately you can repair the vehicles that come into your service department every day.

To ensure the topics you need are covered here on TechLink, we would like to hear from technicians and other service department professionals in GM dealerships. Your feedback will help in determining the coverage of future subjects. So which topics are of interest and value to you?

To take a short survey about the information you want most in TechLink, click the Survey button or click the Survey link on the right side of the TechLink home page.

Your input is very important to us. Thanks for taking the time to complete the survey. We'll share the results soon.

► Thanks to Lisa Scott



GM TechLink is published for all GM retail technicians and service consultants to provide timely information to help increase knowledge about GM products and improve the performance of the service department.

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