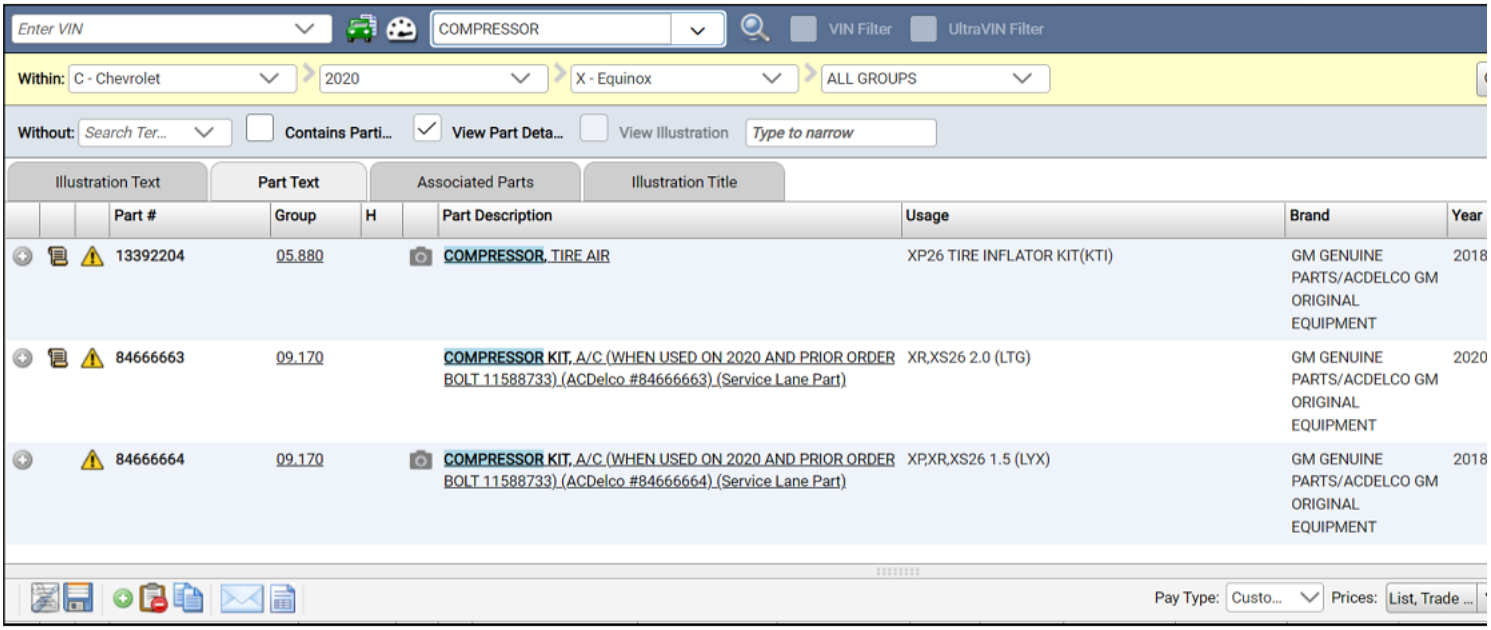
TECH LINK

June 2023, Volume 25, No. 11



GM Global EPC Update

ENHANCES SEARCH FUNCTIONS AND PART VIEW OPTIONS

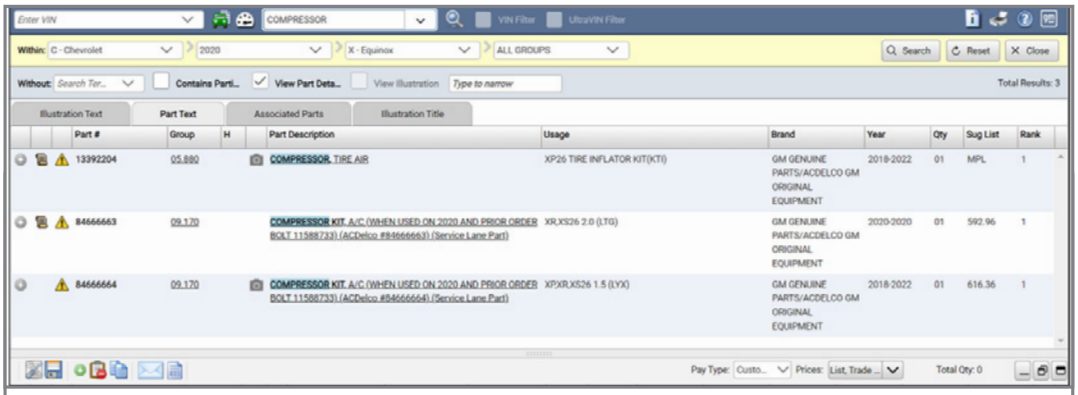
The GM Global Electronic Parts Catalog (EPC) was recently updated with a number of enhanced features that add to the search functions of the EPC.

GM Global EPC Update

Many of the new features in the latest release of the EPC were driven by suggestions from EPC users at GM dealerships. Here's a look at some of the new functions.

SEARCH RESULTS

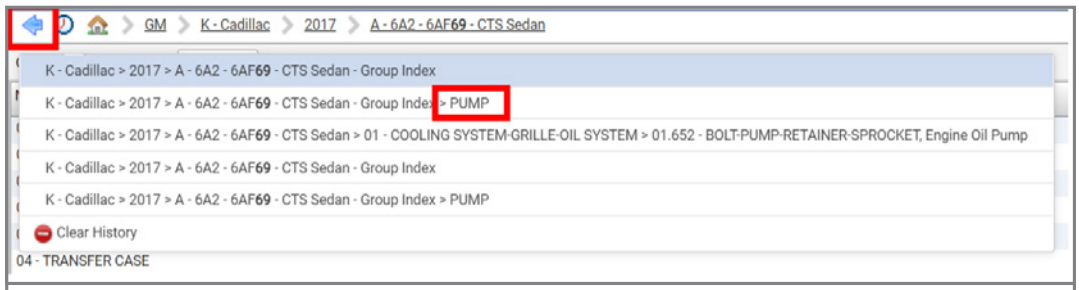
The part brand is now considered when listing search results. The Part Text search results are sorted by brand, and then by the part description within each rank.



The Part Text search results are sorted by brand.

SEARCH HISTORY

Prior search results can be viewed using the Navigation History menu, allowing multiple results to be checked without starting a new search. Previously, neither the back button or navigation history would return the user to the original search results once a selection was made.

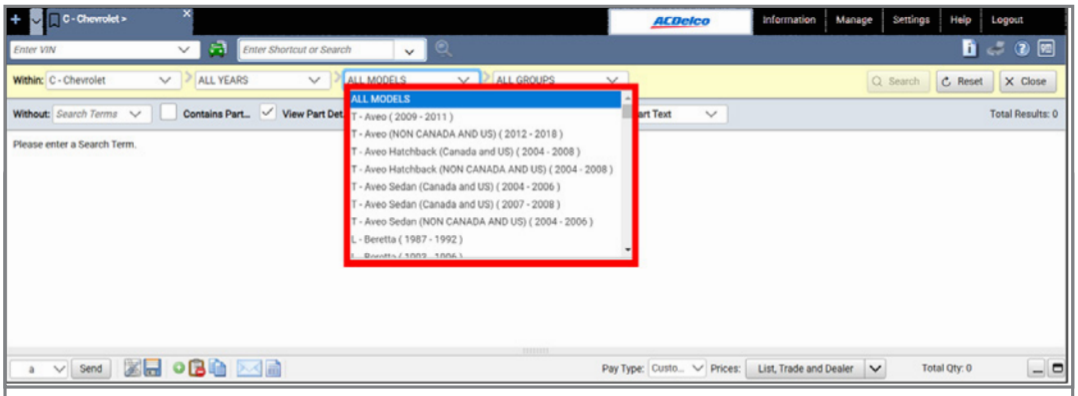


Use Navigation History or the back button to view previous search results.

In addition, now using the back button will return to previous searches in the appropriate historical order.

SEARCH MODEL ACROSS ALL YEARS

The search criteria has been updated to include all years for a selected make and model. Previously, it was necessary to specify a single year before being able to select a model in the dropdown menu.



Search criteria can include all years for a selected make and model.

Choose any model's corresponding catalog (by year range) in the dropdown menu to search all years within that selected catalog, which lists the full year ranges for a given model. The search results will display for all available years for the model selected.

CONTINUED ON PAGE 3

NOTES DISPLAYED IN PART HISTORY

In the past, detailed notes that were added at the part number level were no long available to view when the old part number was replaced in the EPC. User notes now display in the EPC for historical part numbers. A user-added note indicator is shown in both Side-by-Side and Part Text displays.

EXCEPTION CRITERIA HIGHLIGHTED

To make it easier to identify parts that are not indicated for the vehicle being serviced and to help avoid ordering the wrong parts, exceptions (such as in part usage and illustration titles) are displayed with a red, bold, italic EXC.

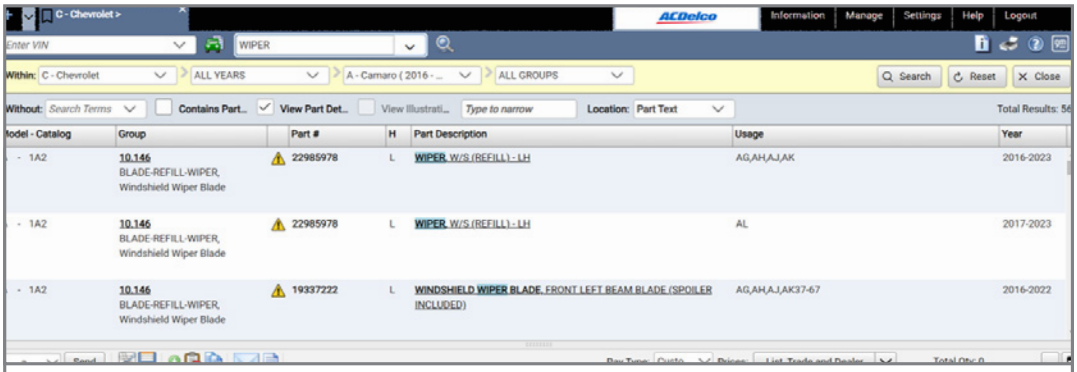
PART IMAGE VIEWS

Part images can be viewed several ways, including panning to a preferred area of the photo or zooming in for a more detailed view. Left click the mouse to grab and move the photo.

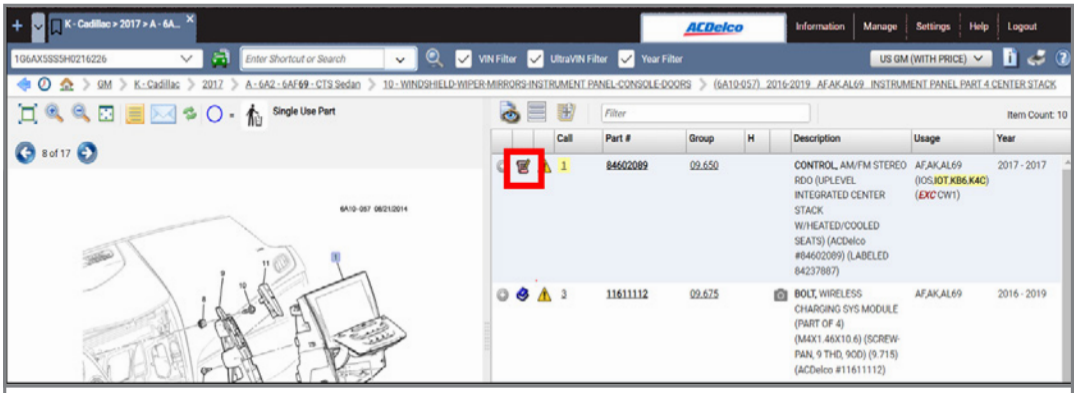
The latest GM Global EPC update was released in June 2023. The EPC link is available on your GlobalConnect Parts Workbench.

For questions or support when using the Global EPC, the GM EPC Technical Support help desk at 1-888-994-6372.

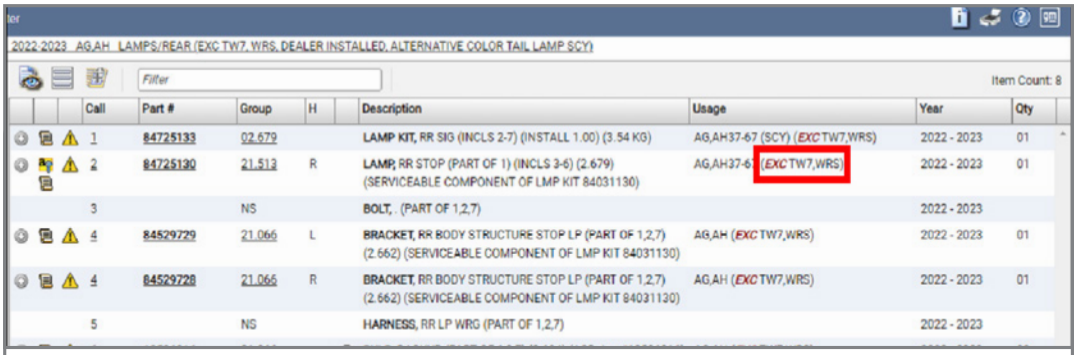
▶ Thanks to Mary Daly and Nicole Schulz



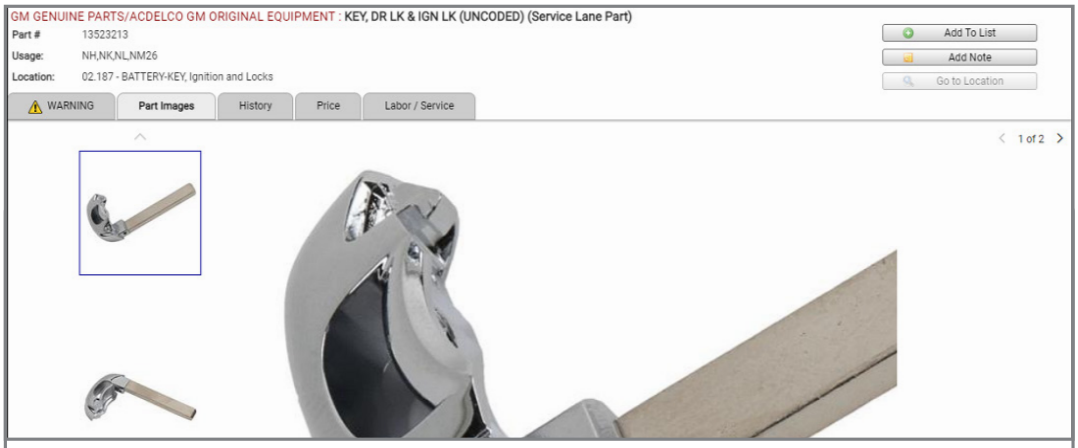
Search results will display for all available years for the model selected.



User-added note indicator



Part exceptions are displayed with a red, bold, italic EXC.



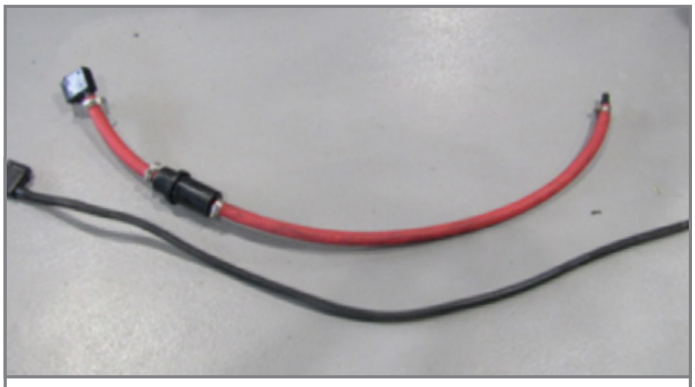
Zoom in or pan across parts photos

DUST INTRUSION

IN THE EVAP SYSTEM

When operated in extremely dusty environments, there may be some dust intrusion into the evaporative emission (EVAP) system that can plug the canister and canister vent solenoid on some 2019-2023 Silverado 1500, Sierra 1500; 2022 Silverado 1500 LTD, Sierra 1500 Limited; 2020-2024 Silverado 2500HD/3500HD and Sierra 2500HD/3500HD models. DTCs P0442 (Evaporative Emission System Small Leak Detected), P0446 (EVAP Vent System Performance), P0455 (Evaporative Emission System Large Leak Detected) or P0449 (Evaporative Emission Canister Vent Valve Control Circuit) also may set.

An in-line filter may be installed between the EVAP canister and air inlet to address this condition. Shown is an original EVAP canister vent hose and a modified vent hose with the filter assembly.



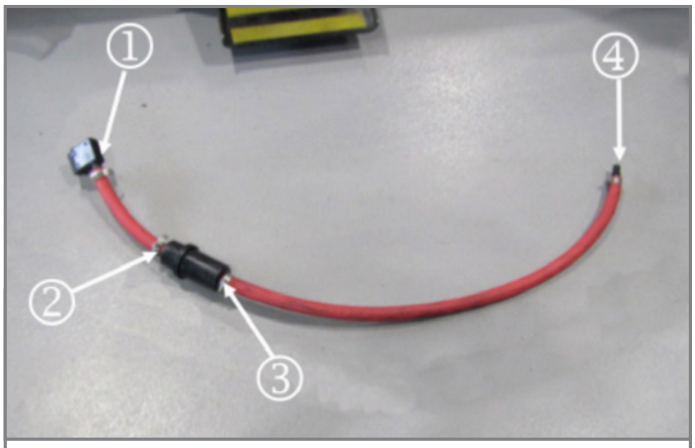
An example of the original (top) and the retrofit

Filter assembly with filter (1)

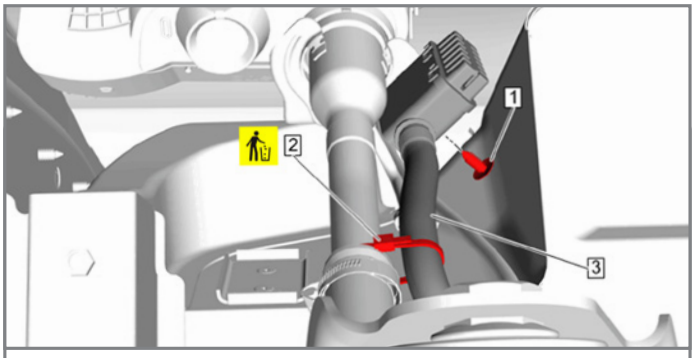
TIP: The retrofit to add the in-line filter is a customer-pay repair. The filter is meant to be a maintenance item that should be checked periodically to help prevent dust intrusion in the EVAP system.

The filter assembly features three parts, including the in-line filter, that is installed as part of the EVAP canister vent hose. Refer to Evaporative Emission Canister Vent Hose Replacement (Filler Pipe to Pipe) in the appropriate Service Information.

After the in-line filter assembly is installed in a new hose section, the hose is secured to the pre-filter and to a male fitting that connects to the quick connect fitting on the canister vent solenoid jumper line.



In-line filter secured to the hose assembly (#2 and #3). The hose is secured to the pre-filter (#1) and a male fitting connecting to the canister vent jumper line.



VAP vent hose (#3)

CONTINUED ON PAGE 5

Diagnosing History DTCs

During vehicle diagnosis, a key part of Strategy Based Diagnosis is to check for current and history DTCs. It's important to understand DTC status, its relationship to diagnosing a vehicle and if the fault is currently present on the vehicle.

Each DTC represents the status of a particular internal test within a control module. Given appropriate conditions, the control module will begin actively monitoring conditions specified by the diagnostic. For history DTCs, the fault is not currently present on the vehicle. This information can be helpful in determining the root cause of a condition, but the history DTC by itself does not indicate a current issue with a component.

SERVICE BULLETINS

In the past, Bulletins have been released in the Service Information identifying certain DTCs set in history that could be ignored on certain vehicles with a particular condition. The Bulletins would address common misdiagnosis of some vehicle conditions or list DTCs set in history that were not related to the condition.

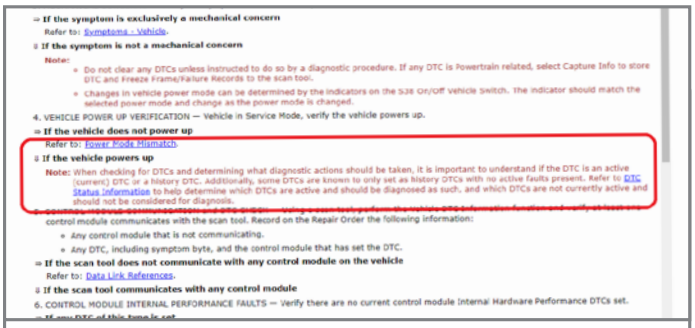
Starting with the 2024 model year, these types of Bulletins will no longer be published. Additional information has been added to some Service Information documents to help clarify DTC-related diagnosis.

For example, in the Diagnostic System Check – Vehicle document, under Vehicle Power Up Verification, the following information has been added:

Note: When checking for DTCs and determining what diagnostic actions should be taken, it is important to understand if the DTC is an active (current) DTC or a history DTC. Additionally, some DTCs are known to only set as history DTCs with no active faults present. Refer to DTC Status Information to help determine which DTCs are active and should be diagnosed as such, and which DTCs are not currently active and should not be considered for diagnosis.

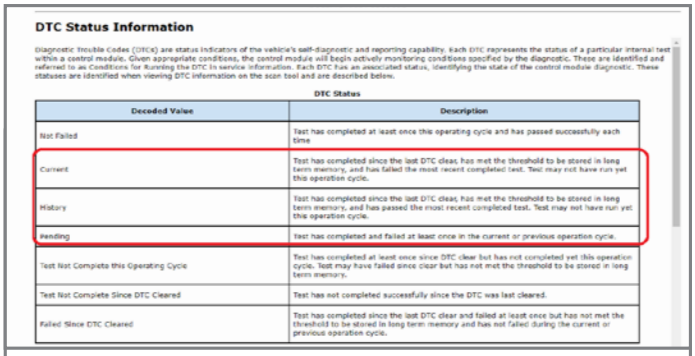
HISTORY DTCS

Diagnostic procedures are written only for an active fault with



Diagnostic System Check – Vehicle

a current DTC. History DTCs related to the customer complaint may be used as a guide or indicator for replicating the condition that caused the DTC to set. Review the Conditions for Running the DTC in a DTC diagnostic procedure for help in recreating the conditions necessary for the DTC to run. Information within the DTC diagnostic procedure, such as the Fault Information table or Conditions for Setting the DTC, also may be helpful in recreating an intermittent DTC.



DTC Status Information

For more information about current and history DTCs as well as the conditions for running the DTCs, refer to DTC Status Information in the appropriate Service Information.

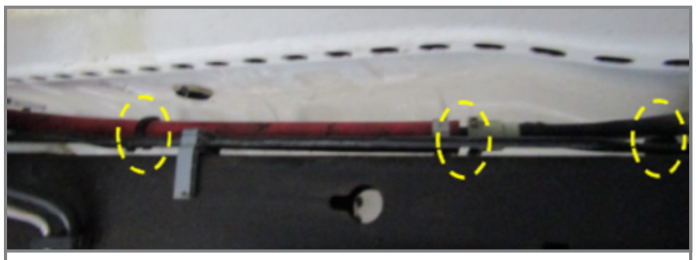
▶ Thanks to Peter Joslyn and Mike Waszczenko

DUST INTRUSION, CONT.

With the new hose and in-line filter assembly installed on the EVAP canister vent hose, secure the new hose at the same locations as the previous line.

Refer to Bulletin #23-NA-073 for additional information and part numbers.

▶ Thanks to Kevin Minor



Secure the new hose at the same locations as the previous line.

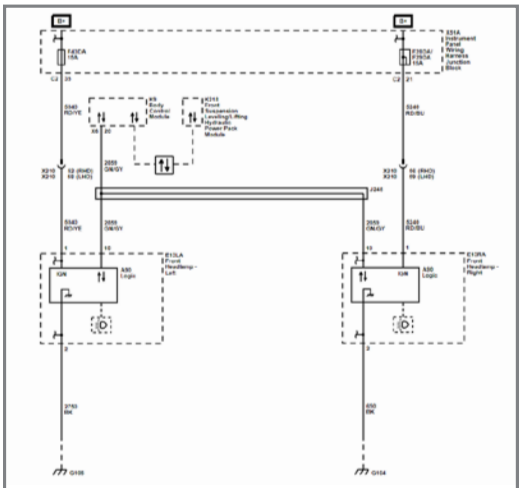
Service Headlamp System Message

A Service Headlamp System message may be displayed on the Driver Information Center (DIC) on some 2020-2023 Corvette models equipped with the Front Lift System (RPO E60). The message may be displayed without any noticeable symptoms on the vehicle. All headlamps and exterior lighting functions may work correctly and no DTCs may be set.

The Service Headlamp System message may display on models equipped with the Front Lift System.

To address the Service Headlamp System message, closely inspect all areas of LIN bus 13 / circuit 2859 that runs from the headlamp capsules to the Body Control Module (BCM). The purpose of this circuit is to command the leveling portion of the headlamps up and down in response to the activation of the front suspension lift system.

The front suspension position sensors provide the K218 Front Suspension Leveling/Lifting Hydraulic Power Pack Module with suspension position information, which sends this information through serial data to the BCM. The BCM responds by sending this information through serial data on LIN bus 13 to each headlamp assembly. The headlamp assemblies respond by adjusting the headlamp low/high beams to the appropriate position to compensate for the suspension position of the vehicle.



LIN bus 13 / circuit 2859 runs from the headlamp capsules to the BCM.

When the vehicle is started, the BCM sends out a test signal to each headlamp to confirm the LIN bus is working correctly. If the message is not received and responded to, the Service Headlamp System message is displayed in the DIC.

When checking the LIN bus, there is not a way to tell where an issue may exist in the circuit. It will be necessary to physically inspect the entire circuit, looking for any open or ground concerns, on both sides of the vehicle.

Refer to #PIC6512 for more information.

Thanks to Matt Bierlein

TECH LINK

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.

Publisher:
Ravishankar Bommanahally
GM Customer Care and Aftersales

Editor:
Chris Henley
GM Customer Care and Aftersales

Technical Editor:
Mark Spencer
mspencer@gpstrategies.com

Production Manager:
Marie Meredith

Creative Design:
5by5 Design LLC
dkelly@5by5dzign.com

Write to:
TechLink
PO Box 500, Troy, MI 48007-0500

GM TechLink on the Web:
GM GlobalConnect