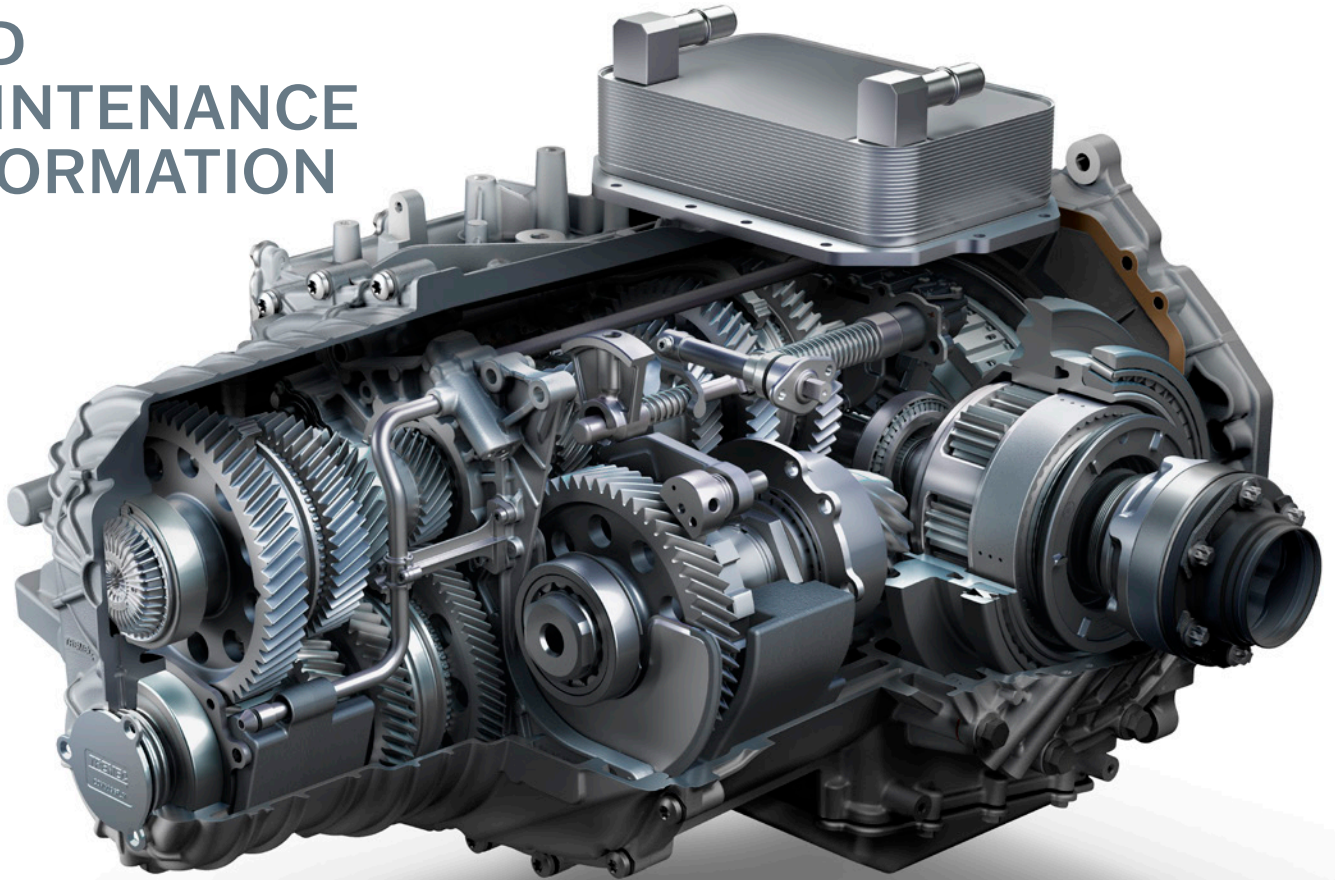


Corvette Transmission Canister Filter

AND MAINTENANCE INFORMATION



The Tremec DCT TR9080 dual clutch transmission (RPO M1L, M1M) on 2020-2024 Corvettes features a transmission canister filter that should be replaced at the initial 7,500-mile (12,000-km) maintenance service. After the initial service, the canister filter should be changed at 22,500 miles (36,000 km) and then at regular 22,500-mile (36,000-km) intervals.

Corvette Transmission
Canister Filter and Maintenance
Information..... 2

Starter or Flywheel Noise
and Fuse Block Matching 5

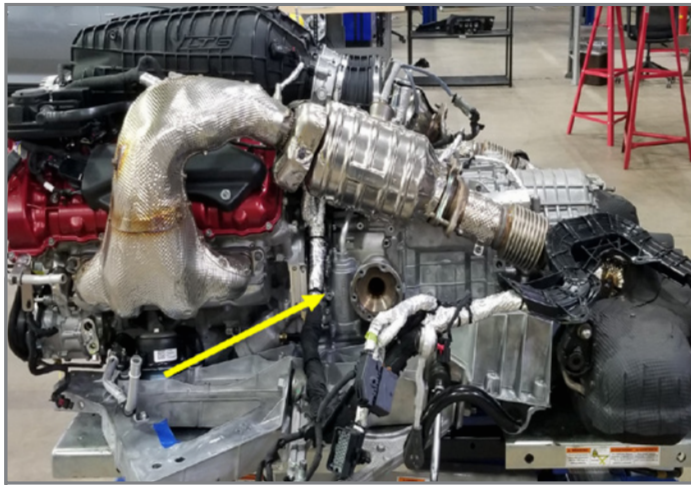
Battery State of Charge
Prevents Radio Programming..... 6

Trailer Brake Control
Module Update..... 7

Corvette Transmission Canister Filter

The canister filter change in the first 7,500 miles (12,000 km) is critical due to the initial break-in of the internal transmission components.

Check the maintenance schedule in the appropriate Service Information for complete maintenance information.



Transmission canister filter



The initial filter change should be at 7,500 miles (12,000 km).

MAINTENANCE COVERAGE

GM has extended maintenance coverage of the filter to two years or 7,500 miles (12,000 km), whichever comes first, on the first filter change to cover vehicles that do not accumulate 7,500 miles in the first year. It is recommended to only replace the filter at the required maintenance intervals due to the loading characteristics of the filter.

Changing the canister filter at 7,500 miles (12,000 km) has been identified by Engineering as the period when the most contaminants may be created due to the break-in of the transmission components. Engineering recommends that the filter be changed as close to 7,500 miles (12,000 km) as possible – plus/minus 1,000 miles (1,600 km) should not be detrimental.

The filter does not need to be changed earlier than 7,500 miles (12,000 km). Additional filter changes can be performed, but the recommended mileage intervals should still be followed for regular maintenance. For example, if a customer elects to have the filter changed before 7,500 miles (12,000 km), it should be changed again at 7,500 miles (12,000 km). GM will only cover one filter change.

Service Information											
Maintenance Schedule (US/CAN)											
<ul style="list-style-type: none"> Visually inspect gas strut for signs of wear, cracks, or other damage. Check the hold open ability of the strut. If the hold open is low, service the gas strut. See Gas Strut(s). 											
	12 000 km/7,500 mi	24 000 km/15,000 mi	36 000 km/22,500 mi	48 000 km/30,000 mi	60 000 km/37,500 mi	72 000 km/45,000 mi	84 000 km/52,500 mi	96 000 km/60,000 mi	108 000 km/67,500 mi	120 000 km/75,000 mi	132 000 km/82,500 mi
Maintenance Schedule Additional Required Services - Normal											
Perform Required Services. Check engine oil level and oil life percentage. Change engine oil and filter, if needed.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check engine air filter life percentage and status. Change engine air filter, if needed. (1)			✓	✓	✓	✓	✓	✓	✓	✓	✓
Replace passenger compartment air filter. (2)				✓	✓	✓	✓	✓	✓	✓	✓
Inspect evaporative control system. (3)					✓	✓	✓	✓	✓	✓	✓
Check the dual clutch transmission fluid life percentage. Change the fluid if needed. (4)											
Change the dual clutch transmission canister filter. (5)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Replace spark plugs. Inspect spark plug wires and/or boots.											

CONTINUED ON PAGE 3

If a transmission is replaced, it should be treated the same as the new vehicle break-in period. The canister filter maintenance should restart as if it was a new vehicle, with the next filter change at 7,500 miles (12,000 km) after transmission replacement.

TIP: Filter change information should be shared with your service advisors and service management. GM will be reviewing maintenance records on transmission warranty claims. Lack of maintenance on the canister filter cartridge may affect warranty coverage.



2023 Corvettes feature a maintenance minder for the transmission filter.

MAINTENANCE MINDER

Beginning with the 2023 model year, the Corvette has a maintenance minder on the Driver Information Center that will display a maintenance message shortly before the 7,500-mile (12,000-km) maintenance interval. The message also will appear every 22,500 miles (36,000 km). The transmission filter minder cannot be reset like the engine oil life monitor.

If the transmission is replaced, customers will need to keep track of the mileage, starting with the first 7,500-mile (12,000-km) maintenance service for the new transmission.

TRANSMISSION FLUID AND FILTER INFORMATION IN THE OWNER'S MANUAL

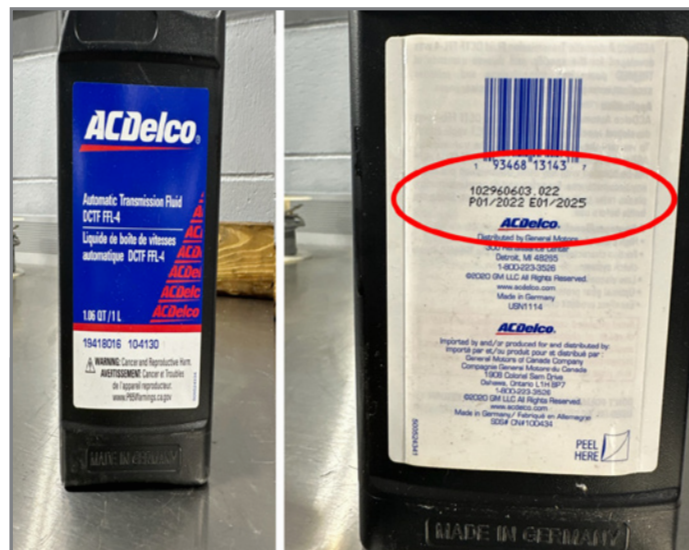
In addition to the maintenance minder, customers should be reminded to follow the transmission fluid and filter change recommendations in the Corvette Owner's Manual. The Owner's Manual includes the following information:

Transmission Fluid Change

When the CHANGE TRANSMISSION FLUID SOON message displays, change the fluid and filter within the next 600 miles (1,000 km). Failure to change the transmission fluid at required intervals can lead to reduced transmission performance. The transmission fluid must be changed at least every three years, and the Fluid Life System must be reset.

Check the transmission fluid life percentage. If the percentage is less than 10%, replace the fluid and filter. The initial transmission canister fluid change must be performed at 7,500 miles (12,000 km), and every 22,500 miles (36,000 km) thereafter.

If the canister filter is replaced more than 500 miles (800 km) prior to the initial 7,500-mile (12,000 km) break-in period, the filter still needs to be replaced again within plus/minus 500 miles (800 km) of the 7,500-mile (12,000 km) service interval.



The fluid has a shelf life in the bottle of three years.

TRANSMISSION FLUID

The DCTF FFL-4 C8 Corvette transmission fluid should always be shaken vigorously prior to adding fluid to a vehicle in order to disperse the additives throughout the fluid. The fluid has a shelf life in the bottle of three years.

Corvette Transmission Canister Filter



DEALERSHIP FAQs

If a customer decided to replace the filter early, they still must replace it again at 7,500 miles. What is a customer to do if they went until 8,100 miles because they could not make it in? Are they just out of warranty now or do they have to pay for two filter replacements at that time and then the warranty is good?

- Changing the canister filter at 7,500 miles was defined as the initial break-in of the transmission components and a period when the most contaminants may be created. Engineering expects the filter to be changed as close to 7,500 miles as possible. Plus/minus 1,000 miles should not be detrimental. If the filter is changed any earlier, say at 3,000 miles, it should be changed again at 7,500 miles as directed. If a transmission is replaced due to failure, the customer should restart the filter maintenance as if it was a new vehicle and the next filter change should be at 7,500 miles after replacement. If the customer fails to change the filter in a timely manner, such as missing the 7,500-mile maintenance interval altogether, and are now at 10,000 miles, the proper repair would be to not perform the flush procedure prior to the first filter replacement. Performing the flush procedure with a possibly overloaded filter would only push debris back into the system. The filter should be replaced first, followed by the flush procedure, and then a second filter should be installed. GM will only pay for the first filter replacement at 7,500 miles. Any additional filters and labor will not be covered.

If we get a vehicle with a porous case and the customer did not replace the filter on time, is their warranty blocked? If a customer bought a used C8 and the previous owner did not replace the filter on time, are they out of coverage? Can we perform the hydraulic system flush procedure and replace the filter twice and then they are good?

- Transmission case porosity issues will not be affected by a lack of maintenance. GM cannot control what previous owners do when it comes to maintenance. Customers can ask dealers or the previous owner to review the maintenance history

on a newly purchased used vehicle. If there is not a history of maintenance record, the proper repair would be to not perform the flush procedure prior to the first filter replacement. Performing the flush procedure with a possibly overloaded filter would only push debris back into the system. The filter should be replaced first, followed by the flush procedure, and then a second filter should be installed. GM will only pay for the first filter replacement at 7,500 miles on a new vehicle. Any additional filters and labor will not be covered. A transmission that is already having symptoms or setting codes will not be repaired with the change of the canister filter. Lack of maintenance by the previous owner may void the transmission warranty. Dealers selling certified used vehicles need to verify that all needed maintenance is performed prior to sale.

TRACK FILL INFORMATION

M1L Transmission and Z51 RPO – Vehicles equipped with M1L transmissions and Z51 models will need an additional two liters of transmission fluid added before track use. Transmissions will need to be identified as Die 1, Die 2 or Die 3.

GM does not condone tracking M1L-equipped vehicles without the Z51 RPO. If a customer decides to track the vehicle anyway, the transmission will need an additional two liters of fluid added before track use.

M1M Transmission – Vehicles equipped with M1M transmissions do not require a track fill with additional fluid.

Die 3 Cases – All vehicles equipped with either M1L or M1M transmissions and Die 3 cases do not require a track fill with additional fluid.

► **Thanks to Marty Leach**

Starter or Flywheel Noise and Fuse Block Matching

Some 2012-2014 Cruze models equipped with the 1.8L engine (RPO LUW, LWE) and a manual transmission may have a knock sound at the front of the vehicle when starting the engine. The sound may be due to the starter not having a high enough cranking speed.

If the sound is heard during start-up, begin diagnosis by checking the battery state of health. Correct the battery charge as needed if it is low. Also perform a voltage drop test on the positive and negative battery cables. Repair any cable conditions if necessary.

If the source of the low-cranking speed of the starter is not identified, replace the starter and the fuse block. Refer to Starter Replacement (1.8L LUW and LWE) and Fuse Block Replacement in the appropriate Service Information.

STARTER AND FUSE BLOCK

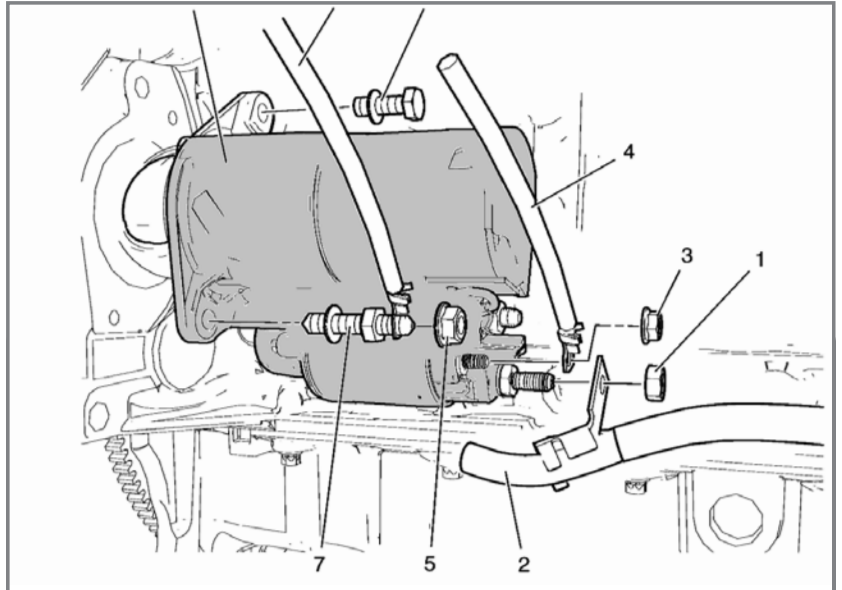
The fuse block and starter must be matched in service. If either part is being serviced, verify proper matched usage.

- Part numbers 55572439 (Starter) and 95937484 (Fuse Block) must be matched.
- Part numbers 55576980 (Starter) and 95476466, 96982033 or 95942232 (Fuse Block) must be matched.

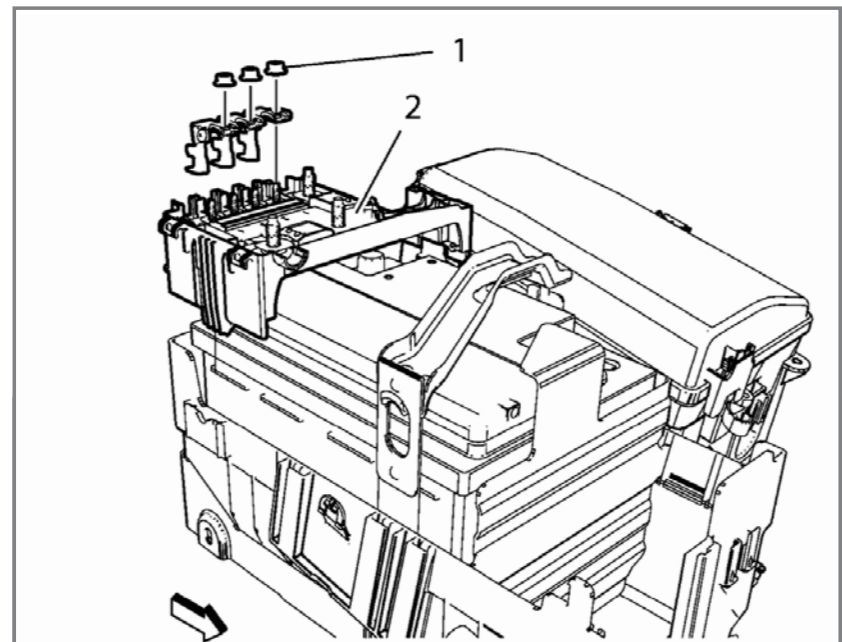
If the knock sound is still present once the starter and block fuse have been replaced, the flywheel should be replaced. Choose the correct size flywheel based on the Electronic Parts Catalog (EPC) notes in accordance with the VIN.

Refer to Bulletin #23-NA-114 for more information, including part numbers.

► Thanks to Mark Kevnick



Starter on the 1.8L engine



Fuse block (#2) is under the battery fuse box cover.

Battery State of Charge Prevents Radio Programming

When USB programming the radio (RPO IVD) on some 2023 Colorado, Canyon; 2023-2024 LYRIQ; and 2024 XT4, Blazer EV and Silverado EV models, a message may display that programming is currently unavailable. The message may appear due to a routine check of the 12-volt battery state of charge before USB programming begins.

To allow USB programming, a file can be created that will prevent the check of the battery state of charge. After downloading the available USB file transfer for the radio from SPS 2 to a USB drive (16 GB or 32 GB Type-C USB drive formatted to FAT32), a new text document should be created on the USB drive to ignore the battery check.

Refer to the latest version of #PIT6047 for the complete procedure to create the file on the USB drive.

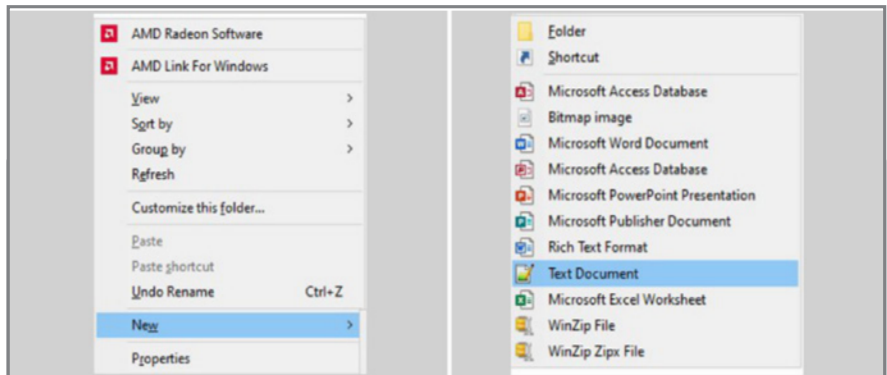
Once the file is created, the USB drive can be ejected from the PC and connected to the vehicle to proceed with USB programming.

A software update to address the battery check condition during USB programming is currently being developed. The battery check condition does not affect OTA updates.

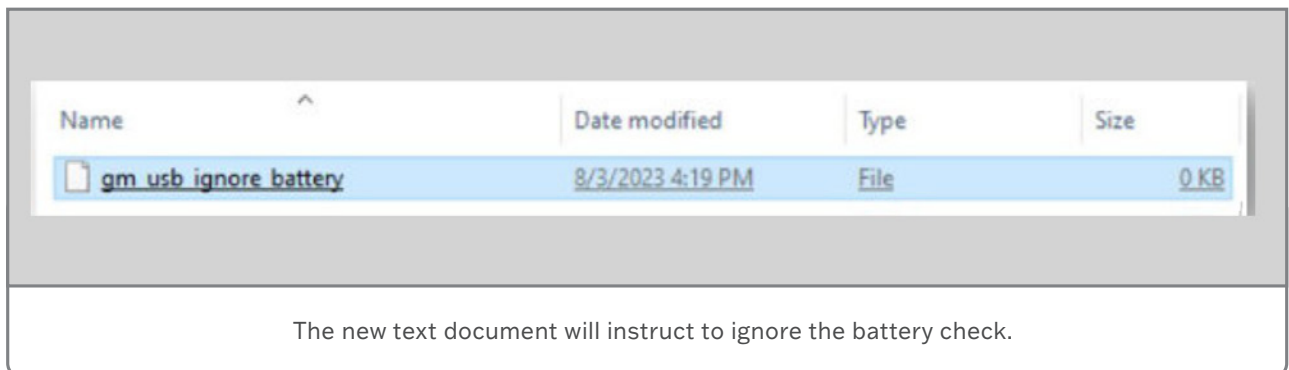
► Thanks to Brett Mulvaney



A11 radio in the 2023 Colorado



Create a new text document on the USB drive



The new text document will instruct to ignore the battery check.

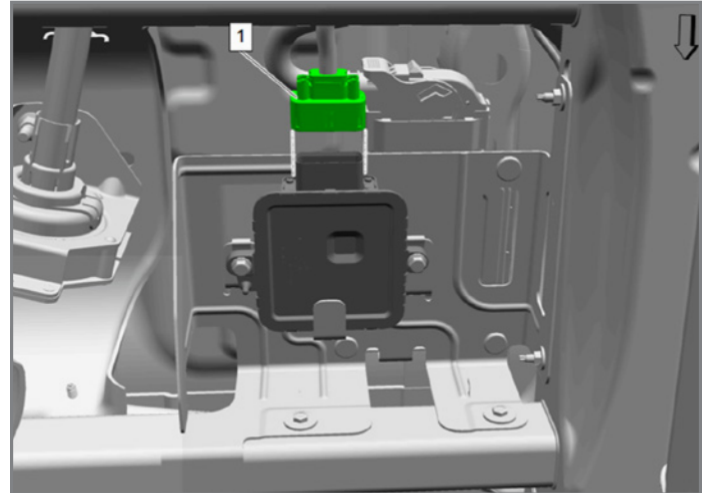
Trailer Brake Control Module Update

The trailer brakes may become disabled while pulling a trailer on some 2023 Colorado, Tahoe, Suburban, Silverado 4500/5500, Canyon, Yukon, Escalade; 2024 Silverado 2500HD/3500HD, Silverado EV, Sierra 2500HD/3500HD and HUMMER EV models due to a trailer battery condition. DTC C1114 (Trailer Brake Control Solenoid Valves Control Circuit) may be set and a Service Trailer Brake System message may appear on the Driver Information Center.



The trailer brakes may be disabled if the customer's trailer has a solar panel battery charger or generator. If the trailer's battery becomes fully charged and has a higher charge than the vehicle's battery, it can feed back into the trailer brake control module, causing it to shut down.

Anytime the vehicle's battery state of charge is lower than the trailer's battery, this condition may occur. Once the vehicle's charging system brings the vehicle's battery up to a higher state



Trailer brake control module (Tahoe shown)

of charge, the condition should no longer occur and the trailer brakes will work as normal.

If diagnosis shows the trailer brake is disabled, replace the trailer brake control module. An updated part is available. Refer to Trailer Brake Control Module Replacement in the appropriate Service Information.

For additional information and part numbers, refer to Bulletin #23-NA-149.

► Thanks to Kevin Minor

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:
Rick Miller
GM Customer Care and Aftersales

Editor:
Paul Bielecki
GM Customer Care and Aftersales

Technical Editor:
Mark Spencer
mspencer@gpstrategies.com

Production Manager:
Marie Meredith

Creative Design:
5by5 Design LLC
dkelly@5by5dzn.com

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

GM TechLink on the Web:
GM GlobalConnect

General Motors service tips are intended for use by professional technicians, not a "do-it-yourselfer." They are written to inform those technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions and know-how to do a job properly and safely. If a condition is described, do not assume that the information applies to your vehicle or that your vehicle will have that condition. See a General Motors dealer servicing your brand of General Motors vehicle for information on whether your vehicle may benefit from the information. Inclusion in this publication is not necessarily an endorsement of the individual or the company. All information contained herein is based on the latest information available at the time of publication and is subject to change without notice. Copyright © 2023 General Motors. All rights reserved.