

New 12V Battery Ratings Chart

for the 2026 Model Year



The latest Original Equipment (OE) Battery Ratings chart for the 2026 model year is now available under the Reference Charts menu for use when testing OE batteries.

SUPPORTED	NOT SUPPORTED
Enterprise grade hardware (PCs and Access Points)	Consumer grade hardware (PC and Access Points), Apple or Mac tablets & PCs
Intel Core i3 (10/11/12) processors 8th generation and above	Non-branded, built by third or other client PC
Intel Core Ultra Series 1 and above	ALL Intel Core i-series 12th generation and below Processors
AMD Ryzen 6000 Series and above	plus AMD Ryzen Series 4000, 5000, 6000, 7000, and 8000 processors
Windows 11 Professional, 64-bit (Workload Connect) *As of 10/14/25	All Operating Systems except Windows 11 Professional, 64-bit and Windows Server 2019 Standard
Windows 10 is no longer supported	*As of 10/14/25 Windows 10 is no longer supported
Windows Server 2019 Standard	All Linux Operating Systems
	Tablets running Android or Mac operating systems

New Firewall Exclusions, Windows 10 Support Removed
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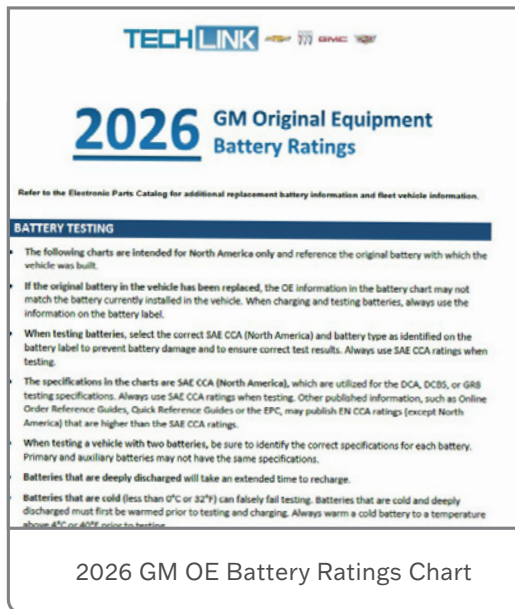
New 12V Battery Ratings Chart for the 2026 Model Year

The latest Original Equipment (OE) Battery Ratings chart for the 2026 model year is now available under the Reference Charts menu for use when testing OE batteries.



The chart includes SAE cold cranking amperage (CCA), amp hours (AH) and reserve capacity (RC) ratings along with battery type specifications. The 2026 model year chart as well as charts for earlier model years can be easily printed using the browser's print function.

Entering the correct battery CCA ratings and battery type when using the Midtronics Diagnostic Charger (DCA-8000P) or other approved chargers/testers is critical for proper test results. If the original/factory battery has been replaced, access the current battery label to view the battery type and CCA, as it may not match the OE specifications.



Selecting the incorrect battery type or CCA rating when testing may result in battery damage or a “Replace Battery” result on a good battery, leading to a good battery being replaced unnecessarily.

TIP: There are two common types of 12V battery testing battery CCA ratings — EN CCA and SAE CCA. EN is a European standard and SAE is a North American standard. Be sure to use the SAE number when testing 12V batteries.

For more information on replacement batteries, refer to the Electronic Parts Catalog.

For more details on proper battery testing, refer to the appropriate Service Information. Go to General Information > General Information > Specifications > 12 Volt Battery Usage for battery specs on 2019 and later model years.

BATTERY TESTING REQUIREMENTS

Keep in mind the following tips to ensure the proper processes are completed to support battery replacement and successful warranty claim submission.

- Validate whether the battery in the vehicle is the OE battery or a replacement battery and then proceed with warranty handling accordingly.
- Accurately enter job card and vehicle information using the appropriate battery tester.
 - 6-digit BAC
 - Last 8 or Full VIN (use VIN scan feature if available)
 - Job card number
 - Leading zero(s) must be added to job card numbers if needed in order to achieve the minimum character limit for the tester. Do not enter leading spaces or letters.
 - For job card numbers with a leading prefix, input only the values after the prefix and add leading zero(s) to achieve the minimum character limit of the job card field. Example: If the job card number is 01-2345, the input would be 02345 in the DCBS.
- Disconnect the battery from the vehicle.
- On vehicles with two batteries, including stop/start vehicles with auxiliary batteries, each battery must be electrically isolated and charged individually.

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New Firewall Exclusions, Windows 10 Support Removed

IN LATEST DEALER INFRASTRUCTURE & SECURITY GUIDELINES UPDATE

The latest GM Dealer Infrastructure & Security Guidelines (DISG) have been updated with recommended firewall exceptions for Techline Connect applications.

The following exception has been added and needs to be able to run not only in the path listed but any location on the PC as noted.

C:\ProgramData\sps\sps3\nativeLib\summary-builder.exe
summary-builder.exe needs to be added as a wildcard to run in any filepath.

For proper operation of Techline Connect apps, Local Windows Administrative access for software installation and updates is required. The recommended firewall and security exceptions help protect from loss, theft and unauthorized access. GM also recommends using privilege management software to manage user rights without needing to give full administrator rights to an individual user.

RECOMMENDED APPLICATIONS

In addition, the DISG lists recommended PC hardware, software applications and network infrastructure to ensure communication between dealership PCs and GM servers. The guidelines cover requirements for the Service Programming System (SPS) to ensure a successful outcome while programming vehicles.

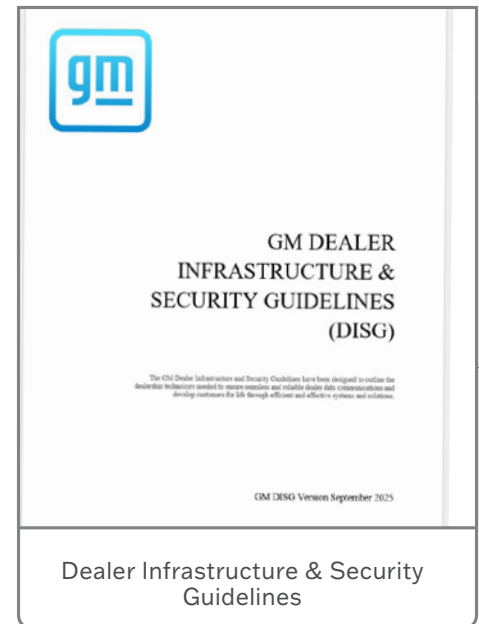
Techline applications (Techline Connect, GDS 2, MDI Manager, MDI/MDI 2, Tech2Win, Data Bus Diagnostics Tool, J2534 Wrapper and Service Information) require additional computing power to perform appropriately during vehicle diagnosis and programming.

The following recommendations are for all service technician applications:

- Local Windows Administrative access for software installation and updates to Windows registry
- One laptop for each technician performing service programming and vehicle diagnostics; otherwise, one for every two technicians

- One MDI 2 for every Techline PC
- One battery maintainer for every two MDI tools in use
- Use of Tripp-Lite Keyspan USB-to-serial adapter (Model: USA - 19HS or USA - 19HS-C) for computers without serial ports

- Recommended Service Programming USB standard for Legacy Vehicles is FAT 32 – File Allocation 4096 (64KB), Size 16 or 32 GB USB 2.0 and USB-C 3.X
- Recommended Service Programming USB standard for Vehicles with RPO IVD & IVE (Virtual Cockpit Infotainment Systems) is NTFS File Format, Size 32 GB or greater USB-C 3.X (no adapters recommended)



SUPPORTED VS. NOT SUPPORTED HARDWARE AND SOFTWARE

The Supported vs. Not Supported matrix includes guidelines for hardware (Enterprise-grade hardware intended for a business environment is recommended) and software used by all departments in the dealership.

The new DISG notes that GM support for Windows 10 Professional will be dropped as of October 14, 2025.

Windows 11 Professional and Windows Server 2019 Standard are the recommended operating systems for new PCs.

CONTINUED ON PAGE 4

- Select the correct battery information (located on the label of the battery being tested).
 - Battery type (Flooded or AGM)
 - CCA rating
- Perform the battery test in the correct diagnostic testing setting (Diagnostic Charge, Diagnostic Mode, etc.), connecting directly to the battery posts.
- Verify that the test result shows a 16-digit Warranty Code (DCA), 15-digit Warranty Code (GR8), or 20-digit Warranty Code (DCBS) prior to warranty battery replacement. Attach the printout to the job card.

TIP: The 12-volt lithium-ion battery in the Corvette E-Ray and ZR1X cannot be tested and does not require a warranty code.

For more information on battery testing and warranty replacement requirements, refer to Bulletin #20-NA-132.

► Thanks to Brett Holsworth

Diagnostic Charge
Technician: admin
03/12/2024 10:09 AM
2015 Chevrolet Cruze
1G1PC588F7197395

REPLACE BATTERY
Failed: Cranking

Cranking: Fail

Voltage: 12.29 V
Rated: 3000 CCA
Measured: 388 CCA
Temperature: 66° F
Chemistry: AGM

DCA-8000
192-111510-A00-0004
#0422140152
UT0X0458J000001F

Diagnostic Charge
Technicien: admin
03/12/2024 10:09 AM
2015 Chevrolet Cruze
1G1PC588F7197395

REPLACER BATTERIE
Échec: État au démarrage

État au démarrage: Échouer

Tension: 12.29 V
Nomin.: 3000 CCA
Mesurée: 388 CCA
Température: 66° F
Chimie: AGM

DCA-8000
192-111510-A00-0004
#0422140152
UT0X0458J000001F

Warranty code from the DCA showing the diagnostic test setting (#1), test result (#2) and warranty code (#3).

VIEW THE NEW GUIDELINES

U.S. dealerships – The latest DISG can be found in the GM Dealer Information Technologies App on GM Global Connect. Select the Dealer Infrastructure & Security Guidelines link at the top of the app's home page. The DISG also is available on the Service Information home page.

Canadian Dealerships – The latest DISG can be found in the Dealer Security and Information Technology App on GM Global Connect.

► Thanks to Chris Henley

SUPPORTED	NOT SUPPORTED
Enterprise grade hardware (PCs and Access Points)	Consumer grade hardware (PC and Access Points), Apple or Mac tablets & PCs Non-branded, built by hand or thin client PC
Intel Core i3 / i5 / i7 / i9 processors 8th generation and above Intel Core Ultra Series 1 and above AMD Ryzen 6000 Series and above	ALL Intel Core i-series 7 th generation and below Processors plus AMD below Ryzen 6000, Celeron, Pentium, and Atom processors
Windows 11 Professional, 64-bit (Techline Connect) *As of 10/14/25 Windows 10 is no longer supported Windows Server 2019 Standard	All Operating Systems <u>except</u> Windows 11 Professional, 64 bit and Windows Server 2019 Standard *As of 10/14/25 Windows 10 is no longer supported All Home Operating Systems Tablets running Android or Mac operating systems

Supported and Not Supported hardware and software matrix

Ground Fault at the Transmission Case

Some 2025-2026 Equinox and Terrain models equipped with the VT40 transmission (RPO MRQ) may have a no start condition with DTCs P27EC (Transmission Range Control Valve Position Sensor Circuit Performance) and P2797 (Automatic Transmission Electric/Auxiliary Fluid Pump Performance) set in the Transmission Control Module (TCM).

These conditions may be caused by a poor ground connection at G111, G112 and/or G113.

- G111 is located in the left side of the engine compartment, attached to the frame rail.
- G112 is located at the left side of the engine, attached to the top of the transmission.
- G113 is located in the engine compartment, attached to the left side of the cylinder head.

The transmission auxiliary pump and wiring harness also may need to be replaced. The electric auxiliary fluid pump is used to keep hydraulic circuits primed during an automatic stop/start event.

TIP: If the vehicle ignition is cycled, transmission shifting will be disabled and the vehicle will need to be towed. The vehicle may not move until the DTCs are cleared, even if the data shows the vehicle in Park.

Begin diagnosis by verifying the transmission fluid level. The transmission fluid level must be checked when the transmission fluid temperature is between 140–176°F (60–80°C).

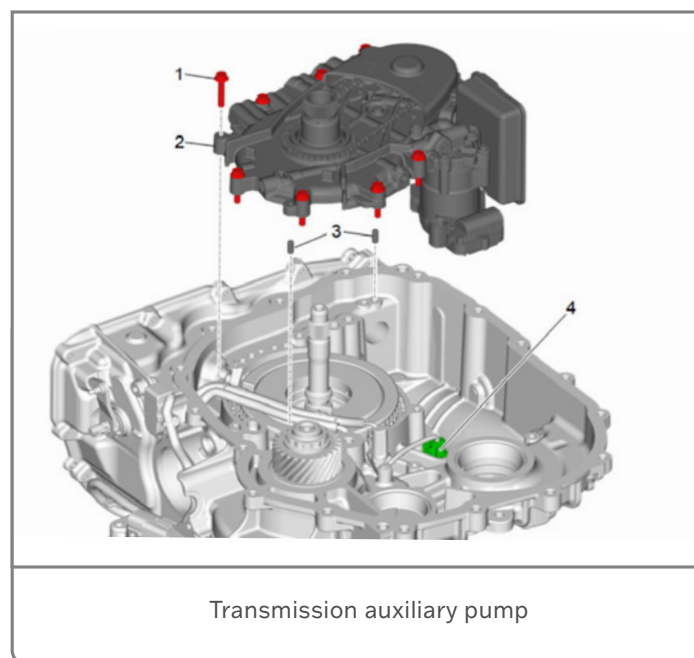
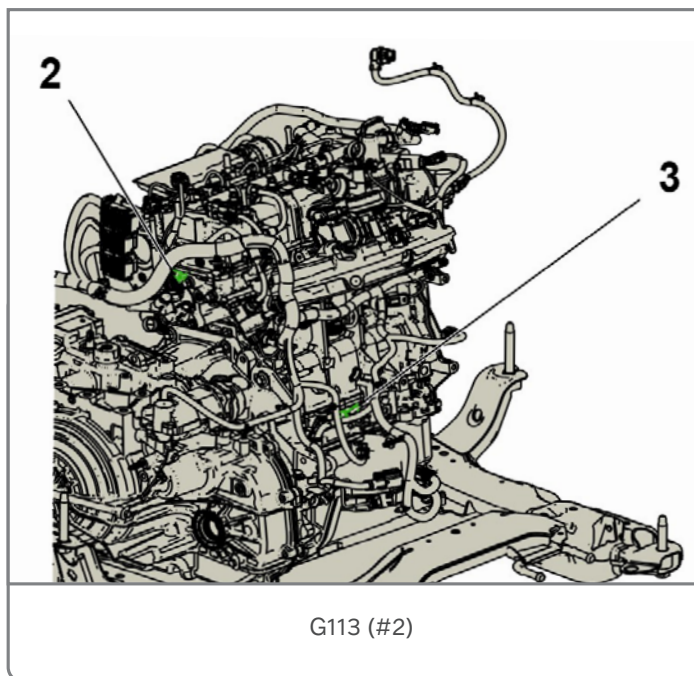
Next, verify torque and test G111, G112 and G113 for resistance.

If voltage drop is greater than 0.5 volts, remove the ground from the chassis and inspect for corrosion or paint, or for any damaged threads. If there are not any issues, replace the ground cable assembly and reevaluate the condition.

If voltage drop is less than 0.5 volts, replace the transmission auxiliary pump and wiring harness. Refer to Automatic Transmission Fluid Pump Removal and Automatic Transmission Fluid Pump Installation in the appropriate Service Information.

Refer to Bulletin #25-NA-271 for additional details, including parts information.

► Thanks to Rob Smith





TCSC Top Issues This Week

The Techline Customer Support Center (TCSC) is available to help dealerships with diagnostic and programming issues related to Techline Connect (TLC) and the Service Programming System (SPS).

TCSC has now released their latest tips to help technicians when using Techline Connect applications. Look for the latest tips on TechLink each week.

To get the most out of Techline Connect, be sure to review the following items before making a call to the TCSC.

The following information covers current issues and trends facing dealerships as of September 11, 2025.

WEEKLY ISSUES

1. 2026 Silverado 1500 and Sierra 1500 Remote Start (BTU), Governors (9C2/9B9/9D7), Bed Delete (ZW9), and Extended Idle Calibrations (SK4) Not Available

Currently, there is a known issue involving 2026 Silverado 1500 and Sierra 1500 light-duty trucks. As of now, TCSC is unable to make any changes for the above RPOs.

The current ETA for the available calibrations is approximately 2 weeks.

2. Front-View Camera Programming or Camera Learn Issues Specific to 2024 Colorado and Canyon (ZR2)

There is currently a known issue with the Front-view Camera involving ONLY 2024 Colorado/Canyon built with ZR2 and UHY, and without UWI, UKW, or ULV.

The Front-view Camera may fail to program or set loss of communication codes such as U0265. The Camera Learn also may fail in GDS2 with various errors.

A VCI is required to correct this problem. Please reach out to TCSC for this fix.

3. Bulletin 25-NA-251 – Vehicle-Wide Programming may Result in a Partial or Failed Condition Where a Majority of the Controllers Fail to Program

There is currently a known issue with the SDGM that may cause VWP to fail on a wide array of vehicles.

This is caused by a known memory issue with the SDGM and requires a power cycle of the SDGM to correct. Please see Document ID: 6994285 for full details.

4. #PIT6428: 2022 T1XX LD Trucks and T1 SUVs Built with IOR Radio

When attempting to program the Radio (Non-USB) through SPS2, specific to ONLY 2022 Silverado 1500 and Sierra 1500 trucks as well as 2022 Tahoe, Suburban, Yukon and Escalade SUVs, an E-4491/E-4423 error may appear that shows unknown reprogramming error 1 at step 0 as seen below:

- E4491: Reprogramming Error! Check all connections and reset Programming Interface!
- E4423: Unknown reprogramming error 1 at step 0

This is a known issue. If you are receiving this error, please contact TCSC for a VCI to correct this problem. Refer to #PIT6428 for more information.

5. 2024+ T1XX Pickup (LD/HD) Wireless Keypad Accessory Kit Learn Failures

There is currently an issue with the Wireless Keypad Accessory kits for 2024 and later model year Silverado 1500, Sierra 1500, Silverado 2500HD/3500HD and Sierra 2500HD/3500HD where the keypad may fail to learn to the vehicle. An error message "Communication Could Not Be Established" and/or "Write Failure" may be seen.

This is a known issue, and engineering is currently researching a solution. There is no ETA for resolution.

6. 2025 T1 Truck Manual Regeneration (FPF) Not Yet Available

Calibrations for Manual Regeneration (FPF) have not yet been released for 2025 Silverado and Sierra trucks. These vehicles are planned to be supported but no ETA is available yet for when the calibrations will be released.

7. DTC U3000 Set After One or Both Side Blind Zone Modules Replaced on 2023+ Colorado, Canyon, Corvette, CT4 and Envision

Engineering is tracking down the cause of this concern. Please answer the following questions to the best of your ability and provide them in your DCM case to TCSC for the quickest possible service:

- Do the replacement SBZ module(s) have a green dot/line on the part label?
- Where did you obtain the new service parts from?
- Were these parts ordered? If so, from where?
- Is there currently a SPAC case set up for this issue?
- Were these parts obtained from another dealer?

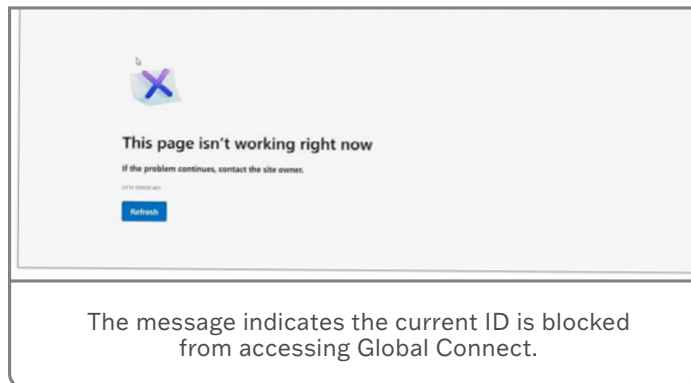
COMMON ISSUES

1. Bulletin #24-NA-098: SPS Best Practices and Programming Error Troubleshooting

Document ID: 6662319 has been published to assist with common programming errors, descriptions and recommended helpful/general troubleshooting for SPS errors. Please refer to this page if you encounter a programming error within SPS2/TLC.

2. TLC Restricted Access

The following message may be seen when attempting to access Techline Connect:



The message indicates that the current ID is blocked from accessing Global Connect. This can be for several reasons but typically is due to a counterfeit MDI device.

To unblock the account, reach out to TCSC via Dealer Case Management (DCM) with the following information:

- User ID in Global Connect
- Email of User

- First and Last Name of User
- BAC/Dealer Code and Name of Dealership

TCSC will be able to reach out to the Cybersecurity team that will be able to determine the cause of the block and may be able to unblock the account. In the case of a counterfeit MDI, the counterfeit tool must be destroyed, and a legitimate Bosch device must be used to ensure the ID is not blocked again. Repeat offenders may not be unblocked from access.

3. E-9111/E-9113 TCM/MCVM Operation Errors

An E-9111 or E-9113 error may occur when programming the TCM, or after replacing the transmission assembly/valve body, and entering the TUN/PUN under MCVM Operations in SPS2.

The error is caused by a mismatch in data between the vehicle's TUN/PUN and the TUN/PUN uploaded in the GM database. Please ensure the complete TUN/PUN number is entered correctly, and that the TUN/PUN is in capital letters. Double check that the number zero (0) is not a letter "O" and that there are not any typos or extra characters.

If the TUN/PUN is correct, open a DCM case with TCSC and attach a clear picture of the replacement TUN/PUN in the case, as TCSC will require these to work with Engineering and have the issue addressed.

If you are receiving these errors via programming and the TUN/PUN was not replaced, TCSC may still require the TUN number.

4. T1XX Trucks ECM/Radio/IPC Part Missing from SPS2 Part Dropdown

When performing IPC Graphics programming, Radio USB, or ECM programming, you may be prompted in SPS2 to select "Service Hardware." However, this is misleading.

For IPC Graphics programming, use the "Boot Software Part Number 1" found in GDS2 under Identification Information.

Similarly, for the Radio USB Programming, use the "Calibration Part Number 1" (also may be called "Application Part Number 1") found in GDS2 under Identification Information.

Additionally, for the ECM, use the "Calibration Part Number 1" (also may be called "Software Module Part Number 1") found in GDS2 under Identification Information.

5. 2024-2025 Silverado 2500HD/3500HD and Sierra 2500HD/3500HD Adding ZW9 (Bed Delete) Built with UV2 (HD Surround Vision Camera)

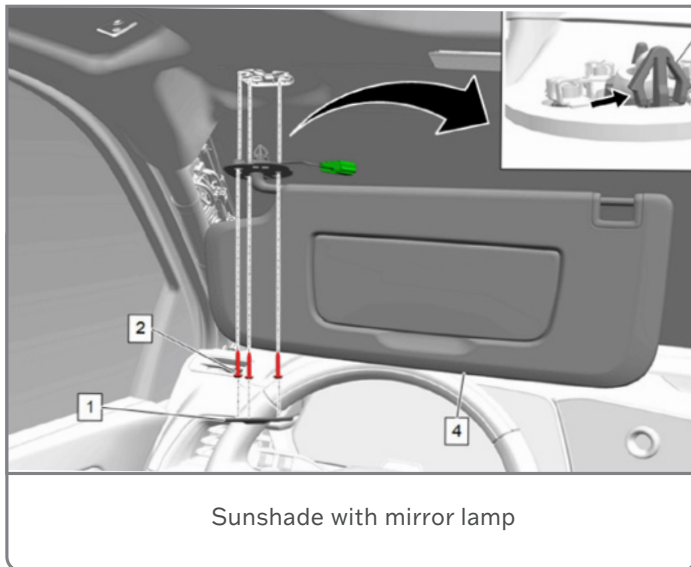
Engineering has confirmed that there are not any compatible calibrations that support both RPO ZW9 (Bed Delete) and RPO UV2 (HD Surround Vision Camera).

Sunshade Lamp Supply Circuit Draw

Some 2025-2026 Tahoe, Suburban, Yukon and Escalade models may experience a low or dead battery. During battery draw diagnostics, a 550 ma draw may be found, and which can be eliminated by removing a Body Control Module (BCM) fuse.

These conditions may be caused by unwanted voltage fluctuating on the sunshade lamp supply circuits from the overhead console (A103 Roof Console). The overhead console may see the voltage fluctuation as a new input each time the voltage dips low, resulting in the BCM staying active and causing the low battery charge condition.

If these conditions are present, back probe the left (4785 LH) and right (2369 RH) sunshade lamp voltage supply circuits to ground at the overhead console using a Digital Multimeter



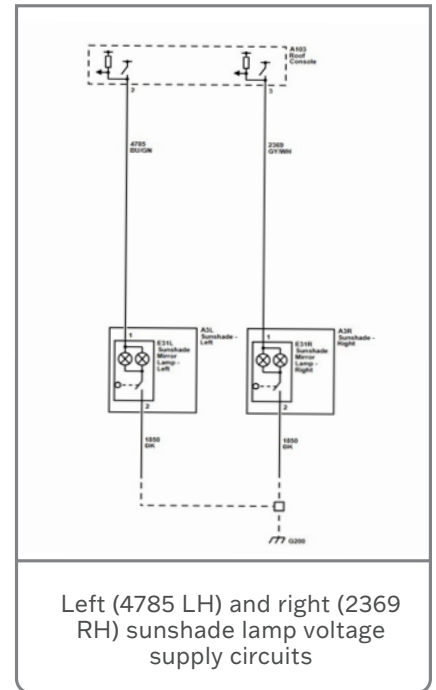
while the sunshade mirror lamps are off/closed. A normally operating sunshade circuit should show a steady 12 volts when the sunshade mirror lamps are off/closed and then drop low and quickly recover back to 12 volts when the lamps are on/opened.

If voltage is found to be fluctuating from approximately 2–12 volts on either circuit while the sunshade mirror lamps are off/closed, disconnect the sunshade and check for draw. After 10 minutes, if the excessive draw has dropped to an acceptable level, replace the sunshade.

TIP: It is important to wait approximately 10 minutes after any BCM LIN device fuses are removed during battery draw testing to allow the BCM to enter the sleep cycle. Pulling new fuses before waiting 10 minutes will keep the BCM awake or reset the BCM wake-up timer.

Refer to #PIT6427 for more details.

► Thanks to Ted Luczak



TOP ISSUES, FROM PAGE 7

Please be advised that ZW9 cannot be added to vehicles with UV2 regardless of trim level.

6) T1 Full-Size Trucks and SUVs Downsizing of Tires is NOT Supported

Please be advised that downsizing tires of any kind is not supported on any T1 series vehicle from 2021 – Current. This includes full-size trucks (Silverado, Sierra) as well as SUVs (Tahoe, Suburban, Yukon, Escalade).

HOW TO CONTACT TCSC

- **U.S. ONLY:** Assistance can be provided by using the CX Connect portal on Global Connect. If additional support is needed once the case is created, contact TCSC at 1-800-828-6860. For U.S. only, a case is required for phone support.
- **Canada:** Contact TCSC at 1-800-828-6860 (English) or 1-800-503-3222 (French).
- **All other regions:** Contact your regional Technical Assistance team for Global Techline Support.

► Thanks to the Techline team

Incomplete Radio Registration Prevents Owner's Manual Download

As part of the Pre-Delivery Inspection (PDI) of the 2026 ESCALADE IQ/IQL and VISTIQ, the digital Owner's Manual should be downloaded to the infotainment system.



Select the myCadillac app on the infotainment screen to download the digital Owner's Manual (VISTIQ shown).

To download the digital manual, go to myCadillac on the infotainment screen and select the gear icon. From the Owner's Manual screen, select Install Now.

Be sure to verify the download completes successfully. The Owner's Manual icon will appear on the home page of the infotainment screen once downloaded. Check the Special Inspection Items on the PDI form for more information.

If the Owner's Manual will not download when the vehicle is connected to Wi-Fi, it may be due to incomplete registration of the radio. If the registration is incomplete, a customer also may not be able to log in to the myCadillac app on the infotainment screen.

To complete the radio registration, perform a radio reboot by holding the Mute button on the steering wheel for at least 12 seconds.

For more details, refer to #PIT6409A.

ESCALADE IQ PDI form

► Thanks to Mark Shearer and Kayla Battaglia

TECH LINK

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