TECH LINK

Mid-May 2026, Volume 28, No. 10

2027 Bolt State of Charge and NACS Charging Tips

The new 2027 Bolt features a 65-kWh lithium iron phosphate (LFP) high-voltage battery pack and a native North American Charging System (NACS) charging port.

Rear Leaf Spring Noise and Possible Fuel Contamination

see page 8

2027 Bolt State of Charge and NACS Charging Tips

The new 2027 Bolt features a 65-kWh lithium iron phosphate (LFP) high-voltage battery pack, enabling faster charging. It uses a native North American Charging System (NACS) charging port that provides access to the expanding public charging network, including Tesla Superchargers. By taking advantage of DC public fast charging speeds up to 150 kW, the Bolt can go from 10% to 80% battery charge in 25 minutes.

Bolt has a native NACS charging port.

Note: Actual charge times will vary based on battery starting state of charge, battery condition, output of charger, vehicle settings, battery temperature and outside temperature.

100% STATE OF CHARGE

Unlike some other GM EVs, the Bolt should be charged to 100% battery state of charge (SOC) for daily use.

The following charging conditions may be found on some Bolt models:

- Significant drop in AC or DC charge rate as SOC increases, above 70%.
- SOC is inconsistent between vehicle sleep cycles.
- Charge time-to-completion estimate is inaccurate.
- Instrument cluster displays 100% SOC but time to charge complete takes longer than usual.
- During charging, the instrument cluster display quickly changes to 100% SOC.

These conditions may be due to state of charge error growth after several cycles of usage without obtaining a complete charge at 100% SOC. Due to the flat voltage curve of the LFP battery, the Battery Management System needs to regularly obtain 100% SOC and Charge Complete status in order to learn and accurately maintain SOC. Charging the high-voltage battery to 100% SOC and Charge Complete status will correct these symptoms.

100% SOC and Charge Complete status

It's recommended to charge to 100% at least once per week. It is OK to keep the charge limit at 100% even for daily use. An 80% charge limit is recommended only when driving in mountainous terrain.

Do not stop charging until the Charge Complete message is shown.

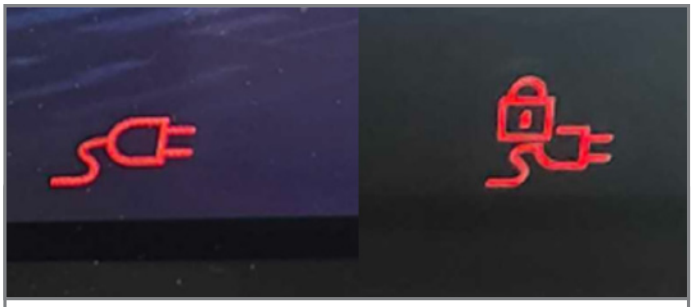
CONTINUED ON PAGE 3

TIP: Do not stop charging until the Charge Complete message is shown. The instrument cluster display may indicate 100% SOC for several minutes while the SOC error is corrected.

Refer to Bulletin #26-NA-139 for more information.

NACS CHARGING PORT CONDITIONS

When initiating a charging session (using either AC (120/240V) or DC charging), the vehicle may display an Unable to Charge message on the Driver Information Center along with additional text stating "Cord lock not working" or "Try a different cord." DTC P3013 (Hybrid/Electric Vehicle Battery Charging Port Lock Stuck Open) also may set. With the charge cord plugged in to the vehicle, one of the following icons will appear at the bottom of the instrument cluster.



Left icon: Cord plugged in partially or blockage present, pin not locked.

Right icon: Cord plugged in fully, pin engaged/locked.

These conditions may occur if the charge coupler/adapter is not fully inserted into the charging port. The weight of the charge cord, or possible blockage in the port interface, may prevent the charge coupler/adapter from fully seating properly.

Lift up slightly on the cord to help fully seat it and allow the pin to lock.

If the weight of the charge cord is causing the coupler/adapter to not stay seated, lifting slightly on the cord will help fully seat it and allow the charge lock pin to lock to initiate the charge. If the charge port lock motor is heard cycling on/off, it means the coupler/adapter Is not fully seated.

In addition, always check to make sure debris, snow, or anything else is not inside the coupler/adapter or charge port, which may prevent the couple/adapter from fully seating.

If DTC P3013 DTC is set, it will not inhibit future charging. Once the coupler/adapter is properly seated into the charge port, the DTC will clear.

For additional information, refer to Bulletin #26-NA-107.

▶ Thanks to Kurtis Hoezee

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 May 28, 2026.

WEEKLY ISSUES

1. E-4398 Issue on the Front View Camera (FCM)

There is a known issue involving the Front View Camera (FCM) on the 2025 Acadia, Traverse and Enclave. These vehicles will show E-4398 in SPS2 when attempting to reprogram existing or replacement modules. FCM programming will be unable to be completed at this time. This issue is currently being investigated but no ETA is available.

2. MDI/Scan Tool Disconnecting in SPS2, Showing Status: Disconnected in TLC

Users may see the MDI/Scan tool disconnect/reconnect rapidly in SPS2, causing issues with connectivity. GM is aware of this issue and actively investigating.

To potentially resolve this issue, disconnect the scan tool, reboot the tool, and then reconnect.

3. UPDATED – EPC Showing Incorrect Radio Hardware for 2025 Blazer EV

Users report that the EPC is directing to an incompatible part for 2025 Blazer EV.

PN 85852385 is not compatible with the 2025 Blazer EV. Please order PN 85791702 instead.

GM is working on correcting the EPC to show the correct hardware.

Note: If you are unable to place an order for PN 85791702, please reach out to Service Parts Assistance Center (SPAC).

4. 2021 T1 SUVs (Tahoe, Suburban, Yukon, Escalade) Unable to Complete SDAC (Serial Authentication Data Configuration)

There is currently a known issue affecting 2021 T1 SUVs where the SDAC may fail. The radio, IPC, or Telematics (OnStar) module may be the cause of these failures.

DO NOT REPLACE THE MODULE. This is a known SPS issue and the current workaround is to disconnect the SDGM X3 connector and re-attempt SDAC. Engineering is aware of this concern and working on a permanent resolution.

5. 9G8 (DRL/AHL Disable), SK4 (Engine Idle Timeout), UTQ (Content Theft), BCN (Retail Locking) and 6N6 (Rear Window Disable) Not Yet Available on 2026 Vehicles

Calibrations for RPOs 9G8, SK4, UTQ, BCN and 6N6 are not yet available for model year 2026 vehicles but are planned to be released. However, there is not currently an ETA.

Note: RPO SK4 calibrations are now available for T1 Trucks (Silverado, Sierra). T1 SUV (Tahoe, Suburban, Yukon, Escalade) is still being worked on.

COMMON ISSUES AND HELPFUL INFORMATION

1. Accessory/Reconfiguration Programming Window Reduced from 90 Days to 14 Days on VIP Vehicles Only

Accessory/Reconfiguration added to a VIP Vehicle VIN by TCSC must be reprogrammed by the dealership within 2 weeks (14 days). If programming is not completed by this time, the changes will be reverted, and the dealership will be required to reach out to TCSC and request the update(s) again.

Note: There will not be an additional charge for changes that are requested again.

2. 2020 Trax IPC Programming Issue

GM is aware of an issue affecting 2020 Trax models where a replacement IPC may fail with E-4491 and line/op/error indicate (X, B0, 85).

CONTINUED ON PAGE 5

This issue is currently being investigated by Engineering. Please reach out to TCSC if you are experiencing this issue.

3. 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.
- 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.
- For the ECM, use the "Calibration Part Number 1" (also may be called "Software Module Part Number 1") found in GDS2 under Identification Information.

4. 2015+ Chevrolet Express SOSM E-4399 Issue and ECM VIN Write Issue

GM is aware of a known issue where programming current/replacement SOSM modules (Left/Right) will cause an E-4399 in SPS2, despite the modules having communication.

Additionally, the VIN may not write on a replacement ECM successful programming events.

Please reach out to TCSC for a VCI to correct either concern.

5. 2024+ Silverado 2500HD/3500HD and Sierra 2500HD/3500HD Adding ZW9 (Bed Delete) Support

Engineering has confirmed that there are not any compatible calibrations that support both RPO ZW9 (Bed Delete) and RPO UV2 (HD Surround Vision Camera) on any model. RPO ZW9 cannot be added to vehicles with RPO UV2 regardless of trim level.

Note:

- RPO ZW9 is supported for long-bed models only
- RPO ZW9 is supported regardless of 17/18/20/22-inch tire sizes.

Refer to the GM Vehicle Order Guide for details, including equipment groups supported (e.g., 1WT, 1LT).

6. 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.

7. TLC Restricted Access

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

The message indicates the current ID is blocked from accessing Global 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 CX Connect 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.

8. E-9111 or E-9113/E-9114 TCM/MCVM Operation Errors

An E-9111 or E-9113/E-9114 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.
- The TUN/PUN is in capital letters.
- The number zero (0) is not a letter "O".
- There are not any typos, extra characters, or spaces.

CONTINUED ON PAGE 6

Fuse F17UA and Possible No Start Condition

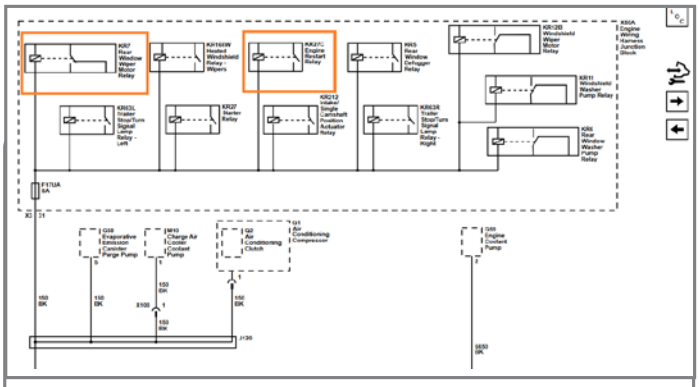
A no start condition on some 2025-2026 Acadia, Traverse and Enclave models may be caused by a rear wiper motor binding or a bent wiper arm. Fuse F17UA may power the X50A Engine Wiring Harness Junction Block, which includes the engine restart relay as well as the rear window wiper motor relay.

If fuse F17UA is open, visually inspect the rear wiper's arm and motor. If the arm is bent or the wiper motor is binding, it may cause fuse F17UA to blow, disabling the engine restart relay.

Refer to the appropriate Service Information to diagnose and repair any rear wiper arm and open fuse conditions.

For more information, refer to Bulletin #26-NA-140.

▶ Thanks to Jessica Thoma



X50A Engine Wiring Harness Junction Block

TCSC, FROM PAGE 5

If the TUN/PUN is correct, open a 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.

9. 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 DTC 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.

HOW TO CONTACT TCSC

- U.S. ONLY: Assistance can be provided by using the CX Connect portal in Global Connect. If additional support is needed once the CX Connect 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

Inoperative PTO on Silverado Medium-Duty Trucks

Some 2019-2023 Silverado 4500HD/5500HD/6500HD trucks may have an intermittent condition where the available Power Take-Off (PTO) is inoperative along with DTC P251A (PTO Enable Switch Circuit) set in the PTO Control Module.

The PTO is an upfitter integrated auxiliary power source. The PTO system controls engine speed to values higher than normal base idle, PTO load relay engagement, and remote starting and shutdown of the engine.

The intermittent PTO operation may be due to a vehicle ground issue. Before replacing the PTO switch, check and clean the vehicle grounds.

G120 (Main PTO ground on the left side of the engine) – Inspect ground bolt length and the ground eyelet for proper clamp load. Check for red anti-corrosion paint between the block and eyelet.

Red anti-corrosion paint.

G340 (Main battery ground on the driver-side frame rail) – Inspect for debris between the eyelet and ground cable.

G398 and G399 (Left frame rail to right frame rail ground cable) – Check for proper tension and eyelet clamp load.

G108 and G110 (Main engine to frame ground on the right front inner frame rail, G108, and on the right side of the engine,

Inspect red anti-corrosion paint between the eyelet and engine block.

G110) – Verify bolt length does not bottom out and inspect red anti-corrosion paint between the eyelet and engine block.

G198 and G199 (Main body-to-left frame rail ground) – Look for proper eyelet clamp load and red anti-corrosion paint between the bolt head and eyelet and the engine block or body stud.

Check eyelet clamp load and red anti-corrosion paint

Refer to #PIP6108 for more details.

▶ **Thanks to Bill Alley**

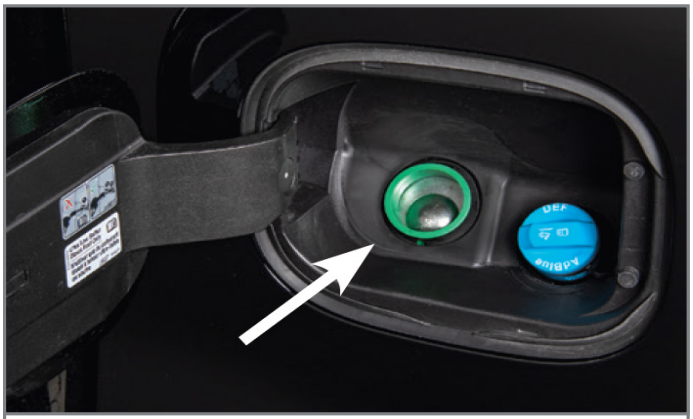
Rear Leaf Spring Noise and Possible Fuel Contamination

Some 2020-2026 Silverado 1500 and Sierra 1500 trucks equipped with the 3.0L diesel engine (RPO LM2, LZ0) may have a squeak or clunk sound coming from the rear of the vehicle, usually at low vehicle speeds or when the suspension is cycling through movement. The noise may be caused by the rear leaf springs. In some cases, the left rear leaf spring insert may have been contaminated with diesel fuel during refueling.

The left rear leaf spring insert may have been contaminated during refueling.

If fuel contamination is found, the left leaf spring insert should be replaced. In addition, if the foam seal around the fuel filler pipe is damaged or missing, a new foam seal should be installed.

FUEL CONTAMINATION



Diesel fuel may have run down the fuel filler pipe from any fuel kick back or when the fuel pump nozzle was removed.

While refueling the vehicle, diesel fuel may have run down the fuel filler pipe from any fuel kick back or when the fuel pump nozzle was removed. As a result, diesel fuel may contaminate the left rear leaf spring insert in the spring eyelet.

When contamination occurs, or if there are any substances or material in the leaf interface, the interaction between the leaf spring elements changes, leading to noise as the components move over each other.

Before performing any repairs, inspect the left rear leaf spring. Check the front half of the leaf spring for signs of diesel fuel contamination, including visible residue or a wet condition at the front leaf spring insert.

TIP: The foam seal around the fuel filler pipe is designed to help keep fuel drips and incidental small spills from contaminating the leaf spring and other components. If a large fuel kick back occurs, or there is a large spill of fuel into the pocket, an effort should be made to remove the excess fuel from components that may have been exposed to diesel fuel.

LEAF SPRING INSERT

Inspect the rear leaf springs and shackles for any damage. Damaged springs or shackles should be replaced following the procedures in the appropriate Service Information.

If there is not any damage, install new leaf spring inserts on each rear leaf spring. Begin by cleaning the springs to remove any diesel fuel or contamination between the leaf elements.

Next, insert a plastic trim tool or plastic wedge between the #1 and #2 leaf springs to access the old insert. Push up on the insert and cut off the stem using a suitable cutting tool.

Leaf spring inserts

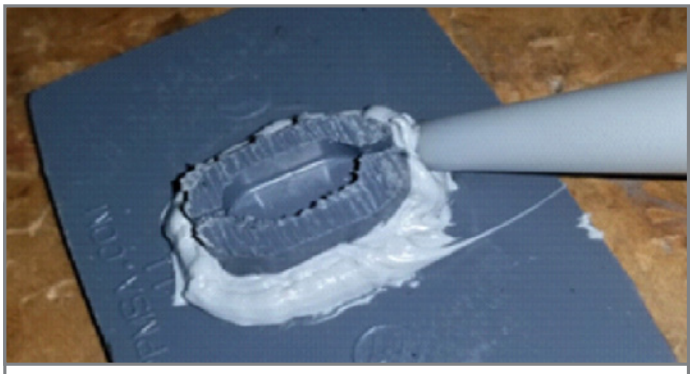
CONTINUED ON PAGE 9

Remove the top portion of the insert and then remove the bottom portion of the remaining stem. Clean any dirt or debris from between the leaf springs.

The stem of the new insert will need to be cut down to 6 mm (0.24 inches). Once the stem is cut, apply a small amount of RTV sealer around the base of the stem.

Push up on the insert and cut off the stem.

Install the new insert into the leaf spring so that the stem portion lines up with the slot in the spring. With the insert positioned correctly, remove the trim tool or plastic wedge to close the spring and seat the new insert. Repeat this procedure for the other leaf spring insert.



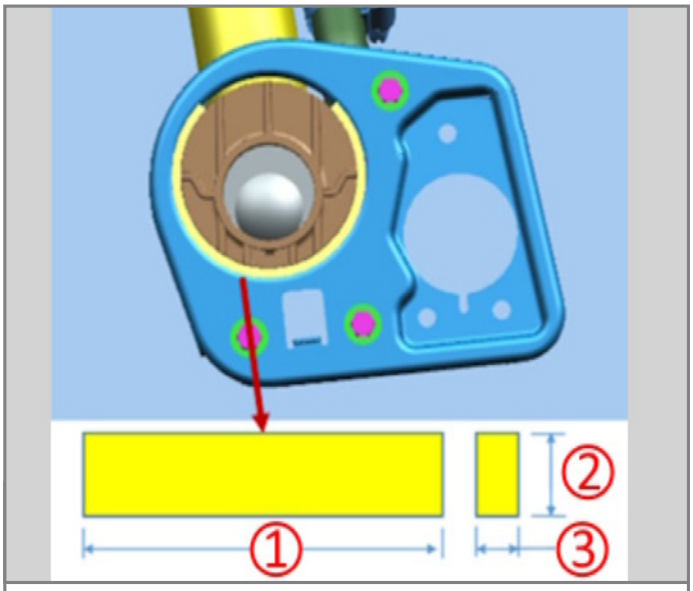
Cut down the stem and apply a small amount of RTV sealer.

TIP: New spring inserts have a break-in period of up to 1,000 miles (1,610 km), so some noise can be expected after the new inserts are installed.

Do not use any kind of lubricants on the new spring inserts. They are designed to work without any lubricant.

FUEL FILLER PIPE FOAM SEAL

When fuel contamination is found, check the fuel filler pipe for a missing seal around the pipe or for any damage to the seal. If the seal is damaged or missing, a new foam seal can be installed around the pipe using a locally obtained high density polyethylene foam pad. The pad material must be polyethylene foam.



Polyethylene foam pad dimensions:
1) Length – 200 mm (7.9 inches)
2) Width – 15 mm (0.6 inches)
3) Thickness – 6.4 mm (0.25 inches)

Cut the foam pad to the following dimensions:

1) Length – 200 mm (7.9 inches)

2) Width – 15 mm (0.6 inches)

3) Thickness – 6.4 mm (0.25 inches)

Remove the fuel filler pipe housing to access the fuel filler opening. Clean off any residual fuel from the fuel filler opening and pipe before installing the new polyethylene foam strip in the filler opening. Position the foam strip to cover the lower portion of the opening.

New polyethylene foam seal installed around filler opening.

For more details, including part numbers, refer to Bulletin #26-NA-084.

▶ Thanks to Mike Waszczenko

Update –Midtronics DCA-8000 Diagnostic Charger

The Only Accepted Battery Tester for Warranty Battery Replacement (U.S.)

The Midtronics DCA-8000 Diagnostic Charger is the latest generation battery charger and tester from Midtronics. It provides fast, accurate testing results and is the GM-required tool for charging and testing 12-volt batteries under warranty (U.S.)

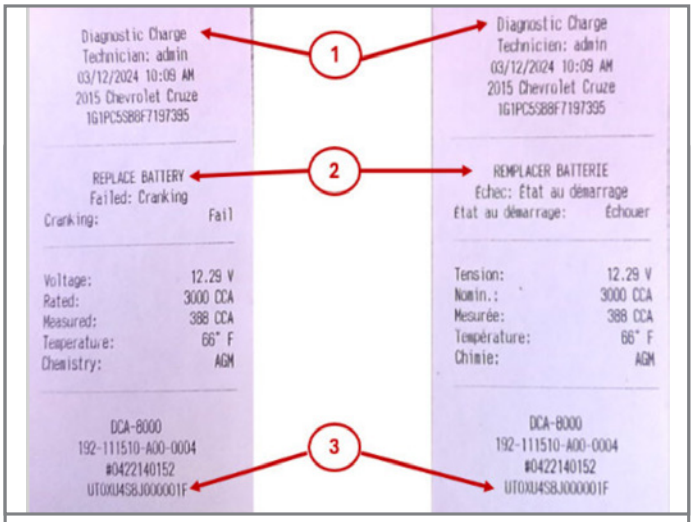
Shipments of the Midtronics Diagnostic Charger DCA-8000P Essential Tool have concluded, and all U.S. dealerships now have at least one DCA (8000 or 8000P) for charging and diagnosing 12V batteries. DCA-8000P shipments to Canadian dealerships will continue throughout the year.

Midtronics GR8 Battery Tester/Charger (GR8) and E-XTEQ Diagnostic Charge Battery Station (DCBS) test codes are no longer accepted in support of replacement warranty claims (U.S.).

In Canada, dealerships may use a DCA Battery Tester/Charger (DCA-8000 or DCA-8000P), GR8 Battery Tester (EL-50313), or an E-XTEQ Diagnostic Charge Battery Station/DCBS (EL-52800) until further notice.

REQUIRED TOOL

All warranty job cards (U.S.) must use the DCA to test 12V batteries under warranty. Only warranty codes generated from a DCA tool will be accepted in support of warranty replacement of a 12V battery.



DCA printout showing (1.) Diagnostic charge test information, (2.) Replace battery result, and (3.) 16-digit warranty code.

The DCA battery test result printout must include:

1. Diagnostic Charge test information
2. Test result that reflects "Replace Battery"
3. The 16-digit Warranty Code, which is the correct code to enter on the warranty transaction. This code is unique to each test performed and is decodable by GM.

TIP: As a standard practice, the DCA should be connected to the dealership's Wi-Fi, which facilitates battery test data transmission to GM in a timely manner.

Refer to Bulletin #20-NA-132 for more information about 12V battery testing and warranty replacement requirements.

BATTERY TEST DECISIONS

For successful 12V battery replacement warranty transactions, review the following guidelines before completing battery testing.

The following items may cause Global Warranty Management (GWM) errors:

- Incorrect battery setup information entered during testing, such as the wrong battery type or CCA.
- Exceeded the maximum number of battery tests. Allow testing to complete. Do not rest after receiving a completed test decision.
- The OEM battery type or CCA information was not available i the GM system for the VIN.

DCA ASSISTANCE

To help with using the DCA in dealerships, Midtronics has produced an operator's guide with a variety of tips, tool updates, connections, and other support topics. More information on assembly, getting started using the tool, and details on the service apps can be found at http://gmdca8000.midtronics.com.

CONTINUED ON PAGE 11

12-Volt Battery Test Decision Mapping		
Fiinal Battery Test Decision	**Decision Cause/Explanation**	**What should you do when you receive this decision?**
CHARGE & RETEST	Incomplete test. Battery is discharged and requires additional charging and diagnostics.	Retest and allow test to complete this time.
NO DECISION	Incomplete test. Battery tested incorrectly as non-diagnostic (or) test terminated before completion, voiding final decision.	Retest and allow test to complete this time.
ABORTED	Incomplete test. User exited charge session during Recovery mode charging.	Retest and allow test to complete this time.
FROZEN BATTERY	Incomplete test. Battery is less than 10F at the clamps, and electrolyte is frozen. This prevents testing and increases risk of internal damage to the battery.	Warm up the vehicle/battery & retest. Keep tool connected to accelerate battery warm-up.
GOOD BATTERY	Test completed -- Good battery. Battery successfully recharged to > 80% State of Charge.	Stop testing. Battery replacement is not required.
GOOD RECHARGE	Test completed – Good battery. Battery recharged effectively to between 60% and 80% State of Charge.	User can stop testing or allow charger to continue in top-off mode. Battery replacement is not required.
REPLACE BATTERY	Test completed – Bad battery.	Stop testing. Submit for replacement.
BAD CELL SHORT REPLACE	Test completed – Bad battery.	Stop testing. Submit for replacement.

Additional DCA units also can be purchased directly from Midtronics. Go to http://gmdca8000.midtronics.com for current pricing and ordering or contact Midtronics at 866-592-8052 for further information.

If you have questions or need assistance with the DCA-8000P, contact Midtronics toll-free at 866-592-8052.

Thanks to Josh Shuck

TECHLINK

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@5by5dzign.com

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

GM TechLink on the Web:
GM Global Connect