Service Bulletin

Bulletin No.: 22-NA-115
Date: February, 2023

INFORMATION

Subject: Battery Maintenance Report FAQs (U.S. ONLY)

Attention: This bulletin applies ONLY to the U.S. market.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	GM Passenger Cars and Trucks (including Medium Duty)	2020	2023	—	—	—	—
Cadillac							
Chevrolet							
GMC							

Involved Region or Country	United States Only

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

U.S. dealers must refer to the Battery Maintenance Report to identify vehicles in their new vehicle inventory that require attention. The Report, located in the Dealer Maxis application on the GlobalConnect App Center, will conveniently identify the specific vehicles in your dealer inventory that require “Charge 12V Battery Charge”, "Plug in High Voltage Charger," or “Start and Move.”

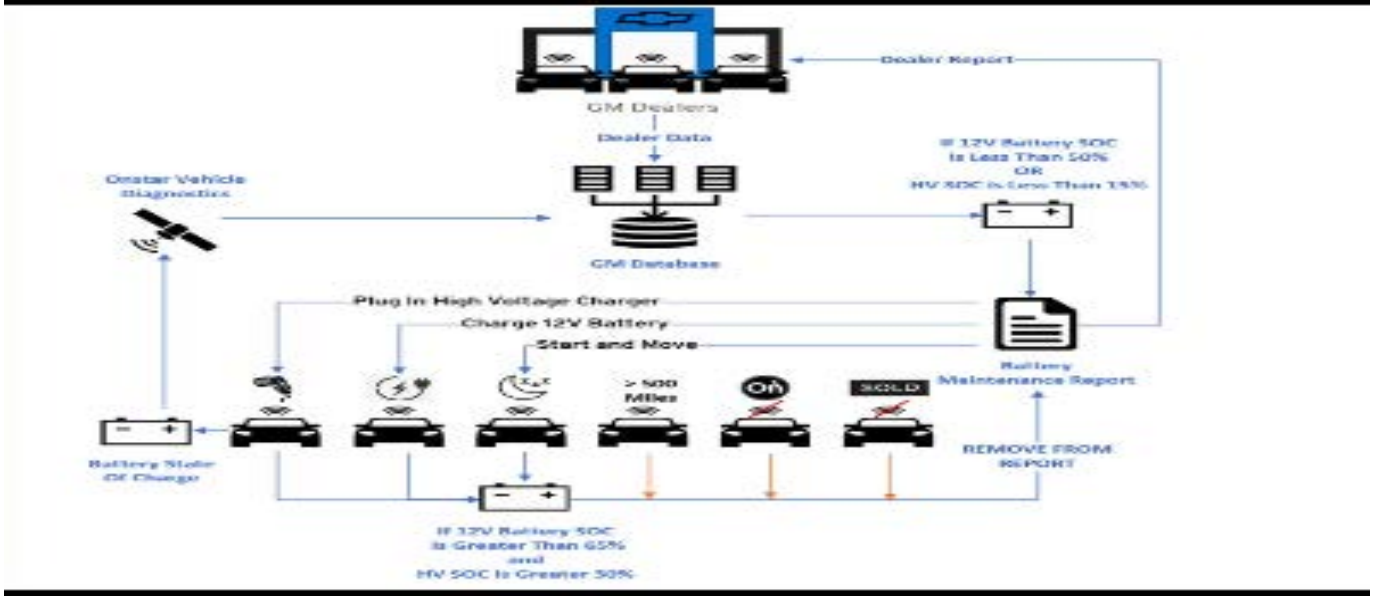
Actions Required

- It is recommended that dealers monitor the report only once per week. As a best practice, dealers should pull a fresh report every Monday morning.
- Vehicles on the report that require a Battery Charge should be charged using the “**Diagnostic Charge** ” mode on the GR8 or the “Diagnostic Trolley” mode on the Diagnostic Charge Battery Station (DCBS). For vehicles with two batteries, each battery should be individually charged.
- The report will also identify vehicles that need to be started and moved as they have remained dormant for an extended period and are no longer transmitting battery state of health information to GM via Remote Vehicle Diagnostics. Sitting in one location for long periods can also lead to tire flat spotting and brake corrosion build up. These vehicles should be started and moved to prevent these issues and also to allow GM to connect to the vehicle so that we can provide proper recommendations on battery maintenance.

After taking action on any particular vehicle noted on the Battery Maintenance Report, it may take **up to 5 days** for the vehicle to be removed from the Report.

Refer to Service Bulletin # 21-NA-043 for requirements on properly maintaining vehicles in dealer inventory.

Process Overview



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Battery Maintenance Report Frequently Asked Questions (FAQs)

Q1: Why do the Dealers need to do this? Doesn't the PDI process take care of this?

A1: Effective January 1, 2021, we made the following PDI changes for 12 Volt Battery Maintenance:

- Eliminated initial PDI battery check and charge
- Eliminated battery charge every 30 days on New Vehicle Inventory
- Eliminated final PDI battery check and charge just prior to delivery

Note: There was no reduction to PDI labor time allowances.

Q2: How can Dealers access the Battery Maintenance Report?

A2: Dealers may access the Battery Maintenance Report by:

1. Access "Maxis for Dealers" App link in the GlobalConnect App Center.
2. Click on the "Battery Maintenance Report" tile.

Note: If you find you do not have access, please see your dealer Partner Security Coordinator (PSC).

Q3: What VINs appear on the Maintenance report?

A3: Vehicles that meet the following criteria:

- U.S Pre-sale inventory
- Less than 500 miles
- AT&T cellular connection
- OnStar full services not activated
- Vehicles Delivered to Dealer or ship-to location

Q4: What does the Required Action "Charge 12V Battery " mean on the report?

A4: This action alert indicates the vehicle battery requires charging due to its low state of charge (SOC). SOC refers to the 12V battery capacity not the voltage. If the battery SOC is less than 50% of its full capacity, the VIN will appear on the report.

All vehicles showing this required action must be charged using the "**Diagnostic Charge** " mode on the GR8 or the "Diagnostic Trolley" mode on the Diagnostic Charge Battery Station (DCBS) to sufficiently charge the battery.

Note: DO NOT use the PDI mode to charge. This mode will only charge for 20 minutes and does not provide enough charge.

GM recommends cycling the ignition every time after charging a vehicle to reset the 30 day Onstar timeout counter.

Q5: After I charge the 12V battery, when will the VIN be removed from the report?

A5: Once battery SOC is above 65%, the VIN will come off report within 5 days.

Q6: What Voltage is 50% State of Charge?

A6: State of Charge is the measure of a battery's capacity not the voltage. As capacity reduces the voltage will lower. Approximately 12.1 Volts at 50% SOC. Battery SOC percentage is dependent on temperature, so reference *Battery Charging* in SI.

Q7: What if my vehicle has two 12V batteries?

A7: Stop/Start vehicles, Medium Duty, Heavy Duty trucks often have the batteries in parallel, so only one state of charge reading is reported. Each one should be individually tested with a diagnostic charger. For Police vehicles, only the main 12V battery is monitored with the battery sensor and not the Auxiliary battery. Both should be checked when "Charge Battery" is displayed on the report.

Q8: What does Required Action "Start and Move Vehicle" mean on the report?

A8: This alert indicates the vehicle has not been started in 12 days. Dealers must start and move the vehicle to prevent tire flat spotting and/or brake corrosion build up.

Q9: How far do I need to drive a vehicle that needs a "Start and Move"?

A9: Moving the vehicle 8 feet forward and 8 feet back will be sufficient.

Q10: If a vehicle alerts for needing a 12V charge, can I just start the vehicle and let it run for a while?

A10: No. Vehicles on the report have reached the caution threshold and our testing shows that they require the type of charging provided using the "Diagnostic Charge" mode on the GR8 or Diagnostic Trolley mode on the Diagnostic Charge Battery Station (DCBS).

Note: Just starting and running the vehicle or charging in "PDI Mode" will not be effective.

Q11: If our GR8 or DCBS is down, can I use a different battery charger?

A11: A different charger may or may not provide enough charge to remove the battery from the report, depending upon the model/time charged etc. Dealers should have equipment repaired as soon as possible. See Service Policies and Procedures for additional information.

Refer to question number 29 and 30 for information on charger alternatives.

Note: PDI Mode charges will not be effective. It will only charge for 20 minutes.

Q12: How often does the Battery Maintenance Report update?

A12: The report updates every day, but each vehicle sends updates once every 5 days. Therefore, after a vehicle is charged by your dealership, it may take UP TO 5 calendar DAYS for the vehicle to be removed from the report.

Q13: What happens if dealer action is not taken within 10 calendar days?

A13: It has been determined that battery damage can occur if it is left under 50% State of Charge for longer than 10 days. Should battery replacement become necessary because of lack of action as communicated in the Battery Maintenance Report, this would be at the dealership's expense.

Q14: Does OnStar need to be activated for GM to receive battery information from the vehicle?

A14: No, full OnStar Activation will disable SOC monitoring and the VIN from the report.

Q15: How is the intelligent Battery Sensor (IBS) used?

A15: The IBS Sensor, also known as Battery Sensor module, is a LIN sensor that tells the vehicle important 12V information such as state of charge (SOC), voltage, current charge, drain, etc. Critical 12V features that depend on this sensor like OTA updates, Battery Maintenance Report, Stop/Start, etc.

Q16: What causes the IBS sensor to reset?

A16: Parasitic drains, unplugging the battery sensor connector or removing it from the negative battery post will reset the learn status. In the scan tool, an unlearned Battery Sensor Module will display a SOC error above 95%. Vehicles will self-learn after 4 hours if there is no excessive drain.

Refer to bulletin **22-NA-214** for more information.

Q17: Once a vehicle is added as a Dealer Demo or loaner, will it come off the report?

A17: Vehicles that have activated OnStar or have greater than 500 miles will be automatically removed from the report.

Q18: Are vehicles that are in transit to the dealership on the report?

A18: No, only vehicles that have been delivered to the dealer or a designated ship-to location will appear on the Maintenance Report.

Q19: Are vehicles located at an Upfitter on the report?

A19: Bailment units ordered as part of an upfitter fleet **WILL NOT** be on the report; however, vehicles ordered by the dealer with an upfitter identified as the ship-to location **WILL BE** on the report. It is the Dealers responsibility to contact the upfitter if the vehicle is on the report and needs action.

Q20: What happens if a vehicle sale does not go through, and a vehicle is returned to inventory?

A20: No action is required if a returned back to the dealer's stock within 48 hours after the retail sale.

Note: Loaners/demo are not categorized as return to stock vehicles.

Q21: Why do some vehicles show on the Regional Report, but not on Dealer Maxis?

A21: The Regional report is a snapshot in time and the resulting picture can be different than the Dealer Maxis report if they were snapshots taken at varying intervals. Vehicles can be sold, pinged again, traded or have been started and moved between the times the two snapshots are taken and reported. Since the Regional data is run early Monday morning. We recommend dealers pull their Maxis report each Monday to minimize the possibility of different snapshots.

Q22: Who do I contact if there's an issue with the data displayed in the Battery Maintenance Report?

A22: Dealers should contact their District Service Manager if they feel there is an issue with the data in the report.

Q23: I charged the vehicle and it's still on the report after 5 days. Why?

A23: There are a few possibilities:

- The VIN did not go above 65% battery state of charge (SOC).
- Vehicle did not have cellular connection will retry to communicate again in 5 calender days.
- Vehicle may be in deep sleep state and requires the ignition to be cycled.
- Vehicle once had OnStar active and now it is disabled.
- Terms and Conditions were rejected on the infotainment center.

Q24: What happens if a 12V battery fails testing after a charge?

A24: If vehicle requiring charging per Battery Maintenance Report fails the initial test, retain the test printout and **RETEST**, again using the required "Diagnostic Charge" (GR8) or (DCBS) process.

Q25: What documentation is required when I'm replacing a 12V battery in dealer inventory?

A25: Technicians are required to print the test result from the GR8/DCBS that supports battery replacement. Dealer must attach a copy to the battery replacement transaction, and retain the original in the vehicle history folder. The Warranty Code from the test printout must also be entered on the warranty transaction in the "Battery Tester Code" field. See Service Bulletin #20-NA-132 for complete details.

Q26: What if a 12V battery fails at PDI, but has not shown up on the Maintenance report?

A26: Although rare, this is a possibility since the vehicle only communicates to GM every 5 days.

Q27: For 12V batteries that fail and require a retest, how long should I wait before retesting?

A27: It is recommended that the second test be performed immediately after the first attempt.

Labor to perform the retest is covered as follows:

1. If the battery **PASSES** the retest, the vehicle can be returned to inventory. Dealers may claim a ZREG Transaction Type for performing the retest using Labor Code 0600284 (Pre-Sale Charge and Test). The allowable allowance mirrors the vehicle's applicable published Base Labor Time for Labor Code 4041512 (Battery Charging and Testing). Published Add Times are ineligible. The transaction must be routed to the Warranty Support Center with a copy of **BOTH** the initial test and the retest result printouts attached to the transaction.
2. If the battery **FAILS** the retest, replace the battery and submit a ZREG warranty claim using the applicable labor operation and published allowance per the Labor Time Guide (labor for testing is included in the published allowance for battery replacement). Attach **BOTH** copies of the test result to the transaction. Enter the 2nd code (obtained after retest) in the Battery Tester Code field of the warranty transaction.

12V Battery Charging Information

Q28: Why does the vehicle stay between 64.5 to 65% SOC on the report after charging?

A28: The vehicle could be sending a default value. The Battery Sensor Module also known as the IBS sensor may be unlearned due to battery disconnect or parasitic drains.

Q29: Can we charge a vehicle by letting the engine idle?

A29: Yes, new vehicles with less than 500 miles are in a mode where they will output a higher voltage to charge a battery. This method should only be used in remote lots.

GM still recommends using approved dealer equipment at the dealerships for vehicles that are **NOT** past due (See question 30). DCBS or GR8 test slips remain a requirement for warranty transactions and should be used to test past due alerted vehicles.

Q30: What other chargers can we use other than the DCBS or GR8?

A30: GM has other approved alternate chargers like the BC1012 and BC512 that can be found on the GM Dealer Equipment website and may be used to maintain alerted, but **NOT** past due vehicles. Both have the capability to charge the 12V lead, AGM, EFB, Li-Ion batteries. Be aware that chargers like the BC512 will not perform a test on the battery. A test printout with a warranty code from a GR8 or DCBS is required to support warranty battery replacements.

The BC1012 charger has the capability to test by IR, CCA and Charge Acceptance.

Important: Both chargers will not produce a warranty code.

Q31: Is charging required after replacing a battery?

A31: Yes, some new batteries may require a charge depending on their shelf life.

Q32: Why do I get clamp connection failures?

A32: There could several reasons why:

- During the test, the clamps have been disconnected from the battery
- During the test, the clamps were not connected directly to the terminals and clamps were heating up. There is a safety feature in the tool to stop the charge if the clamps start to get too hot
- There is an error internally in the DCBS trolley and the tool needs to be restarted.

Q33: What are some common errors when testing a 12V battery?

A33: Here are some tips when testing 12V batteries:

- Technicians must enter the correct battery type and CCA rating when setting up the charge/test.
- Never test or charge a frozen battery.
- Always connect to bare battery posts for battery diagnostics.
- Incorrect batteries that are undersized should not be tested.

Q34: Why is the Cold Cranking Amps (CCA) on the battery different than what I see on the 12V battery reference table?

A34: There are 2 types of CCA Ratings EN CCA & SAE CCA and they are not same. EN is a European Standard and SAE is a North American Standard.

Example: 800 EN CCA is equivalent to 730 SAE CCA.

Q35: What to do if the DCBS is not working?

A35: Always reference the user manual and ensure the DCBS machine has the latest software installed.

Q36: What do I do if I can't resolve my issue DCBS machine?

A36: Contact E-Xteq Tech Support – USA at:

- 1-877-453-3265 English
- Support.usa@e-xteq.com

Hours Of Operation (EST)

- Monday – Friday 8 AM to 8 PM
- Saturday:10 AM to 3 PM

Q37: Where can I find training material on the DCBS?

A37: We featured the DCBS in the following emerging issues broadcasts. These can be viewed in the Center of Learning under GM Media Tube (tech tubes).

- Nov. 2019 – Intro Video
- Jan. 2021 – Battery test
- June 2022 – GR8 phase out
- Oct. 2022 – Battery test

Electric Vehicle (EV) Section

Q38: At what high voltage (HV) SOC does an EV get added to the report?

A38: An EV will get added to the Battery Maintenance Report if the HV SOC falls below 15% or the 12V battery SOC is below 50%.

Q39: At what HV SOC will an EV be removed from the report?

A39: Once the HV battery SOC is above 30% and the 12V battery SOC is above 65%, the VIN will come off the report.

Q40: How should a HV battery be charged on an EV?

A40: If an Electric Vehicle (EV) appears on your Battery Maintenance Report stating "Plug in High Voltage Charger", GM recommends charging the HV battery with a Level 2 or DC Fast Charger. All new EVs should be charged to 80% HV SOC upon receipt of the vehicle from the factory prior to PDI. The high voltage system is designed to maintain the 12V battery state of charge, but it may not prevent an unexpected large parasitic draw from depleting the 12V battery SOC.

Q41: If charging the HV battery on an EV does not successfully charge the 12V battery, and therefore the technician needs to charge the 12V battery, does that have to be performed ONLY by a fully EV trained technician?

A41: Yes. The technician performing a charge and test on the 12V battery of a High Voltage vehicle must have completed all required EV training. Technician should refer to Document ID: 5840812 *Battery Negative Cable Disconnection and Connection* in SI before disconnecting the 12V battery.

Version	4
Modified	Released May 27, 2022 Revised June 23, 2022 – Replaced picture under Process Overview and updated information under Battery Maintenance Report Frequently Asked Questions (FAQs). Revised January 06, 2023 – Updated picture under Process Overview, updated information under Battery Maintenance Report Frequently Asked Questions (FAQs) and added 12V Battery Charger Information and Electric Vehicle (EV) Section with additional FAQs. Revised February 01, 2023 – Added additional FAQs under Electric Vehicle (EV) Section.