

New DCBS Software Update

NOW AVAILABLE

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Servers



A new software update (DCAG1-35-01) and database update (DCDG1-11) are now available for the EL-52800 Diagnostic Charge Battery Station (DCBS). All DCBS units should be updated to ensure battery testing is being performed with the latest technology and information.



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New DCBS Software Update Now Available

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TIP: Updates must be made within 30 days of the new software becoming available. After 30 days, a message will appear on the DCBS notifying users of the required software update.

Check the version numbers to determine if an updated is needed. The version numbers can be found on the handheld remote by going to Settings > Information > About > About the Remote Tool.

LATEST UPDATE

Enhancements in the latest software update include:

- 2023 model year data to allow VIN scans – Users will now have the ability to successfully perform VIN scans for 2023 model year vehicles. Missing vehicles will be added in future updates.
- Minimum RO Digits – The minimum number of characters for the repair order number has been reduced from 5 to 3 digits. The maximum number remains the same at 8 digits.
- BAC must be confirmed after a software update is performed – DCBS will now require re-entry of the BAC code after an update to help ensure the BAC information remains accurate/up to date, particularly in the event of a buy/sell or other change in the BAC code.
- Requirement to perform Optimus connection every 30 days – To ensure efficient data uploads and proper software, the DCBS must now be connected to a computer with Optimus every 30 days to prevent lock out of the remote. Update the software when available; if no software update is available the remote will automatically unlock and reset the 30-day counter.
- Estimated CCA rating on printout – An estimated CCA rating off the battery (before/ after) charging will be added to the result printout.
- Pre-Charge AH on printout – The battery's pre-charge Amp/Hour (AH) rating will be added on the result printout.

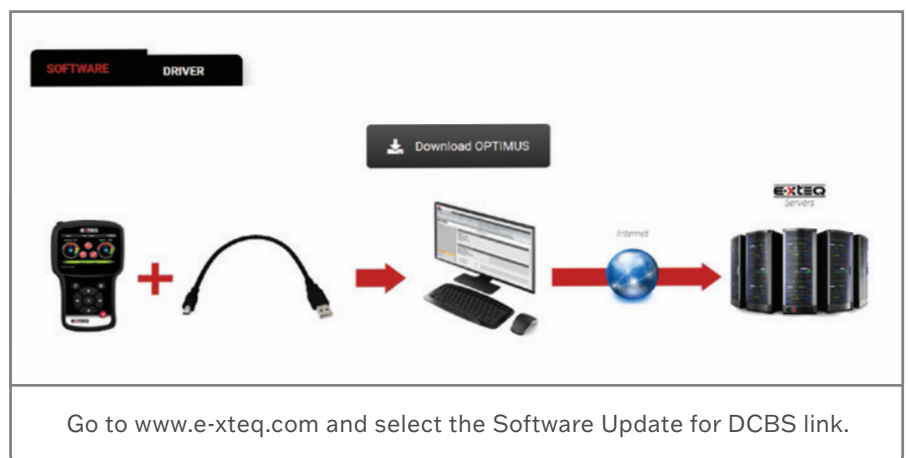


The version number can be found on the handheld remote.

- Minimum Pre-Charge Duration – To increase the odds of battery recovery, the minimum pre-charge duration has increased from 10 seconds to 5 minutes.
- Issue fix: Frozen batteries will no longer provide warranty codes – DCBS was intermittently providing warranty codes when the battery was frozen in error. This issue has been resolved.
- Improved performance with Li-Ion 12V batteries – Resolves previous issues in Lithium-Ion battery wakeup.

UPDATING THE SOFTWARE

To complete the software update, go to www.e-xteq.com and select the Download link, followed by the Software Update for



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2024 Models Included in Latest AFIT Software Update

The latest software update (V18.00) for the CH-47976 Active Fuel Injection Tester (AFIT) has recently been released. The software should be downloaded to ensure proper functionality of the AFIT. It includes testing data for all vehicle programs launching through July 2023.

The software update includes:

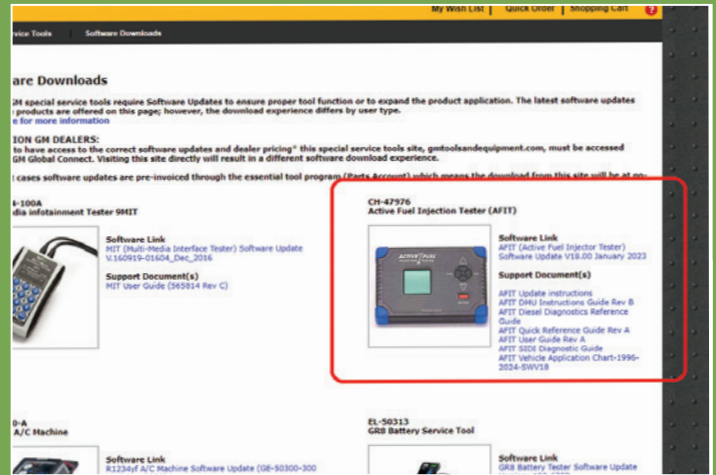
- PC Application Software V4.0 (Windows 10/7 compatible)
- MCU Firmware V3.45
- 2024 MY Database V20.00 (includes applications up to STC July 17, 2023)
- DMU Firmware V1.31

For dealerships using Windows 10, the GMDE-approved Bosch USB-to-Serial Cable CH-47976-3A is required and fully compatible for the AFIT.

SOFTWARE DOWNLOAD

The AFIT software update is available through the GM GlobalConnect app (U.S. only) Special Tools and Software Updates. From the software downloads page, select the link for AFIT (Active Fuel Injector Tester) Software Update – V18.00 January 2023 and follow the instructions.

In Canada, the software is available for download through the Service Application selection of GM Special Tools & Equipment – Software Updates in GM GlobalConnect.



Look for software update V18.00 on the Software Downloads page.

AFIT Update Instructions are available on the GM Tools and Equipment website under the Support Documents link for the software download.

For questions regarding the software release, contact Bosch Automotive Service Solutions Technical Support at 1-800-GM-TOOLS (1-800-468-6657).

► Thanks to Zach Winters

DCBS button. Connect the handheld remote to the PC using the USB cable. If the device has been updated previously, the required Optimus updating software application should already be on the PC. Open Optimus and follow the prompts to update the device. Refer to the DCBS Software Installation Guide for more information.

All DCBS software updates are delivered to the handheld diagnostic remote through the Optimus program. Any new software availability prompts will be displayed on the handheld remote.

For assistance with downloading the software or any questions about the DCBS, contact Tech Support at 1-877-453-3265. Support also is available through www.e-xteq.com.

► Thanks to Zach Winters

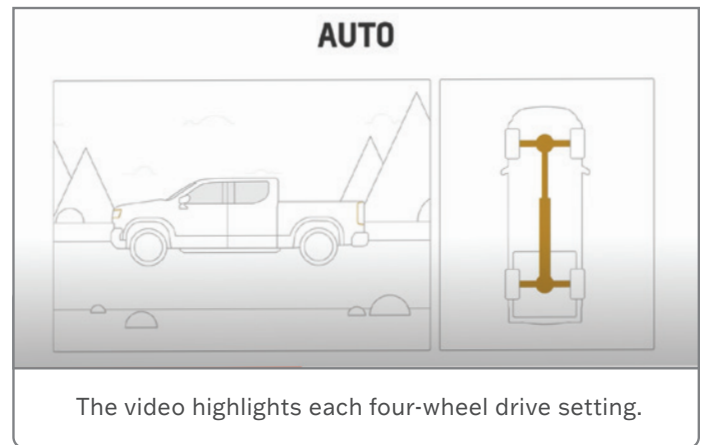


When to Operate Four-Wheel Drive

Driving through mud, snow or rain on dirt, sand or dry pavement? Depending on the particular road conditions, what's the best drivetrain choice – two-wheel drive, four-wheel drive, all-wheel drive? As four-wheel drive and all-wheel drive systems have become more popular, it's important that customers understand the capabilities as well as limitations of these performance features when reacting to current road or weather conditions.

NEW VIDEO RESOURCE

To help customers' understanding of these systems, GM has released a new video, How to Operate Four-Wheel Drive (4WD), that is now available on YouTube.



depending on road and weather conditions.

A better understanding of the four-wheel-drive or all-wheel drive capabilities of a vehicle may help in reducing Customer Concern Not Duplicated (CCND) warranty claims as a result of customers choosing the wrong transfer case mode for the road conditions. For example, selecting Four-Wheel Drive High (4HI) while driving on dry pavement may result in poor handling and a vibration in the steering system as the system tries to overcome the additional traction and lack of tire slippage.

USING THE DIFFERENT FOUR-WHEEL-DRIVE MODES

The typical automatic transfer case may have several settings:

Two-Wheel Drive High (2HI) – Use for driving on most streets and highways. The front axle is not engaged. This setting provides the best fuel economy.



Dealerships are encouraged to share the video with new customers during vehicle delivery and with existing customers when they bring their vehicle in for service or maintenance.

It covers the various four-wheel drive settings on GM vehicles, operating features, and when each setting should be selected,

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Automatic Four-Wheel Drive (AUTO or AWD) – Use when road surface conditions are variable, such as pavement and gravel. When driving with this setting, the front axle is engaged, and the vehicle's power is sent to the front and rear wheels automatically as needed, based on driving conditions.

Four-Wheel Drive High (4HI) – Use when extra traction is needed, such as when driving on snowy or icy roads, or when off-roading. Power is sent to the front and rear wheels at all times. 4HI is not designed to be used on dry pavement or roads with good traction.



Transfer case controls

Four-Wheel Drive Low (4LO) – Use only when driving off road in deep sand, mud or snow, or when climbing or descending steep hills. 4LO delivers extra torque to the front axle and vehicle speed should be kept below a maximum speed, which varies for different models and equipment. When in 4LO, the traction control and electronic stability control systems will be off. Shift into or out of this mode when the vehicle is stopped or moving less than 3 mph (5 km/h) with the transmission in Neutral.

Neutral (N) – Use only when towing the vehicle. Refer to the Owner's Manual for specific information about recreational vehicle towing.

Shifts between 2HI, 4HI and AUTO can be made at normal driving speeds. The shift indicator — located on the button or on the Driver Information Center — will flash until the shift has been completed. Once completed, the indicator will remain illuminated. If a shift cannot be completed, the transfer case will remain in the previously selected setting.

Extended operation in the wrong four-wheel-drive setting for the current road conditions may damage or shorten the life of drivetrain components and cause the tires to wear faster.



Transfer case shift indicator on the Driver Information Center.

DRIVE MODES

The drive modes on some models automatically adjust various vehicle control systems based on driving preferences, weather and road conditions. In some cases, all-wheel drive may be activated automatically when certain modes, such as Sport mode, are selected.

For example, on some all-wheel-drive vehicles, the AWD button or Mode button (if equipped) must be selected in order to send power to all four wheels. It should be used for enhanced traction during slippery conditions on gravel, wet pavement, snow or ice. Some all-wheel-drive models also may have an Off-Road mode for enhanced control while on unpaved roads.

For additional information, refer to the appropriate Owner's Manual.



Drive modes on some AWD models

► Thanks to Robert Cross

Tips for Outside Rearview Mirror Glass Service

Many 2022-2023 HUMMER EVs offer the GM Accessory Outside Rearview Mirror Projection Lights, which is an accessory illumination package that features an outside mirror with a HUMMER EV projection logo puddle lamp. When the vehicle is unlocked, the HUMMER EV logo illuminates on the ground and provides illumination to help to enter or exit the vehicle.

The installation of the Outside Rearview Mirror Projection Lights on the HUMMER EV requires the removal of the outside rearview mirror glass.

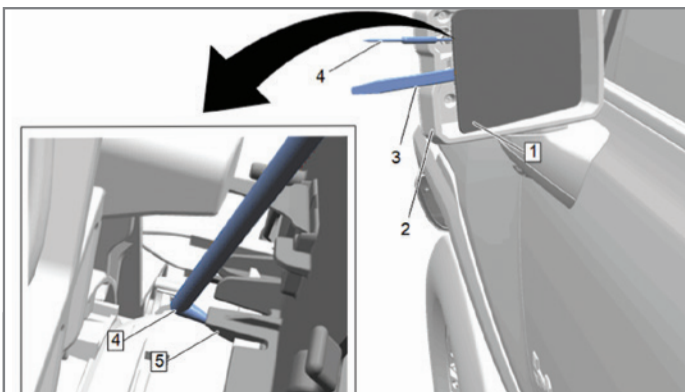


Outside Rearview Mirror Projection Lights

Failure to remove the mirror glass correctly can result in a cracked mirror. In addition, if the mirror glass is not reinstalled properly, it may fall off or not tilt correctly in any of the four directions. Incorrect reinstallation also may cause the Side Blind Zone warning indicator to not work correctly.

PROPER REMOVAL AND INSTALLATION

When removing the mirror glass, use a flat-bladed trim stick to



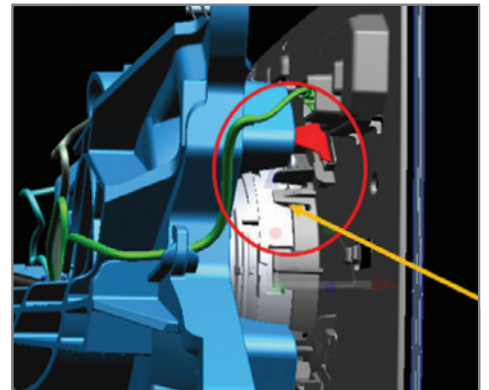
Use a trim stick and curved pick tool to remove the mirror glass.

carefully move the glass away from the housing. Next, with a curved pick tool, reach behind the glass and release the locking tab as shown.

Once the tab is depressed, the glass will release from the actuator.

TIP: Before installation of the new mirror lamp, check the part label for correct orientation (LH or RH) of the parts.

During reinstallation of the mirror glass, be sure the wiring harness connectors are properly reconnected.



Use a curved pick tool to remove the mirror from the actuator.

ANTI-RATTLE TABS

Additional care must be taken to ensure the anti-rattle tabs are properly aligned with the mirror housing before seating the mirror glass to the actuator. If the anti-rattle tabs are bent, it may: cause the mirror to not tilt properly; lead to a vibration while the vehicle is moving making the image appear distorted; result in the mirror falling off the housing when the door is closed.



Example of a bent anti-rattle tab

During installation, carefully line up the anti-rattle tabs on the mirror glass to the housing before fully seating the glass to the actuator. Tilt the mirror in all four directions to confirm proper operation. Rotating the glass will help identify any tabs that are not aligned, which will restrict glass movement.

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New Engine Calibration Addresses Fuel Injection Variation

Some 2022-2023 Trailblazer and Encore GX models equipped with the 1.3L engine (RPO L3T) may have an illuminated Check Engine MIL and DTC P2B95 (Injection Pulse Performance During Cold Start) set in the Engine Control Module (ECM).

These conditions may be due to a fuel injector variation with the converter light off. The ECM should be reprogrammed with an updated calibration to address the injector variation.

During a cold start, the ECM commands dual-pulse mode during Open Loop operation to improve cold start emissions. In dual-pulse mode, the injectors are energized twice during each injection event.

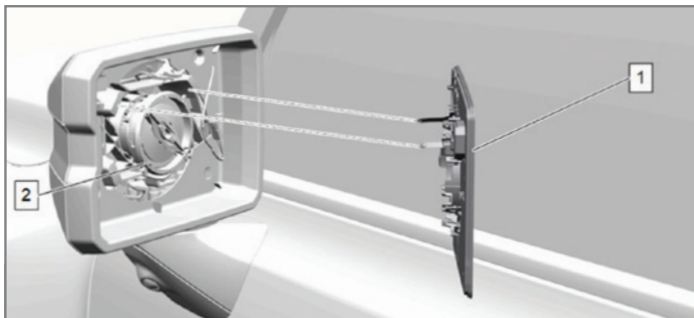
The catalyst must be warmed to efficiently reduce the emissions. The cold start emission reduction control system strategy is to

reduce the amount of time it takes to warm the catalyst. During a cold start, the engine spark timing is altered to allow the catalyst to warm quickly.

Fuel trim bias is used to keep the post catalyst air/fuel ratio within a predetermined range. This allows optimal catalyst efficiency under various operating conditions. The ECM constantly monitors how lean or rich the fuel trim bias is commanded, to determine if the fuel trim bias is greater than a calibrated amount.

For more details, refer to Bulletin #23-NA-022.

► Thanks to Matthew Gager



Line up the anti-rattle tabs on the mirror glass to the housing.

Finally, take extra care when reconnecting the small 2-way connectors that plug into the mirror glass. Be sure to fully seat the connectors.

For more information, refer to Outside Rearview Mirror Attachment Package Installation in the HUMMER EV Accessory Installation Manual available in appropriate Service Information.

► Thanks to Mark Shearer

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