



# Service Bulletin

## INFORMATION

**Subject:** High Voltage Battery Section Serviceability - Essential Tool EL-50332

**Models:** 2012-2013 Buick LaCrosse, Regal (eAssist Only)  
2011-2013 Chevrolet Volt  
2013 Chevrolet Malibu Eco

**Attention:** This bulletin applies **ONLY** to the North American market. Volt battery sections will be placed on parts restriction requiring a call to TAC to assist in the diagnosis prior to repairs.

### Revised Chevrolet Volt Battery Service Strategy

Beginning January 2013, the service strategy for the Chevrolet Volt battery will now include battery section replacement. EL-50332 – EV/HEV Battery Service Tool will be shipped essential to Chevrolet Volt dealers. The rollout will be staggered during the 4th quarter of 2012. This tool is a key enabler for VOLTEC battery section serviceability and de-powering of all HV batteries, including eAssist.

EL-50332 includes all required harnesses/adapters to allow for energy transfer through the 14 Volt Power Converter Harness, the Power Inverter Module Harness, the Hybrid/EV Battery Contactor Assembly or direct connection inside the battery pack. An optional Pelican case is available to store/protect the EL-50332 and its associated cables and adapters. A wheeled cart will also be available to facilitate movement of the tool within the dealership. Contact 1-800-GM TOOLS.

### EL-50332 Tool Functionality

This tool has the capability to:

- Communicate with the battery pack and display critical data such as; pack/cell voltage levels, maximum cell to cell voltage differentials, battery temperature sensor values and battery identification information with the battery pack in or out of the vehicle.
- Capture and log event data on the provided USB memory stick post event review.
- Add electrical energy to or remove electrical energy from high voltage batteries.
- Self-establish voltage targets for both balancing and de-powering events with automatic shutdown when the operation is complete or a fault is detected.
- Balance state of charge between battery sections within the battery pack to facilitate battery section replacement (for applicable products).
- Reduce the state of charge in a battery pack or battery section(s).

Battery pack voltage and current are monitored when adding energy or removing energy from the battery pack or battery sections. Supplied cables/adapters provide the option to monitor battery data through the vehicle harness or through direct connection to the battery pack.

The tool features a versatile electrical harness, allowing technicians to make connections between vehicle batteries and communication systems via unique adapters. Simple menu prompts guide verification that the battery and communication systems are properly connected and that energy transfer can safely begin.

This tool requires an external power source. Supply power options include 12VDC, 120VAC or 240VAC. The appropriate power cords/adapters are provided.



#### EL-50332 Parts List:

- EL-50332 – EV/HEV Battery Service Tool
- 12 Volt Auxiliary Power Cable
- 120V Power Cord
- 12 Volt Auxiliary to Clamps Adapter Cable
- Universal Fuse Box
- TPIM High Voltage Interface Cable
- APM High Voltage Interface Cable
- Sheathed High Voltage Banana Jack Cables
- Vehicle Interface Module (VIM)
- High Voltage Interface Cable
- VIM Low Voltage Cable
- BBDU Low Voltage Interface Cable
- High Voltage Alligator Clips

#### Tool Software Updates

The device utilizes a USB memory stick that will support system upgrades for future vehicle battery systems without a hardware upgrade. Software release upgrades will be made available on the GM Dealer Equipment website.

#### U.S. Dealers:

##### GM Dealer Equipment Website Access

This site can be accessed through GM Global Connect, Service Workbench, "GM Essential Tools - Software Updates." Follow the on-line instructions for updating the tool.

**Important:** To access downloads on this website you must first register and establish a user name and password. A link is provided below the sign-in area to "Apply for Access." Contact GMDE at 1-800-GM-TOOLS if assistance is needed.

For your convenience, here is the direct link to the GMDE software update Webpage: <http://www.gmdesolutions.com/downloads>.

#### Canadian Dealers:

##### Dealer Equipment & Services (DES) Canada Website Access

This site can be accessed through GM Global Connect, Service Library, Tools and Processes and Equipment and then select "Dealer Equipment & Services (DES) Canada."

**Important:** To access downloads on this website you must first register and establish a user name and password. A link is provided at bottom of page to "Create an account" or Contact DES at 1-866-868-3372 if assistance is needed.

For your convenience, here is the direct link to the DES Canada website where you can select the software update page: <http://www.des-canada.ca>.

## GM Dealer Training

GM Service Technical College is supporting the release of the EL-50332 and Voltac battery section replacement with a Virtual Classroom Training course, #18420.10D. The course demonstrates battery section replacement and the voltage balance operation using the new tool in a diagnostic scenario. This course will be available October of 2012 with completion required by December 2012.

## Warranty Information

A Warranty Code is generated by the EL-50332 Midtronics Battery Load Leveling tool and is required for claim processing on Labor Code N5785 - Cell, Battery Replacement. The code is automatically generated and shown on the display. The code must be entered into the Labor Code Dependency Field in GWM.

**Important:** The complete code 10 Characters (11 characters with optional hyphen) must be entered into the Labor Code Dependency Field in GWM.

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GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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