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#19-NA-194: Information on Bolt EV Drive Motor Battery New Exchange Process - (Sep 30, 2020)

Subject: Information on Bolt EV Drive Motor Battery New Exchange Process



This bulletin replaces PIC6239R to advise the Service Department, Parts Department and Warranty Administration Personnel of the revised TAC Approval and Drive Motor Battery ordering process. Please discard PIC6239R.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Bolt EV	2017	2020	—	—	—	—

Involved Region or Country	North America
Information	The previous TAC part restriction and approval process for the Bolt EV Drive Motor Battery has been updated.

Instructions

Note: When ordering high voltage battery sections, refer to Service Bulletin #18-NA-236: High Voltage Lithium-Ion Battery Section and Small Pack Exchange Procedure.

Please review all of the information provided below **prior** to contacting the General Motors Technical Assistance Center (TAC) via Dealer Case Management in the U.S. In Canada, contact TAC at the 800 numbers provided (refer to GM Canada Service Policies & Procedures Manual) to request TAC approval.

Important: Prior to calling TAC, collect and record the required information identified below. Completing the diagnostics and obtaining all required information will minimize downtime, multiple contacts with TAC, misdiagnosis, or unnecessary component replacement.

1. Do not clear codes prior to capturing data. GDS2 Session Log Freeze Frame/Failure Records should be reviewed prior to clearing any DTCs, removing 12 V power, or performing any programming.
2. The GDS2 Session Log should include a Vehicle Wide DTC Check with Module ID Information, any relevant Freeze Frame/Failure Records, Voltage Screen Data from the Hybrid Powertrain Control Module 2 and Cell Voltage Data from the Battery Energy Control Module (BECM). TAC will request that the GDS2 Session Logs be emailed to them for their immediate review. For more information, refer to the latest version of **PIP4902: Procedure For Emailing Global**

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Diagnostic System 2 (GDS2) Session Log To GM TAC (US and Canada Dealers Only)
in SI.

- Record the 16-digit Hybrid/EV Battery Pack Identification Number (BIN), which is located on the left side of the battery and can be seen without removing the battery.

Process

After the data is reviewed, TAC will **authorize** a replacement Drive Motor Battery. The new battery will be within 10% or greater capacity as the pack being removed per the New Vehicle Limited Warranty.

United States: Once authorized by TAC, dealers are now asked to order HV battery packs directly from the GM Battery Service Center by calling: 1-833-33 GM BSC (1-833-334-6272).

Canada: After the dealer calls in and works with TAC to create and/or update a case on an HV battery pack replacement, TAC will use the case reference number and order an exchange Drive Motor Battery through York Electronics in Oshawa Canada.

Note: For Policy/Goodwill repairs, refer to information provided in the Warranty Information section of this bulletin. Dealers must obtain the necessary DM-CCSP pre-approval prior to authorizing TAC to place an order.

The following information under 'Required Information' will need to be provided to TAC in order to complete the order. Please have this information ready when calling.

Required Information for U.S. and Canada

Dealer Name: _____

Dealer Code: _____

Shipping Address: _____

Contact At Dealership (include phone number and email address): _____

Dealerships Preferred Dealer Delivery Time/Date for Dealer Forklift Operator (Must be within 24 hours of the order time):

Hours of operation: _____

Does the Dealership Need Delivery Truck to have Lift gate (if no forklift available): Y/N

RO #: _____

Part # Being Ordered: _____

VIN # _____

Model: Bolt EV _____

Model Year: _____

TAC Case # _____

Return BIN # (from battery): _____

Customer Complaint: _____

Odometer Reading: _____

4 digit battery capacity number code or Ah capacity reading from GDS2: _____

Warranty Repair: Y/N © 2020 General Motors. All rights reserved.

Customer Pay Repair: Y/N

Policy/Goodwill Repair with DMA (US) or DM-CCSP (Canada) pre-approval: Y/N

Drive Motor Battery Removal Tips

Danger: Always perform the High Voltage Disabling procedure prior to servicing any High Voltage component or connection. Personal Protection Equipment (PPE) and proper procedures must be followed.

Caution: When removing the Drive Motor Battery on the GE-52200 or GE-52200A support table, carefully follow SI procedures for drive motor battery removal as the battery weighs approximately 1,000 lbs (454kg).

Only Hybrid/EV Certified Trained Technicians should remove/replace the Drive Motor Battery.

1. Disable the high voltage system. Refer to *High Voltage Disabling* in SI.

Note: The exchange unit will be shipped without coolant.

2. Drain the drive motor battery cooling system. Refer to *Drive Motor Battery Cooling System Draining and Filling* in SI.

Important: The Drive Motor Battery has two ground straps that are attached to the battery. The new battery will NOT come with the 2 ground straps already attached. Vehicles built BEFORE Model Year 2017, VIN 1G1FX6S06H4163254 will need to replace the outlet coolant hose assembly, P/N 42557402, if the battery has not been replaced previously.

3. Remove the Drive Motor Battery. Refer to *Drive Motor Battery Replacement and Shipping Preparation* in SI.

Preparing Drive Motor Battery for Return

Danger: The Drive Motor Battery must be protected when outside of the vehicle. The battery should be placed in the shipping container from the service battery as soon as possible.

After the Battery has been removed from the vehicle and before placement into the shipping container, prepare the battery for return by performing the following steps:

1. Install the coolant plugs. There are 2 of them in the coolant lines. The coolant plugs can be removed from the new service battery assembly and installed in the returned battery. Additional coolant plugs (GM P/N 22770854) can be ordered if they are needed.

Note: The Drive Motor Battery High Voltage Manual Disconnect Lever is also known as the S15 Manual Service Disconnect (MSD).

2. Install the Manual Service Disconnect (MSD) Cover. The MSD cover can be removed from the new service battery assembly and installed in the returned battery. Additional MSD covers (GM P/N 22989605) can be ordered if they are needed. The MSD lever should remain with the vehicle and not be returned with the battery assembly.
3. Install the High and Low Voltage Connector Covers. The covers can be removed from the service battery and installed on the returned battery.
4. Secure the battery in the shipping container from the service battery.

Drive Motor Battery Installation Tips and Module Programming Information

1. Install the Drive Motor Battery. Refer to *Drive Motor Battery Replacement and Shipping Preparation* in SI.
2. Program the K16 Battery Energy Control Module (BECM). Refer to *K16 Battery Energy Control Module: Programming and Setup* in SI. This will also program the Module Balance Boards

(MBBs) and Current Sense Module (CSM) in the background, which may take approximately four minutes.

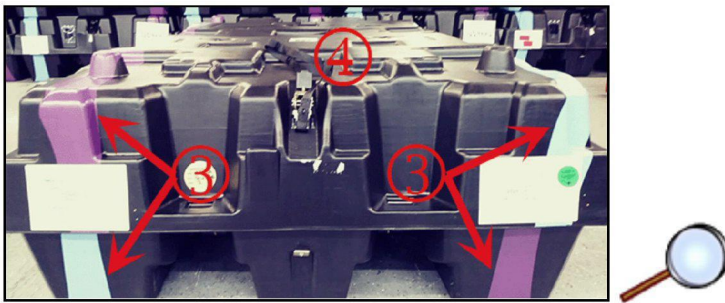
3. Program the K114B Hybrid/EV Powertrain Control Module 2. Refer to *K114B Hybrid/EV Powertrain Control Module 2 Programming and Setup* in SI.
4. Turn the ignition OFF, disconnect all devices from the DLC, close the door and allow the vehicle to enter a sleep cycle (fully powered down) for at least two minutes.
5. After SPS programming of the HPCM 2, perform the Hybrid/EV Battery Pack Capacity Learn procedure. Refer to *Hybrid/EV Battery Pack Capacity Learn* in SI.

Important: A low or incorrect cooling system coolant level could result in internal Drive Motor Battery or coolant heater damage.

6. Add coolant to the Drive Motor Battery Cooling System. Refer to *Drive Motor Battery Cooling System Draining and Filling* in SI.
7. When the installation and programming procedures are complete, drive the vehicle in Sport Mode in Low Gear for approximately 8 km (5 mi). While safely performing the 8 km (5 mi) repair confirmation, perform some side to side and fore/aft motion to purge any air from the Drive Motor Battery cooling plates.
 - 7.1. After the drive cycle, check for any DTCs and clear as needed. If needed, also perform the Clear Secured High Voltage DTCs. Refer to *Clear Secured High Voltage DTCs* in SI.
 - 7.2. Inspect and adjust the Drive Motor Battery cooling system coolant level as needed.
8. Fully charge the vehicle before delivering it to the customer.

Final Shipping Preparation

Example of Incorrect Cocoon Shipping Readiness

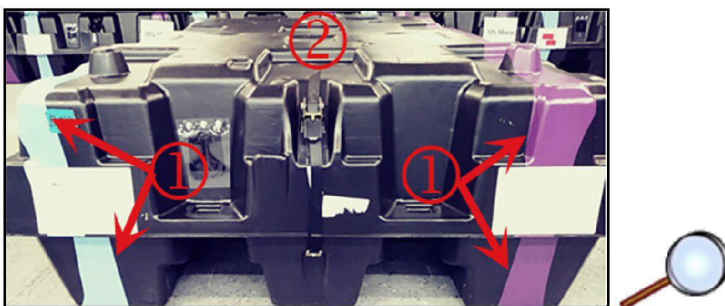


Callout 3: The outside painted lines on the cocoon DO NOT match.

Callout 4: The tie strap is NOT secured to the cocoon.

The lid will still go on the cocoon, however the structural rigidity of the cocoon is compromised. If another battery is stacked on top of the cocoon with the lid installed backwards, it could collapse.

Example of Correct Cocoon Shipping Readiness



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Callout 1: The painted outside lines match correctly.

Callout 2: The tie strap is in place and tightly secured.

Storage Guidelines

- Store the Drive Motor Battery flat.
- Store the Drive Motor Battery in an environmentally protected area (indoors).
- Maintain the Drive Motor Battery at room temperature.
- Protect the Drive Motor Battery from exposure to liquids.
- Protect the Drive Motor Battery from physical damage.

Parts Retention and Returns

Parts Retention and Returns (United States Service Agents ONLY)

All exchanged Li-Ion drive motor batteries are required to be returned for possible refurbishment. If the batteries are not returned within 30 days, the dealer will be charged back the value of a replacement battery pack. These charges are substantial.

Important: Li-Ion batteries are hazardous material. GM requires that at least one person be hazmat certified per servicing dealer. Additional resources for hazardous material shipping can be found as part of appendix G in the latest version of Service Bulletin #99-00-89-019. A compromised (damaged) battery is hazardous waste and must be discharged according to SI procedures for damaged packs. All hazardous materials and hazardous waste must be shipped in accordance with all local, state, and federal laws.

Normal Exchange (Core) Return

For most pack replacements, contact CCA Logistics at: SCGMOps@xpo.com to arrange a pickup. Ship to the address on the return Bill of Lading included with the service pack.

DO NOT wait for the warranty claim to be processed before returning the failed used drive motor battery. This exchanged part is GM's material and is not claimed under the warranty labor operation.

Place a copy of the repair order with the pack to be returned. Failure to return a copy of the repair order with the shipment may result in a debit. Attach the completed return shipping tag to the cocoon.

DO NOT return the battery pack in any container other than the container (cocoon) that the service battery was delivered in. The removed unit must be returned complete in the original exchange shipping container.

For questions about your order status, how to return exchanged material, or to verify battery receipt contact:

GM Battery Service Center

c/o Spiers New Technologies

50 NE 42nd St

Oklahoma City, Oklahoma 73105-2201

1-833-33 GM BSC (1-833-334-6272)

Canadian Failed Battery Returns

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All lithium ion batteries and battery sections that are removed from the vehicle need to be returned to the appropriate core return center. Refer to GM GlobalConnect for the latest GM Canada Parts Bulletin relating to procedures for return of EV Batteries or Sections. This can be found under Parts Bulletins & Resources located in the application section of the Parts Department page.

Canadian Dealers DO NOT return batteries to the ESC or to the WPC.

Note: If the battery or sections are not returned within 30 days of receipt of the exchange component, the entire transaction will be debited, and the dealer will also be charged the value of a replacement battery.

Parts Information

Note: The high voltage battery part number should not be entered on the warranty claim because it is on part exchange.

Applicable miscellaneous items such as coolant should be added to the part allowance amount and claimed in the Parts Cost column and not included in the Net Amount (DMN) column of the warranty claim.

Warranty Information

For warranty repairs made under coverage code V (Voltec/EV) or E (Emissions), refer to Warranty Administration Bulletin #18-NA-180 for the latest Labor Operation / Description / Labor Time / Net Admin Allowance.

For Lithium Ion Battery Replacements under Policy:

Policy Information (United States)	Policy/Goodwill Information (Canada)
Note: For high voltage batteries replaced under Policy, the following guidelines are in effect as of Sept. 30, 2020: 1. If the dealer wants to extend Policy assistance in the repair costs, the dealer must follow guidelines listed in the latest version of Service Bulletin 11-00-89-005 and run the Policy Evaluation Tool entering the labor, miscellaneous parts, and all net items at warranty rates. 2. High voltage batteries and sections replaced under Policy are provided at no cost* to the dealer through the GM Battery Service Center (BSC) exchange program. Dealer must inform the BSC at the time of ordering that the repair is being made under Policy. Do not include the cost of a battery or section when running the Policy Evaluation Tool. Do not enter the battery or section part number or cost on the submitted transaction. 3. Refer to Service Bulletin 18-NA-180 for the eligible handling allowance for the battery or section. This amount is to be entered in the Net/Admin Allowance field of the submitted transaction.	Note: For batteries replaced under Policy, the following guidelines are in effect as of September 11, 2020: 1. All Policy/Goodwill repairs involving material ordered through York Electronics (via TAC) must have pre-approval from the District Manager (DM-CCSP). Failure to obtain approval prior to ordering may result in the full cost of the battery being billed to the dealer for repair outside of warranty coverage. These charges are substantial and are not reimbursable. The Dealer must have pre-approval via email or other type of communication involving the District Manager (DMCCSP). 2. Attach a copy of the approval from District Manager (DM-CCSP) to the job card.
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Policy Information (United States)	Policy/Goodwill Information (Canada)
4. Miscellaneous items such as coolant should be entered in the Parts field and not in the Net Amount of the submitted transaction. *Dealer is not billed for an exchange component unless the defective part is not returned within the prescribed time period (30 days), TAC pre-approval was not obtained, or if the BSC is not notified at the time of order that the repair is being made under Policy. These charges are not eligible for reimbursement.	

For Lithium Ion Battery Replacements as Customer-Pay:

Customer Pay Information (United States)	Customer Pay Information (Canada)
1. The GM BSC will provide a quote for the part ordered, or for the best part currently available for the repair. Refurbished batteries may not always be in stock, and an appropriate substitute may be required as determined by the GM BSC based on current availability 2. The GM BSC will require full payment for the part up front before shipment. 3. Core returns (including shipping) are accepted free of charge by the GM BSC when originating from a repair made at a GM dealer. Contact XPO for pickup using the same instructions as core returns listed above.	1. York Electronics will provide a quote for the part ordered, or for the best part currently available for the repair. Refurbished batteries may not always be in stock, and an appropriate substitute may be required as determined by York Electronics based on current availability 2. Payment to York Electronics is required within 30 days upon receipt of the battery, failure to pay within these terms will result in charge by GM Customer Care & Aftersales (GMCCA) to your Service Agent open account at the Service Agent List Price. These charges are non-refundable. 3. Core returns: Refer to GM GlobalConnect for the latest GM Parts Bulletin relating to procedures for return of EV Batteries or Sections. This can be found under Parts Bulletins & Resources located in the application section of the Parts Department page. Canadian Dealers do NOT return batteries to the ESC or to the WPC. If the battery is not returned within 30 days of receipt of the exchange component, the dealer will be charged the value of a replacement battery.

Version Information

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Version	2
Modified	Released August 29, 2019 September 30, 2020 – Updated the information starting at the Parts Retention and Returns section and relocated the Final Shipping Preparation section.

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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<https://gsitlc.ext.gm.com/gsi/showDoc.do?releaseDate=2020-09-30&name=Information%20on%20...> 10/1/2020