



Service Bulletin

Bulletin No.: 19-NA-192

Date: July, 2023

INFORMATION

Subject: Information on Spark EV (BEV) High Voltage Battery Exchange Process

This bulletin replaces PIP5112S to reflect the revised TAC approval and battery pack ordering process. Please discard PIP5112S.

Brand:	Model:	Model Year:		VIN:		Engine:	Electric Drive Unit:
		from	to	from	to		
Chevrolet	Spark EV	2014	2016	All	All	EN0	1ET35 (RPO MME)

Involved Region or Country	North America
Information	The previous TAC part restriction for battery packs has been updated.

Recommendation/Instructions

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.

Important: This technical service bulletin (TSB) can only be completed by certified repair facilities who have met all specific training, tool and equipment requirements pertaining to the vehicle Brand and Model serviced. Repairs must be performed by a technician who has successfully completed the required training. Please review all the information provided below prior to contacting the General Motors Technical Assistance Center (TAC) via Dealer Connect Messaging 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 the required information. Completing the diagnostics and obtaining all required information will minimize downtime, multiple contacts with TAC, misdiagnosis, or unnecessary component replacement.

Important: Only have a certified Spark EV technician follow the diagnostic procedures below prior to contacting TAC. It will be necessary to connect GDS2 to record the Battery Capacity Code prior to disabling the 12V or High Voltage systems.

- Do not clear codes prior to capturing data. GDS2 Session Log Freeze Frame & Failure Records should be reviewed prior to clearing any DTCs or performing any programming.
 - The GDS2 Session Log should include a Vehicle Wide DTC Check with Module ID Information, any relevant failure records, Voltage screen data from the Hybrid Powertrain Control Module 2 (HPCM 2) and cell voltage data from the Battery Energy Control Module (BECM).
 - TAC will request that you e-mail the GDS2 Session Logs to them for immediate review.
 - The latest version of PIP4902 provides guidance on how to email GDS2 session logs to TAC.



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

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.

Process

U.S Dealers Only: Once GM TAC has authorized a battery pack, dealers are now asked to order packs directly from the GM Battery Service Center by calling 1-833-33 GM BSC (1-833-334-6272). Please note the information required at the time of ordering is shown below under 'Required Information'.

Canadian Dealers Only: After the dealer calls in and works with TAC to create and/or update a case on a battery 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# and email address): _____
- Hours of operation: _____

- Dealerships Preferred Dealer Delivery Time/Date for Dealer Forklift Operator (Must be within 24 hours of the order time) Hours of operation: _____
- Does Dealership Need the Delivery Truck to have a Lift Gate (if no forklift available): Y/N
- RO #: _____
- Part # Being Ordered: _____
- VIN # _____
- Model: _____
- 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
- Customer Pay Repair: Y/N
- Policy/Goodwill Repair (requires DM-CCSP pre-approval in Canada): Y/N

Note: Please notify the BSC if banding equipment is not available at your dealership when requesting a Drive Motor Battery. There is a limited number of Banding Kits available when the Drive Motor Battery order is being placed through the Battery Service Center (BSC). It may be necessary to obtain a Banding Kit through existing dealership resources.

Pack Removal Tips

Remove the battery assembly per SI procedures. Use caution to properly disable high voltage as instructed in SI. Only hybrid/EV trained technicians should remove the battery pack.

Important: The Battery pack has two ground straps that are attached to the battery. The new battery will NOT come with the 2 ground straps already attached.

Important: The exchange unit will be shipped without coolant. As part of the battery removal process, all coolant should be drained from the drive motor battery. Remove any plastic shipping plugs or covers from the new unit and install them on the Drive Motor Battery to be returned.

Danger: The High Voltage 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.

Pack Installation Tips

If working on a 2014 or 2015 Spark EV with the original battery, refer to the following service bulletin for additional instructions as only 2016 Spark EV batteries are available to order:

- 17-NA-003: Information on Retrofitting 2014 Vehicles to Model Year 2016 High Voltage Battery Pack

Programming and Set Up steps: (Please carefully review steps 1-3):

1. Perform K16 Drive Motor Generator Battery Energy Control Module (BECM) programming when replacing the Drive Motor Battery. This will also program the Module Balance Boards (MBBs) and Current Sense Module (CSM) which may take approximately four minutes. Refer to *Battery Energy Control Module Programming and Setup* in SI.
2. Turn the ignition off, disconnect all devices from the DLC, close the door and allow the vehicle to enter a sleep cycle (fully power down) for at least two minutes.
3. After SPS programming the BECM, follow current SI procedure to reset capacity for the new pack. Using GDS2, select Control Functions, perform the Hybrid / EV Pack Capacity Reset and then Battery Capacity Relearn in the Hybrid Powertrain Control Module 2 reset functions.
4. When SI procedures are complete, drive the vehicle in Sport Mode with the vehicle in Low Gear for approximately 8 km (5 mi). While safely performing the 8 km (5 mi) repair confirmation, drive the vehicle with some side to side and fore/aft motion to purge any air from the battery pack cooling plates. After the drive cycle, check for codes and top off the coolant system.

Important: Low coolant or incorrect coolant could result in internal battery or coolant heater damage.

5. Fully charge the vehicle before re-delivering it to the customer.

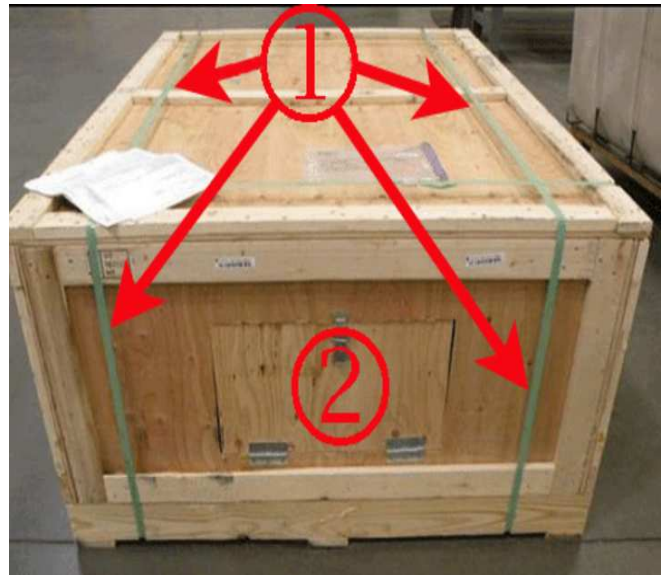
SHIPPING PREPARATION:



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Take a digital picture of the shipping container depicting the condition of the container as the shipping company picks it up and retain it for the shop records.

It is important to package the Drive Motor Battery upon return exactly as the service Drive Motor Battery was received. Zinc-Plated Steel Lag Screws for Wood, 5/16" Diameter, 2-1/2" Length are used to secure the battery pack to the crate base. The dealership must also use banding straps to secure the battery to the container base. The container top or "bonnet" must also be banded to the container base as pictured below:



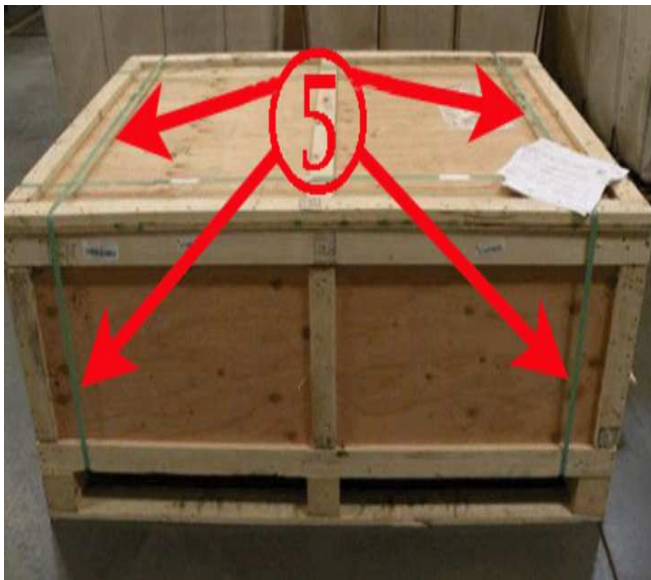
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1. Banding Straps
2. Access Door



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3. Banding Straps
4. Access Door



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5. Banding Straps

PACK STORAGE GUIDELINES:

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

Parts Retention and Returns (United States Service Agents ONLY)

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: GMBatteryReturns@rxo.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 SERVICE AGENTS ONLY:

Canadian Failed Battery Returns:

All lithium-ion batteries and battery sections that are removed from the vehicle need to be returned to the appropriate core return centre. 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 an Electronic Service Center (ESC) or to the Warranty Parts Center (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.

Miscellaneous parts such as coolant should be added in the Parts field and not included in the Net Item field of the warranty claim.

Warranty Information

For warranty repairs made under coverage code V (Voltec/EV) or E (Emissions), refer to Warranty Administration Service 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)
<p>Note: For high voltage batteries replaced under Policy, the following guidelines are in effect as of September 30, 2020:</p> <ol style="list-style-type: none"> 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 <i>at the time of ordering</i> 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. As a "Net" item, this amount should also be included when running the Policy Evaluation Tool. 4. Miscellaneous items such as coolant should be entered in the Parts field and not in the Net Amount of the submitted transaction. <p>*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.</p>	<p>Note: For batteries replaced under Policy, the following guidelines are in effect as of September 11, 2020:</p> <ol style="list-style-type: none"> 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.

For Lithium-Ion Battery Replacements as Customer-Pay:

Customer Pay Information (United States)	Customer Pay Information (Canada)
<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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.

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Modified	<p>Released August 27, 2019</p> <p>Revised September 11, 2020 – Updated the information under Parts Retention and Returns, added the Parts Information section and updated the Warranty Information.</p> <p>Revised October 13, 2020 – Updated the last line under Required Information for U.S. and Canada and updated the Parts Information and Warranty Information.</p> <p>Revised April 25, 2022 – Corrected Propulsion RPO, updated Information section with statement and removed all other content.</p> <p>Revised April 28, 2022 – Reverted bulletin to previous information and removed Bulletin reference 16-NA-142 from under Pack Installation Tips.</p> <p>Revised July 17, 2023 – Added the first two Important statements under Recommendation/Instructions and updated e-mail address under Normal Exchange (Core) Return section.</p>

