

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Release Date: May 2023

Revision: 03

Revision Description: This bulletin has been revised to update one of the High Voltage Drive Motor Cable part numbers. Please discard all previous copies of N222380031-02.

Attention: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Vehicles involved in this recall were placed on stop delivery October 13, 2022. Once the service procedure contained in this bulletin has been performed on the vehicle, the vehicle is released from stop delivery and the vehicle can be delivered to the customer.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

This is a phased launch.

As VINs become eligible for final repair, they will be moved to an "Open" status in IVH. Remaining VINs in "Incomplete. Remedy Not Available" status will not be eligible for the final repair until GM informs dealers at a future date.

For US Dealers: This recall must only be completed by GMC EV certified dealers and repairs must be performed by a technician who has successfully completed the required EV training.

For Canadian Dealers: Only GMC Dealers who have signed the GMC Electric Models Agreement and have met all the GMC HUMMER EV-specific training, tools, and equipment requirements are eligible to complete the repair. Any Dealer unsure of their eligibility status should immediately review with their District Service Manager.

Danger: Carefully read this bulletin before beginning the remedy procedure. This bulletin contains important legal and safety requirements that must be followed in order to safely replace the vehicle's high voltage battery in compliance with applicable federal, state, provincial, and local laws. To avoid injury or death, use of a forklift that meets the specifications outlined in bulletin 22-NA-114 (US) or in the EV Readiness Guides (Canada) is required to safely load and unload crated HV batteries into and out of delivery trucks. Failure to carefully follow the procedures in this bulletin may result in serious injury or death.

Important: For Canadian Dealers: Refer to GM GlobalConnect for the latest GM Canada Parts Bulletin (GMP2018-213) 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.

Important: For US Dealers: Dealers must submit a core return request through the "SNT ALFRED – High Voltage Battery Order and Returns" app in Global Connect. The app is available in the Global Connect Center. It is the same app used to order batteries for the recall. **DO NOT CALL CCA Logistics or RXO directly.**

Important: Shipment of these high voltage batteries is regulated by dangerous goods transportation laws. GM Dealer Parts and Accessories Policies and Procedures requires that dealers comply with all applicable dangerous goods transportation laws, including but not limited to having at least one employee be certified in the transportation of dangerous goods as required by law. Additional resources for dangerous goods transportation can be found as part of appendix G in the latest version of Service Bulletin #99-00-89-019. As the shipper of record, dealers are responsible for compliance with all applicable international, federal, state, provincial, or local dangerous goods transportation laws. This includes, but is not limited to, proper labeling, marking, completion of shipping papers, and packaging. Failure to comply with federal dangerous goods transportation laws may result in a violation of the U.S. Hazardous Materials Transportation Act, as amended, and its implementing regulations issued by the U.S. DOT at Title 49, Volumes 2-3, of the CFR and could subject you to fines of up to \$89,678 for each violation, except the maximum fine is \$209,249 if the violation results in death, serious illness, or severe injury to any person or substantial destruction of property.

Danger: Prior to packaging and requesting the core return through the SNT ALFRED App via Global Connect (US) or Email to GMBatteryReturns@rxo.com (Canada), you are required to verify the core is safe to return by checking one of the following 2 boxes below. If the criteria is not met by either box, the

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



battery is NOT OK to Ship back. You are **Required** to call TAC and obtain verification that the battery is OK to Ship before it can be returned.

Box1 – There were no issues found as outlined in service procedure steps 1 through 5 (“Return Battery Shipping Check List”), battery core is OK to Ship back.

Box2 – There was an issue found with one or more service procedure steps 1 through 5 (“Return Battery Shipping Check List”). However, TAC provided authorization that battery is OK to Ship back. Provide TAC case # (enter here).

Make	Model	Model Year		RPO	Description
		From	To		
GMC	HUMMER EV	2022	2023		

Involved vehicles are marked “Open” on the Investigate Vehicle History screen in GM Global Warranty Management system. This site should always be checked to confirm vehicle involvement prior to beginning any required inspections and/or repairs.

Condition	General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2022-2023 model year GMC HUMMER EV vehicles. The high-voltage battery pack enclosure in some of these vehicles may not have been properly sealed. If the pack enclosure is not sealed, water can enter the pack. GM is aware of three confirmed reports of this condition causing water to enter the pack. In two of the cases, the vehicles would not start. In the third case, the vehicle lost propulsion while driving. A loss of propulsion while driving can increase the risk of a crash.
Correction	Dealers will replace high-voltage battery packs.

Parts

Quantity	Part Name	Part No.
1	High Voltage Battery Assembly	*
As Req.	High Voltage Drive Motor Cable	86783177**
As Req.	High Voltage Drive Motor Cable	86783176**
6	Engine Coolant	12378390 US 10953456 CA

* See “Parts Ordering Information” section below.

** The High Voltage Drive Motor Cable should only be replaced if liquid is present. Refer to Step 5 in the service procedure.

Storage Guidelines for Containerized High Voltage Batteries

- Store the High Voltage Battery and shipping crate flat.
- Protect the High Voltage Battery and shipping crate from exposure to liquids, including rain and snow.
- Protect the High Voltage Battery and shipping crate from physical damage.

Parts Ordering Information

For US Dealers:

In order to simplify the ordering process for high voltage batteries necessary to perform repairs under THIS RECALL, the high voltage battery ordering process requiring authorization from the Technical Assistance Center (TAC) is not required. Battery ordering will be completed using the “SNT ALFRED – High Voltage Battery Order and Returns” app in GlobalConnect. The application can be located in either the “App Center” or “Parts Department” in GlobalConnect. All other high voltage battery orders NOT related to the recall must continue to be authorized through Technical Assistance. Once you locate and enter the app you will be connected directly to the SNT ALFRED portal. At this point simply click “Create New Order” to begin the process to order a high voltage battery. Before visiting the SNT ALFRED ordering portal, please have all required information available (shown below). Please be advised that you will be restricted from ordering a High Voltage Battery, if you have not met all the EV requirements. An applicable forklift on premise, hoist meeting the specifications published in 22-NA-114, the essential tools to perform the recall (listed below), applicable charger and certified EV technician are required.

Note that in addition to order placement, this app is also used to arrange for the high voltage battery core return and to request replacement packaging material and parts.

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



SNT ALFRED -
High Voltage
Battery Order...

6305350

For Canadian Dealers:

High voltage batteries may be ordered from York Electronics by logging onto the York Electronics website (www.yorkelec.com) using the username and password created for your Dealership.

Canadian dealer online order process:

- Log in to the website.
- Click on the GMC HUMMER / BrightDrop Battery Recall icon.
- Complete all required fields and submit the order.
- A copy of the order will be emailed to the email address used to log into the online order system.
- Once the order is processed by the York Electronics order desk, a confirmation email from York will be sent indicating the order was successfully received.

Note: For concerns with the online ordering process, please contact YORK ELECTRONICS OSHAWA at 1-888-650-9675 ext. 307.

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: _____

VIN # _____

Old Battery Identification Number (BIN): _____

Model Year: _____

Parts Retention and Return

Parts Retention and Returns (United States Service Agents ONLY)

All high voltage batteries are GM assets and must be returned. Dealers are to return the high voltage battery as soon as possible after completion of the repair. If the batteries are not **returned within 30 days**, the dealer's open account will be charged a core non-return fee; the dealer will be invoiced for the core charge.

Important: Shipment of these high voltage batteries is regulated by dangerous goods transportation laws. GM Dealer Parts and Accessories Policies and Procedures requires that dealers comply with all applicable dangerous goods transportation laws, including but not limited to having at least one employee be certified in the transportation of dangerous goods as required by law. Additional resources for dangerous goods transportation can be found as part of appendix G in the latest version of Service Bulletin #99-00-89-019. As the shipper of record, dealers are responsible for compliance with all applicable international, federal, state, provincial, or local dangerous goods transportation laws. This includes, but is not limited to, proper labeling, marking, completion of shipping papers, and packaging. Failure to comply with federal dangerous goods transportation laws may result in a violation of the U.S. Hazardous Materials Transportation Act, as amended, and its implementing regulations issued by the U.S. DOT at Title 49, Volumes 2-3, of the CFR and could subject you to fines of up to \$89,678 for each violation, except the maximum fine is \$209,249 if the violation results in death, serious illness, or severe injury to any person or substantial destruction of property.

High Voltage Battery Core Return Process (United States Service Agents ONLY)

Formatted: Font: Not Bold, Not Italic, No underline

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Important: Dealers must submit a core return request through the "SNT ALFRED – High Voltage Battery Order and Returns" app in Global Connect. The app is available in the Global Connect Center. It is the same app used to order batteries for the recall. **DO NOT CALL CCA Logistics or RXO directly.**

Danger: Prior to packaging and requesting the core return through the SNT ALFRED App via Global Connect, you are required to verify the core is safe to return by checking one of the following 2 boxes below. If the criteria is not met by either box, the battery is NOT OK to Ship back. You are Required to call TAC and obtain verification that the battery is OK to Ship before it can be returned.

Box1 – There were no issues found as outlined in service procedure steps 1 through 5 ("Return Battery Shipping Check List"), battery core is OK to Ship back.

Box2 – There was an issue found with one or more service procedure steps 1 through 5 ("Return Battery Shipping Check List"). However, TAC provided authorization that battery is OK to Ship back. Provide TAC case # (enter here).

DO NOT wait for the warranty claim to be processed before returning the removed high voltage battery. ~~This part is GM's material and is not claimed under the warranty labor operation.~~ Place a copy of the repair order with the high voltage battery 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 shipping crate. DO NOT return the high voltage battery in any crate other than the crate that the service high voltage battery was delivered in. The removed unit must be returned complete in the original shipping crate.

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

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

High Voltage Battery Core Return Process (Canadian Service Agents ONLY)

Important: Refer to GM GlobalConnect for the latest GM Canada Parts Bulletin (GMP2018-213) 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.

Danger: Prior to packaging and requesting the core return, you are required to verify the core is safe to return by checking one of the following 2 boxes below. If the criteria is not met by either box, the battery is NOT OK to Ship back. You are Required to call TAC and obtain verification that the battery is OK to Ship before it can be returned.

Box1 – There were no issues found as outlined in service procedure steps 1 through 5 ("Return Battery Shipping Check List"), battery core is OK to Ship back.

Box2 – There was an issue found with one or more service procedure steps 1 through 5 ("Return Battery Shipping Check List"). However, TAC provided authorization that battery is OK to Ship back. Provide TAC case # (enter here).

Dealers can request Core pickup by emailing:

GMBatteryReturns@rxo.com

For Ultium Battery Returns, please include the device ID tracking number found on the plastic pouch on the exterior of the crate.

You will be required to provide size (l x w x h) and weight. This information is available on the GM0003 tag. If your facility does not have a loading dock, please ensure RXO understands that this shipment will be loaded at ground level with a forklift. (LTL carrier will need to bring required equipment).

Specify Return address:

Vancouver Serviced Dealers: TST Overland Express Burnaby
7867 Express Street 111
Burnaby, BC

Edmonton Serviced Dealers: Day & Ross Edmonton X-Dock
11727 – 178th Street
Edmonton, Alberta

Woodstock Serviced Dealers: Day & Ross Woodstock X-Dock
520 Beards Lane, Unit B
Woodstock, Ontario

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Montreal Serviced Dealers: Day & Ross Montreal X-Dock
 5000 Trans Canada Hwy
 Pointe Claire, PQ

For individual batteries over 500 kg. (1102 lbs.) – included with your new battery will be four (4) Class 9 TDG placards. Please provide these to the driver and **ensure** placards are affixed to the vehicle before departing.

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

Note: If the removed high voltage battery is not returned, the entire transaction will be debited, and the dealer will also be charged the value of a service high voltage battery.

Warranty Information

Labor Operation	Description	Labor Time	Trans. Type	Net Item
9106527*	<u>2022 model year only:</u> Hybrid/Electric Vehicle Battery Pack Replacement and Shipping Preparation (Includes K16K107 – Battery Energy Control Module / Drive Motor Control Modules Sequence Programming) ADD: Crating and Uncrating ADD: Diagnosis	11.4 1.8 0.3-1.0****	ZFAT	**
9106636*	<u>2023 model year only:</u> Hybrid/Electric Vehicle Battery Pack Replacement and Shipping Preparation (Includes K16 – Battery Energy Control Module Programming) ADD: Crating and Uncrating ADD: Diagnosis	11.3 1.8 0.3-1.0****	ZFAT	**
9106736	Floor Plan Reimbursement – NEW INVENTORY ONLY	N/A	ZFAT	***

**** If more diagnosis time is required than 1.0, you may claim OLH.

Note: To avoid having to "H" route the floor plan transaction for approval, it must be submitted prior to the repair transaction.

Important: * To avoid warranty transaction rejections, the Warranty Administrator will need to carefully read and follow the instructions below:

- **Required (Warranty Administrator)** – The Warranty Claim Code must be accurately entered in the "Warranty Claim Code" field of the transaction.
- **When more than one Warranty Claim Code is generated for a programming event, it is required to document all Warranty Claim Codes in the "Correction" field on the job card. Dealers must also enter one of the codes in the "Warranty Claim Code" field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS/SPS2.**
- **Required (Warranty Administrator)** – Document the OLD and NEW Battery BINs in the "Correction" field on the job card (per Technician Old and New Battery BIN recording on repair order in service procedure step 5).

** Submit up to \$500.00 USD (\$624.00 CAN) for interim additional labor compensation. Add this amount in the Allowance Net Item field when submitting the repair transaction.

Formatted: Indent: Left: 0", Hanging: 0.19", No bullets or numbering

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Dealers will order and pay for battery packs/modules upfront and receive their approved parts markup based on the listed Dealer prices published in GM's Electronic Parts Catalog upon submission of a claim in accordance with GM's Service Policies & Procedure Manual.

Formatted: No bullets or numbering

****** Submit a \$520.00 USD (\$624.00 CAN) administrative part allowance. Add this amount in the Administrative Allowance Net Item field when submitting the repair transaction.

Formatted: List Paragraph, Indent: First line: 0", Tab stops: 0.19", Left

****** For this specific recall, submit up to \$700.00 USD (\$950.00 CAN) for recall specific impacts to technician and service department throughput, Business Development Centers, high voltage battery handling and storage, and miscellaneous shop supplies.

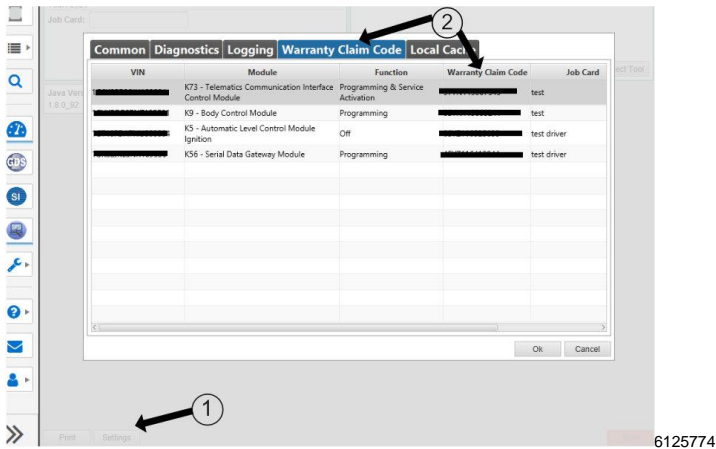
****** Submit up to \$20.00 (\$25.00 CAN) for document preparation and packaging relating to the return of the used high voltage battery assembly. Add this amount in the Allowance Net Item field when submitting the repair transaction.

Submit a \$700.00 USD (\$950.00 CAN) administrative allowance for recall specific impacts to technician and service department throughput, Business Development Centers, high voltage battery handling and storage, and miscellaneous shop supplies.

****** Submit a \$20.00 (\$25.00 CAN) administrative allowance for return of the used high voltage battery assembly (document preparation and packaging). Add this amount in the Administrative Allowance Net Item field when submitting the repair transaction.

****** Involved vehicle owners are eligible for courtesy transportation while their vehicle is being repaired. If courtesy transportation is required, add the actual cost in the appropriate Net Item field when submitting the repair transaction. Refer to GM Warranty Administration Bulletin 17-NA-073 for Courtesy Transportation Program guidelines.

Warranty Claim Code Information Retrieval



If the Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

1. Open TIS/TLC on the computer used to program the vehicle.
2. Select and start SPS/SPS2.
3. Select Settings.
4. Select the Warranty Claim Code tab.

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Floor Plan Reimbursement – NEW INVENTORY ONLY

***** USA Only** – For vehicles eligible for floor plan reimbursement, the amount should be submitted in Net Item/Miscellaneous. This amount should represent the product of the vehicle's average daily interest rate (see table

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



below) multiplied by the actual number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop delivery message October 13, 2022, to the date the VIN was placed in "Open" status in IVH. (Maximum Number of days for Floor Plan is calculated from the "Release Date" on VINs in "Open" Status in IVH, and will be adjusted as additional releases occur.)

Vehicle	Floor Plan Reimbursement Amount	
	USA	Canada
2022 GMC HUMMER EV	\$28.33	N/A
2023 GMC HUMMER EV	TBD	N/A

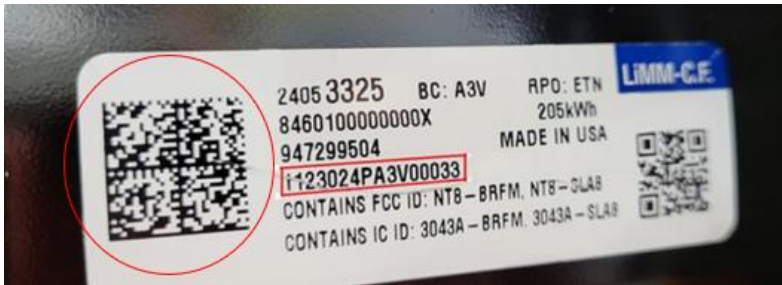
Special Tools

Marketing Number	Description
EL-53000	HV Battery Support Fixture
EL-53152	HV Battery Alignment Pins
GE-47716	Vac-N-Fill Coolant Refill Tool
EL-53076	Battery Pack Coolant Passage Pressure Adapter
EL-53080	High Voltage Battery Pack Lifting System
EL-53097	EV Battery Lifting Eye Bolts
EL-39200-LEAD	Electronic Test Leads Kit
EL-48900-A	HV Safety Kit
EL-49642	SPS Programming Support Tool

REQUIRED: Replacement Battery Identification Number (BIN) Recording (CSMT RPT Method)

IMPORTANT: * (TECHNICIAN) the OLD and NEW BATTERY IDENTIFICATION NUMBER (BIN) RECORDING IS REQUIRED per the information in the Service Procedure.

It is REQUIRED to record the Battery Identification Number (BIN) using the Certified Service Mobile Toolbox (CSMT) Replacement Part Traceability (RPT) App. Refer to **TSB 22-NA-070** for specific information on downloading the App to your mobile phone, how to use/submit the new part serial number/QR code information and other related Q and A.



6305467

If the App is already loaded to your phone, simply:

1. Log into the CSMT RPT application
2. Scan the Vehicle VIN (door pillar QR code or windshield VIN barcode) that the new part is going into and
3. Scan the new part label QR code as shown above and
4. Check the information and if correct then, Submit. (Note: you can verify submission by checking your phone outgoing emails)
5. Repeat steps 1-4 above for Old and New Battery

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Failure to submit this serial number by RPT may cause the claim to reject.

Service Procedure

Danger: Failure to use the proper Personal Protective Equipment and failure to carefully follow these procedures may result in serious injury or death.

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.

Return Battery Shipping Check List – Steps 1-5

- Using the MDI2, check all modules for the following DTCs; U2BFC, U2220-U2237, U1666, U1667, U2426, U2427, U359E, P0AA6.
 - If ANY of the above DTCs are set (current OR history), **stop work immediately, record the data that was incorrect and contact TAC (for additional diagnostics, battery storage, handling, and shipping information).**
 - If NONE of those DTCs are set, continue to the next step.

Description	Status	Action
High Voltage Isolation Data - U2BFC	Set	Refer to TAC
High Voltage Isolation Data - U2220	Set	Refer to TAC
High Voltage Isolation Data - U2237	Set	Refer to TAC
High Voltage Isolation Data - U1666	Set	Refer to TAC
High Voltage Isolation Data - U1667	Set	Refer to TAC
High Voltage Isolation Data - U2426	Set	Refer to TAC
High Voltage Isolation Data - U2427	Set	Refer to TAC
High Voltage Isolation Data - U359E	Set	Refer to TAC
High Voltage Isolation Data - P0AA6	Set	Refer to TAC

- With the MDI2 and GDS, observe and record the battery energy control module parameter(s) in GDS (example of the correct data screen shown above). Under Module Diagnostics, select **K16 – Battery Energy Control Module - > Data Display -> High Voltage Isolation Data -> Most Recent Isolation Resistance – Pack & Pack 2.**
 - If value IS below 6.3 MOhm, rerun the isolation test (select *Hybrid/Electric Vehicle Battery Pack Active Isolation Test* in GDS).
 - If value remains below 6.3 MOhm, **stop work immediately, record the data that was incorrect and contact TAC (for additional diagnostics, battery storage, handling, and shipping information).**
 - If value is NOT below 6.3 MOhm, proceed to next step.

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Parameter Name	Value	Unit	Display Name
Hybrid/Electric Vehicle Battery Pack Control Temperature	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 1	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 2	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 3	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 4	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 5	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 6	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 7	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 8	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 9	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 10	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 11	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 12	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 13	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 14	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 15	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 16	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 17	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 18	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 19	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 20	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 21	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 22	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 23	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 24	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 25	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 26	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 27	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 28	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 29	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 30	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 31	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 32	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 33	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 34	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Pack Control Temperature 35	35	°C	Battery Energy Control Module

6305377

- With the MDI2 and GDS, observe and record the battery energy control module parameter(s) in GDS (example of the correct data screen shown above). Under Module Diagnostics, select **K16 – Battery Energy Control Module - > Data Display -> Hybrid/Electric Vehicle Battery Pack Temperature Data**. Ensure *Hybrid/Electric Vehicle Battery Pack Thermal Event Gas Sensor* and *Hybrid/Electric Vehicle Battery Pack Thermal Event Gas Sensor 2* both display 30,000 PPM or less.
 - If either sensor is greater than 30,000 PPM, **TURN OFF AND EXIT THE VEHICLE. Stop work immediately, record the data that was incorrect and contact TAC (for additional diagnostics, battery storage, handling, and shipping information).**
 - If both sensors do not exceed 30,000 PPM or gas level *decreases* proceed to the next step.

Parameter Name	Value	Unit	Display Name
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 1	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 2	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 3	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 4	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 5	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 6	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 7	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 8	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 9	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 10	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 11	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 12	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 13	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 14	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 15	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 16	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 17	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 18	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 19	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 20	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 21	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 22	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 23	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 24	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 25	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 26	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 27	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 28	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 29	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 30	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 31	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 32	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 33	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 34	35	°C	Battery Energy Control Module
Hybrid/Electric Vehicle Battery Interface Control Module 1 Temperature 35	35	°C	Battery Energy Control Module

6305357

- With the MDI2 and GDS, observe and record the battery energy control module parameter(s) in GDS (example of the correct data screen shown above). Under Module Diagnostics, select **K16 – Battery Energy Control Module - > Data Display -> Hybrid/Electric Vehicle Battery Module Temperature Data**. Ensure *Hybrid/Electric Vehicle Battery Interface Control Module 1 thru Module 24 Temperature 1 and 2* are all within 5C degrees of each other. Additionally, ensure none exceed 35C.
 - If any temperature is 5C degrees greater than the others or exceeds 35C, **TURN OFF AND EXIT THE VEHICLE. Stop work immediately, record the data that was incorrect and contact TAC (for additional diagnostics, battery storage, handling, and shipping information).**
 - If all temperatures are within 5C of each other and do not exceed 35C:
 - Inspection is complete.

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Danger: If any liquid drips from any of the Battery Pack electrical connectors (or the inspection port/drain plug on the high voltage battery) while disconnecting them, finish battery replacement as quickly as possible and immediately place the removed Battery Pack outside, and contact TAC (for additional diagnostics, battery storage, handling, and shipping information).

Note: The new Battery Pack provided may have slight differences from your existing battery, such as a lack of the metal heat shields. It is not necessary to transfer anything from the old Battery Pack to the new one.

5. Replace the Hybrid/Electric Vehicle Battery Pack. Refer to *Hybrid/Electric Vehicle Battery Pack Replacement and Shipping Preparation* in SI.
 - Refer to bulletin 22-NA-005 for additional container-specific information on uncrating the new battery you will receive. This bulletin also contains information on packaging and crating the battery that will be removed from the vehicle for return to GM.
 - After reviewing document 22-NA-005, refer to Hybrid/Electric Vehicle Battery Pack Lifting System and remove the replacement battery pack from the shipping crate. Place the replacement battery pack onto the 4 inch x 4 inch x 8 foot boards. Then remove the EL-53097 EV Battery Lifting Eyebolts for later transfer onto the defective battery pack.



6305405

- Prior to removing the Battery Assembly from the vehicle, after disconnecting the High Voltage connectors, remove the inspection port/drain plug (circled above) to see if any fluid drains, then reinstall the plug.
 - + If fluid drains from the High Voltage connectors or the inspection port/drain plug, **refer to the danger statement above step 5.**
 - + If no fluid drains from either area, proceed to the next step.

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



- **REQUIRED (Technician)** - Locate the BIN label on the rear of the battery and record the BIN of both the old and new battery packs on the repair order.

Programming Procedure

Notes:

Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector (DLC). If there is an interruption during programming, programming failure or control module damage may occur.

Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. When required, install a battery maintainer or power supply that provides a steady and stable voltage. Do not use a battery charger, as charging voltage will often fluctuate when connected to the vehicle. This may interrupt programming. If a battery maintainer is not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply.

Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.

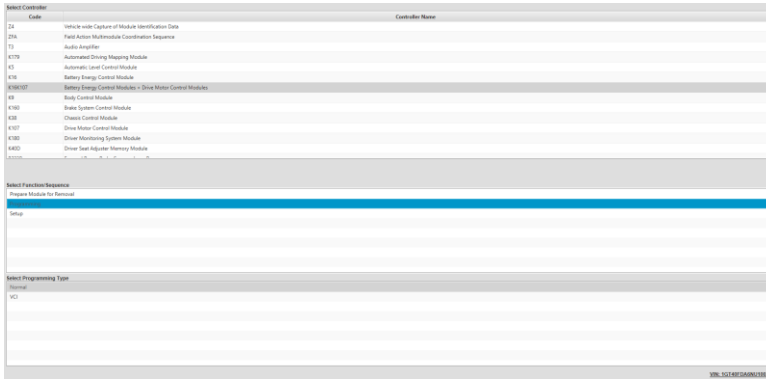
During the programming procedure, follow the SPS prompts for the correct propulsion system state.

Clear DTCs after programming is complete.

6. Prior to programming, ensure there are no latched High Voltage DTCs. Refer to *Clear Secured High Voltage DTCs* in SI.

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack

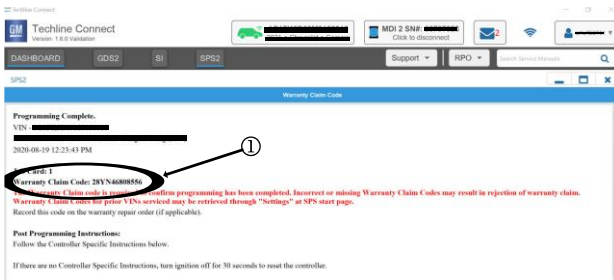


7. Program the vehicle using the MDI2 and Techline Connect.

- For MY 22 HUMMER EV - Select the sequenced programming event “K16K107 – Battery Energy Control Module / Drive Motor Control Modules”, as shown above, and then follow the on-screen instructions.
- For MY 23 HUMMER EV - Select “K16 – Battery Energy Control Module”, and then follow the on-screen instructions.



- If the above message appears on the IPC, disconnect the 12v battery system negative cable and wait at least 10 minutes before reconnecting the battery again and starting at step 5. Refer to *Battery Negative Cable Disconnection and Connection* in SI. If any other trouble is encountered with programming, contact Techline at 1-800-828-6860.



5644478

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Note: The screenshot above is an example of module programming and may not be indicative of the specific module that is being programmed. Module selection and VIN information have been blacked out.

Important: To avoid warranty transaction rejections, you **MUST** record the warranty claim code provided on the Warranty Claim Code (WCC) screen shown above on the job card. Refer to callout 1 above for the location of the WCC on the screen.

- Record SPS Warranty Claim Code on job card for warranty submission.

Dealer Responsibility – For USA & Export (USA States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

Dealer Responsibility – All

All new, used, GM Certified Pre-Owned (CPO), courtesy transportation vehicles, dealer shuttle vehicles, CarBravo, etc. in dealers' possession and subject to this recall must be held and inspected/repared per the service procedure of this bulletin before customers take possession of these vehicles. Involved vehicles must be held and not delivered to customers, dealer-traded, released to auction, used for demonstration, or any other purpose.

All GM Certified Pre-Owned (CPO) vehicles currently in the dealers' inventory within the SHIFT Digital system will be de-certified and must be held and remedied per the service procedure in this bulletin. Upon submitting an accepted/paid warranty transaction in the Global Warranty Management (GWM) system, the vehicle can be re-certified for sale within the SHIFT Digital system, or once again be used in the Courtesy Transportation Program.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this field action enters your vehicle inventory you must take the steps necessary to ensure the program correction has been made before selling the vehicle. In addition, for vehicles entering your facility for service, you are required to ensure the customer is aware of the open field action and make every reasonable effort to implement the program correction as set forth in this bulletin prior to releasing the vehicle.

Dealer Reports – For USA & Export

For dealers with involved vehicles, a listing has been prepared and will be available through GM GlobalConnect Maxis Field Action Reports or sent directly to export dealers. The Inventory tab of the dealer reports will contain VINs that apply to this recall. This information is intended to assist dealers with the **PROMPT COMPLETION** of these vehicles. The Customer In-Service tab will contain customer names and addresses from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall may be a violation of law in several states.

Courtesy Transportation – For USA & Canada

Courtesy transportation is available for customers whose vehicles are involved in a product program and still within the warranty coverage period. See General Motors Service Policies and Procedures Manual for courtesy transportation program details.

Customer Notification

Product Safety Recall
N222380031 Improper Urethane Sealing - High Voltage Battery
Pack



USA & Canada - General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

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 tools, equipment, 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 dealer for information on whether your vehicle may benefit from the information.



**We Support
Voluntary Technician
Certification**

Product Safety Recall
N222380031 Improper Urethane Sealing - High Voltage Battery Pack



IMPORTANT SAFETY RECALL

April 2023

This notice applies to your vehicle, **VIN:** _____

Dear General Motors Customer:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2022-2023 model year GMC HUMMER EV vehicles. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

IMPORTANT

- Your vehicle is involved in GM safety recall N222380031.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at **no charge**.
- Until the repair is completed, your vehicle can be driven and charged normally. But as a precaution, do not drive your vehicle through deep water (over 24 inches deep).

Why is your vehicle being recalled?

In some of the recalled vehicles, the high-voltage battery pack enclosure may not have been properly sealed. If the pack enclosure is not sealed, water can enter the pack. If water enters the battery pack enclosure, one or more malfunction indicator lamps may illuminate and the driver information center may display a warning message to the driver. Your vehicle may not start or could lose propulsion while driving. A loss of propulsion while driving can increase the risk of a crash.

What will we do?

Your GMC dealer will replace high-voltage battery packs. This service will be performed for you at **no charge**. Because of service scheduling requirements, it is likely that your dealer will need your vehicle for 1-2 days to complete the repair.

What should you do?

You should contact your GMC dealer to arrange a service appointment as soon as possible.

When scheduling your appointment, confirm with the dealer that they are an EV certified dealer.

Do you have questions?

If you have any questions or concerns that your preferred GMC HUMMER EV dealer is unable to resolve, please contact the EV Concierge at 1-833-HUMMER-EV (1-833-486-6373) (TTY 711 / 1-800-833-2438).

For the hearing or speech impaired, please contact our Customer Assistance Center using the Telecommunication Relay Service by dialing 711 then providing the appropriate Customer Assistance Center number for your vehicle.

Division	Number	Text Telephones (TTY)
GMC HUMMER EV/SUV	1-833-HUMMER-EV (1-833-486-6373)	711 / 1-800-833-2438
Puerto Rico – English	1-866-467-9700	
Puerto Rico – Español	1-866-467-9700	
Virgin Islands	1-866-467-9700	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free

Product Safety Recall

N222380031 Improper Urethane Sealing - High Voltage Battery Pack



Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to <http://www.nhtsa.gov>. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 22V771.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Regina A. Carto
Vice President
Global Product Safety and Systems

GM Recall: N222380031