

Stacy L. Balzer Director Service Engineering Operations Ford Customer Service Division Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

January 16, 2024

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: Harvest Program 23H06

Certain 2021-2023 Model Year Mustang Mach-E and 2022-2023 Transit Battery

Electric Vehicle (BEV)

High Voltage Battery Module Replacement

PROGRAM TERMS

This program will be in effect through January 16, 2025. There is no mileage limit for this program.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Mustang Mach-E	2021	Cuautitlan	August 3, 2020, through November 10, 2021
Mustang Mach-E	2022	Cuautitlan	January 5, 2022, through October 11, 2022
Mustang Mach-E	2023	Cuautitlan	March 22, 2023, through May 10, 2023
Transit BEV	2022	Kansas City	February 11, 2022, through March 15, 2022
Transit BEV	2023	Kansas City February 14, 2023, through June 8, 2023	
Transit BEV	2023	Kocaeli	January 6, 2023, through January 30, 2023

REASON FOR THIS PROGRAM

This is a proactive investigation program by Ford Motor Company to obtain field parts for evaluation. Ford is voluntarily conducting this program to evaluate the field performance and functionality of the obtained High Voltage Battery modules. Parts obtained from this program must be returned to Ford for evaluation.

SERVICE ACTION

Ford Motor Company's Recall Specialty Team (RST) will be proactively reaching out to the owners of the identified vehicles. The RST will aid owners in setting up service appointments. This service must be performed at no charge to the vehicle owner.

To assist vehicle owners in having this replacement completed, dealers should:

- Arrange to pick up the owner's vehicle and drive it to the dealership for repairs (rentals are authorized see Rental Vehicles).
- Re-deliver the owner's vehicle after repairs have been completed.
- Pick-up and delivery should be made available for all customers. Refer to the Rental and Claiming sections for further details.

OWNER NOTIFICATION MAILING SCHEDULE

The RST will contact select owners of affected vehicles, and a service appointment will be arranged at that time.

ATTACHMENTS

- Administrative Information Attachment
- Labor Allowances and Parts Ordering Information Attachment
- Technical Information Attachment
- Mobile Service Repair Assessment Attachment
- Mobile Repair/Vehicle Pickup and Delivery Record Attachment
- Owner Notification Letter

QUESTIONS & ASSISTANCE

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician System (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,

Stacy L. Balzer

MOBILE SERVICE REPAIR ASSESSMENT LEVEL

- All repairs in this program have the following assessment level.
 - Not a Mobile Service Repair

OASIS ACTIVATION

OASIS will be activated based on owner participation.

FSA VIN LISTS ACTIVATION

FSA VIN Lists will be available through https://web.fsavinlists.dealerconnection.com based on owner participation. Owner names and addresses will not be available at this time.

NOTE: Your FSA VIN Lists may contain owner names and addresses obtained from motor vehicle registration records. The use of such motor vehicle registration data for any purpose other than in connection with this program is a violation of law in several states, provinces, and countries. Accordingly, you must limit the use of this listing to the follow-up necessary to complete this service action.

SOLD VEHICLES

• Ford Motor Company's Recall Specialty Team (RST) will contact select owners of affected vehicles and will direct the owners to dealers for repairs.

STOCK VEHICLES

- Correct all affected units in your new vehicle inventory before delivery.
- Use OASIS to identify any affected vehicles in your used vehicle inventory.

BRANDED / SALVAGED TITLE VEHICLES

Affected title-branded and salvaged vehicles are not being investigated at this time.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

Dealers are pre-approved for up to 2 days for a rental vehicle. Follow Extended Service Plan (ESP) guidelines for dollar amounts. Rentals will only be reimbursed for the days the vehicle is at the dealership for part replacement. Prior approval for more than 2 rental days is required from the SSSC via the SSSC Web Contact Site.

PICK-UP & DELIVERY- Participating Dealers

Dealers participating in the Remote Experience Program:

• Ford Dealers - Refer to EFC12071, 2023 Remote Experience Program, Pick-Up & Delivery Offset section for additional details.

PICK-UP & DELIVERY- Non-participating Dealers

Ford Dealers not participating in the 2023 Remote Experience Program for Pick-Up & Delivery are authorized to claim unique services for completing this program.

- Dealers are authorized to claim one-half labor hour per repair for vehicle Pick-Up & Delivery services. Refer to Labor Allowances for details.
- Dealers must retain a Vehicle Pick-Up & Delivery Record with the repair order documentation.

ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual / Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSAs / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required, although related damage must be on a separate repair line with the "Related Damage" radio button checked.
 - o Ford vehicles 3 years or 36,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site before completing the repair.

CLAIMS PREPARATION AND SUBMISSION

- Claim Entry: Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
 - O When entering claims:
 - Claim type 31: Field Service Action
 - Sub Code: 23H06
 - Customer Concern Code (CCC): D16 HV battery system trouble
 - Condition Code (CC): 42 Does Not Operate Properly
 - Causal Part Number: 10D672, Quantity 0
 - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- Related Damage/Additional labor and/or parts: Must be claimed as Related Damage on a separate repair line from the FSA with the same claim type and subcode as described in the Claim Entry above.
 - **IMPORTANT:** Click the Related Damage Indicator radio button.
- Rentals: For rental vehicle claiming, follow Extended Service Plan (ESP) guidelines for dollar amounts. Enter the total amount of the rental expense under the Miscellaneous Expense code RENTAL.
- Pick-Up & Delivery:
 - Dealers participating in the Remote Experience Program
 - Refer to EFC12071, 2023 Remote Experience Program, Pick-Up & Delivery (PDL) Offset section for additional details.
 - Dealers NOT participating in the Remote Experience Program
 - Dealers may claim one-half labor hour per repair for vehicle Pick-Up & Delivery services.
 - Dealers must retain a Vehicle Pick-Up & Delivery Record with the repair order documentation.

Parts Handling Allowance: A parts handling allowance is being provided, unless otherwise notified by the Company or as provided by state law, in addition to the dealer cost of the High Voltage Battery Module. To claim the allowance, enter \$330 as HANDLG in the Misc. Expense area of the claim form.

LABOR ALLOWANCES

Description	Labor Operation	Labor Time	
Replace Affected High Voltage Battery Module – Mach-E	MT23H06B	Up to 8.2 Hours	
Replace Affected High Voltage Battery Module – Transit BEV	MT23H06C	Up to 8.5 Hours	
Vehicle Pick-up and Delivery Allowance:		0.5 Hours	
This allowance is only for <u>non-eligible</u> 2023 Remote Experience Program Dealers.	23H06PP		
NOTE: This allowance is for dealer-performed vehicle pick-up/delivery for dealership repairs only. Can only be claimed once, regardless of outstanding FSAs repaired.	231100FF	0.0110013	

PARTS REQUIREMENTS / ORDERING INFORMATION

NOTE: High-voltage battery modules and Thermal Interface Material (TIM) will be proactively ordered on the dealer's behalf based on inventory availability. Parts will be delivered to dealers before the start of the repair. The Thermal Interface Material must be claimed on the RO or the claim may be rejected. Order the Motorcraft® Yellow Prediluted Antifreeze/Coolant through normal order processing channels. To guarantee the shortest delivery time, an emergency order for parts must be placed.

Part Number	Description	Order Quantity	Claim Quantity
VC-13DL-G	Motorcraft® Yellow Prediluted Antifreeze/Coolant (Up to 15.9 Litters per vehicle) As Required		quired
TA-38-B	Thermal Interface Material (TIM) - Do not order, only claim on the RO. NOTE: Ford will directly order 2 tubes of TIM which will be delivered to the dealership before the start of the repair. Do not order TIM at this time.	0	2

DEALER PRICE

For the latest prices, refer to DOES II.

ESSENTIAL SPECIAL SERVICE TOOLS

If you do not have the special tools referenced in the workshop manual to perform the FSA repair, please contact 1-800 ROTUNDA and choose option 3 to place an order.

HANDLING ALLOWANCE

An allowance of \$330 per repair is being provided unless otherwise notified by the Company or as provided by state law, in addition to the dealer cost of the High Voltage Battery Module.

For HV battery/array, refer to EFC12696 Electric Vehicle High Voltage Battery Packs and Array Kits Part Retention & Return Process for Replacements Under Warranty, FSAs, and Customer Pay. This communication outlines the retention and return processes for Electrical Vehicle HV battery packs and array kits. The process outlined in this communication applies to all Electrical Vehicle HV battery packs and array kits from all Hybrid Electric and Battery Electric vehicles, and all repair types, including Warranty, Field Service Actions, and customer-paid repairs.

EXCESS STOCK RETURN

The excess stock returned for credit must have been purchased from Ford Customer Service Division by Policy Procedure Bulletin 4000.

REPLACED FSA PARTS INSPECTION AND SIGN OFF

Effective March 1^{st,} 2021, all parts replaced as part of an FSA repair with a repair order open date of March 1^{st,} 2021, or later must be inspected and signed off on the repair order by a member of your dealer's fixed operations management team or an employee the task has been delegated to. If the task is to be delegated to a non-management employee, the employee needs to be someone other than the technician who completed the repair and needs to understand the importance of completing this task consistently and accurately.

- All parts replaced as part of an FSA repair should be returned to the parts department following the Warranty Parts Retention and Return Policies.
- Inspect the replaced parts to verify the FSA repair was completed.
- If the FSA repair is found to be complete, the designated employee signs the repair order line or parts return stamp area (electronic or hand-signed) for the FSA repair indicating the parts were inspected and validated to have been replaced.
- After the parts have been inspected, they should be handled based on the guidance in the
 parts status report in the Online Warranty System (Hold, Return, CORE, Scrap, etc.). Please
 visit FMCDEALER > PARTS & SERVICE > WARRANTY ADMINISTRATION & WARRANTY
 PARTS RETURN for the latest Immediate Scrap List information.
- This process is subject to review during warranty audits for FSA repairs with a repair order open date of March 1^{st,} 2021, or later. Any eligible FSA claims requiring parts replacement found not to have been inspected and signed off during a warranty audit will be subject to chargeback and consideration for enrollment into the Dealer Incomplete Recall Repair Process.

Note: Other approvals (electronic or handwritten) for add-on repair lines, dealer-owned vehicle repairs, and repeat repairs do not qualify as FSA parts inspection approvals. The post-repair FSA parts inspection process (electronic or handwritten) is independent of other warranty approval requirements. The approval by the designated employee implies that the FSA parts were found to be replaced and must be able to be identified on the Repair Order. If multiple FSAs require approval on a single Repair Order, each applicable occurrence will require individual post-repair approval by the designated employee.

CERTAIN 2021-2023 MODEL YEAR MUSTANG MACH-E AND 2022-2023 TRANSIT BATTERY ELECTRIC VEHICLE (BEV) — HIGH VOLTAGE BATTERY MODULE REPLACEMENT

SERVICE PROCEDURE

MARNING: Service of the high voltage system on this vehicle is restricted to qualified personnel. The required qualifications vary by region. Always observe local laws and legislative directives regarding electric vehicle service. Failure to follow this instruction may result in serious personal injury or death.

MARNING: To prevent the risk of high-voltage shock, always follow precisely all warnings and service instructions, including instructions to depower the system. The high-voltage system utilizes approximately 450 volts DC, provided through high-voltage cables to its components and modules. The high-voltage cables and wiring are identified by orange harness tape or orange wire covering. All high-voltage components are marked with high-voltage warning labels with a high-voltage symbol. Failure to follow these instructions may result in serious personal injury or death.

MARNING: Never install the service disconnect plug when a high-voltage service cover is removed. Always install the cover prior to connecting the service disconnect plug. The cover prevents inadvertent contact with the high voltage which is present at several points under the cover. Failure to follow these instructions may result in serious personal injury or death.

MARNING: Disconnect the 12 volt (V) battery before servicing the direct current to alternating current (DC-AC) inverter or alternating current (AC) powerpoint to prevent the risk of high voltage shock. Failure to follow this instruction may result in serious personal injury.

⚠WARNING: Any fluid or gel found within the high voltage battery tray is to be treated as battery acid and requires safety glasses and rubber gloves prior to clean up.

NOTE: If you do not have the special tools referenced in the Workshop Manual (WSM) to perform the FSA repair, please contact 1-800 ROTUNDA and choose option 3 to place an order.

NOTE: It is recommended to discharge the vehicle battery down to 25%-30% before beginning any of the following work. Allow the vehicle to run with all the accessories running if at full charge. If unable to discharge the battery, each *new* module can take up to 7 hours to charge, and up to 14 hours per array.

NOTE: With the high voltage battery removed, if the 12V battery is reconnected the vehicle will remain in Emergency Mode until the brake is pressed.

NOTE: If you become locked out of the vehicle, there is an access plug within the rear bumper.

NOTE: If the Ford Diagnostic and Repair System (FDRS) cannot communicate with the Battery Energy Control Module (BECM) contact the Technical Assistance Center (TAC) for diagnostic support.

1. Using FDRS or similar diagnostic scan tool, Check for DTCs. Is DTC P0AA6, P0B24, and/or P0DE6 present?

YES - Contact the TAC for diagnostic support.

NO - Proceed to Step 2.

NOTE: Make sure that the FDRS release level is at 37.4.4 or higher.

- 2. Using FDRS, perform a Battery Energy Control Module (BECM) battery health check and record the BECM health tool generated target voltage code.
- 3. Remove the High Voltage Battery Cover. Follow the Workshop Manual (WSM) procedures in Section 414-03A.

NOTE: For extended-range batteries, the fifth row may need to be removed if all of the affected SN are not found within the visible 5 rows and inspection of the fifth lower is needed. Follow the WSM procedures in Section 414-03A.



FIGURE 1

NOTE: Each row of arrays is called a battery module. The arrays in a row need to be replaced as a pair. See Figure 2.

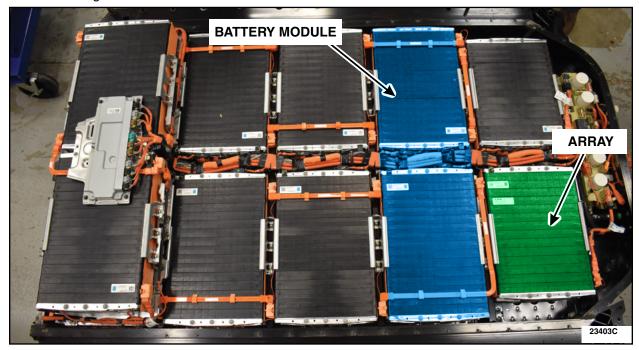


FIGURE 2

4. Remove the module with the affected array(s). Follow the WSM procedures in Section 414-03A.

5. Transfer the jumper harness from the inboard side of the module to the *new* module. See Figure 3.

NOTE: This jumper harness is found on all five rows except for the fifth upper on the extended-range.

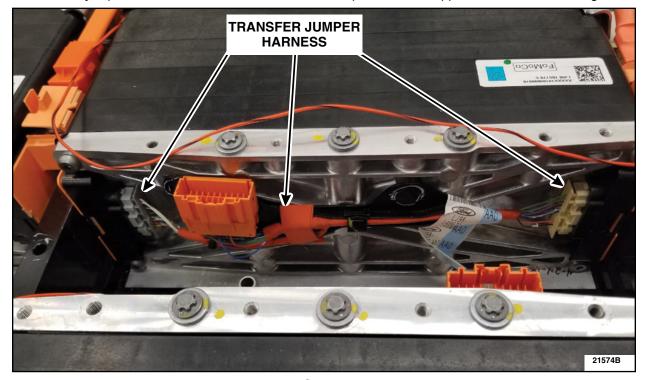


FIGURE 3

- 6. Install the new battery module. Follow the WSM procedures in Section 414-03A.
- 7. Install the high voltage battery cover. Follow the WSM procedures in Section 414-03A.
- 8. Using FDRS, check and clear codes.
- 9. Charge the vehicle to 100 percent.

NOTE: Please verify if the vehicle is in One-Pedal Driving mode prior to the test drive. If the vehicle did not arrive with One-Pedal Driving mode activated prior to the test drive, turn off One-Pedal Driving before releasing the vehicle to the customer.

- 10. To activate One-Pedal Driving perform the following:
 - a. Touch the Mustang Mach-E icon in the upper-left corner of your touchscreen.
 - b. From the DRIVE MODE screen, slide the button to turn it on.
 - c. Use the brake to come to a complete stop if the vehicle does not slow down soon enough.

NOTE: Keep in mind that until you turn them off, Drive Modes and One-Pedal Driving will remain on each time you start the vehicle.

TECHNICAL INSTRUCTIONS
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HARVEST/SURVEY PROGRAM 23H06

- 11. Perform a test drive of at least 20 miles (32 Km) in city driving conditions with One-Pedal Driving activated to verify the repair.
 - City driving consisting of occasional acceleration and coast conditions. Safely but aggressively accelerate from 0-40 MPH (0-64 Kmh) and coast from 40-0 MPH (0-64 Kmh) with One-Pedal Driving activated to verify the repair.

NOTE: If the vehicle did not arrive with One-Pedal Driving mode activated prior to the test drive, turn off One-Pedal Driving before releasing the vehicle to the customer.

IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.

Mobile Repair / Vehicle Pick-Up and Delivery Record

VIN	received (check one):	
☐ Mobile Repair		
☐ Pick-up and/or delivery service	e	
As outlined below for the 23H06 Fiel	ld Service Action program.	
☐ Mobile Repair – Date:		
	OR	
□ Pick-up – Date:		
□ Delivery – Date:	 	
Repair Order#	Repair Order Date	
Service Manager Signature	 Date	

Harvest Program 23H06

Certain 2021-2023 Model Year Mustang Mach-E and 2022-2023 Transit Battery Electric Vehicle (BEV)

High Voltage Battery Module Replacement

Mobile Service Repair Assessment

Assessment levels have been identified to help determine the ease of performing eligible mobile service repairs for a Field Service Action (FSA) outside of the dealership service facility.

Dealer Bulletin

Within the Administrative Information Attachment of the dealer bulletin a mobile service repair assessment level(s) will be provided. These assessment levels have been determined using the amount of time, equipment and labor identified to perform the intended service action.

Assessment Levels

- Mobile Reprogramming
- Light Mobile Service
- Enhanced Mobile Service
- Advanced Mobile Service
- Wheel and Tire Mobile Service
- Not a Mobile Service Repair

Description of each level that is used to determine the overall assessment.

- Mobile Reprogramming
 - Module Programming or similar type services
 - Minimum tools maybe required other than an IDS/FDRS setup
 - FDRS programming that requires internet connection (wi-fi or mobile hotspot)
 - Make sure vehicle has a charge port to ensure battery voltage is maintained during flashing of the module(s)
 - Repairs not greater than 1 hour in length (including time to wait for programming)

 Note: The location will need a charging station or wall box to maintain the 12-volt battery.
- Light Mobile Service
 - Interior repair procedures that do not require seat, dash, or headliner removal
 - Under hood repairs that do not require large component removal
 - Exterior repairs that do not require large component/panel removal
 - Repairs may require standard hand tools (Access to a Technician starter kit or similar)

Harvest Program 23H06

Certain 2021-2023 Model Year Mustang Mach-E and 2022-2023 Transit Battery Electric Vehicle (BEV)

High Voltage Battery Module Replacement

- Enhanced Mobile Service

- A two-person process is required anytime a procedure requires work under the vehicle
- Brake Inspection and Brake Repair/Replacement
- Limited Suspension Component replacement (no alignment)
- Under Vehicle access for limited repairs (no large component removal)
- Vehicle Check Up VCU
- Pre-Delivery Inspection PDI
- Used Car Inspection/Presale Inspection
- May require floor jack, jack stands, and impact tools

Note: Wheel lock may be required.

- Advanced Mobile Service

- Fluid Exchange/Oil Change
- Light Repairs
- Brake Hydraulic Repairs

⊕ — Wheel and Tire Mobile Service

- Tire Removal from Wheel
- Tire Balancing
- Tire Repair

Note: Specialized Mobile Service unit and equipment including Tire balancer and Tire Changer required.

Not a Mobile Service Repair

- Large component removal
- BEV Battery Replacement
- Requires a vehicle hoist to complete the repair (more than inspection)
- Required vehicle alignment
- Requires significant vehicle disassembly
- Repairs greater than 2-3 hours
- Any repairs that require M-Time
- Includes a service procedure where the vehicle owner may be distressed about the state
 of their vehicle