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Ford Customer Service Division

Ford Motor Company
P. O. Box 1904
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September 13, 2023

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: Customer Satisfaction Program 23B57

Certain 2022 and 2023 Model Year F-150 Battery Electric Vehicle (BEV)
High Voltage Battery Module Replacement and/or Battery Energy Control Module
(BECM) Software Update

PROGRAM TERMS

This program will be in effect through September 13, 2024. There is no mileage limit for this program.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
F-150 BEV	2022	Rouge Electric Vehicle Center	October 14, 2021 through October 19, 2022
	2023		Beginning June 10, 2022

US population of affected vehicles: 36,611. Affected vehicles are identified in OASIS and FSA VIN Lists.

Note: The list of affected VIN's may be updated daily as vehicles are added to the program. End build dates will be provided once they are established at the assembly plant.

Note: Some vehicles may be in the process of being repaired at the plant. Monitor OASIS before opening an RO and/or beginning a repair. Parts purchased for an FSA can be returned for credit if required. See the EXCESS STOCK RETURN details in Labor Allowances and Parts Ordering Information for more information.

REASON FOR THIS PROGRAM

Some of the affected vehicles may have high voltage battery modules that can cause Diagnostic Trouble Code (DTC) P0B24 – Hybrid Battery Voltage Unstable to set causing a stop safely now message to appear on the Instrument Panel Cluster (IPC) and the vehicles high voltage battery output to be limited.

All vehicles will receive an update to the Battery Energy Control Module (BECM) software strategy that detects if the high voltage battery experiences a voltage deviation and may enter the vehicle into a reduced performance state. This updated software is available for dealers to update or will become available as an Over the Air (OTA) update.

SERVICE ACTION

Vehicles with an affected high voltage battery module(s):

Ford Motor Company's Customer Relationship Center (CRC) will be proactively reaching out to owners of vehicles identified via connected vehicle data that have one or more high voltage battery modules that are experiencing a voltage deviation. The CRC will offer aid in setting up a service appointment. Owners may also choose to schedule their own service appointment. Dealers that are contacted by the CRC or have a customer that has scheduled their own service appointment, are to reach out to the SSSC for details on what battery module(s) is to be replaced. Once the appropriate battery module(s) is replaced, dealers are to update the BECM software.

Vehicles without an affected high voltage battery module(s):

For vehicles that arrive at the dealership that do **not** have an affected battery module(s), dealers are to update the BECM software.

This service must be performed on all affected vehicles at no charge to the vehicle owner.

To assist vehicle owners to have this repair complete, dealers should:

- Arrange for a mobile repair at the owner's location, or:
 - Arrange to pick up the owner's vehicle and drive it to the dealership for repairs (rentals maybe authorized – see Rental Vehicles).
- Re-deliver the owner's vehicle after repairs have been completed.
- Pick-up and delivery and mobile service should be made available for all customers. Refer to the Rental and Claiming sections for further details.

NOTE: Only vehicles **without** an affected high voltage battery module(s) are eligible for mobile repair because only the software will be updated. All vehicles are eligible for pick-up and delivery.

OVER-THE-AIR (OTA) UPDATES (FORD POWER-UP / LINCOLN ENHANCE):

- In addition to you being able to update vehicles now using FDRS, Ford is planning to deploy an OTA software update by mid-4th Quarter.
- Before scheduling service for an OTA-capable vehicle, please verify through PTS that the Field Service Action (FSA) is still open (OASIS) and that the vehicle has not already received the OTA update.
 1. Verify FSA is still open by viewing the "Outstanding Field Service Actions" on the OASIS results page on PTS. (Note: If the OTA update was recently downloaded onto the vehicle the FSA may still show as open)
 2. If the FSA is still open in the Outstanding Field Service Actions section, proceed to the tab titled "Connected Vehicle". In the "Over the Air Update 60-Day History", you can determine if an OTA update occurred on the affected module by viewing the "Completion Status", which should show "Campaign Successful". The "Release Notes" will also indicate that the campaign was successfully downloaded onto the vehicle. (Note: the FSA may still show as open in the Outstanding Field Service Actions section of PTS even though the OTA update was successfully downloaded onto the vehicle. This FSA will eventually be removed from the Outstanding Field Service Actions screen of PTS.)

OWNER NOTIFICATION MAILING SCHEDULE

Owners' letters are expected to be mailed the week of September 25, 2023. Owners will be given the option of installing the software update themselves, or they can have their dealer perform the service for them.

ATTACHMENTS

- Administrative Information
- Labor Allowances and Parts Ordering Information
- Technical Instructions
- Mobile Service Repair Assessment
- Mobile Repair/Vehicle Pickup and Delivery Record
- How to Enable Ford Power-Up
- 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,

A handwritten signature in black ink that reads "Stacy L. Balzer". The signature is written in a cursive, flowing style.

Stacy L. Balzer

Customer Satisfaction Program 23B57**MOBILE SERVICE REPAIR ASSESSMENT LEVEL**

- Vehicles **without** an affected high voltage battery module(s) have the following assessment level.
 - ✔ - Mobile Reprogramming
- Vehicles **with** an affected high voltage battery module(s) have the following assessment level.
 - ⊘ - Not a Mobile Service Repair

MOBILE REPAIR RECOMMENDATIONS

- Confirm with the customer a mobile repair is feasible.
- Check OASIS before going to the customer's home or business to confirm if any other outstanding FSA needs to be completed.
- Transportation – due to the simplicity of this repair, a specialty vehicle is not required.

MOBILE REPAIR ADDITIONAL INFORMATION

Please ensure the technician brings the following to the mobile repair destination:

- Printed Technical Instructions.
- Printed Repair/Work Order or any other necessary documentation as customer copy(s)
 - Documents could also be emailed to the customer.
- Shirt/uniform and vehicle graphic with the dealership or Ford logos are recommended.
- Recommended specialty tools: N/A.

MOBILE REPAIR QUESTIONS AND ASSISTANCE

- For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. Work with Dealership warranty administrator to create a SSSC contact ID#.
- Once an SSSC agent responds to the new contact ID#, you may opt to call the SSSC hotline: (800) 325-5621.

MOBILE REPAIR CLAIMING QUESTIONS

Dealers participating in the Remote Experience Program:

- Refer to Electronic Field Communication - EFC12071 2023 Remote Experience Program.

Dealers **NOT** participating in the 2023 Remote Experience Program:

- For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. Work with the Dealership warranty administrator to create an SSSC contact ID#.
- Once an SSSC agent responds to the new contact ID#, you may opt to call the SSSC hotline: (800) 325-5621.

OASIS ACTIVATION

OASIS will be activated on September 13, 2023.

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FSA VIN LISTS ACTIVATION

FSA VIN Lists will be available through <https://web.fsavinlists.dealerconnection.com> on September 13, 2023. Owner names and addresses will be available by October 13, 2023.

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

- Owners of affected vehicles will be directed to dealers for repairs.
- Immediately contact any of your affected customers whose vehicles are not on your VIN list but are identified in OASIS. Give the customer a copy of the Owner Notification Letter (when available) and schedule a service date.
- Correct other affected vehicles identified in OASIS which are brought to your dealership.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

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 branded / salvaged title vehicles are eligible for this service action.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

For vehicles **with** an affected high voltage battery module(s), dealers are pre-approved for up to 15 days for a comparable rental vehicle. Follow Extended Service Plan (ESP) guidelines for dollar amounts. Rentals will only be reimbursed for the day(s) the vehicle is at the dealership for part replacement. Prior approval for more than 15 rental day(s) is required from the SSSC via the SSSC Web Contact Site.

Rental is not approved for vehicles that only require a BECM software update.

TOWING

For vehicles **with** an affected high voltage battery module(s), if towing is required, dealers are authorized to claim up to a maximum value of \$250 to provide towing services for this program.

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PICK-UP AND DELIVERY- Participating Dealers

Dealers participating in the Remote Experience Program:

- Refer to EFC12071, 2023 Remote Experience Program, Pickup & Delivery (PDL) Offset section for additional details.

PICK-UP AND DELIVERY- Non-participating Dealers

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.
 - 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.
 - When entering claims:
 - Claim type 31: Field Service Action
 - Sub Code: 23B57
 - 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 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.

Customer Satisfaction Program 23B57

CLAIMS PREPARATION AND SUBMISSION (CONTINUED)

- **Pickup & Delivery:**
 - Dealers participating in the Remote Experience Program –
 - Refer to EFC12071, 2023 Remote Experience Program, Pickup & Delivery (PDL) Offset section for additional details.
 - Dealers NOT participating in the Remote Experience Program –
 - Dealers are authorized to claim one-half labor hour per repair for vehicle pick-up and delivery services.
 - Dealers must retain a Vehicle Pick-up and Delivery Record with the repair order documentation.
- **Mobile Repair:**
 - Dealers participating in the Remote Experience Program –
 - Refer to Electronic Field Communication - EFC12071 2023 Remote Experience Program.
 - Dealers NOT participating in the Remote Experience Program –
 - Mobile repair allowances can be claimed for dealer-performed mobile repairs. Dealers that are working with Ford-contracted mobile repair companies should refer to those companies for claiming instructions.
 - For dealer-performed mobile repairs, retain a copy of the Service Management signed record (see Repair Procedure Improvement & Revised Labor Time), with the repair order documentation.
 - Claim the mobile repair allowance Labor Operation Code 23B57MM along with the applicable Labor Operation Code for the repair (refer to the Labor Allowances table in Labor Allowances and Parts Ordering Information).
- **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.
- **Provision for Towing:** Dealers are authorized to claim up to a maximum value of \$250 to provide towing services for completing this program; only applies to vehicles **with** an affected high voltage battery module(s). Submit on the same line as the repair.
 - Program Code: 23B57
 - Misc. Expense: OTHER
 - Misc. Expense: Claim up to \$250.00

Customer Satisfaction Program 23B57

LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Replace 1 affected High Voltage Battery Module	MT23B57B	Up to 8.2 Hour(s)
Replace 2 affected High Voltage Battery Modules	MT23B57C	Up to 12.2 Hour(s)
Update BECM Software	23B57D	0.6 Hour(s)
Time to contact the SSSC. NOTE: This labor operation can only be claimed with MT23B57B or MT23B57C	23B57E	0.2 Hour(s)
Mobile Service: This allowance is only for <u>non-eligible</u> 2023 Remote Experience Program Dealers. Can be used when the repair takes place away from the dealership. If Additional Time is Required Due to Travel, Please Submit an SSSC Approval Form	23B57MM	0.5 Hours
Vehicle Pick-up and Delivery Allowance: This allowance is only for <u>non-eligible</u> 2023 Remote Experience Program Dealers. 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.	23B57PP	0.5 Hours

Customer Satisfaction Program 23B57

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 prior to the start of the repair. The Thermal Interface Material must be claimed on the RO or the claim may be rejected.

NOTE: If a damaged High Voltage Battery Module is delivered to your dealership, contact the SSSC via a web contact for further instruction.

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 Liters per vehicle)	As Required	
TA-38-B	Thermal Interface Material (TIM) – Do not order, only claim on the RO. NOTE: Ford will directly order 2 tubes of TIM per new module which will be delivered to the dealership prior to the start of the repair. Do not order TIM at this time.	0	2

Less than 4% of the affected vehicle population is expected to require one or more high voltage battery modules needing to be replaced.

DEALER PRICE

For the latest prices, refer to DOES II.

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 a high voltage battery module.

PARTS RETENTION, RETURN, & SCRAPPING

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES. If a replaced part receives a scrap disposition, the part must be scrapped by all applicable local, state, and federal environmental protection and hazardous material regulations. Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall.

Customer Satisfaction Program 23B57

PARTS RETENTION, RETURN, & SCRAPPING (CONTINUED)

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 1st, 2021, all parts replaced as part of an FSA repair with a repair order open date of March 1st, 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 1st, 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.



Ford Motor Company
Ford Customer Service Division
P. O. Box 1904
Dearborn, Michigan 48121

September 2023

Customer Satisfaction Program 23B57

Mr. John Sample
123 Main Street
Anywhere, USA 12345

Your Vehicle Identification Number (VIN): 12345678901234567

At Ford Motor Company, we are committed not only to building high-quality, dependable products but also to building a community of happy, satisfied customers. To demonstrate that commitment, we are providing a no-charge Customer Satisfaction Program for your vehicle with the VIN shown above.

Why are you receiving this notice?

Your vehicle has a Battery Energy Control Module (BECM) software strategy that detects if your high voltage battery experiences a voltage deviation. If that detection is triggered, your vehicle may enter into a reduced performance state.

What will Ford and your dealer do?

In the interest of customer satisfaction, Ford Motor Company would like to update your vehicles BECM software to adjust the way the vehicle performs if a voltage deviation is identified.

Ford has authorized your dealer to install the BECM software free of charge (parts and labor) under the terms of this program.

Your vehicle is capable of Ford Power Up Software Updates. This software is anticipated to be available via Ford Power Up Software Updates mid-4th Quarter.

When Automatic Updates are turned ON (standard from the factory), the software will be downloaded to your vehicle over a private wi-fi network or through your vehicle's modem through the cellular network. Before the software will install you will have to schedule a day and time when you will not need the vehicle for up to 90 minutes while the installation completes.

Note: Refer to ford.com/support for further information on your Ford Power Up Software Updates system.

If you prefer to wait for the software to become available via Ford Power Up Software Updates, should the software fail to load or install properly, Ford has authorized your dealer to install the BECM software free of charge (parts and labor) under the terms of this program.

This Customer Satisfaction Program will be in effect until September 13, 2024 regardless of mileage. Coverage is automatically transferred to subsequent owners.

- How long will it take?** The time needed for this software installation via Ford Power Up Software Updates is approximately 90 mins. If you prefer to go to your dealer for the software update, the time needed for this repair is less than one-half day. However, due to service scheduling requirements, your dealer may need your vehicle for a longer period.
- What should you do?** If you choose to have your dealer install this software, please call your dealer to schedule a service appointment for Customer Satisfaction Program 23B57. Provide the dealer with your VIN, which is printed near your name at the beginning of this letter.
- For your convenience, when the software is available via Ford Power Up Software Update capabilities, you should not need to take your vehicle to your dealer unless you're unable to successfully perform the update.
- To complete this software update your vehicle will have to be parked with the ignition off for a short period. Also, you will have to schedule (we suggest overnight or during work hours) the software installation to ensure that you will not need your vehicle during the update. You can check the progress of the installation via the icons on the in-vehicle screen, the FordPass app, or on the Owner's website.
- If you do not already have a servicing dealer, you can access ford.com/support for dealer addresses, maps, and driving instructions.
- Ford Motor Company wants you to have this service action completed on your vehicle. The vehicle owner is responsible for making arrangements to have the work completed. Ford Motor Company can deny coverage for any vehicle damage that may result from the failure to have this service action performed on a timely basis. Therefore, please have this service action performed as soon as possible.
- NOTE: You can receive information about Recalls and Customer Satisfaction Programs through our FordPass App. The app can be downloaded through the App Store or Google Play. In addition, there are other features such as reserving parking in certain locations and controlling certain functions on your vehicle (lock or unlock doors, remote start) if it is equipped to allow control.
- What if you no longer own this vehicle?** If you no longer own this vehicle and have an address for the current owner, please forward this letter to the new owner.
- You received this notice because our records, which are based primarily on state registration and title data, indicate that you are the current owner.
- Can we assist you further?** If you have difficulties getting your vehicle repaired promptly and without charge, please contact your dealership's Service Manager for assistance.
- RETAIL OWNERS:** If you have questions or concerns, please contact our **Ford Customer Relationship Center at 1-866-436-7332** and one of our representatives will be happy to assist you. If you wish to contact us through the Internet, our address is: ford.com/support.
- For the hearing impaired call 1-800-232-5952 (TDD). Representatives are available Monday through Friday: 8:00 AM – 8:00 PM (Eastern Time).

**Can we assist you
further?
(Continued)**

FLEET OWNERS: If you have questions or concerns, please contact our **Ford Pro Contact Center at 1-800-34-FLEET**, choose Option #1, and one of our representatives will be happy to assist you. If you wish to contact us through the Internet, our address is fleet.ford.com.

Representatives are available Monday through Friday: 7:00 AM – 11:00 PM and Saturday 7:00 AM – 5:00 PM (Eastern Time).

Thank you for your attention to this important matter.

Ford Customer Service Division

CERTAIN 2022 AND 2023 MODEL YEAR F-150 BATTERY ELECTRIC VEHICLES (BEV) — BATTERY ENERGY CONTROL MODULE (BECM) SOFTWARE UPDATE

SERVICE PROCEDURE

Module Programming

NOTE: Program appropriate vehicle modules before performing diagnostics and clear all Diagnostic Trouble Codes (DTCs) after programming. For DTCs generated after programming, follow normal diagnostic service procedures.

1. Connect a battery charger to the 12 Volt (V) battery.

NOTE: Verify the negative cable of the charger is installed on a chassis or engine ground and not the 12V battery negative terminal to prevent the battery saver mode from activating on the vehicle.

NOTE: If the diagnostic software does not load or if the vehicle cannot be identified properly, make sure there is a good internet connection and the Vehicle Communication Module (VCM) is properly connected to the Data Link Connector (DLC).

2. Log into Ford Diagnostic and Repair System (FDRS).

NOTE: Vehicle information is automatically retrieved by the diagnostic software and a Network Test is run. Vehicle identification data appears on the screen when this is complete.

3. Click **Read VIN from Vehicle** or manually enter the Vehicle Identification Number (VIN).

NOTE: Available modules are shown on the left hand (LH) side of the screen and available procedures are listed on the right hand (RH) side of the screen. Modules that are communicating are highlighted in green.

4. Select **Toolbox** tab.

5. From the list on the LH side of the screen, select the **BECM**.

NOTE: After the programming of the BECM, the FDRS will automatically prompt you to update the necessary modules based on the vehicles options and calibration levels. Follow the on-screen instructions to complete the update.

6. From the list on the RH side of the screen, select **BECM - Battery Energy Control Module (BECM) Software Update**.

7. Click **RUN**. Follow all on-screen instructions carefully. Then, continue on next page.



NOTE: After the programming of the BECM, the FDRS will automatically prompt you to update the necessary modules based on the vehicles options and calibration levels. Follow the on-screen instructions to complete the update. You may be prompted to update one or more of the following modules.

- Anti-lock Brake System (ABS) Module
- Electric All Drive Control Module (AWDCH or SOBDMB)
- Hybrid Powertrain Control Module (HPCM or SOBDMC)
- Powertrain Control Module (PCM)
- Secondary On-Board Diagnostic Control Module (SOBDM)
- Battery Charger Control Module or Generic Function Module 2 (BCCMB or GFM2)

8. From the list on the RH side of the screen, select **Self-Test** and click **RUN**.

9. Click the **Run Selected Tests** button in the lower right.

10. Click the **Clear & Retest** button at the top of the screen to clear DTCs in all modules.

11. Disconnect the battery charger from the 12V battery once the programming has completed.



Important Information for Module Programming

NOTE: When programming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect FDRS/scan tool to a power source.

NOTE: A good internet connection is necessary to identify the vehicle and to load the diagnostic software.

- Inspect the Vehicle Communication Module II (VCM II)/Vehicle Communication Module III (VCM III) or the Vehicle Communication and Measurement Module (VCMM) and the cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable FDRS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

Recovering a module when programming has resulted in a blank module

- a. Disconnect the VCM II/VCM III or the VCMM from the data link connector (DLC) and your computer.
- b. After ten seconds, reconnect the VCMII/VCMIII or the VCMM to the DLC and the PC. Launch FDRS. The VCMII/VCMIII or the VCMM icon should turn green in the bottom right corner of the screen. If it does not, troubleshoot the FDRS to VCM connection.
- c. If you are using the same FDRS as the initial programming attempt, select the appropriate VIN from the Vehicle Identification menu. If you are using a different FDRS, select "Read VIN from Vehicle" and proceed through the Network Test.
- d. In the Toolbox menu, navigate to the failed module and Download/Run Programmable Module Installation (PMI). Follow the on-screen prompts. When asked if the original module is installed, select "No" and continue through the installation application.
- e. Once programming has completed, a screen may list additional steps required to complete the programming process. Make sure all applicable steps are followed in order.



CERTAIN 2022 AND 2023 MODEL YEAR F-150 BATTERY ELECTRIC VEHICLES (BEV) — HIGH VOLTAGE BATTERY MODULE REPLACEMENT AND BATTERY ENERGY CONTROL MODULE (BECM) SOFTWARE UPDATE

SERVICE PROCEDURE

IMPORTANT: Do not order service parts for this repair – Ford has pre-ordered the necessary module service kit and the Thermal Interface Material (TIM), which will be shipped in advance. Note that coolant will not be provided but should be replaced. See dealer bulletin for warranty claiming information.

NOTE: The kit will come with a new cold plate, a template for applying the TIM, 2 buss-bar cover caps, 4 terminal safety caps, and the replacement module. TIM material (TA-38-B paste) will be shipped separately. Please ensure this paste is unopened and not expired before you attempt carrying out the repair.

NOTE: DO NOT remove or lower the high voltage battery from the vehicle until all of the necessary parts and tools (ESST's) are in place to perform the repair.

NOTE: If a high voltage battery module is damaged, contact the Special Service Support Center (SSSC) for further instructions.

1. Has the SSSC been contacted and did the SSSC provide which high voltage battery module(s) is to be replaced?

Yes - Continue to the next step.

No - Contact the SSSC for further instruction.

2. Before performing any repairs, perform the Battery Health Report procedure using the Ford Diagnostic and Repair System (FDRS). Confirm the cell/module(s) that the SSSC indicated needed to be replaced is the minimum voltage cell/module compared to the other modules within the battery pack. Also, confirm there are no other low cells in the battery pack ($>0.030V$ lower than the median value).

NOTE: Ensure to document the FDRS Generated Target Voltage Code as it is necessary for balancing the replacement module(s).

- Does the minimum cell/module from Battery Health Report match the cell/module the SSSC directed you to replace?

Yes - Continue to the next step.

No - Contact the SSSC for further instruction.



NOTE: The FDRS Generated Target Voltage Code as it is necessary for balancing the replacement module.

3. Have you documented the FDRS Generated Target Voltage Code for the battery module(s) that are to be replaced?

Yes - Continue to the next step.

No - Re-run the FDRS Battery Health Report procedure and document the FDRS Generated Target Voltage Code.

NOTE: The following procedure must be completed prior to the installation of a replacement high voltage battery module directed by the Ford workshop manual. The replacement high voltage battery modules and Midtronics xMB-9640 module balancer must be placed on a stable clean work area with access to a AC wall power outlet.

4. Perform the high voltage battery module balancing. Follow the Workshop Manual (WSM) procedures in Section 414-03A. Repeat this procedure for each module being replaced and then proceed to Step 5.

NOTE: Balancing of the *new* module should be performed in the crate (using the A804 cable) prior to installation into the battery tray.

- If there is a problem establishing communication with the *new* module, confirm all updates to the xMB have been performed.
- If there is still an issue, connect to a module in the battery that is not faulted to confirm if it is an xMB issue or a module issue.
 - If the xMB will still not connect, contact Midtronics (1-866-592-8052).
 - If the xMB does connect to a known good module, reconnect to the *new* module (in the crate) again and attempt to balance.
 - If the xMB still cannot communicate with the *new* module contact the SSSC for further instruction.

5. Replace the affected battery module and cold plate. Follow the WSM procedures in Section 414-03A.

NOTE: See Figures 1 and 2 (on Page 3) for reference on battery module pack positions.

6. Perform the Battery Energy Control Module (BECM) software update. Refer to the Technical Instructions – Battery Energy Control Module (BECM) Software Update for further instruction.



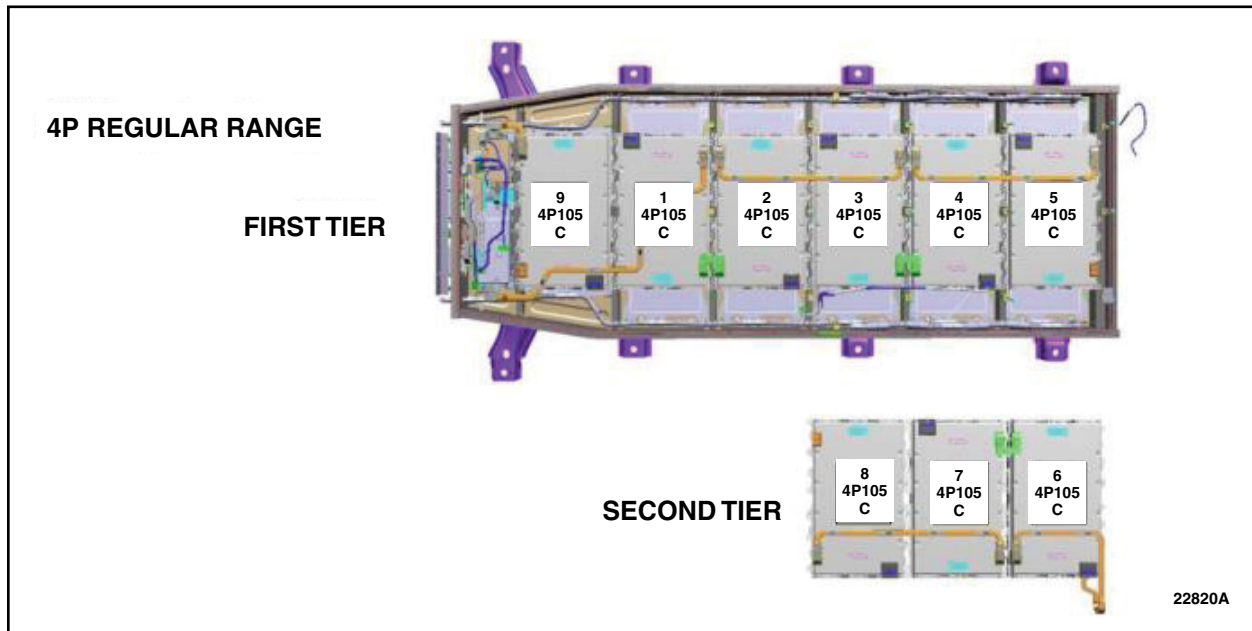


FIGURE 1

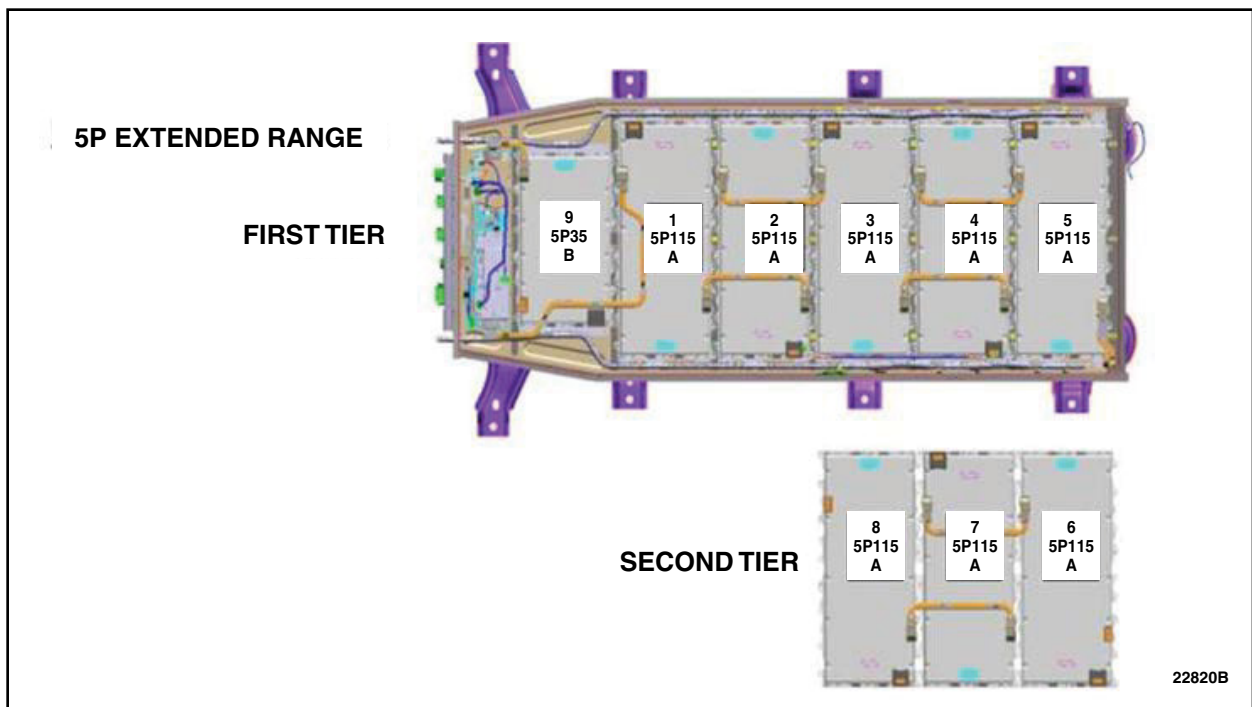


FIGURE 2

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.



Ford Power-Up Software Updates

How to turn on Automatic Updates and Set a Recurring Schedule

Ford Power-Up software updates are downloaded and installed over-the-air using either an external WiFi or FordPass™ Connect (vehicle modem). Most software updates will happen seamlessly in the background, if both of the following have been done on your vehicle:

1. Automatic Updates is turned ON.
2. A Recurring Schedule has been set.

We recommend scheduling updates for overnight or at a time that you will not need to enter or use the vehicle.

To set a recurring schedule:

1. Tap Settings on your vehicle's SYNC screen.
2. Choose System (or Software) Updates.
3. Press Schedule Updates (or Recurring Update Schedule).

Depending on your vehicle you will either:

4. Choose Schedule.
 5. Choose your preferred days and times.
 6. Press Save.
- or**
4. Select one of the Preset options OR Select Custom Schedule.
 5. If Custom Schedule choose your preferred days (minimum of 2) and time.
 6. Exit the screen (Schedule is auto saved).

To confirm Automatic Updates is turned ON:

1. Tap Settings on your vehicle's SYNC screen.
2. Choose System (or Software) Updates.
3. Confirm Automatic Updates is toggled to ON.

Prior to software download and installation, you will receive a reminder in your vehicle (24 hours prior) and in your FordPass® App. You can reschedule up to 2 mins before the update begins.

Important Notes:

- Ford Power-Up software updates are not deployed to all vehicles at the same time.
- If you choose to turn Automatic Updates OFF, you will not receive this software update unless you have previously consented to all prior updates.
- To confirm that this recall is included in the software update and is available or successfully installed in your vehicle, tap Settings on your vehicle's SYNC screen, select System (or Software) Updates and select Update Details to view the latest release notes. You will also get an Update Successful alert in the message center of your FordPass® app.

If you are unsure if you have received the software update for this recall or have any questions regarding software updates, please call our specially trained Software Update Customer Relationship Center at:

1-833-389-0848.

Customer Satisfaction Program 23B57

**MOBILE REPAIR / VEHICLE PICK-UP AND DELIVERY
RECORD**

VIN _____ received (check one):

- Mobile Repair
- Pick-up and/or delivery service

As outlined below for the 23B57 Field Service Action program.

Mobile Repair – Date: _____

OR

Pick-up – Date: _____

Delivery – Date: _____

Repair Order #

Repair Order Date

Service Manager Signature

Date

Customer Satisfaction Program 23B57













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 Attachment I 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)

Customer Satisfaction Program 23B57

   – 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