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

October 7, 2022

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: NEW VEHICLE DEMONSTRATION / DELIVERY HOLD -

Safety Recall 22S41 – Supplement #1

Certain 2021-2022 Model Year Mustang Mach-E Vehicles

Secondary On-Board Diagnostic Control Module C (SOBDMC) and Battery Energy

Control Module (BECM) Software Update

REF: NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Safety Recall 22S41

Dated: June 28, 2022

New! REASON FOR THIS SUPPLEMENT

• Technical Instructions Update: Note and steps added to direct dealers to resolve any Diagnostic Trouble Codes (DTCs) applicable to the SOBDMC or BECM prior to starting the software programming directed in 22S41.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Mustang Mach-E	2021-2022	Cuautitlan	May 27, 2020 through May 24, 2022

Affected vehicles are identified in OASIS and FSA VIN Lists.

REASON FOR THIS SAFETY RECALL

In the affected vehicles, the high voltage battery main contactors may overheat, which can result in a contactor that remains open or a contactor that welds closed. Should the contactors weld closed while driving, a powertrain malfunction warning light will be illuminated on the next key cycle, along with a possible no start condition.

If the contactors open while driving, a powertrain malfunction warning light will be illuminated, the vehicle will display "Stop Safely Now" in the instrument panel cluster, and the vehicle will experience an immediate loss of motive power. The vehicle will coast to a stop, and all 12V systems including power brakes and steering will remain functional.

New! SERVICE ACTION

Before demonstrating or delivering any new in-stock vehicles involved in this recall, dealers are to reprogram the Powertrain Control Module (PCM), BECM and SOBDMC using the Ford Diagnostic and Repair System (FDRS). An Over The Air (OTA) update will also be deployed – see OTA section. These modules are coordinated with the PCM, BECM and SOBDMC and may also update: Antilock Braking System (ABS), Secondary On-Board Diagnostic Control Module (SOBDM) and Secondary On-Board Diagnostic Control Module B (SOBDMB).

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

SERVICE ACTION (continued)

NOTES:

- Prior to starting Recall 22S41, verify there are not any DTCs present in the SOBDMC or BECM. If DTCs are present, please follow any applicable TSB/SSM information and workshop manual direction to resolve the DTC issue BEFORE completing Recall 22S41.
- An Over the Air (OTA) update will also be deployed at a later date see OTA section.
- Integrated Diagnostic Software (IDS) cannot be used for programming on Mustang Mach-E vehicles.
- Some vehicles in this recall may also have 22B08 open. Check OASIS to confirm it is not open. Refer to 22B08 documents for vehicle eligibility and repair instructions.

OWNER NOTIFICATION MAILING SCHEDULE

Owner letters were mailed the week of July 5, 2022. Owners will be given the option of installing the software update themselves, or they can have their dealer perform the service for them.

PLEASE NOTE:

Federal law requires dealers to complete this recall service before a new vehicle is delivered to the buyer or lessee. Violation of this requirement by a dealer could result in a civil penalty of up to \$21,000 per vehicle. Correct all vehicles in your new vehicle inventory before delivery.

OTA: FORD POWER-UP DISTRIBUTED OVER THE AIR:

- In addition to your dealer being able to update vehicles now using FDRS, Ford Power-Up software deployment will occur in several phases, scheduled to begin mid-July and continue through mid-August.
- Before scheduling service for an OTA capable vehicle, please verify through PTS that the FSA is still open (Oasis) and has not already received the Ford Power-Up update.
 - 1. Verify Safety Recall 22S41 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 Safety Recall 22S41 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: Safety Recall 22S41 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).

Note: Some vehicles affected by this recall were also subject to 22B08. Until 22B08 is completed, the vehicle is not able to receive software updates and/or other enhancements from the Ford Power-Up system using Wi-Fi or through the vehicle's modem.

New! ATTACHMENTS

Attachment I: Administrative Information

Attachment II: Labor Allowances and Parts Ordering Information

Attachment III: Technical Information

Owner Notification Letters

Ford Power-Up Software Updates (Enabling Automatic Updates and Setting Recurring Schedule)

Recall Reimbursement Plan

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

NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Safety Recall 22S41 - Supplement #1

Certain 2021-2022 Model Year Mustang Mach-E Vehicles

Secondary On-Board Diagnostic Control Module C (SOBDMC) and Battery Energy Control Module

(BECM) Software Update

OASIS ACTIVATION

OASIS was activated on June 28, 2022.

FSA VIN LISTS ACTIVATION

FSA VIN Lists were made available through https://web.fsavinlists.dealerconnection.com on June 28, 2022. Owner names and addresses were made available by July 22, 2022.

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 recall 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 recall.

SOLD VEHICLES

- Ford has not issued instructions to stop selling/delivering or driving used vehicles under this safety recall. Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable. Owners can continue to safely drive their vehicles.
- 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.

DEALER-OPERATED RENTAL VEHICLES

The Fixing America's Surface Transportation (FAST) Act law effective June 2016 prohibits a rental company from selling, renting or leasing vehicles subject to a safety or compliance recall. Please consult your legal counsel for legal advice.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this recall.

OWNER REFUNDS

- This safety recall must still be performed, even if the owner has paid for a previous repair. Claiming a refund will not close the recall on the vehicle.
- Ford Motor Company is offering a refund for owner-paid repairs covered by this recall if the
 repair was performed prior to the date indicated in the reimbursement plan, which is posted
 with this bulletin. Owners are directed to seek reimbursement through authorized dealers or, at
 their option, directly through Ford Motor Company at P.O. Box 6251, Dearborn, MI 481216251.

NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Safety Recall 22S41 - Supplement #1 Certain 2021-2022 Model Year Mustang Mach-E Vehicles Secondary On-Board Diagnostic Control Module C (SOBDMC) and Battery Energy Control Module (BECM) Software Update

OWNER REFUNDS (continued)

- Dealers are also pre-approved to refund owner-paid <u>emergency</u> repairs that were performed away from an authorized servicing dealer after the end date specified in the reimbursement plan. Non-covered repairs, or those judged by Ford to be excessive, will not be reimbursed.
- Refunds will only be provided for the cost associated with repairs associated with the high voltage battery main contactors.

RENTAL VEHICLES

Rental vehicles are not approved for this program.

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 FSA's / 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 prior to 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, select claim type 31: Field Service Action. The FSA number 22S41 is the sub code.
 - 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 same claim type and sub code as described in Claim Entry above.

IMPORTANT: Click the Related Damage Indicator radio button.

- **Refunds:** Submit refunds on a separate repair line.
 - Program Code: 22S41
 Misc. Expense: ADMIN
 Misc. Expense: 0.2 Hrs.
 - Multiple refunds should be submitted on one repair line and the invoice details for each repair should be detailed in the comments section of the claim.

NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Safety Recall 22S41 - Supplement #1 Certain 2021-2022 Model Year Mustang Mach-E Vehicles Secondary On-Board Diagnostic Control Module C (SOBDMC) and Battery Energy Control Module (BECM) Software Update

LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Reprogram the SOBDM and BECM using FDRS. These modules are coordinated with the PCM and may include other modules listed in the bulletin. Therefore, the PCM software should be selected as the primary module to install.	22S41B	0.6 Hour
NOTE: Integrated Diagnostic Software (IDS) cannot be used for programming on Mustang Mach-E vehicles.		

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts are not required to complete this repair.

CERTAIN 2021-2022 MODEL YEAR MACH-E VEHICLES — SECONDARY ON-BOARD DIAGNOSTIC CONTROL MODULE C (SOBDMC) AND BATTERY ENERGY CONTROL MODULE (BECM) SOFTWARE UPDATE

SERVICE PROCEDURE

NEW! NOTE: Prior to starting Recall 22S41, verify that no Diagnostic Trouble Codes (DTC) are present in the Secondary On-Board Diagnostic Control Module (SOBDMC) or Battery Energy Control Module (BECM). If DTC's are present, please follow any applicable TSB/SSM information and Work Shop Manual (WSM) direction to resolve the DTC issue BEFORE completing Recall 22S41.

1. Connect a battery charger to the 12V battery.

NOTE: Verify that the negative cable of the charger is installed on a chassis or engine ground, and not the 12 volt 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 VIN.
- 4. Check for DTCs. Verify that no DTCs are present in the SOBDMC or BECM. Are related DTC's present?

Yes - Please follow any applicable TSB/SSM information and WSM direction to resolve the DTC issue BEFORE completing Recall 22S41.

No - Continue to Step 5.

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

- 5. Select Toolbox tab.
- 6. From the list on the LH side of the screen, select the PCM.
- 7. From the list on the RH side of the screen, select **PCM Powertrain Control Module (PCM) Software Update**.
- 8. Click **RUN**. Follow all on-screen instructions carefully.

ATTACHMENT III
PAGE 2 OF 3
SAFETY RECALL 22S41-S1

NOTE: The following modules will also be programmed during the PCM update:

Hybrid Powertrain Control Module (SOBDMC)
 Battery Energy Control Module (BECM)

NOTE: The following modules may also be programmed during the PCM update:

- Anti-Lock Brake System (ABS) Module
- Secondary On-Board Diagnostic Control Module A (SOBDM)
- Secondary On-Board Diagnostic Control Module B (SOBDMB)
- 9. Once PCM Update has completed, check the software tab to make sure that the above listed modules do not have any available software updates.
- 10. From the list on the RH side of the screen, select Self-Test and click RUN.
- 11. Click the Run Selected Tests button in the lower right.
- 12. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.
- 13. Disconnect the battery charger from the 12V battery once the programming has completed.

NOTE: If applicable, advise the customer that this vehicle is equipped with an adaptive transmission shift strategy which allows the vehicle's computer to learn the transmission's unique parameters and improve shift quality. When the adaptive strategy is reset, the computer will begin a re-learning process. This re-learning process may result in firmer than normal upshifts and downshifts for several days.

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 Vehicle Communication Module II/III (VCM II/III)/Vehicle Communication and Measurement Module (VCMM) and 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/III or VCMM from the data link connector (DLC) and your PC.
- b. After ten seconds, reconnect the VCM II/III or VCMM to the DLC and the PC. Launch FDRS. The VCM II/III or 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.

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 an external Wi-Fi or FordPass™ Connect (vehicle modem). Most software updates will happen seamlessly in the background, as long as 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. See your Owner's Manual for more information on how to navigate your entertainment display.

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).
- 4. Choose Schedule.
- 5. Choose your preferred days and times.
- 6. Press Save.

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 be required to consent prior to each update.
- Once the update is available/successfully installed on your vehicle, click Update Details to view the latest release notes which will specify if this recall is/was included in the release.
- Refer to <u>Ford.com/support</u> for further information on software updates.

NOTE: In your vehicle's entertainment screen click on Update Details to view details on this update and confirm if this recall is available or successfully installed on your vehicle. 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.

Ford Motor Company Recall Reimbursement Plan for 22S41

Ford and Lincoln dealers are in the best position to quickly and efficiently process reimbursement requests. However, federal legislation requires all motor vehicle manufacturers to establish processes through which customers may seek recall reimbursement directly from the manufacturer or from the dealers.

Regarding the specific reimbursement plan for Recall # 22S41, owners who have paid for service to remedy the defect or noncompliance must have had that service performed prior to January 31, 2023. After this date, if repairs related to this recall are performed by a non-Ford repair facility in an emergency situation, customers must submit any refund requests through their dealership. As required by this federal regulation, Ford Motor Company submitted the details of its latest General Recall Reimbursement Plan in a letter to the National Highway Traffic Safety Administration (NHTSA) in May 2021. The following is the text of that letter and the Plan:

General Recall Reimbursement Plan

(As submitted to the NHTSA)

Pursuant to the requirements set forth in 49 CFR Part 573 and Part 577 of the Code of Federal Regulations, Ford Motor Company (Ford) is submitting required information pertaining to our general reimbursement plan for the cost of remedies paid for by vehicle owners before they are notified of a related safety recall.

Set forth below is Ford's general plan to reimburse owners and purchasers for costs incurred for remedies in advance of notification of potential safely-related defects or noncompliances pursuant to Part 573.6 (c)(8)(i). This plan has not changed since our February 20, 2019 submission.

Reimbursement Notification

Ford's notice to a vehicle owner in accordance with 49 CFR Part 577 will indicate that Ford is offering a refund if the owner paid to have service to remedy the defect or noncompliance prior to a specified ending date. In accordance with Part 573.13 (c)(2), this ending date will be defined as a minimum of ten calendar days after the date on which Ford mailed the last of its Part 577 notifications to owners and will be indicated in the specific reimbursement plan available to owners for an individual recall. This notice will direct owners to seek eligible reimbursement through authorized dealers or, at their option, directly through Ford at the following address:

Ford Motor Company P.O. Box 6251 Dearborn, MI 48121-6251

Ford notes that this rule allows for the identification of a beginning date for reimbursement eligibility. Under the rule, an owner who paid to remedy the defect or noncompliance prior to the identified beginning date would not be eligible for reimbursement. Ford generally has not established such a beginning date for reimbursement eligibility and does not presently anticipate changing this general policy. However, in any case where Ford determines a beginning date is appropriate, Ford will indicate that date in the owner notice. As permitted by 577.11(e), Ford may not include a reimbursement notification when all vehicles are well within the warranty period, subject to approval by the agency.

Costs to be Reimbursed

For vehicles, reimbursement will not be less than the lesser of:

- The amount paid by the owner for the remedy that specifically addressed and was reasonably necessary to correct the defect or noncompliance that is the subject of the recall, or
- The cost of parts for the remedy (to be no more than the manufacturer's list retail price for authorized part(s), plus associated labor at local labor rates, miscellaneous fees (such as disposal of waste) and taxes.

For replacement equipment, reimbursement will be the amount paid by the owner for the replacement item (limited by the amount of the retail list price of the defective or noncompliant item that was replaced, plus taxes, where the brand or model purchased by the owner was different than the brand or model that was the subject of the recall). If the item of motor vehicle equipment was repaired, the reimbursement provisions identified above for vehicles will apply.

Ford notes that costs incurred by the owner within the period during which Ford's original or extended warranty would have provided for a free repair of the problem will not be eligible for reimbursement, as provided by Part 573.13 (d)(1).

Entities Authorized to Provide Reimbursement

Ford will continue to use authorized dealers to reimburse owners under the specific reimbursement plans for a particular recall and will encourage owners to pursue requests for reimbursement directly through dealers to expedite reimbursement. Ford will also provide a mailing address to which customers can, at their option, send requests for reimbursement directly to Ford, as previously noted. Requests for reimbursement sent directly to Ford may take up to 60 days to process. Whether the owner chooses to pursue reimbursement requests through a dealer or directly through Ford, the owner will be directed to submit the required documentation, upon which reimbursement eligibility will be determined.

Required Documentation

The reimbursement determination will depend upon the information provided by the customer. Consistent with Part 573.13 (d)(4) the following information must be submitted:

- Claimant name and address
- · Vehicle make, model, and model year
- Vehicle identification number (VIN) and, for replacement equipment, a description of such equipment or, for tires, the model, size and TIN (DOT code)
- Identification of the recall number (either the Ford recall number or the NHTSA recall number)
- Identification of the owner of the recalled vehicle at the time that the pre-notification remedy was obtained
- An original receipt for the pre-notification remedy that includes a breakdown of the amount for
 parts, labor, other costs and taxes, including costs for the replacement item. Where the receipt
 covers work other than to address the recall or noncompliance, Ford may require the claimant
 to separately identify costs that are eligible for reimbursement.
- If the remedy was obtained during the warranty period, documentation indicating that the
 warranty was not honored or the warranty repair did not correct the problem related to the
 recall.

Failure to submit all of the above information may result in denial of the reimbursement request.

Additional Information

The Part 577 required owner notice will provide a toll-free telephone number through which specific information about the reimbursement plan can be requested from Ford. This general reimbursement plan will be incorporated into notifications pursuant to Part 573.6 by reference. Information specific to an individual recall also may be incorporated into the Part 573.6 notification.