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November 22, 2021

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: NEW VEHICLE DELIVERY HOLD
Customer Satisfaction Program 21P22
Certain 2021 Model Year Mustang Mach-E Vehicles
Software Calibration Update

PROGRAM TERMS

P programs are utilized for non-safety repairs intended to improve customer vehicle experience. P programs are intended to be performed during normal service visits without requiring a separate visit. This allows dealers to provide additional value to the customer, to accompany any planned visit.

For vehicles involved with a Customer Satisfaction P type program, dealers are encouraged to complete this program on the next dealer service visit, including vehicles involved in FSA 21C22 or 21S42. As this program is intended to be performed on vehicles already at the dealership for service, customer notifications will not be issued for this program.

Vehicles involved in this P program will be identified in OASIS.

This program will be in effect through November 30, 2022. In addition, the vehicle must still be within bumper-to-bumper warranty (e.g., less than 36,000 miles) for the P program to apply.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Mach E	2021	Cuautitlan	June 18, 2020 through June 18, 2021

Affected vehicles are identified in OASIS and FSA VIN Lists.

REASON FOR THIS PROGRAM

In some of the affected vehicles, while driving downhill for an extended distance, the vehicle may experience a loss of propulsion. If this occurs a "Stop Safely Now" message will appear on the instrument cluster display along with audible warning chimes. The customer will not be able to accelerate until the vehicle is turned off and restarted, returning the vehicle to normal driving mode. The vehicle may also try going into park causing a ratchet noise while the vehicle is in motion and in some cases could damage the parking pawl.

Along with this update, there are several additional updates for customer satisfaction included in this software update. This will include updates for no start, handling performance, ability for over the air updates, improved range in cold weather, DC fast charge total time improvements, display range accuracy, e-latch door robustness, and phone as a key detection.

SERVICE ACTION

Before delivering any new in-stock vehicles involved in this program, dealers are to update the Powertrain Control Module and all applicable modules per technical instructions. This service must be performed on all affected vehicles at no charge to the vehicle owner.

OWNER NOTIFICATION MAILING SCHEDULE

Owner letters will not be mailed for this program.

ATTACHMENTS

Attachment I: Administrative Information
Attachment II: Labor Allowances and Parts Ordering Information
Attachment III: Technical Information

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 cursive script that reads "D. Johnson".

David J. Johnson

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OASIS ACTIVATION

OASIS will be activated on November 22, 2021.

FSA VIN LISTS ACTIVATION

FSA VIN Lists will be available through <https://web.fsavinlists.dealerconnection.com> on November 22, 2021. Owner names and addresses will not be turned on for this program.

SOLD VEHICLES

- Correct any affected vehicles identified in OASIS which are brought to your dealership.
- Pick-up and delivery, and rental coverage is included in 21S42 and 21C22. Recommend performing 21P22 along with these programs.
- 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.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this service action.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

- Pick-up and delivery, and rental coverage is included in 21S42 and 21C22. Recommend performing 21P22 along with these programs.
- If 21P22 is performed along with another repair that cumulatively exceeds 4 hours of labor, Dealers are pre-approved for up to one days for a 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 one rental day(s) is required from the SSSC via the SSSC Web Contact Site.

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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.
 - 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:
 - Claim type 31: Field Service Action. The FSA number 21P22 is the sub code.
 - Customer Concern Code (CCC): E29
 - Condition Code (CC): 04
 - Causal Part Number: RECAL
 - Part 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 same claim type and sub code 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 Miscellaneous Expense code RENTAL.

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LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Reprogram Powertrain Control Module using Ford Diagnosis and Repair System, up to additional twelve modules may need program: SOBDM – Secondary On Board Control Module ABS – Anti-lock Brake System BECM – Battery Energy Control Module SOBDMC – Secondary On Board Control Module C SOBDMB – Secondary On Board Control Module B (AWD) OBCC – Off Board Charger Controller BCM – Body Control Module DCME – Door Control Module E DCMF – Door Control Module F DCMG – Door Control Module G DCMH – Door Control Module H RFA – Remote Function Actuator NOTE: Record the name of each updated module on the repair order.	MT21P22B	Actual time up to 1.3 Hours

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts are not required to complete this repair.

CERTAIN 2021 MODEL YEAR MUSTANG MACH-E VEHICLES — SOFTWARE CALIBRATION UPDATE

SERVICE PROCEDURE

Module Programming

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

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 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 PCM.

6. From the list on the RH side of the screen, select PCM - Powertrain Control Module (PCM) Software Update.

7. Click RUN. Follow all on-screen instructions carefully.

NOTE: During programming of PCM if necessary FDRS will automatically update following modules:

- SOBDM – Secondary On Board Control Module
- ABS – Anti-Lock Brake System
- BECM – Battery Energy Control Module
- SOBDMC – Secondary On Board Control Module C
- SOBDMB – Secondary On Board Control Module B

All other modules available will have to be programmed individually.



8. From the list on the LH side of the screen, select the BCM.
9. From the list on the RH side of the screen, select BCM - Body Control Module (BCM) Software Update.
10. Click RUN. Follow all on-screen instructions carefully.
11. From the list on the LH side of the screen, select the OBCC.
12. From the list on the RH side of the screen, select OBCC - Off-Board Charger Controller (OBCC) Software Update.
13. Click RUN. Follow all on-screen instructions carefully.
14. Select the SW Updates tab on the RH side of the screen. See Figure 1.

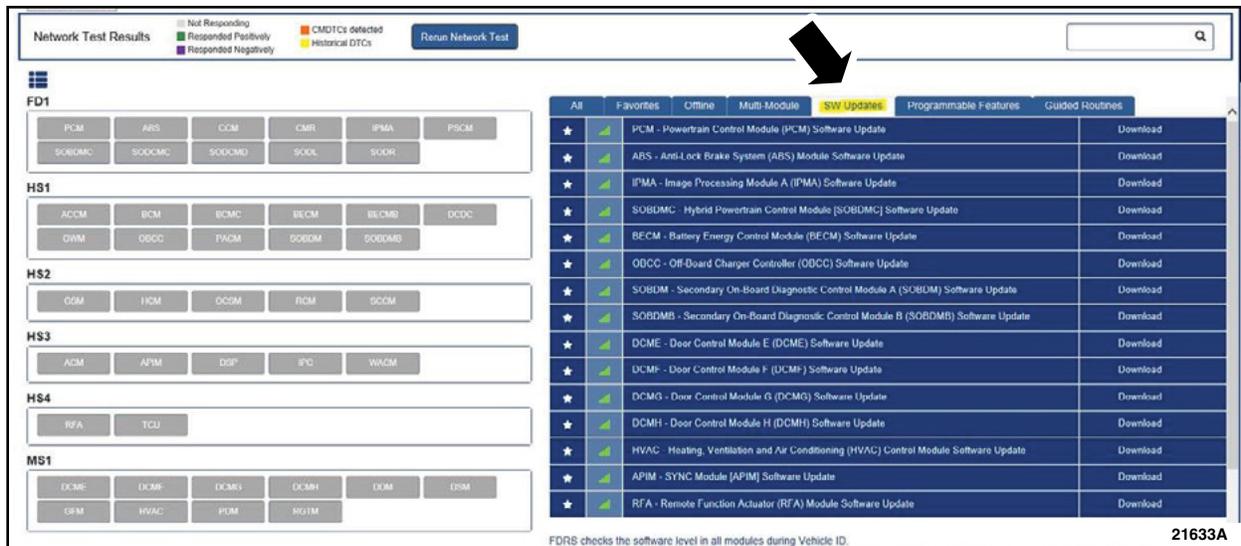


FIGURE 1

15. From the list on the RH side of the screen, select DCME - Door Control Module E (DCME) Software Update.
16. Click RUN. Follow all on-screen instructions carefully.
17. Repeat steps 14-16 for Door Control Module F (DCMF), Door Control Module G (DCMG), and Door Control Module H (DCMH).
18. From the list on the LH side of the screen, select the RFA.
19. From the list on the RH side of the screen, select RFA - Remote Function Actuator (RFA) Module Software Update.
20. Click RUN. Follow all on-screen instructions carefully.



21. From the list on the RH side of the screen, select Self-Test and click RUN.
22. Click the Run Selected Tests button in the lower right.
23. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.
24. After clearing all DTCs, are P1A10 and U101E still present?
 - Yes – Proceed to step 25.
 - No – Proceed to step 28.
25. From the list on the LH side of the screen, select the SOBDMC.
26. From the list on the RH side of the screen, select SOBDMC - Reset the Secondary On-Board Diagnostic Control Module C (SOBDMC).
27. Click RUN. Follow all on-screen instructions carefully.
28. Disconnect the battery charger from the 12V battery once the programming has completed.



NOTE: 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 (VCM II)/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 VCMII or VCMM from the data link connector (DLC) and your PC.
- b. After ten seconds, reconnect the VCMII/VCMM to the DLC and the PC. Launch FDRS. The VCMII/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.

