



# TECHNICAL SERVICE BULLETIN

## Various SYNC4 Concerns

**21-2310**  
11 October 2021

### Model:

<b>Ford</b> 2021 F-150
2021 Mustang Mach-E

**Issue:** Some 2021 Mach-E/F-150 vehicles may experience at least one of the following symptoms: audio settings resetting after a key cycle, Android Auto connection concerns, Sirius presets missing more than three pages after a key cycle, information and entertainment screen freezing/locking up, Pro Power Onboard messaging confusion after a tripped circuit breaker (F-150 only), WiFi keyboard defaulting to United Kingdom (UK) English, windows media audio (WMA) files not playing properly from a universal serial bus (USB) device, intermittent blank information and entertainment screen, CarPlay connection concerns, and/or Bluetooth connectivity concerns. This may be due to the software in the accessory protocol interface module (APIM). To correct the condition, follow the Service Procedure steps to reprogram the APIM.

**NOTE:** The APIM software update that addresses the symptoms listed in this bulletin may have been sent via over the air (OTA) to connected vehicles that have automatic updates enabled through the SYNC4 screen. Enter the vehicle identification number (VIN) in Professional Technician System (PTS) and check the OTA Dashboard under the Connected Vehicle tab for OTA update history. If an update to the APIM has successfully completed recently and the customer is reporting the symptoms are no longer present, this article may not apply.

**Action:** Follow the Service Procedure steps to correct the condition on vehicles that meet all of the following criteria:

- 2021 Mustang Mach-E/F-150
- One or more of the following customer symptoms:
  - Audio settings resetting after a key cycle
  - Android Auto connection concerns
  - Sirius presets missing more than three pages after a key cycle
  - Information and entertainment screen freezing/locking up
  - Pro-Power Onboard messaging confusion after a tripped circuit breaker (F-150 only)
  - Wi-Fi keyboard defaulting to UK English
  - WMA files not playing properly from a USB device
  - Intermittent blank information and entertainment screen
  - Apple CarPlay connection concerns
  - Bluetooth connectivity concerns

**Warranty Status:** Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

### Labor Times

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Description	Operation No.	Time
2021 F-150/Mustang Mach-E: Check For GWM And APIM Software Update, Reprogram The APIM (Do Not Use With Any Other Labor Operations)	212310A	0.8 Hrs.
2021 F-150/Mustang Mach-E: Check For GWM And APIM Software Update, Reprogram The GWM And APIM (Do Not Use With Any Other Labor Operations)	212310B	0.9 Hrs.

### Repair/Claim Coding

Causal Part:	14G670
Condition Code:	04

## Service Procedure

**NOTE: Ask the customer to bring their spare key fob to assist in the Ford Diagnosis and Repair System (FDRS) programming.**

**NOTE: The gateway module (GWM) must be at the latest software level before the APIM update can be performed. Updated APIM software will not show as being available in FDRS until the GWM has been successfully updated.**

1. Connect the VCM II, VCMM or later level to the vehicle DLC and the diagnostic scan tool USB port. Start a vehicle session with the FDRS and select the toolbox tab to see the available software updates.
2. Is a GWM software update available?
  - (1). Yes - proceed to Step 3.
  - (2). No - proceed to Step 4.
3. Update the GWM using the latest version of FDRS. Refer to Workshop Manual (WSM), Section 418-01A.
  - (1). Connect a battery charger to the 12V battery.

**NOTE: A blank 32GB or larger USB flash drive is required for GWM update. Make sure the USB flash drive being used is formatted correctly. To see the available drives, hold down the Windows icon keyboard key and press the E keyboard key. Right click on the USB flash drive, and select Properties. If File System under the General tab is not exFAT, the drive must be formatted. To format the USB flash drive, right click on the USB flash drive, select Format, select exFAT for the File System, and select Default Allocation Size for the Allocation Unit Size. De-selecting Quick Format is not necessary and will result in a more lengthy operation.**

- (2). Using the FDRS, reprogram the GWM by selecting GWM - Gateway Module A (GWM) Software Update. Follow all on-screen instructions carefully.
- (3). When prompted, connect the USB flash drive to the diagnostic scan tool.

**NOTE: It may take up to 30 seconds for the vehicle to recognize the USB flash drive.**

- (4). When prompted by the FDRS, safely remove/eject the USB flash drive from the FDRS diagnostic scan tool and connect it to the USB media hub to install the software into the GWM. The update starts automatically and may take 10 minutes or longer to complete. It is normal for the GWM to reset during this step. It is possible to open a progress bar in the SYNC touchscreen in the vehicle by pressing on the Updating In Progress banner at the top left corner of the screen.
- (5). There will be a prompt to restart the vehicle in the vehicle SYNC touchscreen. With the USB drive still in the vehicle, turn the vehicle ignition OFF and open the driver's door to allow the vehicle to power down. The SYNC touchscreen may stay turned on for a few more seconds after turning off the vehicle and opening the driver's door. Allow the vehicle to sit powered down for at least 5 minutes.

(6). With the USB drive still in the vehicle and after waiting 5 minutes, close the driver's door and turn the vehicle ignition ON. Allow the vehicle to power on and look for a Update Successful pop up in the vehicle SYNC touchscreen.

(7). Once the pop-up stating Update Successful appears in the SYNC screen, select Close, remove the USB flash drive from the USB media hub and connect it to the FDRS diagnostic scan tool, and select OK on the FDRS. This initiates the remaining automated configuration steps and reports the GWM assembly, vehicle interface processor (VIP), calibration, customer interface processor (CIP), and application software levels to the Ford online database. Failure to follow this step results in an inaccurate database as well as omitted, improperly installed, or improperly configured applications (features) such as navigation (if equipped). It is normal for the GWM to reset during this step.

4. If a GWM software update was performed, re-run the network test on the FDRS. Is an APIM software update available?

(1). Yes - proceed to Step 5.

(2). No - this article does not apply. Refer to WSM, Section 415-00.

**NOTE: A blank 64GB or larger USB flash drive is required for APIM software update. Make sure the USB flash drive being used is formatted correctly. To see the available drives, hold down the Windows icon keyboard key and press the E keyboard key. Right click on the USB flash drive and select Properties. If File System under the General tab is not exFAT, the drive must be formatted. To format the USB flash drive, right click on the USB flash drive, select Format, select exFAT for the File System, and select Default Allocation Size for the Allocation Unit Size. Make sure the Quick Format box is selected. If it is not selected, it will result in a lengthier operation.**

5. Verify a battery charger connected to the vehicle's 12v battery. Set the charger to maintain 12.6-13.6 volts.

6. Close all doors on the vehicle. Locking the latch mechanically while the door is open will simulate a closed door.

7. Download and Run the APIM Software Update application on the FDRS and follow the on-screen prompts. If any error conditions are experienced during programming, refer to WSM Section 418-01A > General Procedures > Module Programming for the Error Condition Table.

(1). Follow the FDRS prompts and install the USB flash drive into the vehicle. Wait 5 minutes for the updating prompts to show up in the Sync screen.

**NOTE: It may take up to 5 minutes for the vehicle to recognize the USB flash drive. All doors must remain closed until the SYNC screen prompts a restart is required. To view the progress, you can drop down the updating screen in the sync screen.**

(2). When the USB has downloaded to the vehicle, the touchscreen indicates a message for Restart Required. The ignition needs to be turned off for 10 minutes. Open the driver's door, then close it to allow the vehicle to completely power down. During this key off time, the screen continues through a reboot process.

(3). After the 10 minutes, start the vehicle and allow another 5 minutes for the Update Successful message to appear in SYNC screen. Once the Update Successful message appears, the USB flash drive may be removed, and the doors opened.

(4). Return the USB thumb drive to the FDRS and follow the on-screen prompts to complete the procedure.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.