TECHNICAL SERVICE BULLETIN
BlueCruise/ActiveGlide - Hands-Free Driving Mode No Longer Available

23-2122
12 April 2023

This bulletin supersedes 22-2494.

Model:

Ford
2023 Expedition
2021-2023 F-150
2021-2023 Mustang Mach-E
Lincoln 2023 Navigator

Summary

This article supersedes TSB 22-2494 to update the vehicles affected, issue, action, and Service Procedure.

Issue: Some 2021-2023 F-150/Mustang Mach-E and 2023 Expedition/Navigator vehicles equipped with BlueCruise/ActiveGlide may experience loss of BlueCruise/ActiveGlide hands-free driving mode availability and/or BlueCruise/ActiveGlide inoperative and/or diagnostic trouble code (DTC) U2400:00 in the gateway module (GWM) and advanced driver assistance system (ADAS) modules with no other DTCs present. This may be due to an expired BlueCruise/ActiveGlide map file in the GWM and/or the customer's BlueCruise/ActiveGlide map subscription being expired. To correct the condition, follow the Service Procedure to update the GWM.

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

- One of the following vehicles:
  - 2021-2023 F-150/Mustang Mach-E
  - 2023 Expedition/Navigator

- BlueCruise/ActiveGlide hands-free driving mode is no longer available and/or the customer's BlueCruise map subscription being expired

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description
BAGM-48H6-760	1	Battery - Refer To The Parts Catalog For The VIN Specific Application
BAGM-49H8	1	Battery - Refer To The Parts Catalog For The VIN Specific Application
BAGM-94RH7-800	1	Battery - Refer To The Parts Catalog For The VIN Specific Application

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

Description	Operation No.	Time
2021-2023 F-150, 2023 Expedition/Navigator: Check The Hands Free Driving Mode Expiration Date And Reprogram The Appropriate Modules As Required By The Software Update And Service Procedure (Do Not Use With Any Other Labor Operations)	MT232122	Actual Time

Repair/Claim Coding

Causal Part:	14G650

Condition Code:	04

Service Procedure

1. On the center display screen, navigate to Settings > About SYNC > Hands-Free Driving Mode available through DD-MM-YYYY. Is the expiration date in the past or is it blank? Also verify that the customer's BlueCruise/ActiveGlide Map subscription is up to date and they have the BlueCruise/ActiveGlide Map automatic updates turned on.

NOTE: The date format is DD-MM-YYYY. Example: 02-04-2022 is for 02-Apr-2022.

(1). Yes - proceed to Step 2.

(2). No - this article does not apply. Refer to Workshop Manual, Section 419-03B for normal diagnostics.

2. Connect a battery charger to the vehicle's 12V battery. Set the charger to maintain the battery at 12.6-13.6 volts.

3. Close all the doors on the vehicle. If a door must be left open during the service procedure, mechanically latch the door latch to simulate a closed door.

4. Perform the necessary updates.

(1). For 2021-2022 vehicles, perform the Module Software Updating Procedure for the GWM, accessory protocol interface module (APIM) and telematic control unit module (TCU) followed by the Vehicle Connectivity Verification/Map Update Procedure.

(2). For 2023 model year vehicles, perform the Vehicle Connectivity Verification Procedure/Map Update Procedure.

Module Software Updating Procedure

NOTE: The following instructions apply when performing a software update on any of the following modules: GWM, TCU and APIM.

NOTE: The time required to complete this procedure varies depending on several factors including the number of module software updates required, available internet bandwidth, universal serial bus (USB) flash drive variability, and the potential that controller area network (CAN) flashing (software update via the data link connector [DLC] with Ford Diagnosis and Repair System [FDRS]) may be required. Connect to the internet with an ethernet cable and use a USB 3.0 or higher flash drive when performing software updates.

1. Start an FDRS session and navigate to Toolbox tab > Datalogger > Body Control Module (BCM) and select the BATT_SOC parameter identification (PID). Verify the PID reads 80% or higher. If state of charge (SOC) is less than 80%, charge the battery then navigate back to Toolbox tab > BCM > Reset Battery Monitor Sensor Learned Values application. Perform the battery monitor sensor (BMS) reset.

(1). If the battery is unable to achieve an 80% SOC then a new battery may be required. Use the Rotunda GRX-3590 or DCA-8000 testers to verify if replacement is required. If the battery is replaced, fully charge the new battery. Disconnect the Rotunda charger and perform a BMS reset using the FDRS scan tool.

2. Reconnect the battery charger and set it to maintain a vehicle voltage of 12.6-13.6 volts. A low battery state of charge while performing a software update to any module may result in a repeat Restart Required message in the vehicle center display screen or a message on the FDRS saying Part Number Validation Failed or DID Validation Failed.

3. Are there any updates available for the GWM, TCU and/or APIM?

(1). Yes - proceed to Step 4.

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

4. Perform the Module Software Updating Procedures outlined below for the following modules: GWM, APIM and TCU. Perform a network test after each software update using the latest software level of the FDRS scan tool. This will refresh the list of modules that have available software updates based current module software levels. If any error conditions are experienced during programming, refer to WSM Section 418-01A > General Procedures > Module Programming for the Error Condition Table.

NOTE: A 32GB or larger USB flash drive is required for APIM, TCU and GWM software updates. USB 3.0 or higher is recommended for faster file transfer.

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

- • Select Default Allocation Size for the Allocation Unit Size

De-selecting Quick Format is not necessary and will result in a lengthier operation.

5. Using the FDRS, begin module programming by selecting the SW Updates tab. Follow all on-screen instructions carefully. Perform the software updates in the order below:

NOTE: All 3 modules must be at the latest software level. However, depending on the current software level of the modules, all the following updates may not be required.

(1). GWM

(2). APIM

(3). TCU

NOTE: If the next update is not showing available, perform a network test and recheck availability.

6. When prompted, connect the USB flash drive to the FDRS.

7. When prompted by the FDRS, safely remove/eject the USB flash drive from the FDRS and connect it to the USB media hub to install the software into the module. When the USB software update begins, the center display screen displays a message stating Do Not Remove USB. The update may take 10 minutes or longer to complete.

NOTE: It may take up to 5 minutes for the vehicle to recognize the USB flash drive.

8. When the pop-up stating Restart Required appears on the center display screen:

(1). Turn the ignition off.

(2). Wait for 10 minutes.

(3). Restart the vehicle (key-on vehicle running/ready). The update is still in process at this time.

NOTE: It may take up to 5 minutes before the center display screen displays Update Successful pop-up. After 5 minutes if Update Successful pop-up is not shown on the center display screen, remove the USB flash drive and select yes on the FDRS Was the USB Update Successful prompt (FDRS verifies if the module software update was successfully installed on the module).

9. Once the pop-up stating Update Successful appears in the center display screen, select Close, remove the USB flash drive from the USB media hub, and select Yes on FDRS indicating the update installed successfully. This initiates the remaining automated configuration steps and reports the module software part numbers 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 module to reset during this step.

10. Proceed to Vehicle Connectivity Verification/Map Update Procedure.

Vehicle Connectivity Verification/Map Update Procedure

1. Verify if the vehicle connectivity is set to ON. Go to Settings > Connectivity > Under Connected Vehicle Features the Vehicle Connectivity setting should be ON.

NOTE: If not, ask customers to turn it ON if they wish to use BlueCruise as BlueCruise will not work with Vehicle Connectivity set to OFF.

2. Update BlueCruise Maps:

(1). Cycle the ignition off and on 10 times.

(2). Keep ignition on.

(3). Wait 5 minutes.

(4). Perform an additional ignition cycle off then on.

(5). Check SYNC About screen for this message: Hands-Free Driving Mode available through 10-06-2073 or future date.

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.