TECHNICAL SERVICE BULLETIN
Android Auto/Apple CarPlay Connectivity, Center Display Screen Concerns, Navigator Not Storing Running Boards Enable/Disable Setting

22-2492
15 December 2022

Model:

Ford 2022 Expedition	
Lincoln 2022 Navigator	

Issue: Some 2022 Expedition/Navigator vehicles may experience Android Auto/Apple CarPlay connectivity concerns, or center display screen inoperative, frozen or blank. Navigator vehicles with power running boards may randomly not remember the enable/disable setting after a key cycle. This may be due to the software in the accessory protocol interface module (APIM). To correct the condition, follow the Service Procedure to reprogram the APIM.

NOTE: The APIM software update that addresses the symptom listed in this article may have been delivered over-the-air (OTA) via Ford Power-Up software updates to connected vehicles that have automatic updates enabled through the center display 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 been successfully completed recently and the customer is reporting the symptoms are no longer present, this article may not apply.

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

- 2022 Expedition/Navigator

- At least one of the following:

  - Android Auto/Apple CarPlay connectivity concerns
  - Center display screen inoperative, frozen or blank
  - Navigator power running boards not storing the enable/disable setting after a key cycle

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
2022 Expedition/Navigator: Reprogram The Appropriate Modules As Required By The Software Update And Service Procedure (Do Not Use With Any Other Labor Operations)	MT222492	Actual Time

Repair/Claim Coding

Causal Part:	14G371
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. The time required to complete this procedure will vary 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 FDRS) may be required. It is recommended to connect to the internet with an ethernet cable and use a USB 3.0 capable flash drive when performing software updates.

NOTE: The following modules may each require more than one software update: gateway module (GWM), telematic control unit (TCU), accessory protocol interface module (APIM)

1. Start an FDRS session and navigate to Toolbox tab > Datalogger > body control module (BCM) and select the BATT_SOC 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-800 testers to verify if replacement is required. If the battery is replaced, fully recharge the new battery. Then 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 screen or a message on the FDRS saying Part Number Validation Failed or DID Validation Failed.

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

4. Are there any updates available for the GWM, TCU and APIM modules?

    (1). Yes - proceed to Step 5.

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

5. Perform the Module Software Updating Procedures outlined below for the following modules: GWM, TCU and APIM. 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. Continue performing software updates to the GWM, TCU and APIM until all available software updates for those modules are complete. If any error conditions are experienced during programming, refer to WSM Section 418-01A > General Procedures > Module Programming for the Error Condition Table.

6. If the in-vehicle SYNC screen does not indicate that the USB flash drive has started to download, this may require recovery of the APIM module. Refer to related Technical Service Bulletins (TSB) or Special Service Messages (SSM) for APIM recovery using the FDRS service tool.

Module Software Updating Procedure

The following instructions apply when performing a software update on any of the following modules:

- GWM
- TCU
- APIM

NOTE: A blank 64GB or larger USB flash drive is required, and a USB 3.0 USB flash drive is recommended for fastest software installation. Make sure the USB flash drive being used is formatted as exFAT file system. To confirm the USB flash drive is formatted as exFAT, hold down the Windows icon keyboard key and press the E keyboard key. Right click on the USB flash drive, then 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 results in a more lengthy operation.

1. Using the FDRS, begin module programming by selecting the SW Updates tab. Download and run the application for desired module. Follow all on-screen instructions carefully.

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

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

3. When prompted by the FDRS, safely remove/eject the USB flash drive from the FDRS and connect it to the USB 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 starts automatically and may take 10 minutes or longer to complete. If the message stating Do Not Remove USB does not display on the center display screen within 5 minutes of the USB drive being connected to the vehicle's USB hub select Did The Update Install Successfully > No on the FDRS and follow the on-screen instructions to either attempt USB programming again or perform CAN programming for the module.

4. When the pop-up stating Restart Required appears on the center display screen, turn the ignition OFF, keep the vehicle doors closed, and wait for 10 minutes. Restart the engine (key-on engine running [KOER]). The update is still in process at this time.

NOTE: It may take up to 5 minutes before SYNC center display screen displays Update Successful pop up. After 5 minutes if Update Successful pop up is not shown on SYNC center display screen, remove the USB 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).

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