



TECHNICAL SERVICE BULLETIN

Various Warning Messages Displayed In FordPass Or IPC And FordPass Displayed A High Voltage Battery Charge Of 50%

23-2349

06 November
2023

Model:

Ford
2023 Escape

Issue: Some 2023 Escape vehicles may exhibit various warning messages displayed in FordPass such as: check fuel cap, glow plug pre-heater fault, exhaust system fault, change air filter soon, air suspension fault, clean the exhaust filter, check fuel inlet, engine temperature high, anti-theft system/key fault, collision assist unavailable or instrumental panel cluster (IPC). Fordpass may also display a high voltage battery charge of 50% after a full charge. This may be due to the software installed in the gateway module (GWM). To correct this condition, follow the Service Procedure to reprogram the GWM.

NOTE: The GWM software update that addresses the symptom listed in this article may have been sent via Ford Power-Up software updates delivered over-the-air (OTA) 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 GWM 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 to correct the condition on vehicles that meet all of the following criteria:

- 2023 Escape
- At least one of the following warning messages displayed in FordPass:
 - IPC and Fordpass displayed a high voltage battery charge of 50% after a full charge
 - Check fuel cap
 - Glow plug pre-heater fault
 - Exhaust system fault
 - Change air filter soon
 - Air suspension fault
 - Clean the exhaust filter
 - Check fuel inlet engine temperature high
 - Anti-theft system/key fault
 - Collision assist unavailable

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description
BXT-99RT4-A	1	Battery 470 amp (2.5L HEV/PHEV)

BAGM-48H6-760	1	Battery 760 amp (1.5L/2.0L)
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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
2023 Escape: Reprogram The Appropriate Modules As Required By The Software Update And Service Procedure (Do Not Use With Any Other Labor Operations)	MT232349	Actual Time

Repair/Claim Coding

Causal Part:	14G490
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 3.0/3.1 capable flash drive when performing software updates.

- 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 50% or higher. If state of charge (SOC) is less than 50%, charge the battery then navigate back to Toolbox tab > BCM > Reset Battery Monitor Sensor Learned Values application. Perform the battery monitor sensor (BMS) reset.
 - If the battery is unable to achieve an 50% 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 recharge the new battery. Then disconnect the Rotunda charger and perform a BMS reset using the FDRS scan tool.
- 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.
- Are there any updates available for the GWM?
 - Yes - proceed to Step 4.
 - No - this article does not apply. Refer to Workshop Manual (WSM), Section 415-00.
- Perform the Module Software Updating Procedures outlined below for the 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 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.

Module Software Updating Procedure

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

- GWM
- TCU
- APIM

NOTE: A 32GB or larger USB flash drive is required for software updates. 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

1. Using the FDRS, begin module programming by selecting the SW Updates tab. Download and run the application for the desired module. Follow all on-screen instructions carefully.
2. When prompted, connect the USB flash drive to the FDRS.
3. When prompted by the FDRS, safely remove/eject the USB flash drive from the PC, turn the vehicle to key on engine running (KOER). Connect the USB to the media hub to install the software update. The update starts automatically and 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 with software update.

4. When the center display screen prompts to restart the vehicle:

- (1). Turn the vehicle OFF.
- (2). Wait 10 minutes.
- (3). Restart the vehicle KOER.
- (4). Leave the USB drive inserted into the vehicle, until the vehicles infotainment display screen states programming successful.

NOTE: It may take up to 5 minutes before the center display screen displays the Update Successful pop-up. After 5 minutes if Successful pop-up is not shown on the 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. Download and run the application for the desired module. Continue following the FDRS prompts to complete GWM, TCU and APIM software update.

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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.

