



TECHNICAL SERVICE BULLETIN

6.7L - Engine Coolant Temperature Gauge Falsely Reads High

25-202206 February
2025

This bulletin supersedes 24-2210. Reason for update: Update the Service Procedure

Model:

Ford 2023 F-Super Duty	Chassis Cab Engine: 6.7L Diesel
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Markets: North American markets only

Issue: Some of the vehicles listed in the Model statement above may exhibit an engine coolant temperature gauge falsely reading at the high end of the normal range while towing in high ambient temperatures with no DTC stored in the PCM or warning messages present in the IPC. This may be due to the software in the IPC.

NOTE: The IPC software update that addresses the symptom listed in this bulletin may have been sent via Ford Power-Up software updates delivered OTA to connected vehicles that have automatic updates enabled through the center display screen. Enter the VIN in PTS and check the OTA Dashboard under the Connected Vehicle tab for OTA update history. If an update to the IPC has successfully completed recently and the customer is reporting the symptoms are no longer present, this article may not apply.

Action: For vehicles that meet all of the criteria in the Issue and Model statements, follow the Service Procedure to reprogram the IPC.

Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
BXT-65-750	Only If Necessary	1	1	Battery (750 Amp) - Refer To The Parts Catalog For The VIN Specific Application
BAGM-65-A	Only If Necessary	1	1	Battery (750 Amp) - Refer To The Parts Catalog For The VIN Specific Application

Claim Quantity refers to the total number of individual pieces required to repair the vehicle.

Package Order Quantity refers to the amount of the service part number package(s) required to repair the vehicle.

Number In Package refers to the number of individual pieces included in a service part number package.

Only If Necessary indicates the part is not mandatory. Refer to the Service Procedure to determine the inspection/inclusion criteria.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Service Part New Vehicle (SPNV)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SPNV/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 F-Super Duty 6.7L Chassis Cab: Perform software update for GWM, APIM, TCU, PCM, TCM, SOBDMC, BCM, and IPC	252022A	3.0 Hrs.
2023 F-Super Duty 6.7L Chassis Cab: Additional Time For Further Updates To GWM, APIM, TCU "Refer To Warranty & Policy Manual, Section 1.3 For Time Recording Requirements And Procedures For Actual Time. Ford Monitors Module Reprogramming Vehicle History Session Data To Compare Against Warranty Claiming Activity" (Can Be Claimed With Operation A)	AP252022	Actual Time Up To 2.0 Hrs.

Repair/Claim Coding

Causal Part:	10849
Condition Code:	04

Service Procedure

NOTE: The time required to complete this procedure varies depending on several factors including the number of module software updates required, available internet bandwidth, USB flash drive variability, and the potential that CAN flashing (software update via the DLC with FDRS) may be required. Connect to the internet with an ethernet cable, use a USB 3.2 Gen 2 or higher flash drive. When performing USB software updates, using high speed USB ports on the laptop is recommended for faster file transfer.

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 50% or higher.

NOTE: Connecting the battery charger negative clamp directly to the battery negative terminal might result in the SOC PID not immediately reflecting the improvement from charging.

- (1). If SOC is less than 50%, charge the battery by attaching the battery charger's negative clamp to the engine or chassis ground and not the negative battery terminal. Refer to WSM, Section 414-01.
 - (2). If the battery is unable to achieve a 50% SOC, use the Rotunda GRX-3590 or DCA-8000 testers to verify if replacement is required.
 - If the battery does not need to be replaced, disconnect the Rotunda charger and perform a BMS reset using the FDRS scan tool.
 - 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 SOC while performing a software update to any module may result in a repeat Restart Required message in the vehicle's center display screen or a message on the FDRS saying Part Number Validation Failed or DID Validation Failed.
3. Is there a software update available for any of the following modules?
 - GWM
 - APIM
 - TCU
 - PCM
 - TCM
 - SOBDMC
 - BCM
 - IPC
 - (1). Yes - proceed to Step 4
 - (2). No - this article does not apply.
4. Prepare to update the software for the GWM, APIM, and TCU.
 - (1). A 32GB or larger USB flash drive is required for APIM, TCU, and GWM software updates. USB 3.2 Gen 2 or higher is recommended for faster file transfer on both the computer port and the USB drive.
 - (2). 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.
 - (3). 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.
 - (4). De-selecting Quick Format is not necessary and results in a lengthier operation.
5. Using the FDRS, begin module programming by selecting the SW Updates tab. Follow all on-screen instructions carefully.

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. Start the vehicle (KOER) then connect the USB flash drive 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 with software update.

8. When the vehicle's center display screen prompts to restart the vehicle:
 - (1). Turn the vehicle OFF.
 - (2). Wait 10 minutes.
 - (3). Restart the vehicle (key-on vehicle running). The update is still in process at this time.

9. Follow FDRS on-screen prompts to complete the update.

NOTE: It may take up to 5 minutes before "Update Successful" appears in the vehicle's center display screen. 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 prompt stating "Was The USB Update Successful" (FDRS verifies if the module software update was successfully installed on the module).

10. Perform the software update for the GWM. Follow all update screens. If there is no GWM software update available, proceed to Step 14.
 - (1). Follow the center display screen prompts.
 - (2). Follow FDRS prompts to complete the GWM programming.
 - 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.
 - (3). Perform a network test using the FDRS scan tool.
 - (4). Proceed to Step 11.
11. Perform the software update for the APIM. Follow all update screens. If there is no APIM software update available, proceed to Step 15.
 - (1). Follow the center display screen prompts.
 - (2). Follow FDRS prompts to complete the APIM programming.
 - 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.
 - (3). Perform a network test using the FDRS scan tool.
 - (4). Proceed to Step 12.
12. Perform the software update for the TCU. Follow all update screens. If there is no TCU software update available, proceed to Step 16.
 - (1). Follow the center display screen prompts.
 - (2). Follow FDRS prompts to complete the TCU programming.
 - 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.
 - (3). Perform a network test using the FDRS scan tool.
 - (4). Proceed to Step 13.

13. Perform a network test using the FDRS scan tool.
14. Are there any updates still available for the GWM, APIM, and/or TCU?
 - (1). Yes - return to Step 4.
 - (2). No - proceed to Step 15.
15. Is there a PCM update available?
 - (1). Yes - perform the software update. Proceed to Step 16.
 - (2). No - proceed to Step 16.
16. Is there a TCM update available?
 - (1). Yes - perform the software update. Proceed to Step 17.
 - (2). No - proceed to Step 17.
17. Is there a SOBDMC update?
 - (1). Yes - perform the software update. Proceed to Step 18.
 - (2). No - proceed to Step 18.
18. Is there a BCM update?
 - (1). Yes - perform the software update. Proceed to Step 19.
 - (2). No - proceed to Step 19.
19. Is there an IPC update?
 - (1). Yes - perform the software update. Proceed to Step 20.
 - (2). No - this article does not apply. Refer to WSM, Section 413-01 for normal diagnostics.
20. Perform a network test using the FDRS scan tool.
21. Are there any updates available for the GWM, APIM, TCU, PCM, TCM, SOBDMC, BCM and/or IPC?
 - (1). Yes - proceed to Step 10.
 - (2). No - repair is complete.

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 relearning process. This relearning process may result in firmer than normal upshifts and downshifts for several days.

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