

TECHNICAL SERVICE BULLETIN Illuminated TPMS Indicator With DTC B124D Stored In The Body Control Module (BCM)

10 July 2023

Model:

| Ford |
|-----------------|
| 2021-2023 F-150 |

Issue: Some 2021-2023 F-150 vehicles equipped with a direct current/alternating current converter module A (DCACA) inverter (minor feature code HUKAK) may exhibit an illuminated tire pressure monitoring system (TPMS) indicator with diagnostic trouble code (DTC) B124D stored in the BCM. This may be due to the DCACA inverter causing radio frequency interference (RFI). To confirm a vehicle is built with a certain minor feature code, review the build information by double-clicking the vehicle identification number (VIN) in the upper left corner in the Professional Technician System (PTS). To correct this condition, follow the Service Procedure to confirm if the inverter is the source of RFI and mitigate the interference.

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

- 2021-2023 F-150
- · Equipped with a DCACA inverter (minor feature code HUKAK)
- DTC B124D:02 in the BCM

Parts

| Service Part Number | Quantity | Description | Unit of Issue | Piece Quantity | Note |
|------------------------|--------------|---|------------------|-------------------|------------------------|
| NAI837X | As Needed | Rotunda® Coroplast Electrical Wire Harness Tape | | | Rotunda part number |
| 164-R9343- 1332 | As Needed | 3M™ Film Tape 9343 (13/32 in x 36 yard) | | | Rotunda part number |
| FL3Z- 9929024-AJ | 2 | Garment Hook | 1 | 2 | |
| Obtain Locally | 1 | Fair-Rite Products Corp.® Round Cable Snap-Its (0461164281) - 61 Round Cable Core Assembly, 6 mm Core Inside Diameter | | | |

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

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

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as nonwhole numbers, including less than 1.

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 SuperCab: Diagnose And Install Ferrite Bead Following The Service Procedure Includes Time To Access Harness And Road Tests (Do Not Use With Any Other Labor Operations) | 232218A | 2.3 Hrs. |

2021-2023 F-150 SuperCrew: Diagnose And Install Ferrite Bead Following The Service Procedure Includes Time To Access Harness And Road Tests (Do Not Use With Any Other Labor Operations)

Repair/Claim Coding

| Causal Part: | 19G317 |
|-----------------|--------|
| Condition Code: | 42 |

Service Procedure

1. Confirm the inverter is the source of RFI.

(1). Disconnect connector C3501C going to the DCACA inverter. Refer to the Wiring Diagram, Cell 150 - Connector Views, C3501C (Direct Current/Alternating Current (DC/AC) Inverter).

(2). Perform a 20 minute road test at 32 km/h (20 mph) or higher. If the TPMS indicator is no longer illuminated at any point, end the road test.

2. Is DTC B124D still present in the BCM after road tests?

(1). Yes - this article does not apply. Refer to the Workshop Manual (WSM), Section 204-04B Tire Pressure Monitoring System (TPMS), Diagnosis and Testing for normal diagnostics.

(2). No - proceed to Step 2.

- 3. Reconnect connector C3501C to the DCACA inverter.
- **4.** Obtain access to the radio transceiver module (RTM) but do not remove it. (Figure 1). Refer to WSM, Section 419-10 Multifunction Electronic Modules, Removal and Installation.

Figure 1



E416551

- Disconnect connector C9026 from the RTM. Refer to the Wiring Diagram, Cell 150 Connector Views, C9026 (Radio Transceiver Module (RTM)).
- 6. Install the Fair-Rite Products Corp.® Round Cable Snap-Its onto the 14A005 harness, approximately 25 mm (1 inch) before connector C9026 (Figure 2). Make sure the Round Cable Snap-Its is clean and free of oil, dirt, or grease, as it could affect the ability to mitigate RFI. Do not open and close the Round Cable Snap-Its more than necessary as it could affect the ability to mitigate RFI.

Figure 2



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(1). To close the Round Cable Snap-Its onto the harness, place the Round Cable Snap-Its over the harness in the required location, close it, and press the two sides of the Round Cable Snap-Its together until there is an audible/tactile click. (Figure 3) Make sure to not damage the wiring when closing the Round Cable Snap-Its.

Figure 3



- 7. Wrap Coroplast electrical wire harness tape around the Round Cable Snap-Its to secure it onto the harness. Do not cover the exposed wiring near connector C9026 with tape as it could stress the wiring to connector C9026. If necessary, use 3M[™] Film Tape 9343 to secure the Round Cable Snap-Its and harness further to prevent stress on connector C9026.
- **8.** Reinstall the headliner. Refer to the WSM, Section 501-05 Interior Trim and Ornamentation, Removal and Installation, Headliner Lowering.
- **9.** Perform a 20 minute road test at 32 km/h (20 mph) or higher. If the TPMS indicator is no longer illuminated at any point, end the road test.

10. Is DTC B124D present after the road test?

(1). Yes - refer to the WSM, Section 204-04B Tire Pressure Monitoring System (TPMS), Diagnosis and Testing for additional diagnostics.

(2). No - repair is complete.

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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.