

TECHNICAL SERVICE BULLETIN Equipped With 2kW (Not 400W) DCACA Inverter (Minor Feature Code HUKAK) - Illuminated TPMS Indicator With DTC B124D:02 Stored In BCM

24-2122

25 April 2024

This bulletin supersedes 23-2276. Reason for update: clarify the vehicle applications

Model:

Ford 2021-2023 F-150

Markets: North American markets only

Issue: Some 2021-2023 F-150 vehicles equipped with a 2 kilowatt (kW) (not 400 watt (W)) <u>DCACA</u> inverter (minor feature code HUKAK) may exhibit an illuminated <u>TPMS</u> indicator with <u>DTC</u> B124D:02 stored in the <u>BCM</u>. This may be due to the DCACA inverter causing <u>RFI</u>. To confirm a vehicle is built with a certain minor feature code, review the build information by double-clicking the <u>VIN</u> in the upper left corner in the <u>PTS</u> website. 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 2 kW (not 400 W) DCACA inverter (minor feature code HUKAK)
- DTC B124D:02 in the BCM

Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description	Note
FL3Z- 9929024-AJ	2	2	1	Garment Hook, Light Slate - Refer To The Parts Catalog For The VIN Specific Application	
FL3Z- 9929024-AB	2	2	1	Garment Hook, Java - Refer To The Parts Catalog For The VIN Specific Application	
FL3Z- 9929024-AK	2	2	1	Garment Hook, Black Onyx - Refer To The Parts Catalog For The VIN Specific Application	
NAI837X	As Needed	As Needed		Rotunda® Coroplast Electrical Wire Harness Tape	Rotunda® part number
Obtain Locally	1	1		Fair-Rite Products Corp.® Round Cable Snap-Its (0461164281) - 61 Round Cable Core Assembly), 6 mm Core Inside Diameter	

Parts - Only If Necessary

Service Part Number	Claim Quantity	Package Order Quantity	Description	Note
164-R9343-1332	Only If Necessary	Only If Necessary	3M™ Film Tape 9343 (13/32 in x 36yd)	Rotunda® part number

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.

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

Only If Necessary indicates the part is not mandatory.

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)	242122A	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)		2.7 Hrs.

Repair/Claim Coding

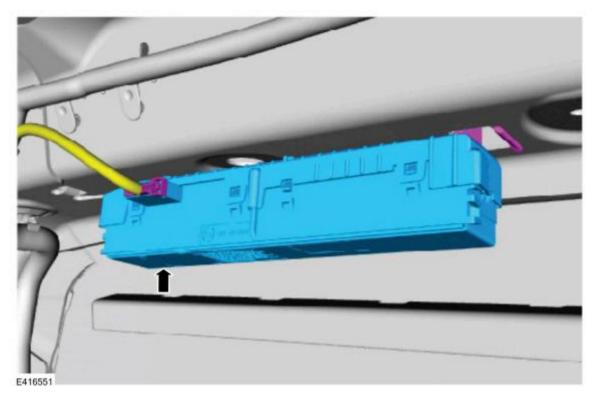
Causal Part:	19G317	
Condition Code:	42	

Service Procedure

NOTE: This repair does not apply to vehicles equipped with 400w inverters and should not be performed on vehicles equipped with minor feature codes HUKAJ or HUKAD.

- 1. Confirm the inverter is the source of RFI.
 - (1). Disconnect connector C3501C going to the <u>DCACA</u> 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 <u>TPMS</u> 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 <u>WSM</u>, Section 204-04B Tire Pressure Monitoring System (TPMS), Diagnosis and Testing for normal diagnostics.
 - (2). No proceed to Step 3.
- 3. Reconnect connector C3501C to the DCACA inverter.
- **4.** Obtain access to the <u>RTM</u> but do not remove it. (Figure 1). Refer to <u>WSM</u>, Section 419-10 Multifunction Electronic Modules, Removal and Installation.

Figure 1



- **5.** Disconnect connector C9026 from the <u>RTM</u>. 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 <u>RFI</u>. Do not open and close the Round Cable Snap-Its more than necessary as it could affect the ability to mitigate <u>RFI</u>.

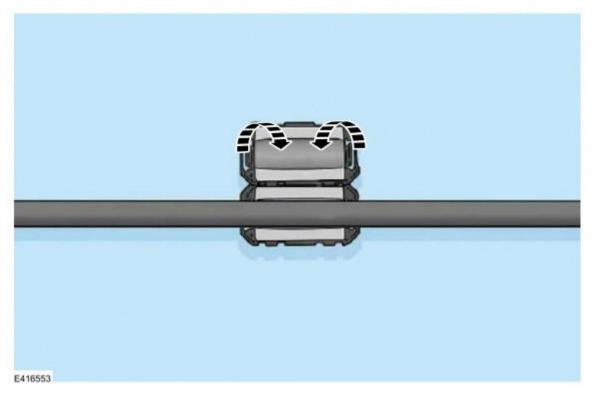
Figure 2



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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 <u>WSM</u>, 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 <u>TPMS</u> indicator is no longer illuminated at any point, end the road test.
- 10. Is DTC B124D present after road test?
 - (1). Yes perform additional diagnostics outside of this article. Refer to the <u>WSM</u>, Section 204-04B Tire Pressure Monitoring System (TPMS), Diagnosis and Testing.
 - (2). No repair 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.