



TECHNICAL SERVICE BULLETIN

400 Watt DC/AC Inverter System Inoperative With B1330:9A In The BCM

24-2020

19 January
2024

This bulletin supersedes 23-2367. Reason for update: revise Step 8 of the Service Procedure

Model:

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

Issue: Some 2021-2023 F-150 vehicles equipped with a 400 watt direct current/alternating current (DC/AC) inverter system with a pickup bed AC power outlet socket may experience the DC/AC inverter system inoperative with DTC B1330:9A stored in the BCM. This may be due to a connection issue at C4628. To correct the condition, follow the Service Procedure to inspect the connector and secure the harness.

Action: Follow the Service Procedure to correct the condition if the vehicle meets all of the following criteria:

- 2021-2023 F-150
- 400 watt DC/AC inverter system with a pickup bed AC power outlet socket
- DC/AC inverter system inoperative with DTC B1330:9A stored in the BCM

Parts

| Service Part Number | Quantity | Description | Unit of Issue | Piece Quantity |
|---------------------|-----------|--|---------------|----------------|
| 8U5Z-14A163-E | 1 | Retainer | 1 | 1 |
| MU5Z-19A464-A | 1 | Auxiliary Power Outlet | 1 | 1 |
| 13A409 | 1 | Wire Harness - Refer To The Parts Catalog For The VIN Specific Application | 1 | 1 |
| XG-12 | As Needed | Motorcraft® Electrical Grease | | |

Quantity refers to the amount of the service part number package(s) 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 non-whole 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: Check DTCs, Disconnect C4628, Replace AC Power Outlet Socket Harness Retainer, Inspect Connector C4628, Fail, Replace Outlet Socket Assembly And 13A409 Body Harness Assembly, Download And Run The BCM - Reset Battery Monitor Sensor Learned Values And BCM LIN New Module Initialization Check DTCs | 242020A | 1.9 Hrs. |
| 2021-2023 F-150: Check DTCs, Disconnect C4628, Replace AC Power Outlet Socket Harness Retainer, Inspect Connector C4628, Pass, Download And Run The BCM - Reset Battery Monitor Sensor Learned Values And BCM LIN New Module Initialization Check DTCs | 242020B | 0.6 Hrs. |

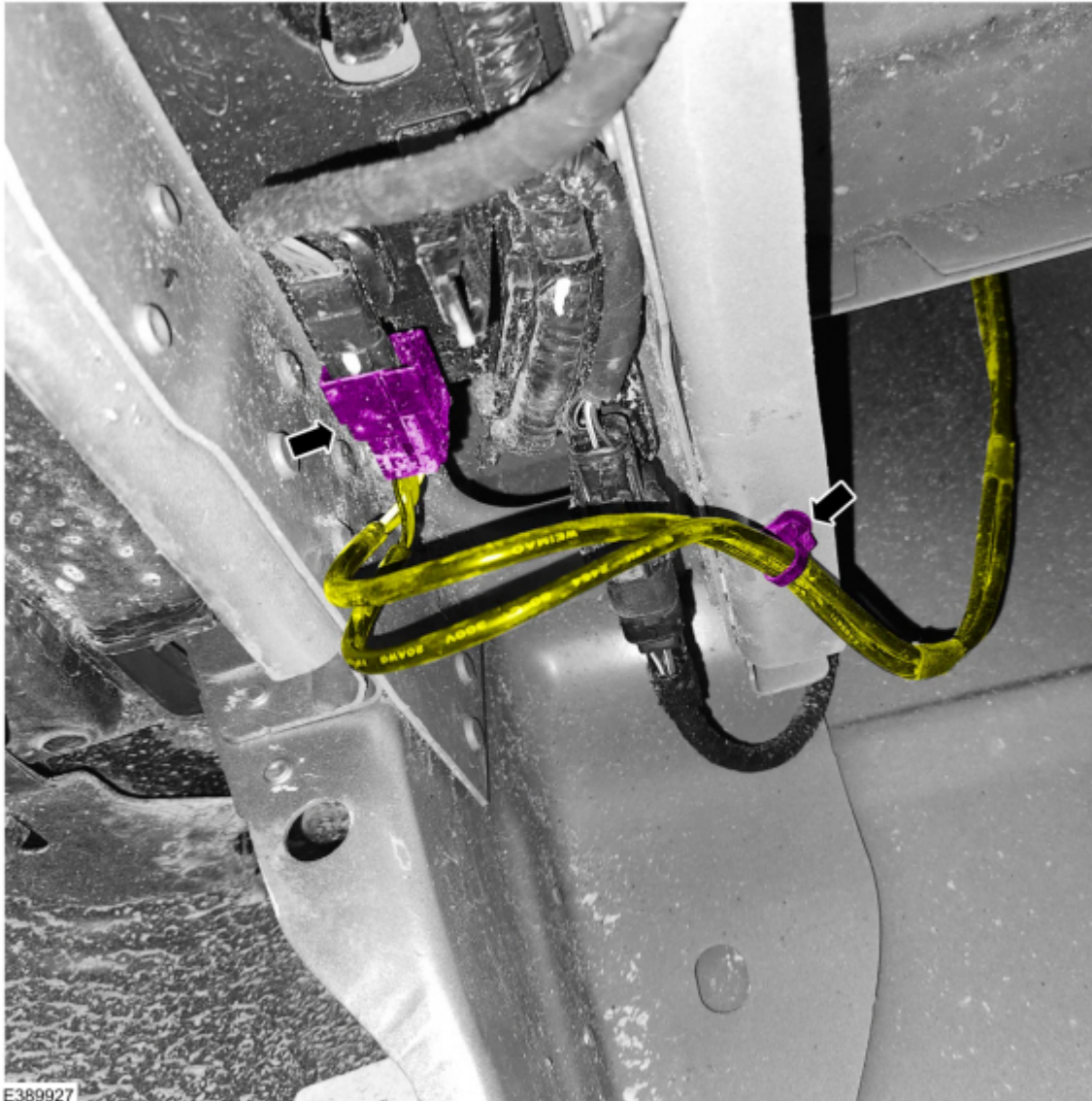
Repair/Claim Coding

| | |
|-----------------|--------|
| Causal Part: | 19A464 |
| Condition Code: | 43 |

Service Procedure

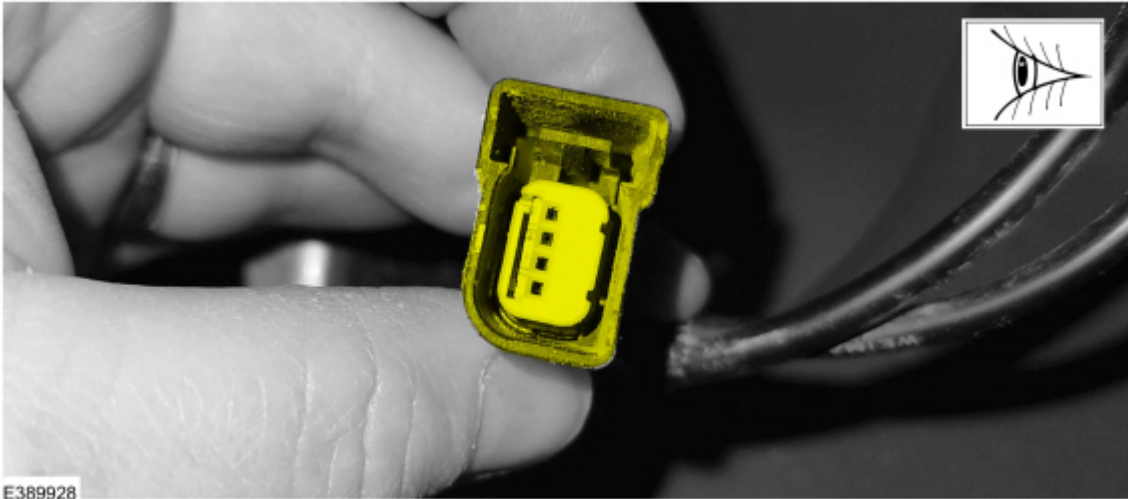
1. Disconnect connector C4628 and remove the pickup bed AC power outlet socket harness retainer from the body located in Figure 1.

Figure 1



2. Using a suitable tool, carefully cut and remove the pickup bed AC power outlet socket harness retainer from the pickup bed AC power outlet socket harness. Discard the retainer.
3. Inspect connector C4628 for the presence of corrosion, dirt and/or damage. Is corrosion, dirt and/or damage present in connector C4628? (Figure 2)

Figure 2

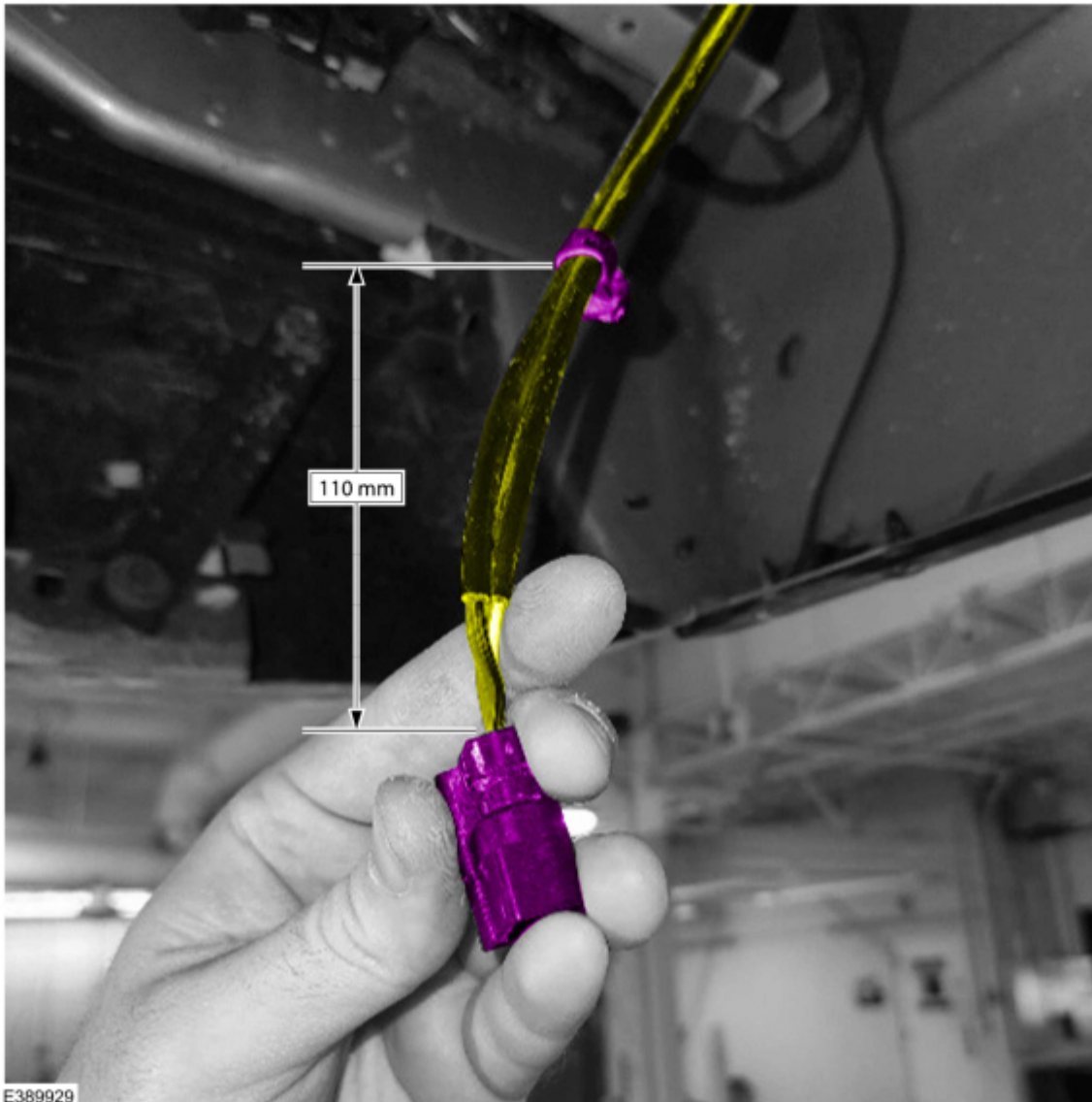


(1). Yes - replace the pickup bed AC power outlet socket assembly. Refer to WSM, Section 414-05. Replace the body side harness assembly (13A409) of connector C4628. Proceed to Step 4.

(2). No - proceed to Step 4.

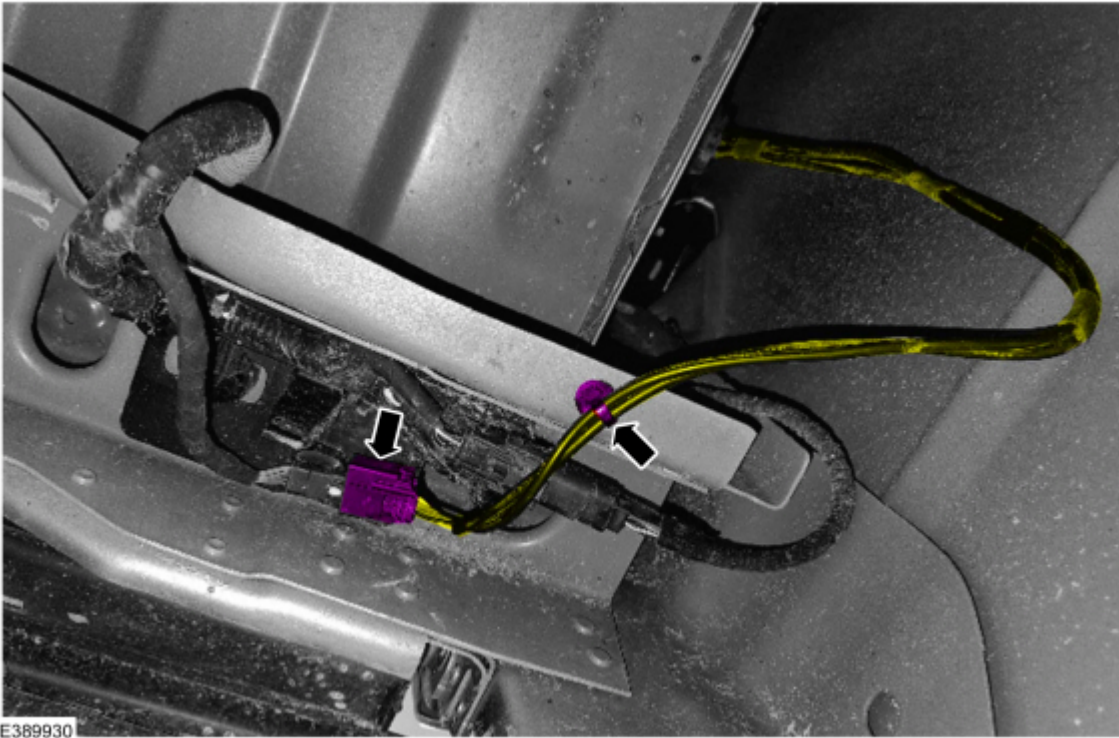
4. Install a new pickup bed AC power outlet socket harness retainer 4.3 in. (110 mm) from the back of the pickup bed power outlet harness connector. If the pickup bed AC power outlet socket has been replaced, remove and discard the factory-installed harness retainer and install the new harness retainer. (Figure 3)

Figure 3



5. Apply Motorcraft® Electrical Grease to the pickup bed AC power outlet socket connector and reconnect to the C4628 bodyside harness. Secure the harness retainer to the body. (Figure 4)

Figure 4



⚠ CAUTION: The bend radius of the pickup bed AC power outlet socket harness should be no less than 4 mm. Hard kinks and tight bends of the pickup bed AC power outlet socket harness can lead to wire damage.

6. Fold approximately 7 in. (185 mm) of the remaining/loose pickup bed AC power outlet socket harness in 2 bends just behind the pickup bed AC power outlet socket panel. Secure the folded wire with a wire tie. Inspect the routing of the harness to make sure it is not pulled too tight against the body sheet metal near the harness retainer and provides just enough length. (Figure 5)

Figure 5



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7. Tightly compress the bends and completely wrap the folded pickup bed AC power outlet socket harness section with anti-abrasion electrical tape. (Figure 6)

Figure 6



8. Download and run the BCM - Reset the Battery Monitoring Sensor Learned Values application and then the BCM - Local Interconnect Network (LIN) New Module Initialization in the FDRS to relearn the direct current/alternating current module A (DCACA) outlet configuration and retest. If DTC B1330:9A persists, continue with normal diagnostics in the WSM, Section 414-05.

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