

# TECHNICAL SERVICE BULLETIN 4WD Inoperative, Illuminated Powertrain Malfunction (Wrench) Indicator -Various 4WD DTCs

**23-2182** 21 June 2023

This bulletin supersedes 22-2447.

Model:

Ford 2021-2022 Bronco

#### Summary

This article supersedes TSB 22-2447 to update the TSB Issue and Service Procedure.

**Issue:** Some 2021-2022 Bronco vehicles may exhibit an illuminated powertrain malfunction (wrench) indicator with diagnostic trouble codes (DTCs) stored in the all-wheel drive (AWD) module. The setting of these DTCs result in an inoperative 4WD system that may be intermittent. These DTCs may be setting due to a low battery state of charge. To correct the condition, follow the Service Procedure to verify the battery condition and reprogram the AWD module.

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

- 2021-2022 Bronco
- Illuminated powertrain malfunction (wrench) indicator and various DTCs stored in the AWD module
- 4WD system inoperative

#### Parts

#### Parts To Replace Only If Necessary

| Service Part Number | Quantity  | Description | Unit of Issue | Piece Quantity |
|---------------------|-----------|-------------|---------------|----------------|
| BAGM-94RH7-800      | If Needed | Battery     | 1             | 1              |
| BAGM-48H6-760       | If Needed | Battery     | 1             | 1              |

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.

If Needed 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<br>No. | Time        |
|--|------------------|-------------|
| 2021-2022 Bronco: Check And Correct The Battery State Of Charge And Reprogram The AWD Module Following The Service Procedure (Do Not Use With Any Other Labor Operations)                            | 232182A          | 0.4<br>Hrs. |
| 2021-2022 Bronco: Check And Correct The Battery State Of Charge, Replace The Battery<br>And Reprogram The AWD Module Following The Service Procedure (Do Not Use With Any<br>Other Labor Operations) | 232182B          | 0.6<br>Hrs. |

### Repair/Claim Coding

| Causal Part:    | 7P238 |  |
|-----------------|-------|--|
| Condition Code: | 42    |  |

## **Service Procedure**

- 1. Perform Pinpoint Test A in Workshop Manual (WSM), Section 414-01 > Diagnosis and Testing > Battery.
- **2.** Reprogram the AWD module using the latest software level of the FDRS scan tool. If the concern is still present, follow normal diagnostics in the WSM, Section 307-07.
- 3. Clear the DTCs with Ford Diagnosis and Repair System (FDRS).

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.

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