



TECHNICAL SERVICE BULLETIN

Charging System Fault Message In The Instrument Panel Cluster - Mud Accumulation In Generator

23-2238

24 July 2023

This bulletin supersedes 22-2392.

Model:

Ford 2021-2022 Bronco

Summary

This article supersedes TSB 22-2392 to update the Service Procedure and labor operation allowance.

Issue: Some 2021-2022 Bronco vehicles may exhibit a charging system fault message displayed in the instrument panel cluster (IPC), various diagnostic trouble codes (DTCs) related to charging system, and/or a charging system that has stopped functioning after water fording in muddy water. This may be the result of mud accumulation inside the generator causing it to fail. To resolve the concern, follow the Service Procedure to replace the generator and install a revised generator shield onto the vehicle.

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

- 2021-2022 Bronco
- Mud accumulation in the engine compartment, especially around the generator
- At least one of the following symptoms:
 - Charging system malfunction message displayed in the IPC
 - DTCs related to charging system errors
 - Charging system that is non-operational

Parts**2.3L Engine**

Service Part Number	Quantity	Description
MB3Z-10317-K	1	Generator Shield
MB3Z-10346-A	1	Generator - Option A
MB3Z-10346-H	1	Generator - Option B

Parts**2.7L And 3.0L Engines**

Service Part Number	Quantity	Description
MB3Z-10317-J	1	Generator Shield
MB3Z-8620-B	1	Accessory Belt
MB3Z-10346-B	1	Generator - Option A
MB3Z-10346-J	1	Generator - Option B

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
2021-2022 Bronco 2.3L: Replace The Generator, Includes Time To Remove The Protective Boot Following The Service Procedure (Do Not Use With Any Other Labor Operations Outside Of This Article)	232238A	1.5 Hrs.
2021-2022 Bronco 2.7L: Replace The Generator Following The Service Procedure (Do Not Use With Any Other Labor Operations Outside Of This Article)	232238B	1.0 Hrs.
2022 Bronco 3.0L: Replace The Generator Following The Service Procedure (Do Not Use With Any Other Labor Operations Outside Of This Article)	232238C	1.3 Hrs.
Extra Time To Retrieve DTC's And Diagnose The Charging System, Includes Time To Remove Mud And Accessories That Interfere With Diagnosis And Generator Replacement (Can Be Claimed With Operation A, B, Or C)	MT232238	Actual Time

Repair/Claim Coding

Causal Part:	10317
Condition Code:	46

Service Procedure

- Use low pressure water to clean the upper and lower engine compartment. Remove all mud and/or dirt that may interfere with inspection and diagnosis.
- Retrieve all DTCs from the vehicle using the latest version of the Ford Diagnosis and Repair System (FDRS) scan tool. Were any DTCs present in the body control module (BCM) or powertrain control module (PCM) related to charging system performance?
 - Yes - diagnose the charging system using the charging system DTC(s) that were retrieved from the BCM and/or PCM. Refer to the Workshop Manual (WSM), Section 414-00. Proceed to Step 3.
 - No - this article does not apply.
- Did WSM diagnostics lead to generator replacement?
 - Yes - proceed to Step 4.
 - No - this article does not apply.
- Replace the generator, refer to WSM, Section 414-02. During replacement, replace the generator shield with the new generator shield.
- For 2.3L only, during generator replacement, while the B+ connector is disconnected, cut off and discard the rubber protective boot which covers the B+ wire connector. (Figure 1)

Figure 1



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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.