



## TECHNICAL SERVICE BULLETIN

### Illuminated ABS Indicator, Engine Will Not Turn Off, Will Not Shift Out Of Park And/Or Various Electrical Symptoms

**22-2044**

15 February  
2022

This bulletin supersedes 22-2004.

#### Model:

<b>Ford</b> 2020-2022 Super Duty
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#### Summary

This article supersedes TSB 22-2004 to update the vehicle symptoms.

**Issue:** Some 2020-2022 F-Super Duty vehicles may exhibit a condition where the engine will not turn off and/or have various electrical symptoms including a dead battery, horn stays on and no crank/no start. The vehicle may also have an illuminated anti-lock braking system (ABS) indicator with diagnostic trouble codes (DTCs) C0020 and U3003 in the ABS module. The vehicle may not shift out of park (P) and/or have continuously illuminated brake lamps with DTCs P0504 and/or C0040. This may be a result of water/moisture intrusion into the battery junction box (BJB). The BJB is located under the hood of the vehicle. This water/moisture intrusion may be related to the BJB cover not installed completely or broken cover tabs/locking fingers allowing water/moisture into the BJB. To correct the condition, follow the Service Procedure steps to inspect for water/moisture intrusion into the BJB and replace the BJB if water/moisture intrusion is found.

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

- 2020-2022 F-Super Duty
- At least one of the following symptoms:
  - Engine will not turn off
  - Dead battery
  - Horn stays on
  - No crank/no start
  - Illuminated ABS Indicator with DTCs C0020 and U3003
  - Will not shift out of park (P) and/or continuously illuminated brake lamps with DTCs P0504 and/or C0040

#### Parts

Service Part Number	Quantity	Description
LC3Z-14A068-A	1	Power Distribution Box / Battery Junction Box (Diesel Engine)
LC3Z-14A068-B	1	Power Distribution Box / Battery Junction Box (Gas Engine)

**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
2020-2022 F-Super Duty: Inspect And Replace The BJB (Do Not Use With Any Other Labor Operations)	222044A	0.6 Hrs.

#### Repair/Claim Coding

Causal Part:	14A068
Condition Code:	42

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## Service Procedure

1. Visually inspect the BJB for signs of water/moisture intrusion. Are there signs of water/moisture intrusion into the BJB and/or broken cover tabs/locking fingers?
  - (1). Yes - proceed to Step 2.
  - (2). No - this article does not apply. Refer to Workshop Manual (WSM) for symptom based diagnostics.

Figure 1 - Example of moisture intrusion with BJB cover on



Figure 2 - Example of moisture intrusion with BJB cover off



## 2. Replace the BJB assembly.

- (1). Remove the battery and battery tray. Refer to the Workshop Manual, Section 414-01.
- (2). Remove the BJB cover.
- (3). Loosen the two BJB connector bolts and remove the battery power cable nut. Disconnect the battery power cable from the BJB.
- (4). Release the BJB from the two locking tabs on each side of the BJB.
- (5). Lift the BJB to allow access to both BJB connectors. Disconnect both connectors and remove the BJB.
- (6). Remove the cover from the new BJB and connect both connectors to the new BJB.
- (7). Install the new BJB into both locking tabs.
- (8). Attach the battery power cable and tighten the battery power cable nut to 10.5 Nm (93 lb-in). Tighten the connector bolts to 5.4 Nm (48 lb-in).
- (9). Install the new BJB cover making sure the cover tabs/locking fingers are installed correctly.
- (10). Install the battery tray and battery back into the vehicle. Refer to WSM, Section 414-01.

Figure 3 - Correct cover installation



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Figure 4 - Incorrect cover installation



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Figure 5 - Incorrect cover installation





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Figure 6 - Incorrect cover installation



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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.