

## **TECHNICAL SERVICE BULLETIN**

21-2219

# Various Electrical Concerns - Wiring Harness Contacting Coolant Reservoir Bracket - Built On Or Before 20-Nov-2020

29 September 2022

#### Model:

Ford

2021 F-650/F-750

**Issue:** Some 2021 F-650/F-750 vehicles built on or before 20-Nov-2020 may exhibit various electrical concerns and/or various illuminated warning lamps including malfunction indicator lamp (MIL) with various diagnostic trouble codes (DTCs) present. This may be due to the battery junction box (BJB) wiring harness contacting the coolant reservoir bracket. To correct the condition, follow the Service Procedure to repair any damaged circuits and secure the BJB wiring harness to the BJB.

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

- 2021 F-650/F-750
- Built on or before 20-Nov-2020
- At least one of the following concerns:
  - Inoperative/false activation of tail lamps/stop lamps
  - Inoperative cruise control
  - Inoperative air conditioning (A/C)
  - Engine stalls
  - No crank/no start
  - Inoperative upfitter switches
  - Rough idle/lack of power
  - Inoperative transmission SelectShift™ switch
  - Illuminated charging system warning indicator
  - Inoperative TOW/HAUL mode
  - DTCs P0572, P0573, P0504, P0533, P0480, P0645, P0685, P068A, P0230, P0231, P0101, P0102, P0103, P0104, P0113, P2122, P2123, P0446, P0452, P0453, P0620, P0625, P0626, P0657, P2669 and/or P06E4

#### **Parts**

Service Part Number	Quantity	Description
CU5Z-14A163-F	1	Cable Tie Strap With Retainer
GA1Z-14A099-A	1	Wire Protection Sleeve
NAI837X	As Needed	Coroplast Electrical Wire Harness Tape or equivalent

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)/Emissions Warranty/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/Emissions Warranty/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 F-650/F-750: Inspect And Repair Wire Harness Includes Time To Route And Secure Wire Harness (Do Not Use With Any Other Labor Operations)		1.0 Hrs.

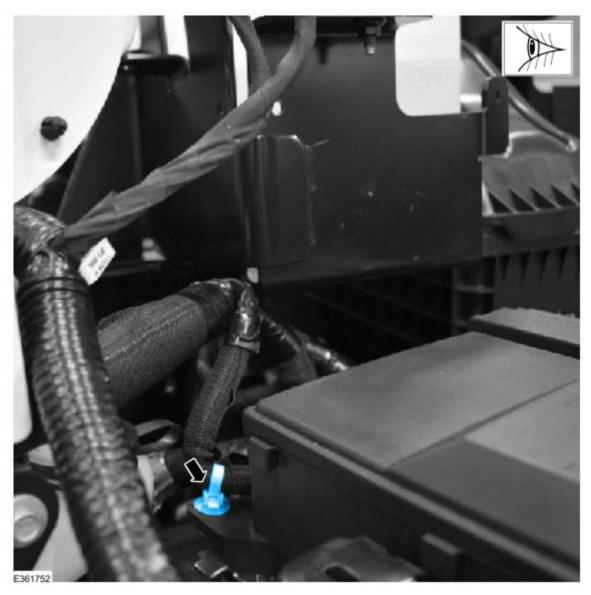
Causal Part:	12A581
Condition Code:	30

# **Service Procedure**

**1.** Closely inspect the wiring harness for contact with the coolant reservoir bracket. (Figure 1) Figure 1



**2.** Remove the wiring harness retainer from the bracket. (Figure 2) Figure 2



 ${\bf 3.}$  Cut the wiring harness retainer off the wiring harness. (Figure 3) Figure 3



- **4.** If any contact is noticed, carefully remove wiring harness sheathing. Repair all damaged circuits as necessary. Refer to Wiring Diagram, Cell 005. Wrap repaired section of wiring harness at least twice with Coroplast Electrical Wire Harness Tape.
- **5.** Cover the wiring harness with the protective sleeve and secure with two wraps of Coroplast Electrical Wire Harness Tape in 3 spots. (Figure 4)

Figure 4

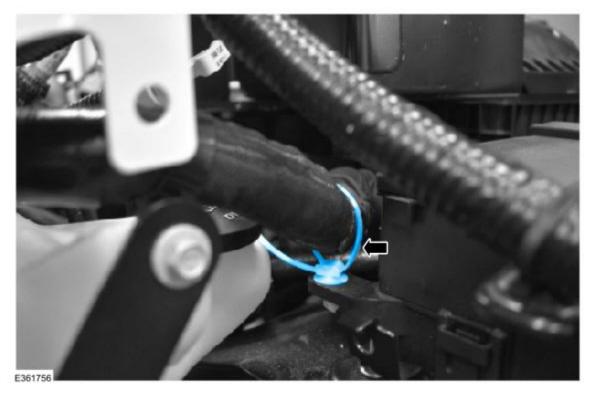


**6.** Loosely install the new cable tie strap around the large section of the wiring harness with the tail end facing towards the engine. (Figure 5)

Figure 5

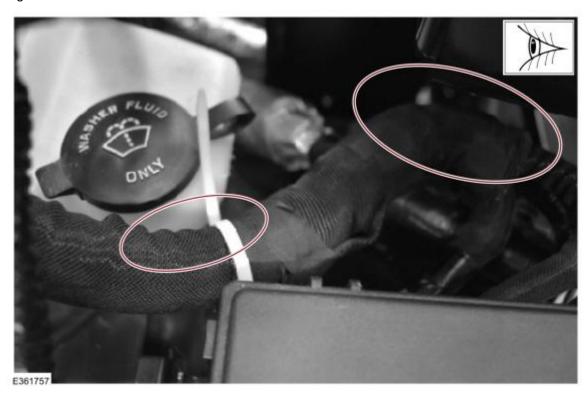


**7.** Insert the cable tie strap retaining pin into the hole located on the BJB bracket. (Figure 6) Figure 6



**8.** Inspect and make sure adequate clearance is present around the wiring harness near the washer fluid reservoir and the coolant reservoir bracket. (Figure 7)

Figure 7



**9.** Tighten the cable tie strap and trim excess material. (Figure 8) Figure 8



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