



TECHNICAL SERVICE BULLETIN

Trailer Connected/Disconnected Warnings In The IPC

**20-
2374**
27 October
2020

Model:

Ford
2019-2020 Ranger

Issue: Some 2019-2020 Ranger vehicles may exhibit random Trailer Connected/Disconnected messages in the instrument panel cluster (IPC) message center when no trailer is connected. This may be caused by corrosion and/or moisture in C4098 (4-pin trailer tow connector), C4099 (4/7-way trailer tow brake electrical connector) and/or inline C405. To correct the condition, follow the Service Procedure steps to inspect and repair the wiring and reprogram the trailer module (TRM).

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

- 2019-2020 Ranger
- Trailer Connected/Disconnected message in the IPC message center when no trailer is connected

NOTE: Part quantity refers to the number of that service part number required, which may be different than the number of individual pieces. Service part numbers contain 1 piece unless otherwise stated. "As Needed" indicates the part is required but the number may vary or is not a whole number; parts can be billed out as non-whole numbers, including less than 1.

Parts

Part Number	Description	Quantity
14405	Wiring Harness - Refer To The Parts Catalog For The VIN Specific Application	1
15K868	Rear Bumper Wiring Harness - Refer To The Parts Catalog For The VIN Specific Application	1
5U2Z-14S411-JA	Pigtail Wiring Kit	1
FU5Z-14489-A	Trailer Tow Brake Electrical Connector	1
KB3Z-13A576-C	Rear Wiring Harness (Without Rear Bumper)	1
XG-12	Motorcraft® Electrical Grease	As Needed

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
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MT: 2019-2020 Ranger: Reprogram The TRM, Inspect And Repair Or Replace Wire Harness(es) Following The Service Procedure	MT202374	Actual Time
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Repair/Claim Coding

Causal Part:	15K868
Condition Code:	X4

Service Procedure

1. Reprogram the TRM using the latest software level of the appropriate Ford diagnostic scan tool.
2. For vehicles equipped with a 4-pin trailer tow connector, proceed to Step 3. For vehicles equipped with a 4/7-way trailer tow connector mounted in the bumper, proceed to Step 7.
3. Inspect connector C405 for corrosion. Is corrosion present?
 - (1). Yes - proceed to Step 4.
 - (2). No - proceed to Step 5.
4. Replace the wiring harness(es) of the affected connector(s) and apply Motorcraft® Electrical Grease to the terminals and reconnect C405.
 - (1). When replacing the 15K868 harness, the 4-pin trailer tow connector on the new harness assembly is to be cut approximately 15 cm (6 inches) from the 4-pin trailer tow connector end. The cut-off 4-pin trailer tow connector should then be soldered onto the new harness using recommended splicing method 1 or 2 as shown in the Wiring Diagram, Cell 005, pages 5 or 6. Repair is complete.

NOTE: Do not use the butt splices provided with the service pigtail kit.

NOTE: Soldering the pigtail and using the dual wall heat shrink tubing will prevent moisture from migrating through the harness.

5. Thoroughly dry connector C405 of any moisture and apply Motorcraft® XG-12 Electrical Grease to the terminals and reconnect C405.
6. Replace C4098 with the service pigtail using recommended splicing method solder 1 or 2 as shown in the Wiring Diagram, Cell 005, pages 5 or 6. Repair is complete.

NOTE: Do not use the butt splices provided with the service pigtail kit.

NOTE: Soldering the pigtail and using the dual wall heat shrink tubing will prevent moisture from migrating through the harness.

7. Inspect the trailer side connection terminals of the 4/7-way trailer tow connector mounted in the bumper for corrosion. Is there corrosion present?
 - (1). Yes - proceed to Step 8.
 - (2). No - proceed to Step 9.
8. Replace the 4/7-way trailer tow connector.
9. Inspect connectors C405 and C4099 for corrosion. Is corrosion present?
 - (1). Yes - replace the affected harness(es), apply Motorcraft® Electrical Grease to the terminals and reconnect C405 and C4099.
 - (2). No - thoroughly dry connectors C405 and/or C4099, apply Motorcraft® Electrical Grease to the terminals and reconnect C405 and C4099.

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.