

TECHNICAL SERVICE BULLETIN
Ambient Air Temperature Sensor Replacement

Model:	
Ford 2024-2026 Ranger	Built on or before 12-Jan-2026

Markets: North American markets only

Issue: Some of the vehicles listed in the Model statement above may require the replacement of the ambient air temperature sensor for various concerns. DTCs P0071, P0072, and/or P0073 may be present in the PCM.

Action: For vehicles that meet all of the criteria in the Issue and Model statements, follow the Service Procedure to replace the ambient air temperature sensor, wiring pigtail kit, and ambient air temperature sensor bezel. If WSM Pinpoint Test BB (The Outside Air Temperature Display Is Inoperative Or Incorrect) leads to replacement of the ambient air temperature sensor.

Service Part Number	Claim Quantity	Description	Note
HC3Z-12A647-A	1	Ambient Air Temperature Sensor	
PC3Z-14A411-D	1	Wiring Pigtail Kit	
STWZ-17A703-A	1	Ambient Air Temperature Sensor Bezel	
3UZZ-14A086-AB	1	Heat Shrink Tube	
NA837X	As Needed	Croplast Electrical Wire Harness Tape Or Equivalent	Rollunda part number

Claim Quantity Claim Quantity refers to the total number of individual pieces required to repair the vehicle. This may differ from the number of service part number packages due to the unit of issue (UOI).

As Needed indicates the part is necessary but 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: Warranty coverage limits and policies are not altered by a TSB. Warranty coverage limits are determined by the identified causal part.

Labor Times

Description	Operation No.	Time
2024-2026 Ranger: Replace The Ambient Air Temperature Sensor And Bezel. Includes Time To Splice Wires And Reset Temperature Sensor Learned Values Following The Service Procedure	262301A	0.4 Hrs.

Repair/Claim Coding

Causal Part:	12A647
Condition Code:	42

Service Procedure

1. Perform Pinpoint Test BB in WSM, Section 412-00 outside of this article. Did Pinpoint Test BB (The Outside Air Temperature Display Is Inoperative Or Incorrect) lead to the replacement of the ambient air temperature sensor?

(1) Yes - proceed to Step 2.

(2) No - this article does not apply. Refer to WSM, Section 413-01 for normal diagnostics.

2. Remove the ambient air temperature sensor and bezel. Refer to WSM, Section 412-00 Climate Control System > Climate Control System - General Information > Removal and Installation > Ambient Air Temperature Sensor.

3. Cut the ambient air temperature sensor wiring harness as close to connector C650 as possible. (Figure 1)

Figure 1



Figure 1

4. Cut the new ambient air temperature sensor wiring pigtail kit 3 5/32 in. (80 mm) back from the connector. (Figure 2)

Figure 2



Figure 2

5. Splice the new ambient air temperature sensor wiring pigtail kit to the harness using the solder method. Refer to Wiring Diagram, Cell 005, Pages 5-6.

6. Wrap the new section of wiring (including the heat shrink tube) with Croplast electrical wire harness tape or equivalent. (Figure 3)

Figure 3



Figure 3

7. Install the ambient air temperature sensor and bezel. Refer to WSM, Section 412-00 Climate Control System > Climate Control System - General Information > Removal and Installation > Ambient Air Temperature Sensor.

8. Reset the outside air temperature sensor learned values. Refer to WSM, Section 412-00 Climate Control System > Climate Control System - General Information > General Procedures.

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