

2.5L - AIR CONDITIONING (A/C) INOPERATIVE AND/OR MESSAGE CENTER AMBIENT AIR TEMPERATURE DISPLAY INACCURATE - DTCS P0073, P0074 AND/OR U0422	TSB 16-0054
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FORD:

2014-2016 Transit Connect

ISSUE

Some 2014-2016 Transit Connect vehicles equipped with 2.5L engine may exhibit an intermittent condition in which the ambient air temperature (AAT) display in the instrument panel cluster (IPC) is inaccurate and/or the A/C is inoperative. The inoperative A/C may be caused by the AAT reading below -1.1 °C (30 °F) the actual ambient temperature is above -1.1 °C (30 °F) with diagnostic trouble codes (DTCs) P0073, P0074 and/or U0422.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

1. Does the AAT display in the IPC read inaccurate and/or the AAT temp reading is below -1.1 °C (30 °F) with A/C inoperative?
 - a. Yes - proceed to Step 3.
 - b. No - proceed to Step 2.
2. Connect the Ford Integrated Diagnostic System (IDS) service tool or equivalent scan tool to the data link connector (DLC). Check for DTCs and historical powertrain DTCs. Are DTCs U0422 stored in the IPC and/or P0073 and/or P0074 stored in the powertrain control module (PCM) memory or in the historical powertrain DTCs snapshot data?
 - a. Yes - proceed to Step 3.
 - b. No - this article does not apply. Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
3. Using IDS, reset the keep alive memory (KAM).
4. Is the AAT display in the IPC display accurate and does the A/C resume function?
 - a. Yes - replace AAT sensor. Refer to Workshop Manual (WSM), Section 412-00 and proceed to Step 5.
 - b. No - this article does not apply. Refer to PC/ED manual for normal diagnostics.
5. Replace the AAT sensor connector using the pigtail connector kit.
 - a. Disconnect the negative battery cable. Refer to WSM, Section 414-01.

NOTE: The information contained 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, Lincoln, or Mercury 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 supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

- b. Take the AAT sensor connector pigtail from the connector kit and cut to size.
 - (1) The overall length should not exceed 15 cm (6"). Take measurement from the back of the AAT sensor connector to the middle of the harness node. (Figure 1A)

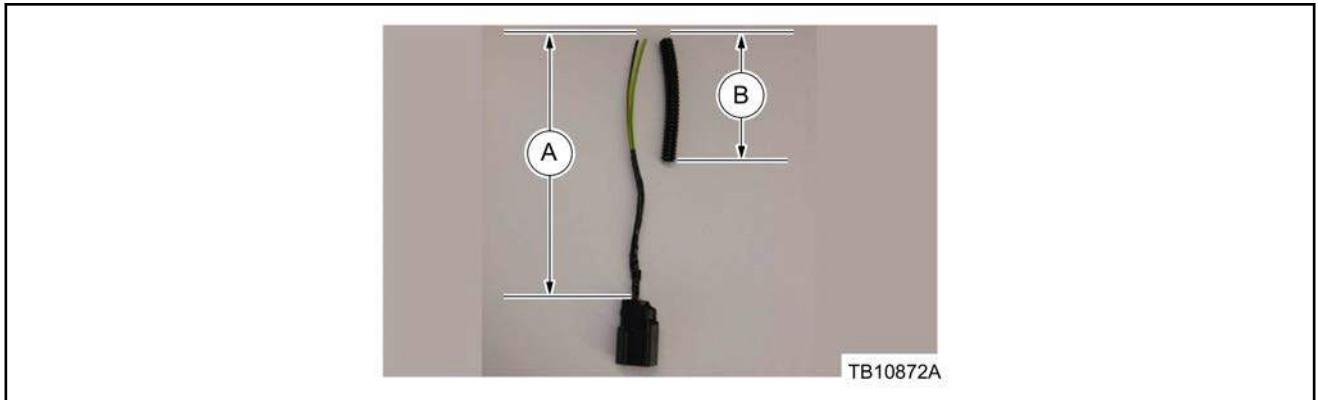


Figure 1 - Article 16-0054

- c. Use Rotunda Coroplast™ electrical wire harness tape or equivalent. Wrap 15 cm (6") length of wire of the pigtail harness. Leave enough wire from the pigtail exposed to splice it to the main harness. (Figure 1)
- d. Fold back the AAT sensor connector harness so that 17 mm (5/8") of wire is bent from the back of the connector and 17 mm (5/8") of wire is bent from the front of the connector. (Figure 2A)

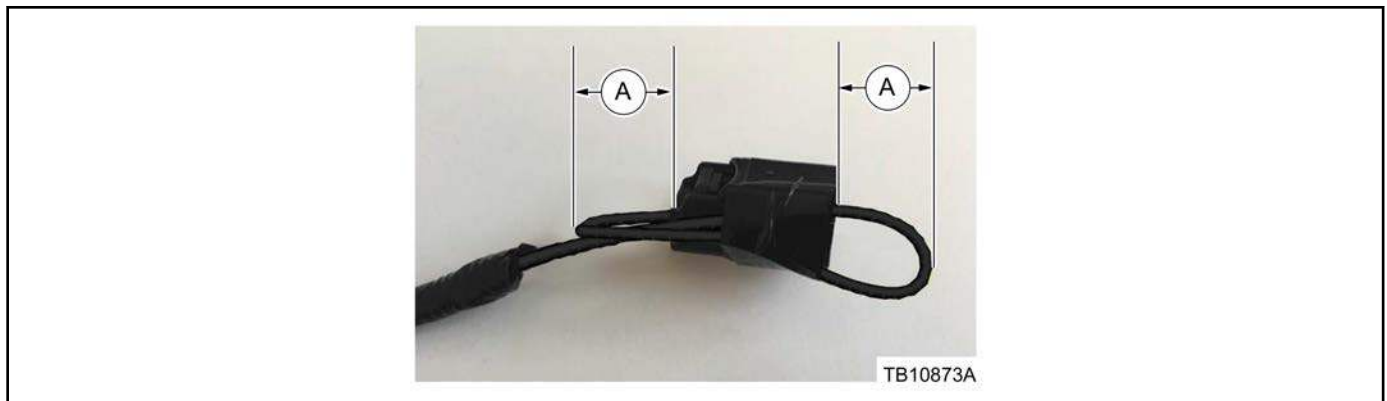


Figure 2 - Article 16-0054

- e. Use a half-width piece of electrical tape and tape the harness to the connector.
 - (1) Avoid taping over the locking tab of the connector.
- f. Remove and save the wiring convolute from the engine wiring harness and cut the AAT sensor connector wires 10 mm (3/8") away from the connector on the engine harness. Cut each circuit individually.
- g. Refer to the instructions in the AAT sensor connector pigtail kit for installation.
- h. Take the saved convolute from Step 5f and cut a length approximately 60 mm (2 3/8"). Install the convolute over the new AAT sensor connector harness. (Figure 1B)

TSB 16-0054 (Continued)

- i. Using Rotunda Coroplast™ electrical wire harness tape or equivalent electrical tape, tape under the convolute first and leave 10 mm (3/8") of the tape beyond the convolute, then tape over the convolute starting at the end nearest to the connector back to the harness. (Figure 3)

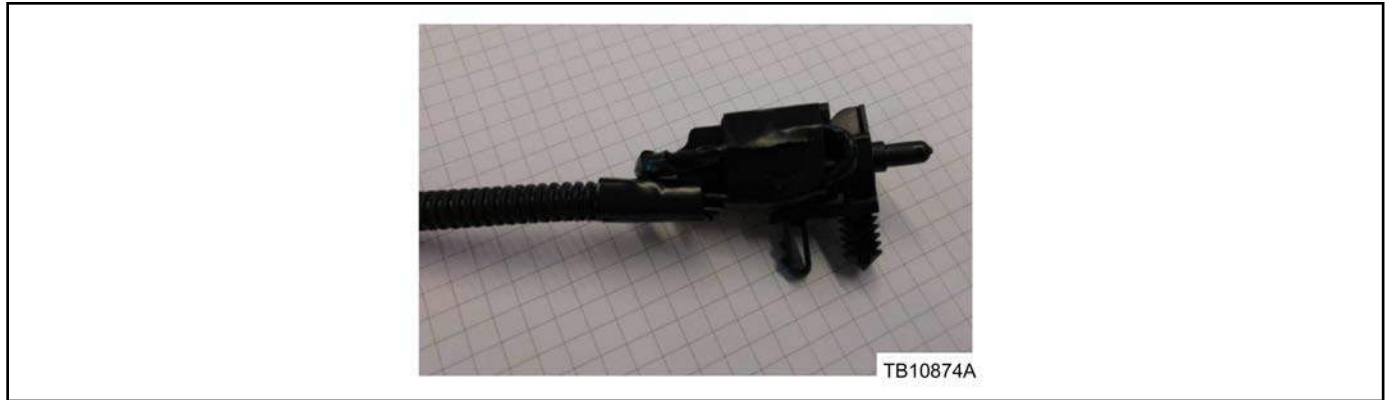


Figure 3 - Article 16-0054

- (1) Avoid taping over the locking tab of the connector.
6. Connect the new connector to the AAT sensor. Refer to WSM, Section 412-00.
7. Connect the negative battery terminal. Refer to WSM, Section 414-01.

Obtain Locally	
Part Number	Part Description
NAI837X	Rotunda Coroplast™ Electrical Wire Harness Tape
	Standard Electrical Tape

PART NUMBER	PART NAME
AU2Z-14S411-AGB	Pigtail Connector Kit Assembly
AU5Z-12A647-B	Ambient Temperature Sensor

OPERATION	DESCRIPTION	TIME
160054A	2014-2016 Transit Connect 2.5L: Retrieve DTCs And Replace The AAT Sensor And AAT Sensor Connector Following The Service Procedure (Do Not Use With Any Other Labor Operations)	1.1 Hrs.

WARRANTY STATUS:

Eligible Under Provisions Of New Vehicle Limited Warranty Coverage

Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

DEALER CODING

BASIC PART NO.	CONDITION CODE
14290	x2