

DTC	B1411/11	Room Temperature Sensor Circuit
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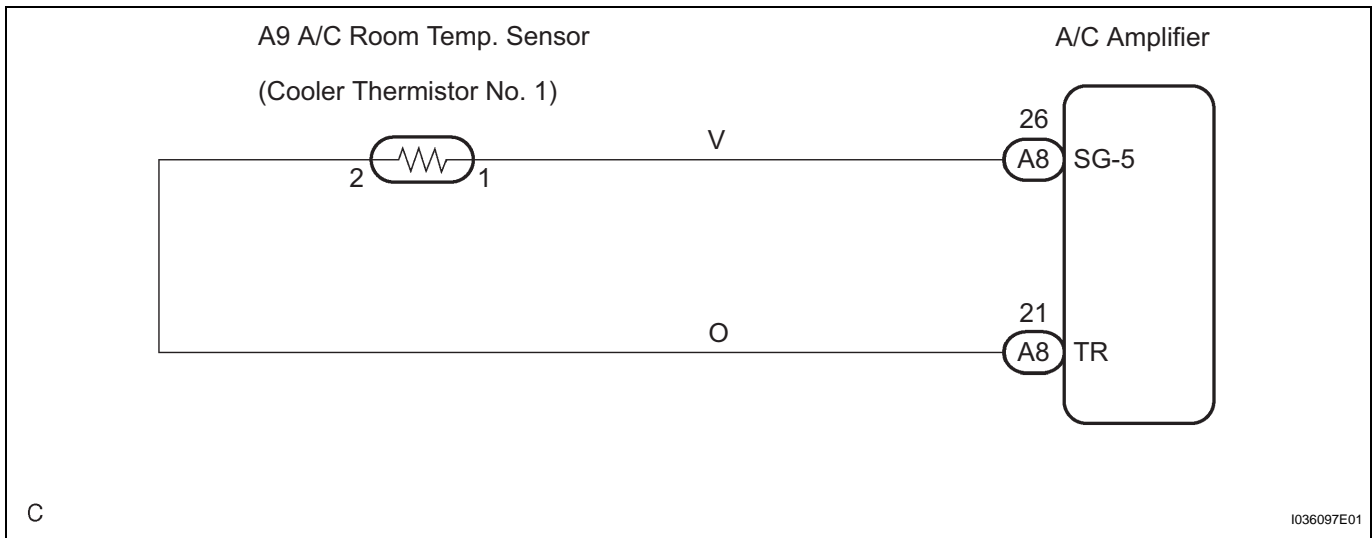
DESCRIPTION

This sensor detects the temperature inside the cabin and sends the appropriate signals to the A/C amplifier.

DTC No.	DTC Detection Condition	Trouble Area
B1411/11	Open or short in room temperature sensor circuit	<ul style="list-style-type: none"> Cooler thermistor No. 1 Harness or connector between cooler thermistor No. 1 and A/C amplifier A/C amplifier

AC

WIRING DIAGRAM



1	READ VALUE OF INTELLIGENT TESTER
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- (a) Connect the intelligent tester to DLC3.
- (b) Turn the ignition switch ON and push the intelligent tester main switch ON.
- (c) Select the items below in the DATA LIST, and read the displays on the intelligent tester.

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
ROOM TEMP	Room temperature sensor / min.: -6.5°C max.: 57.25°C	Actual room temperature	-

Result

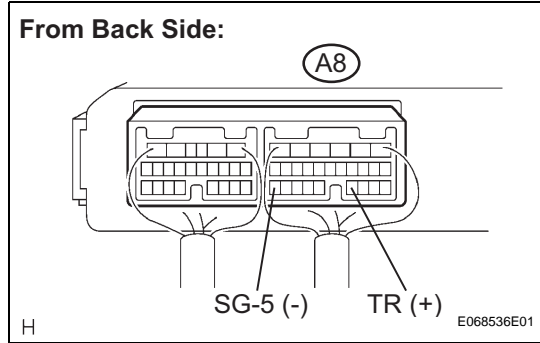
Result	Proceed to
NG	A
OK (Checking from the PROBLEM SYMPTOM TABLE)	B
OK (Checking from the DTC)	C

B	PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE
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C **Go to step 5**

A

2 INSPECT AIR CONDITIONING AMPLIFIER (TR - SG-5)



- (a) Remove the A/C amplifier with connectors still connected.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester connection	Condition	Specified condition
A8-21 (TR) - A8-26 (SG-5)	Ignition switch ON at 25°C (77°F)	2.0 ± 0.2 V
A8-21 (TR) - A8-26 (SG-5)	Ignition switch ON at 40°C (77°F)	1.4 ± 0.2 V

HINT:

As the temperature increases, the voltage decreases.

Result

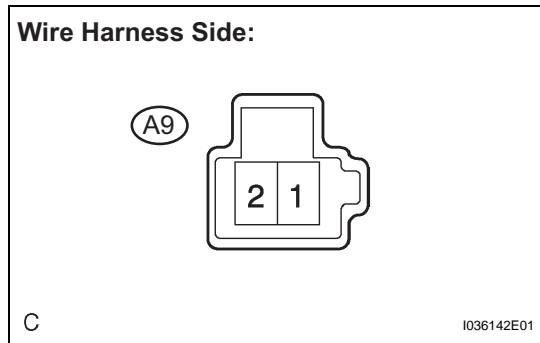
Result	Proceed to
NG	A
OK (Checking from the PROBLEM SYMPTOM TABLE)	B
OK (Checking from the DTC)	C

B **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**

C **Go to step 5**

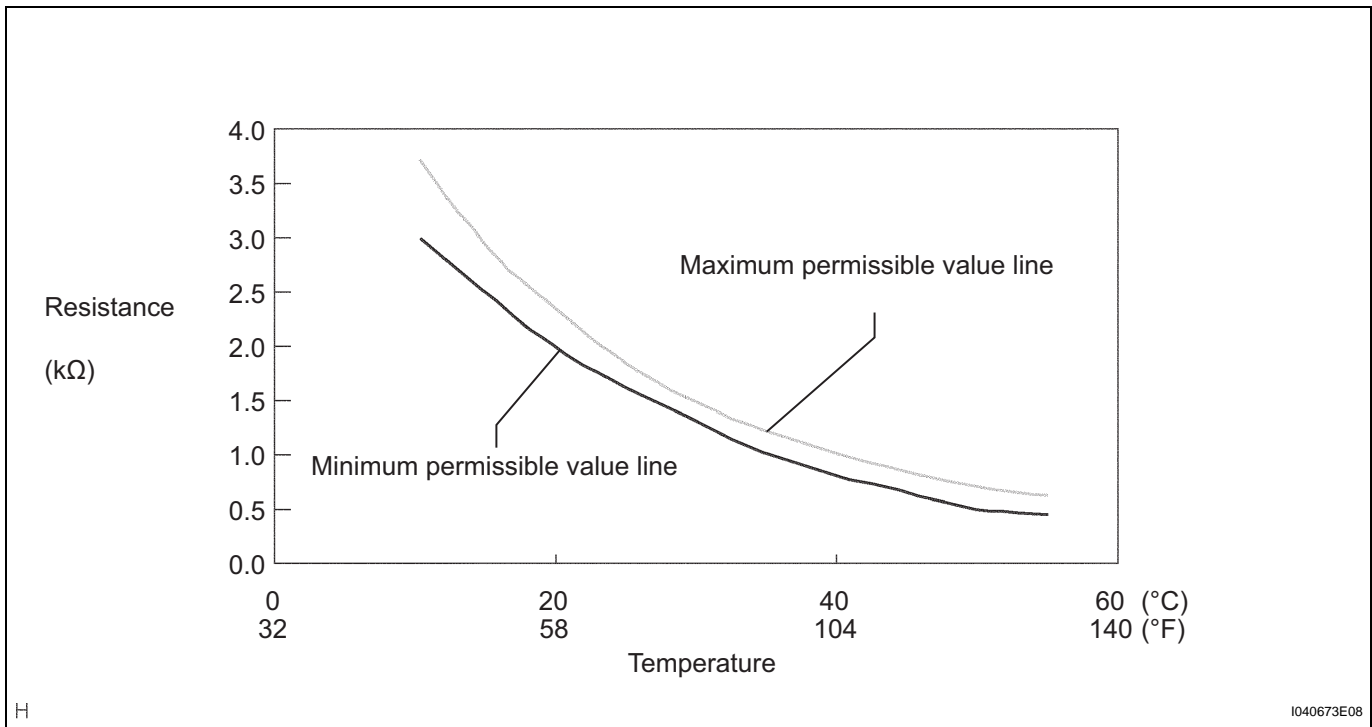
A

3 INSPECT COOLER THERMISTOR NO.1



- (a) Remove the cooler thermistor No. 1.
- (b) Measure the resistance according to the value(s) in the table below.

AC



Standard resistance

Tester connection	Condition	Specified condition
A9-1 - A9-2	10°C (50°F)	3.00 to 3.73 kΩ
A9-1 - A9-2	15°C (59°F)	2.45 to 2.88 kΩ
A9-1 - A9-2	20°C (68°F)	1.95 to 2.30 kΩ
A9-1 - A9-2	25°C (77°F)	1.60 to 1.80 kΩ
A9-1 - A9-2	30°C (86°F)	1.28 to 1.47 kΩ
A9-1 - A9-2	35°C (95°F)	1.00 to 1.22 kΩ
A9-1 - A9-2	40°C (104°F)	0.80 to 1.00 kΩ
A9-1 - A9-2	45°C (113°F)	0.65 to 0.85 kΩ
A9-1 - A9-2	50°C (122°F)	0.50 to 0.70 kΩ
A9-1 - A9-2	55°C (131°F)	0.44 to 0.60 kΩ
A9-1 - A9-2	60°C (140°F)	0.36 to 0.50 kΩ

NOTICE:

Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.

HINT:

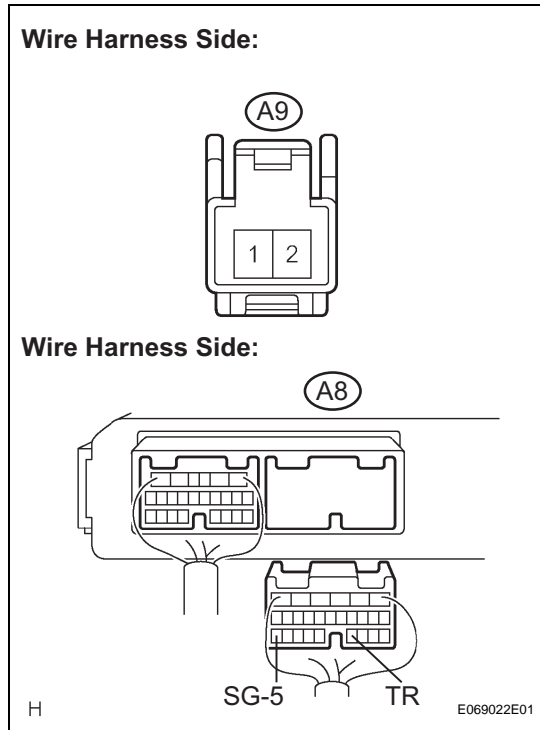
As the temperature increases, the resistance decreases (see the chart).

NG

REPLACE COOLER THERMISTOR NO.1

OK

4 CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - COOLER THERMISTOR NO. 1)



(a) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
A8-26 (SG-5) - A9-2	Always	Below 1 Ω
A8-21 (TR) - A9-1	Always	Below 1 Ω
A8-26 (SG-5) - Body ground	Always	10 kΩ or higher
A8-21 (TR) - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5 READ DTC OUTPUT

(a) Clear the DTCs.
 (b) Read DTC at least 8.5 minutes after turning the ignition switch to the ON position.

Standard:

Normal codes are output.

NG REPLACE AIR CONDITIONING AMPLIFIER

OK

USE SIMULATION METHOD TO CHECK