

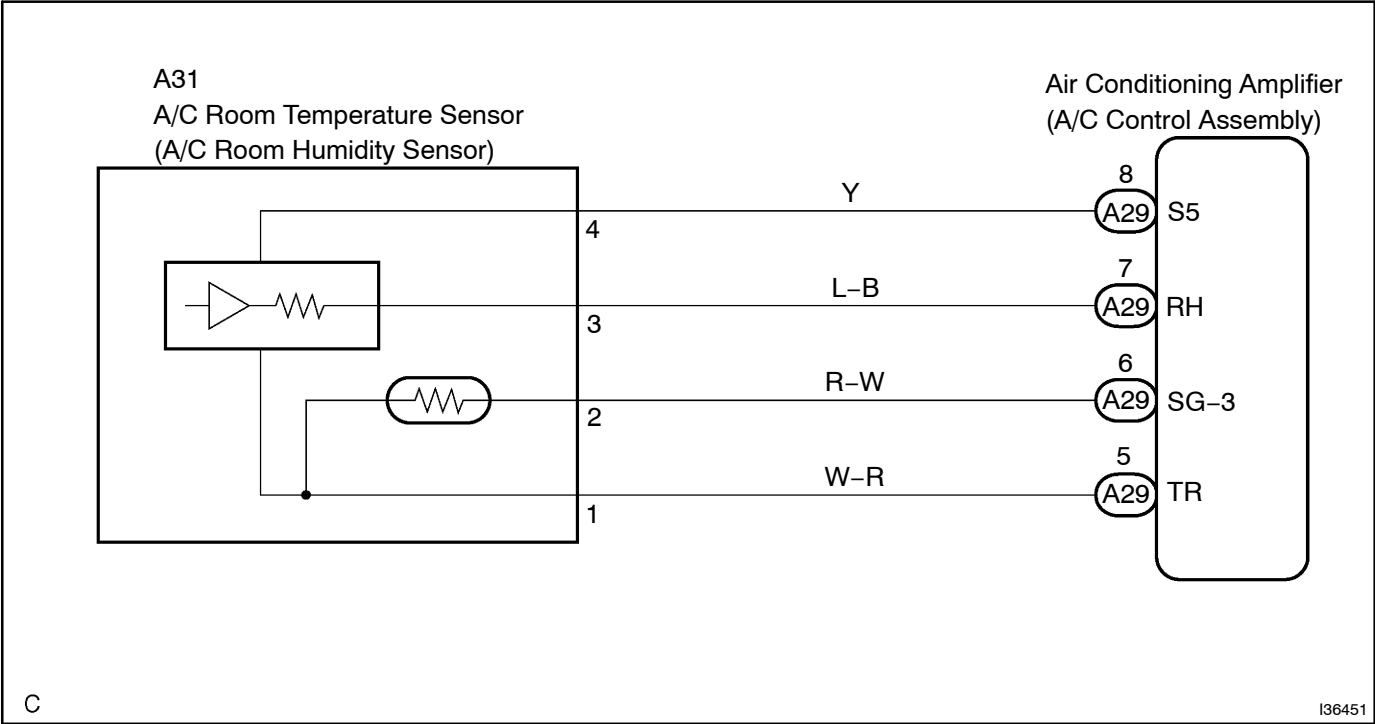
DTC	RrDEF,A/C	HUMIDITIY SENSOR CIRCUIT
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CIRCUIT DESCRIPTION

The A/C room humidity sensor detects room humidity. The voltage of the A/C room humidity sensor changes in accordance with room humidity. The A/C amplifier reads changes in the A/C room humidity sensor. The A/C room humidity sensor is integrated with the A/C room temperature sensor.

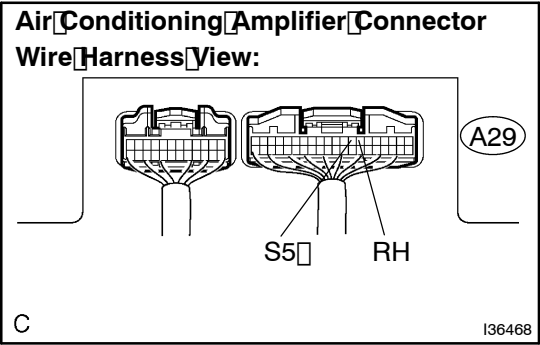
DTC No.	Detection item	Trouble Area
RrDEF, A/C	Open or short in room humidity sensor circuit	<ul style="list-style-type: none">• A/C room humidity sensor (A/C room temperature sensor)• Harness or connector between A/C room humidity sensor (A/C room temperature sensor) and A/C amplifier• A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER (S5 - RH)



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

Standard:

Tester Connection	Condition	Specified Condition
A29-7 (RH) - A29-8 (S5)	Ignition switch: ON at 25°C (77°F)	1.8 to 2.2 V
A29-7 (RH) - A29-8 (S5)	Ignition switch: ON at 40°C (104°F)	1.2 to 1.6 V

HINT:
As the temperature increases, the voltage decreases.

Result:

NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

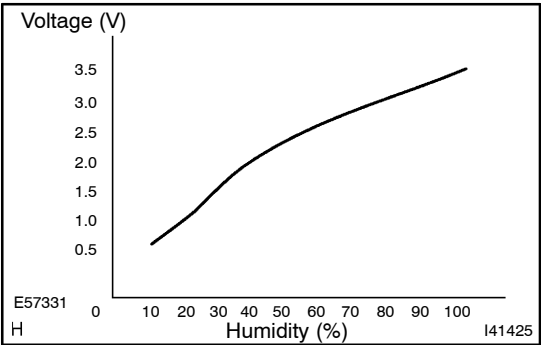
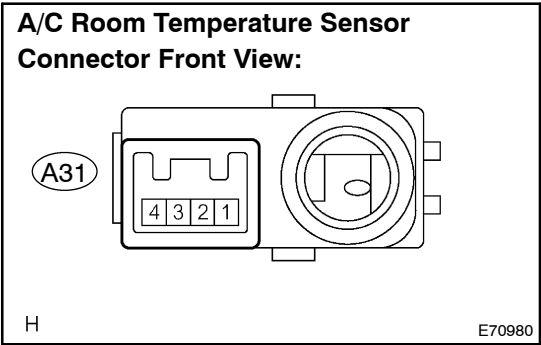
B PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-862)

C REPLACE AIR CONDITIONING AMPLIFIER (SEE PUB. NO. RM864E ON PAGE 55-96)

A

2

INSPECT A/C ROOM TEMPERATURE SENSOR (HUMIDITY SENSOR)



- (a) Remove the A/C room temperature sensor with the connector still connected.
- (b) Disconnect the connector from A/C room temperature sensor.
- (c) Connect the three 1.5 V dry cell batteries in series. Connect the positive (+) and negative (–) leads to connector terminals 4 and 2, respectively.
- (d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A31-3 – A31-4	at 25°C (77°F) Humidity: 40%	1.61 to 2.24 V
A31-3 – A31-4	at 25°C (77°F) Humidity: 60%	2.26 to 2.66 V

HINT:
As the humidity increases, the resistance decreases (see the graph on the left).

NG

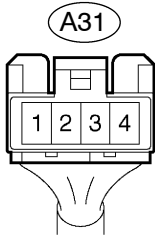
REPLACE A/C ROOM TEMPERATURE SENSOR

OK

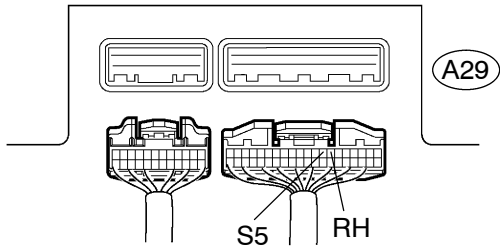
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CHECK HARNESS AND CONNECTOR (A/C ROOM TEMPERATURE SENSOR - AIR CONDITIONING AMPLIFIER) (SEE PAGE 01-32)

A/C Room Temperature Sensor
Front View:



Air Conditioning Amplifier Connector
Wire Harness View:



C

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- (a) Disconnect the connectors from the A/C room temperature sensor and A/C amplifier.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A31-3 - A29-7 (RH)	Always	Below 1 Ω
A31-4 - A29-8 (S5)	Always	Below 1 Ω
A31-3 - Body ground	Always	10 k Ω or higher
A31-4 - Body ground	Always	10 k Ω or higher

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER (SEE PUB. NO. RM864E ON PAGE 55-96)