

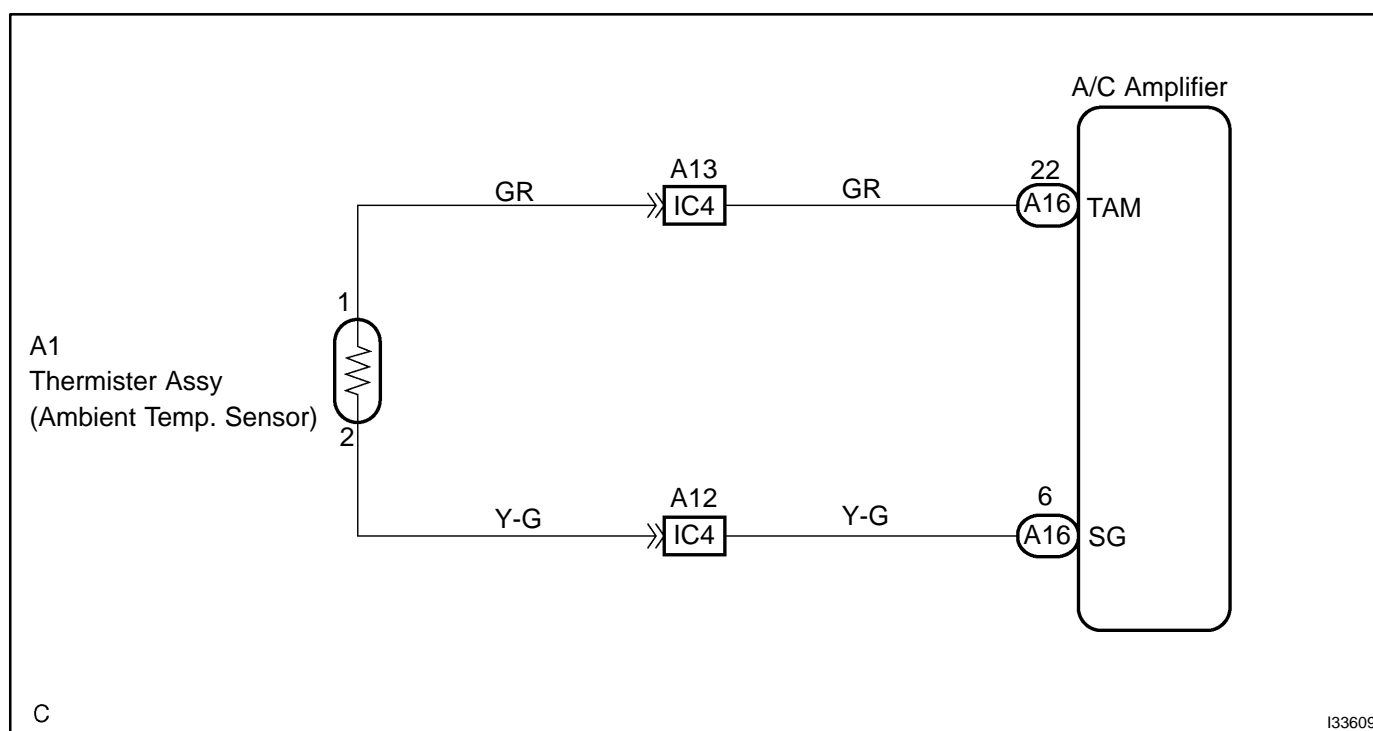
<b>DTC</b>	<b>12</b>	<b>AMBIENT TEMPERATURE SENSOR CIRCUIT</b>
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## CIRCUIT DESCRIPTION

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

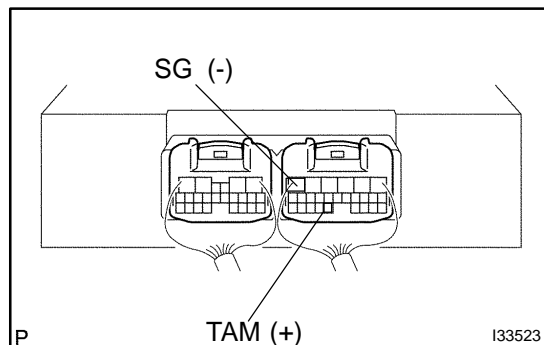
DTC No.	Detection item	Trouble Area
12	Open or short in ambient temperature sensor circuit	<ul style="list-style-type: none"> <li>• Thermistor assy (Ambient temperature sensor)</li> <li>• Harness or connector between thermistor assy (ambient temperature sensor) and A/C amplifier</li> <li>• A/C amplifier</li> </ul>

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 INSPECT AIR CONDITIONING AMPLIFIER(TAM, SG)



- (a) Remove the A/C amplifier with the connectors being connected.
- (b) Turn the ignition switch to ON.
- (c) Measure voltage between terminal TAM and SG of the A/C amplifier connector at each temperature.

**Voltage:**

**at 25 °C (77 °F) : 1.4 - 1.8 V**

**at 40 °C (104 °F) : 0.9 - 1.3 V**

**HINT:**

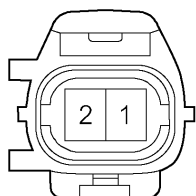
As the temperature increases, the voltage decreases.

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**PROCEED TO NEXT CIRCUIT INSPECTION  
SHOWN ON PROBLEM SYMPTOMS TABLE**

**OK**

## 2 INSPECT THERMISTOR ASSY



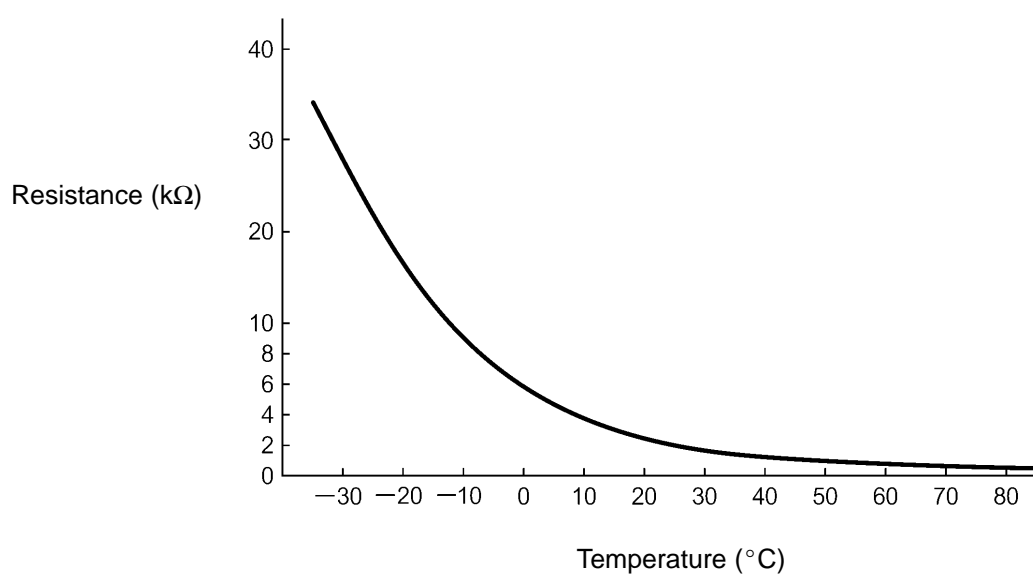
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- (a) Remove the thermistor assy (ambient temp. sensor).
- (b) Measure resistance between terminal of the thermistor assy (ambient temp. sensor) connector at each temperature.

**Resistance:**
**at 25 °C (77 °F) : 1.65 - 1.75 kΩ**
**at 40 °C (104 °F) : 0.85 - 0.95 kΩ**
**HINT:**

As the temperature increases, the resistance decreases as shown in the illustration.



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**REPLACE THERMISTOR ASSY**
**OK**

**3 CHECK HARNESS AND CONNECTOR(BETWEEN THERMISTOR ASSY (AMBIENT TEMP. SENSOR) AND AIR CODITIONING AMPLIFIER)**

- (a) Check for open and short circuit in the harness and the connector between the thermistor assy (ambient temp. sensor) and the A/C amplifier (See page [01-35](#) ).

**NG****REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****4 CHECK DIAGNOSTIC TROUBLE CODE**

- (a) Start up the DTC check mode.  
(b) Check that the DTC 12 is not output again.

**Standard: DTC 12 is not output.****NG****SYSTEM OK****OK****CHECK AND REPLACE AIR CONDITIONING AMPLIFIER**