

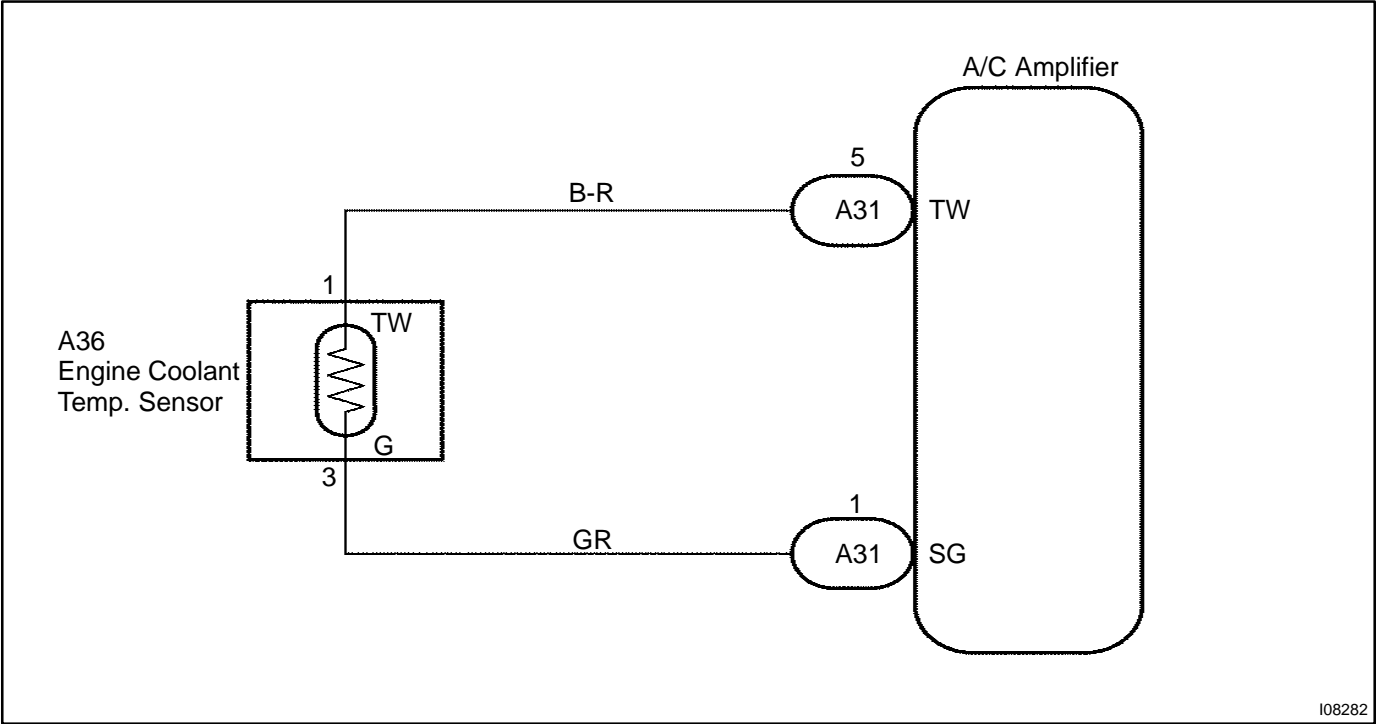
<b>DTC</b>	<b>14</b>	<b>Engine Coolant Temperature Sensor Circuit</b>
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### CIRCUIT DESCRIPTION

This sensor detects the engine coolant temperature and sends the appropriate signals to the A/C control assembly. These signals are used for warm up control when the engine is cold.

DTC No.	Detection Item	Trouble Area
14	Open or short in engine coolant temperature sensor circuit.	<ul style="list-style-type: none"> <li>• Engine coolant temperature sensor</li> <li>• Harness or connector between engine coolant temp. sensor and A/C control assembly</li> <li>• A/C control assembly</li> </ul>

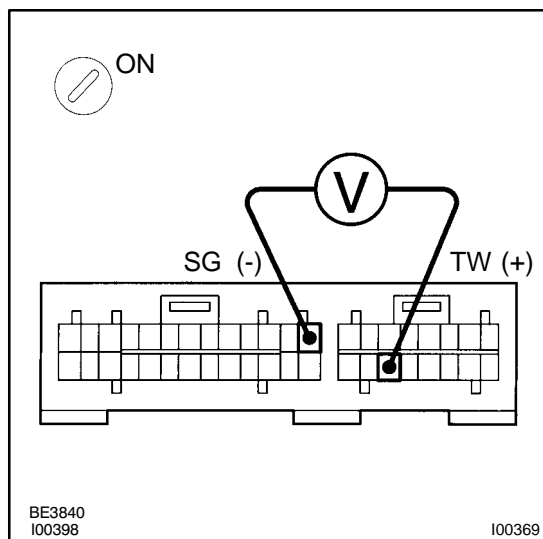
### WIRING DIAGRAM



I08282

## INSPECTION PROCEDURE

- |   |  |
|---|--|
| 1 | Check voltage between terminals TW and SG of A/C control assembly connector. |
|---|--|

**PREPARATION:**

- Remove A/C control assembly with connectors still connected (See page [AC-84](#) ).
- Turn ignition switch to ON.

**CHECK:**

Measure voltage between terminals TW and SG of A/C control assembly connector at each engine coolant temperature.

**OK:****Voltage**

at 0 °C (32 °F): 2.8 - 3.2 V

at 40 °C (104 °F): 1.8 - 2.2 V

at 70 °C (158 °F): 0.9 - 1.3 V

**HINT:**

As the temperature increases, the voltage decreases.

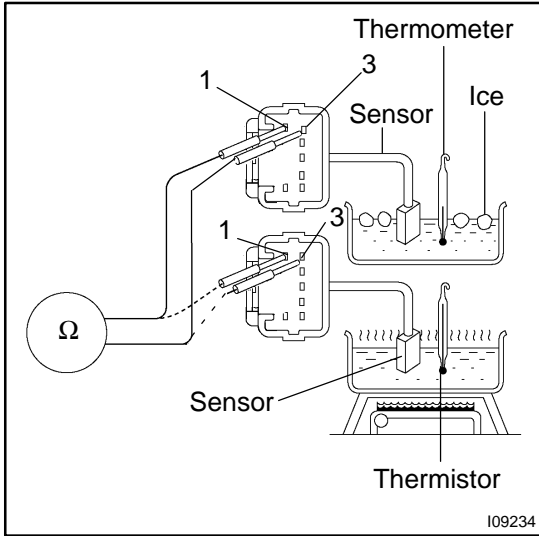
NG

Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page [DI-586](#) ). However, if DTC 14 is displayed, check and replace A/C control assembly.

## 2 Check engine coolant temperature sensor.



### **PREPARATION:**

Remove engine coolant temperature sensor (See page [AC-28](#) ).

### **CHECK:**

Measure resistance between terminals 1 and 3 of engine coolant temperature sensor connector at each temperature.

### **OK:**

**Resistance :**

**at 0 °C (32 °F) : Below 50 kΩ**

**at 40 °C (104 °F) : 2.5 - 2.7 kΩ**

**at 100 °C (212 °F): Over 0.3 kΩ**

### **HINT:**

As the temperature increases, the resistance decreases gradually.

**NG**

**Replace engine coolant temperature sensor.**

**OK**

## 3 Check harness and connector between A/C control assembly and engine coolant temperature sensor (See page [IN-28](#) ).

**NG**

**Repair or replace harness or connector.**

**OK**

**Check and replace A/C control assembly.**