

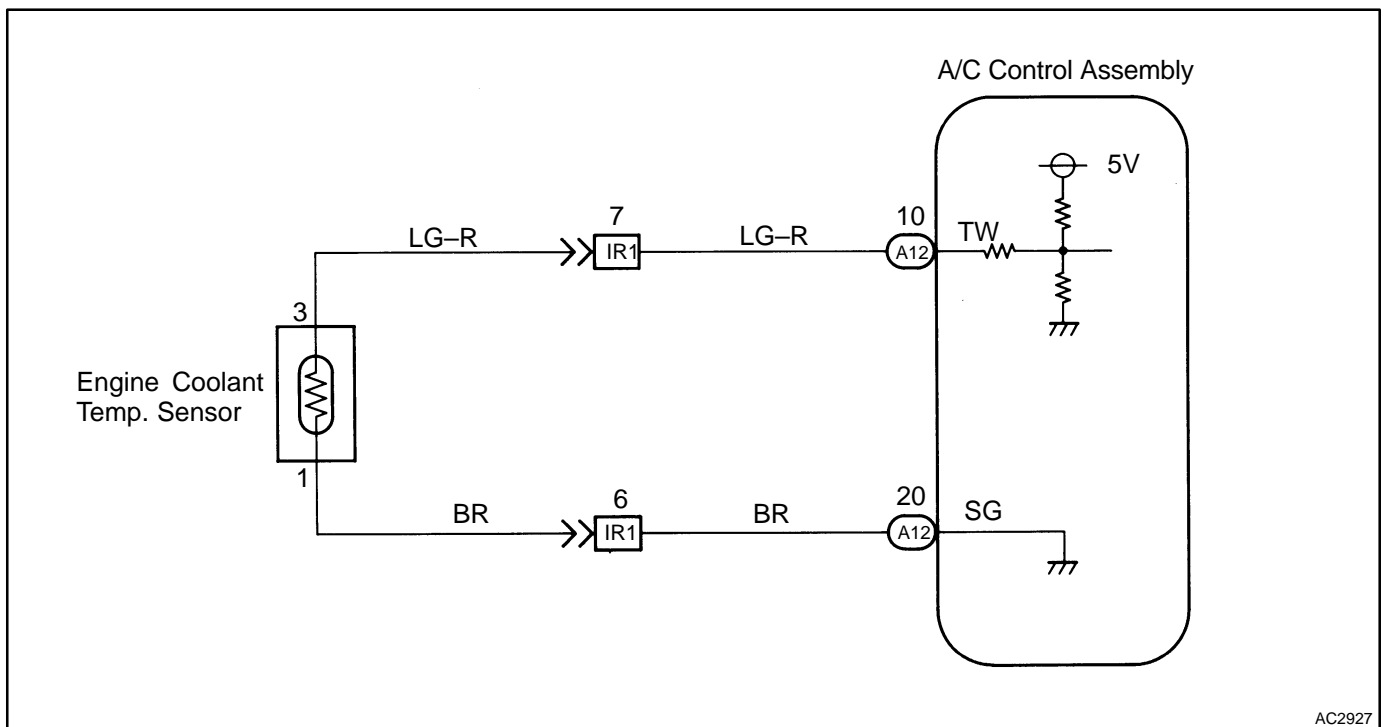
<b>DTC</b>	<b>14</b>	<b>Engine Coolant Temperature Sensor Circuit</b>
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## CIRCUIT DESCRIPTION

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

DTC No.	DTC Detecting Condition	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 temperature sensor and A/C control assembly.</li> <li>• A/C control assembly.</li> </ul>

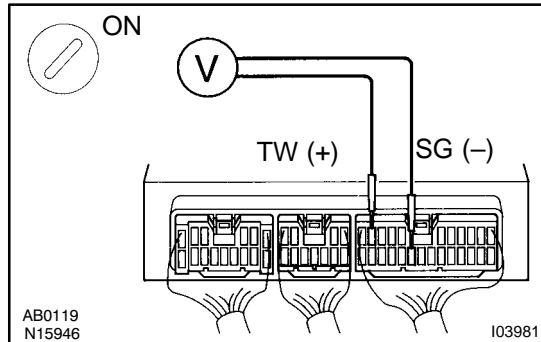
## WIRING DIAGRAM



AC2927

## INSPECTION PROCEDURE

- |          |  |
|----------|--|
| <b>1</b> | <b>Check voltage between terminals TW and SG of air conditioning control assembly connector.</b> |
|----------|--|

**PREPARATION:**

- (a) Remove upper console panel.
- (b) Remove A/C control assembly with connectors still connected.
- (c) Turn ignition switch ON.

**CHECK:**

Measure voltage between terminals TW and SG of air conditioning control assembly connector at each 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.

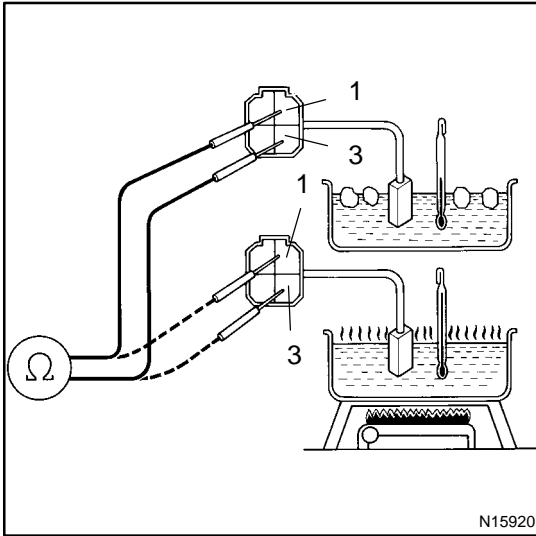
**NG**

Proceed to next circuit inspection shown on matrix chart (See page DI-821). However, if DTC 14 is displayed, check and repair air conditioning control assembly.

**NG**

**Go to step 2.**

## 2 Check engine coolant temperature sensor.



### PREPARATION:

- (a) Remove A/C unit (See page AC-24).
- (b) Remove engine coolant temperature sensor (See page AC-65).

### CHECK:

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

### OK:

#### Resistance:

at 0°C (32°F): 16.5 – 17.5 kΩ

at 40°C (104°F): 2.4 – 2.8 kΩ

at 70°C (158°F): 0.7 – 1.0 kΩ

### HINT:

As the temperature increases, the resistance decrease.

NG

Replace engine coolant temperature sensor.

OK

## 3 Check for open and short in harness and connector between air conditioning control assembly and engine coolant temperature sensor (See page IN-29).

NG

Repair or replace harness or connector.

OK

Check and replace air conditioning control assembly.