

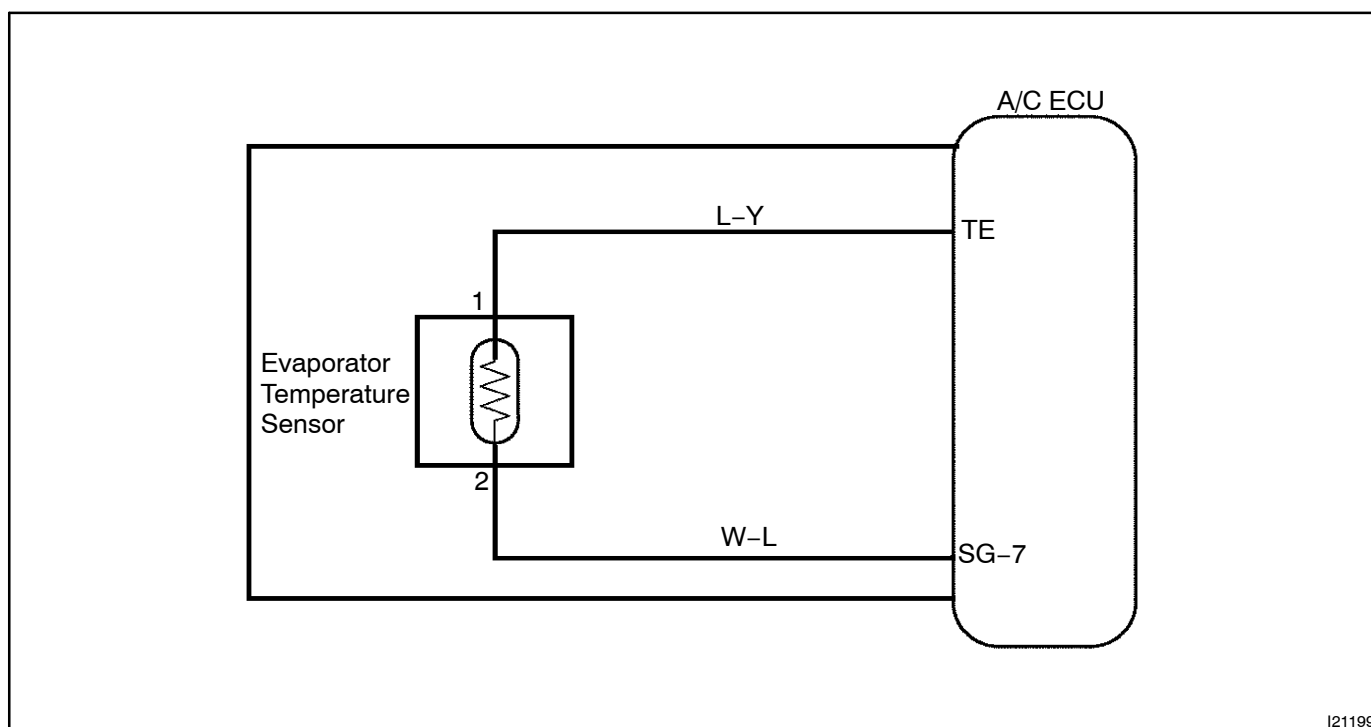
<b>DTC</b>	<b>B1413/13</b>	<b>Evaporator Temperature Sensor Circuit</b>
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## CIRCUIT DESCRIPTION

This sensor detects the temperature inside the cooling unit and sends the appropriate signals to the A/C ECU.

DTC No.	Detection Item	Trouble Area
B1413/13	Open or short in evaporator temperature sensor circuit.	<ul style="list-style-type: none"> <li>• Evaporator temperature sensor.</li> <li>• Harness or connector between evaporator temperature sensor and A/C ECU.</li> <li>• A/C ECU.</li> </ul>

## WIRING DIAGRAM



I21199

**INSPECTION PROCEDURE****HINT:**

In case of using the hand-held tester start the inspection step 1 and in case of not using the hand-held tester, start from step 2.

**1** Check evaporator temperature sensor using hand-held tester.

**PREPARATION:**

Connect the hand-held tester to the DLC3.

**CHECK:**

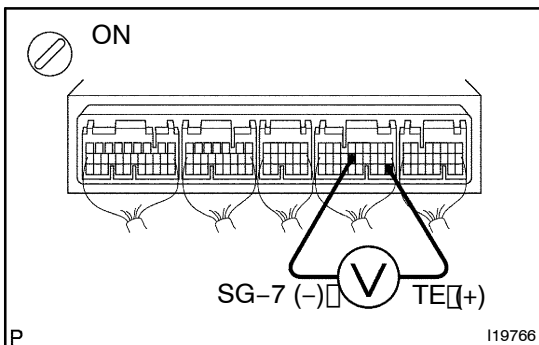
Check the evaporator temperature sensor using DATA LIST.

**OK**

Check and replace A/C ECU.

**NG**

**2** Check voltage between terminals TE and SG-7 of A/C ECU connector.

**PREPARATION:**

Remove A/C ECU with connectors still connected.

**CHECK:**

- Turn ignition switch to ON.
- Measure voltage between terminals TE and SG-7 of A/C ECU connector at each temperature.

**OK:****Voltage**

at 0°C (32°F) 2.0 - 2.4V

at 15°C (59°F) 1.4 - 1.8V

**HINT:**

As the temperature increases, the voltage decreases.

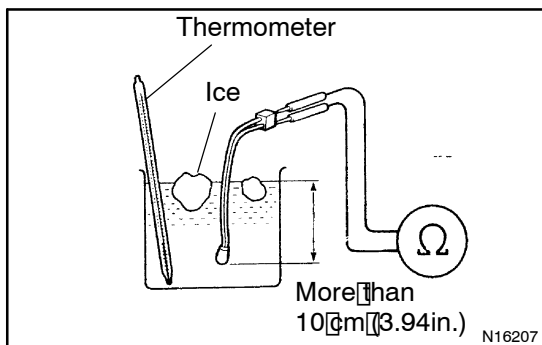
**NG**

Go to step 3.

**OK**

Proceed to next circuit inspection shown on problem symptoms table (See page DI-1772). However, if DTC B1413/13 is displayed, check and replace A/C ECU.

### 3 Check evaporator temperature sensor.



#### PREPARATION:

Remove evaporator temperature sensor (See page AC-82).

#### CHECK:

Measure resistance between terminals 1 and 2 of evaporator temperature sensor connector at each temperature.

#### OK:

##### Resistance

at 0°C (32°F) 4.76 - 4.95 kΩ

at 15°C (59°F) 2.22 - 2.46 kΩ

#### HINT:

As the temperature increases, the resistance decreases.

NG

Replace evaporator temperature sensor.

OK

### 4 Check harness and connector between A/C ECU and evaporator temperature sensor (See page IN-35).

NG

Repair or replace harness or connector.

OK

Check and replace A/C ECU.