

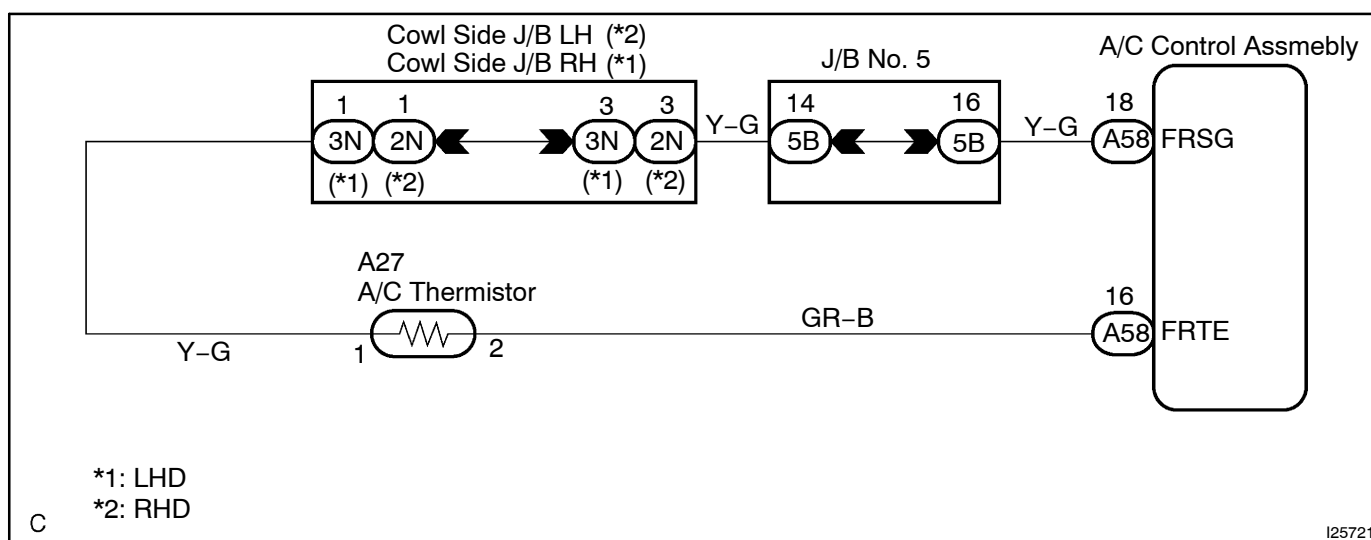
|            |           |                                                    |
|------------|-----------|----------------------------------------------------|
| <b>DTC</b> | <b>13</b> | <b>Front Evaporator Temperature Sensor circuit</b> |
|------------|-----------|----------------------------------------------------|

## CIRCUIT DESCRIPTION

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

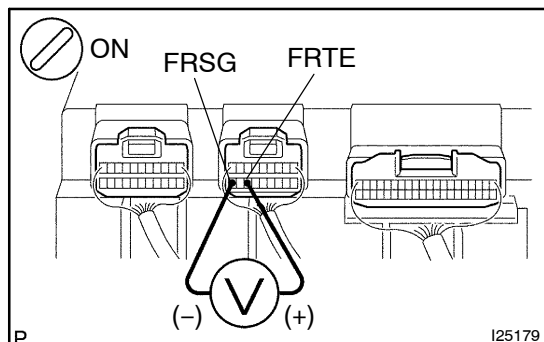
| DTC No. | Detection Item                                               | Trouble Area                                                                                                                                                                                       |
|---------|--------------------------------------------------------------|------------------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

## WIRING DIAGRAM



## INSPECTION PROCEDURE

## 1 Check voltage between terminals FRTE and FRSG of A/C amplifier.

**PREPARATION:**

Remove A/C amplifier with connectors still connected.

**CHECK:**

- Turn ignition switch to ON.
- Measure voltage between terminals FRTE and FRSG of A/C amplifier connector at each temperature.

**OK:****Voltage :**

at 0°C (32°F) : 2.0 – 2.4 V

at 15°C (59°F) : 1.4 – 1.8 V

**HINT:**

As the temperature increases, the voltage decreases.

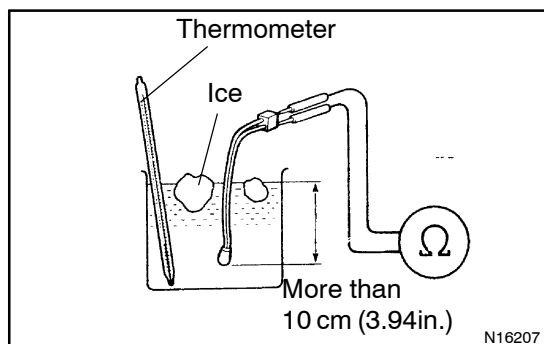
NG

Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-1238). However, if DTC 13 is displayed, check and replace A/C amplifier.

## 2 Check front evaporator temperature sensor.

**PREPARATION:**

Remove front evaporator temperature sensor.

**CHECK:**

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

**OK:****Resistance :**

at 0°C (32°F) : 4.5 – 5.2 kΩ

at 15°C (59°F) : 2.0 – 2.7 kΩ

**HINT:**

As the temperature increases, the resistance decreases.

NG

Replace front evaporator temperature sensor.

OK

**3****Check harness and connector between front evaporator temperature sensor and A/C amplifier ([See page IN-38](#)).****NG****Repair or replace harness or connector.****OK****Check and replace A/C amplifier.**