

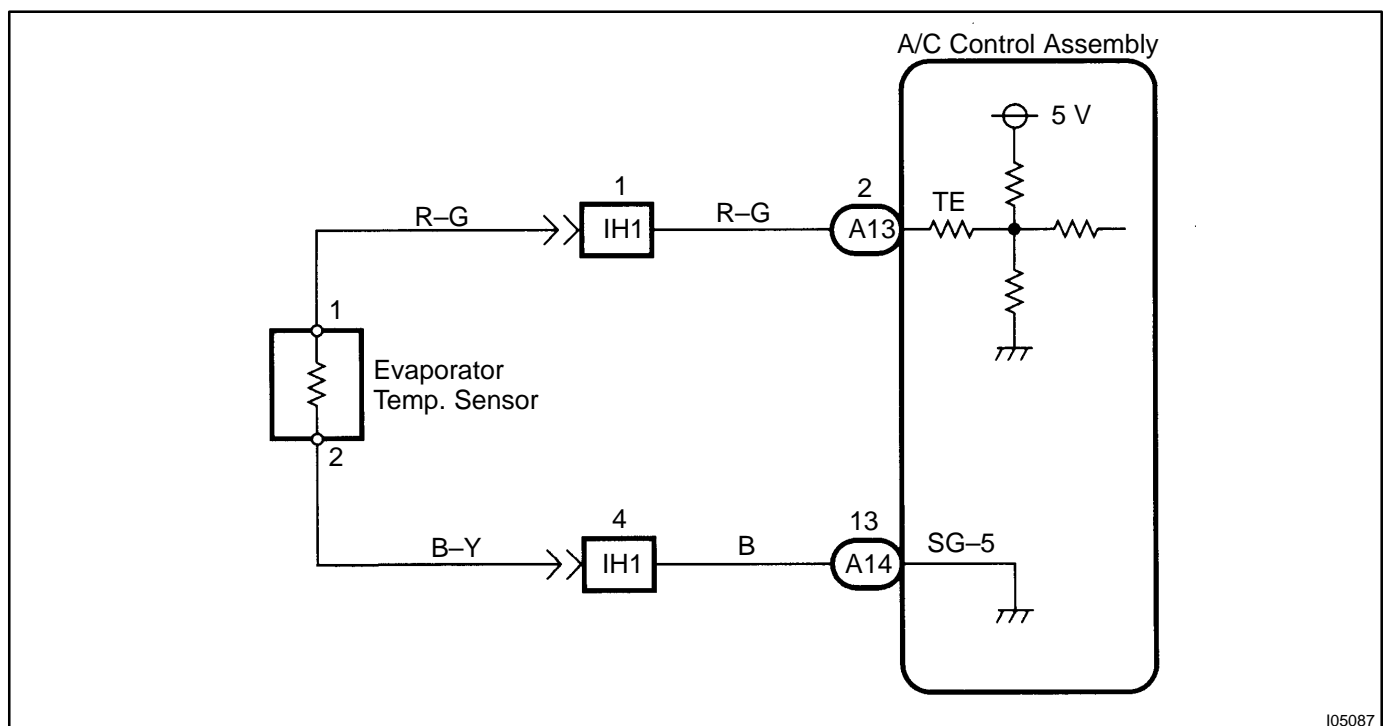
DTC	B1413/13	Evaporator Temperature Sensor Circuit
------------	-----------------	--

CIRCUIT DESCRIPTION

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

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

WIRING DIAGRAM



I05087

INSPECTION PROCEDURE

HINT:

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

1 Check evaporator temp. sensor using LEXUS hard-held tester.

PREPARATION:

Connect the LEXUS hard-held tester to the DLC3.

CHECK:

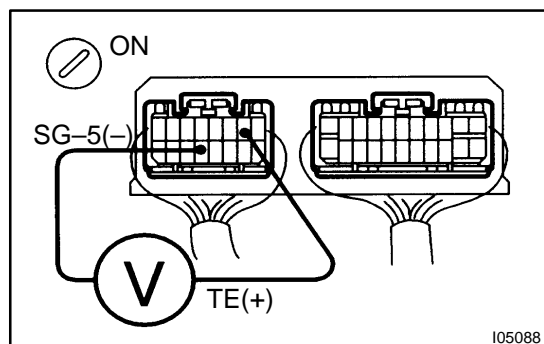
Check the evaporator temp. sensor using DATA LIST.

OK

Check and replace A/C control assembly.

NG

2 Check voltage between terminals TE and SG-5 of A/C control assembly connector.



PREPARATION:

Remove air conditioning control assembly with connectors still connected.

CHECK:

- Turn ignition switch ON.
- Measure voltage between terminals TE and SG-5 of A/C control assembly 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:

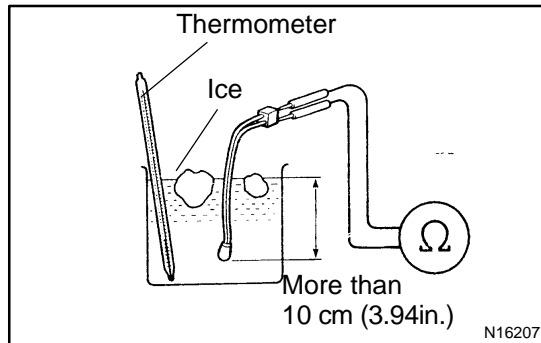
As the temperature increases, the voltage decreases.

NG

Go to step 3.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-1309). However, if DTC B1413/13 is displayed, check and replace A/C control assembly.

3 Check evaporator temperature sensor.**PREPARATION:**

Remove evaporator temperature sensor (See page [AC-72](#)).

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 evaporator temperature sensor.****OK****4 Check harness and connector between A/C control assembly and evaporator temperature sensor (See page [IN-32](#)).****NG****Repair or replace harness or connector.****OK****Check and replace A/C control assembly.**