DI90N–01

DTC	RrDEF, FOOT	Front Evaporator Temperature Sensor Circuit

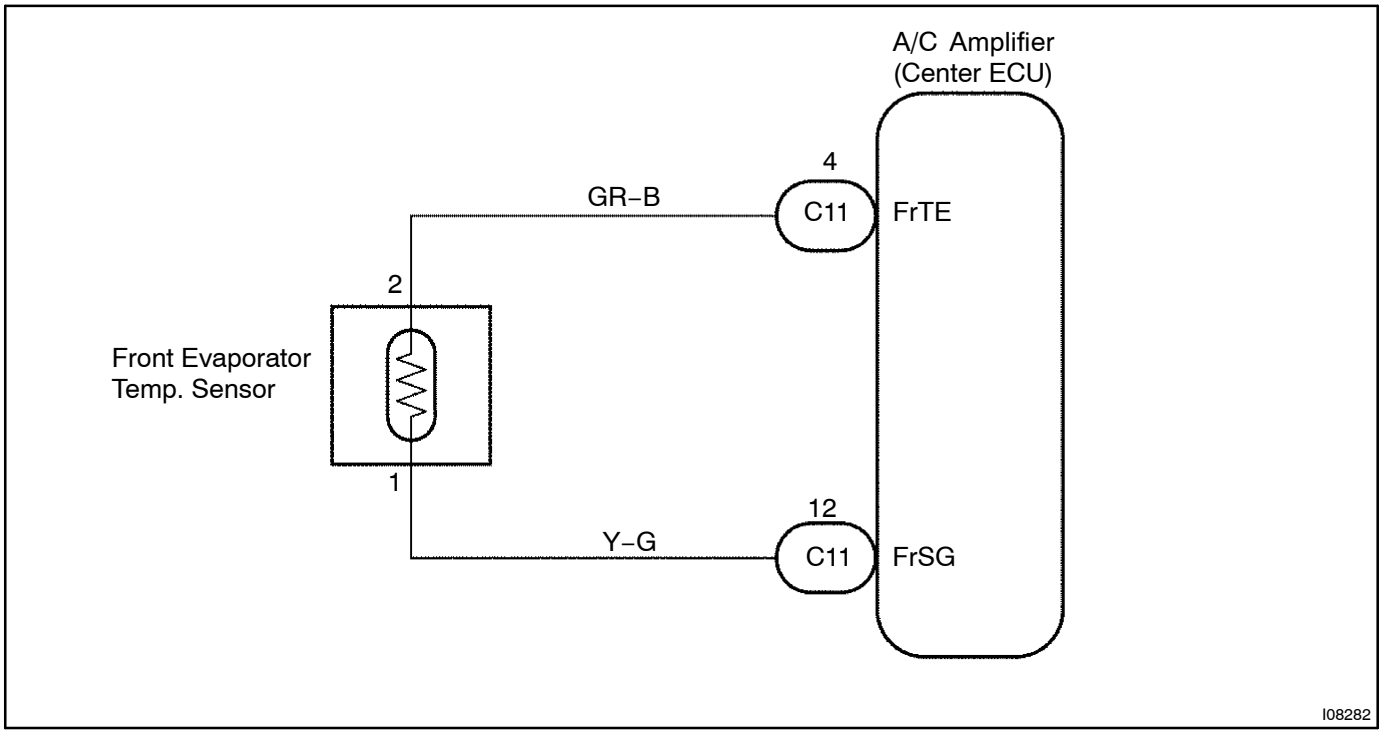
DTC	13	Front Evaporator Temperature Sensor circuit

CIRCUIT DESCRIPTION

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

Blinking light	Detection Item	Trouble Area
RrDEF FOOT	Open or short in evaporator temperature sensor circuit.	• Evaporator temperature sensor • Harness or connector between evaporator temperature sensor and A/C amplifier • A/C amplifier
DTC No.	Detection Item	Trouble Area
13	Open or short in evaporator temperature sensor circuit.	• Evaporator temperature sensor • Harness or connector between evaporator temperature sensor and A/C amplifier • A/C amplifier

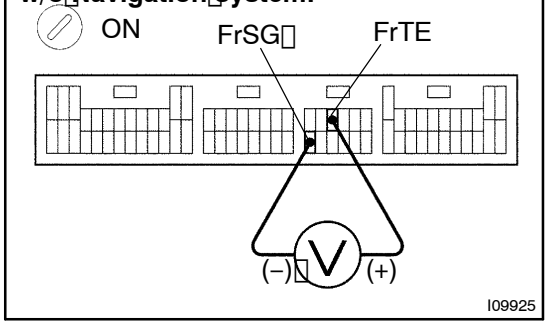
WIRING DIAGRAM



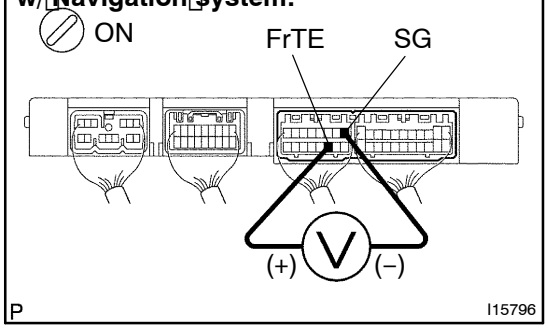
INSPECTION PROCEDURE

1	**Check voltage between terminals FrTE and FrSG (or SG) of A/C amplifier connector.**

w/o Navigation system:



w/ Navigation system:



PREPARATION:

Remove A/C amplifier with connectors still connected.

CHECK:

(a) Turn ignition switch to ON.

(b) Measure voltage between terminals FrTE and FrSG (or SG) 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:

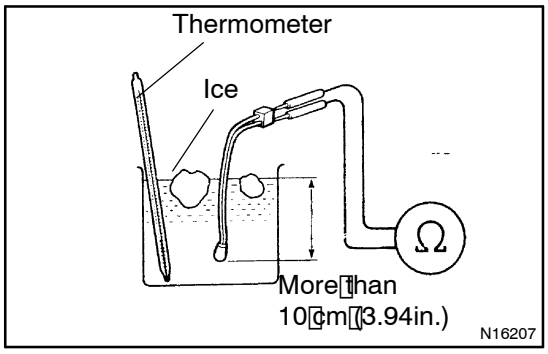
As the temperature increases, the voltage decreases.

NG → **Go to step 2.**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–130). However, if RrDEF and FOOT indicators light up (or DTC 13 is displayed), check and replace amplifier.

2	**Check front evaporator temperature sensor.**



PREPARATION:
Remove front evaporator temperature sensor.
CHECK:
Measure resistance between terminals 1 and 2 of front 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

3	**Check harness and connector between A/C amplifier and front evaporator temperature sensor (See page IN–34).**

NG	**Repair or replace harness or connector.**

OK

Check and replace A/C amplifier.