DI1C4–03

DTC	B1412/12	Ambient Temperature Sensor Circuit

CIRCUIT DESCRIPTION

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

DTC No.	Detection Item	Trouble Area
B1412/12	Open or short in ambient temperature sensor circuit.	●Ambient temperature sensor. ●Harness or connector between ambient temperature sensor and A/C control assembly. ●A/C control assembly.

WIRING DIAGRAM

I00318
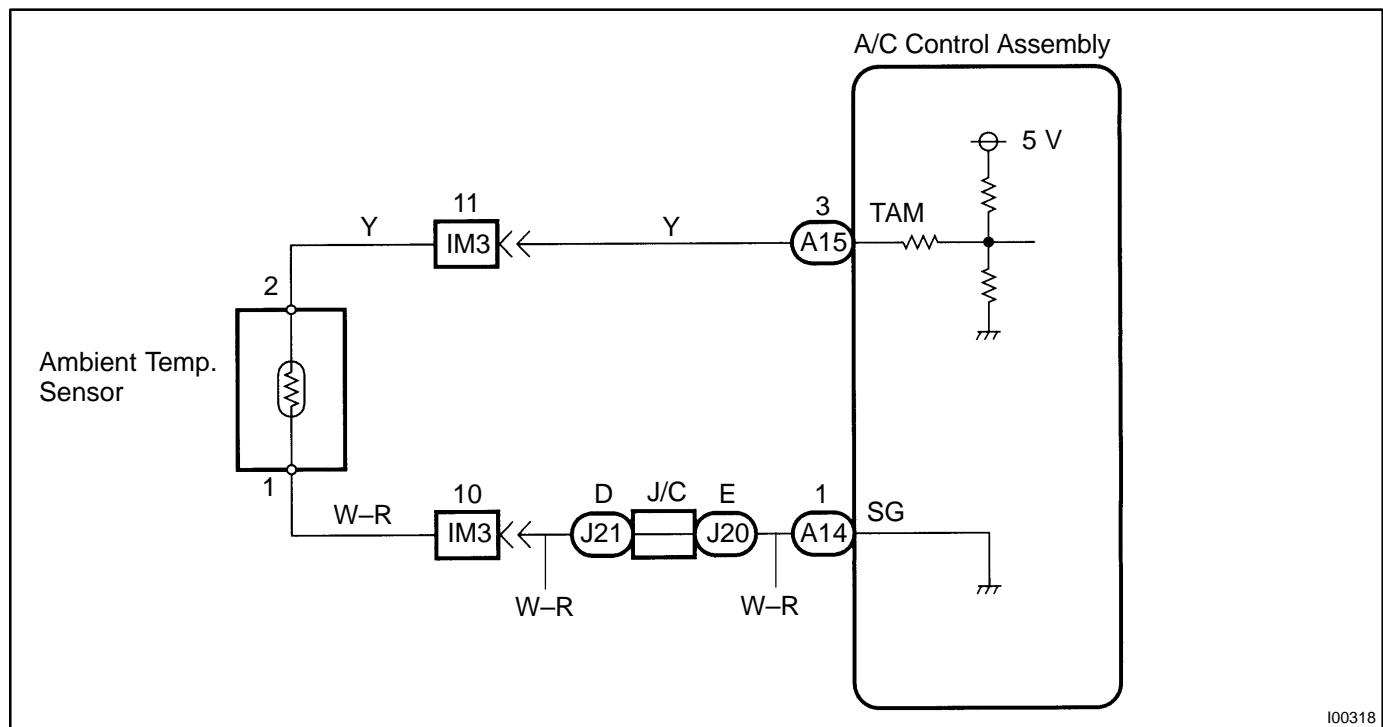
INSPECTION PROCEDURE

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 form step 2.

1	Check ambient temp. sensor using hand–held tester.

PREPARATION:

Connect the hand–held tester to the DLC3.

CHECK:

Check the ambient temp. sensor using DATA LIST.

OK ⟩ Check or replace A/C control assembly.
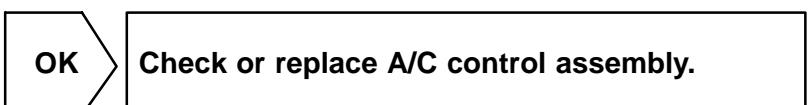
NG

2	Check voltage between terminals TAM and SG of A/C control assembly connector.

BE3840
I00319   I00334
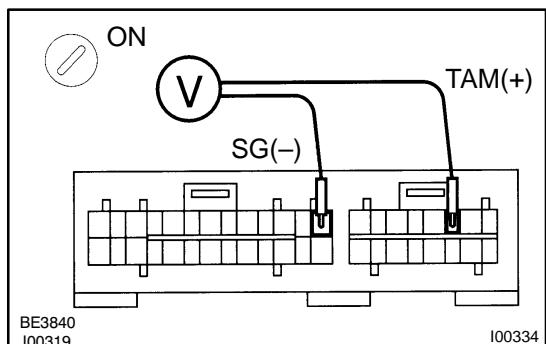
PREPARATION:

(a) Remove A/C control assembly with connectors still connected (See page BO–79).

(b) Turn ignition switch ON.

CHECK:

Check voltage between terminals TAM and SG of A/C control assembly connector at each temperature .

OK:

Voltage

at 25 ˚C (77 ˚F) : 1.35 – 1.75 V

at 40 ˚C (104 ˚F) : 0.85 – 1.25 V

HINT:

As the temperature increases, the voltage decreases.

NG ⟩ **Go to step 3.**
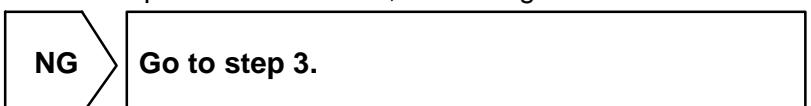
OK

Proceed to the next circuit inspection shown on matrix chart (See page DI–711). However, if DTC B1412/12 is displayed, check and replace A/C control assembly.

3	Check ambient temperature sensor.
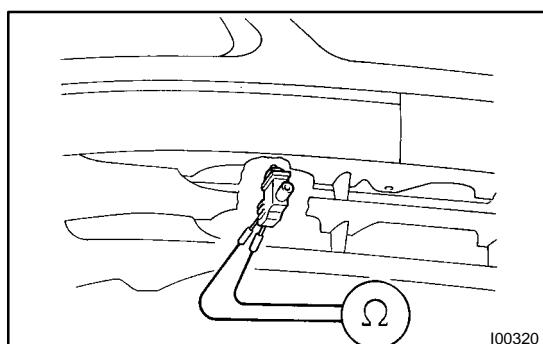
PREPARATION:
Disconnect ambient temperature sensor connector.
CHECK:
Check resistance between terminals 1 and 2 of ambient temperature sensor connector at each temperature.
OK:

Resistance
at 25 ˚C (77 ˚F) : 1.6 – 1.8 kΩ
at 40 ˚C (104 ˚F) : 0.5 – 0.7 kΩ

HINT:
As the temperature increases, the resistance decreases.

NG	Replace ambient temperature sensor.

OK

4	Check harness and connector between A/C control assembly and ambient temperature sensor (See page IN–31).

NG	Repair or replace harness or connector.

OK

Check and replace A/C control assembly.