DI882–02

DTC	RrDEF, B/L	Ambient Temperature Sensor Circuit

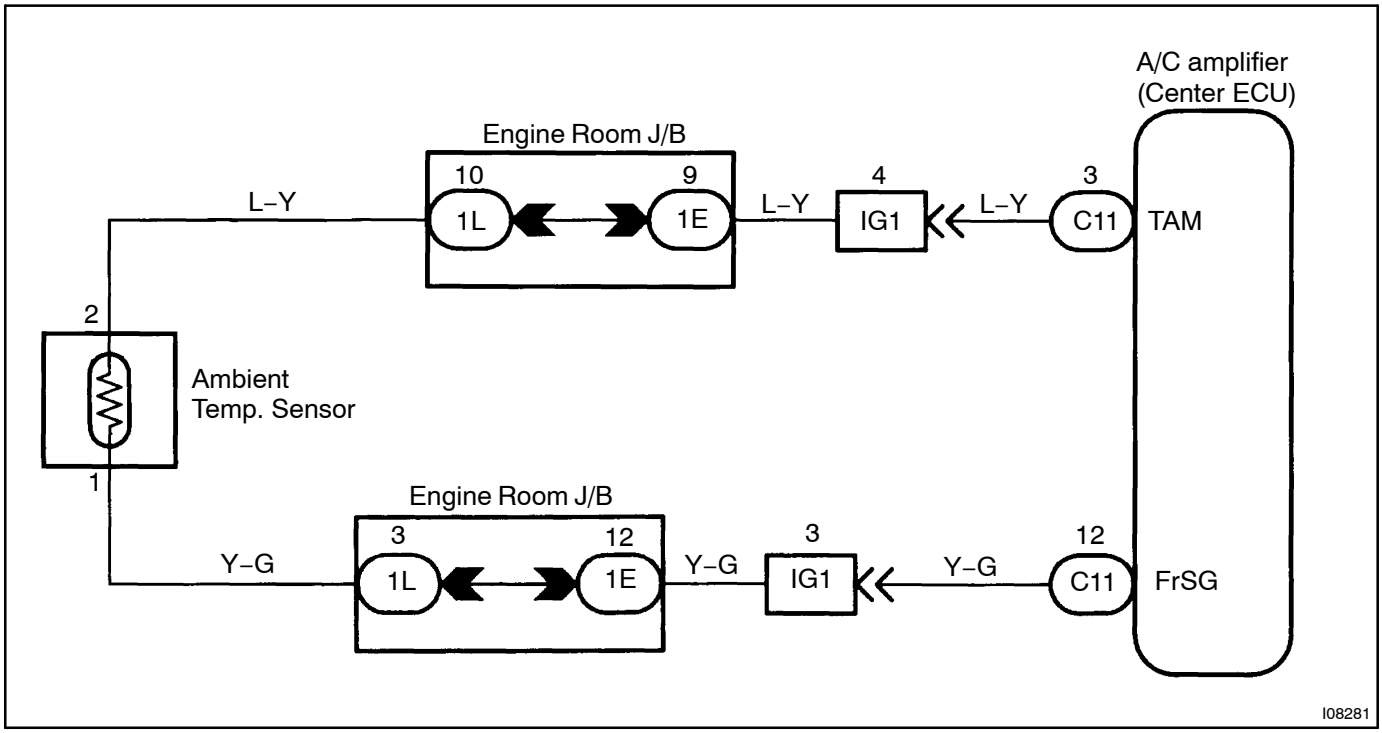
DTC	12	Ambient Temperature Sensor Circuit

CIRCUIT DESCRIPTION

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

Blinking light	Detection Item	Trouble Area
RrDEF B/L	Open or short in ambient temperature sensor circuit.	• Ambient temperature sensor • Harness or connector between ambient temperature sensor and A/C amplifier • A/C amplifier
DTC No.	Detection Item	Trouble Area
12	Open or short in ambient temperature sensor circuit.	• Ambient temperature sensor • Harness or connector between ambient temperature sensor and A/C amplifier • A/C amplifier

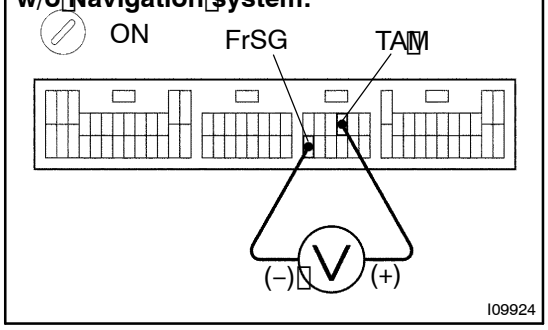
WIRING DIAGRAM



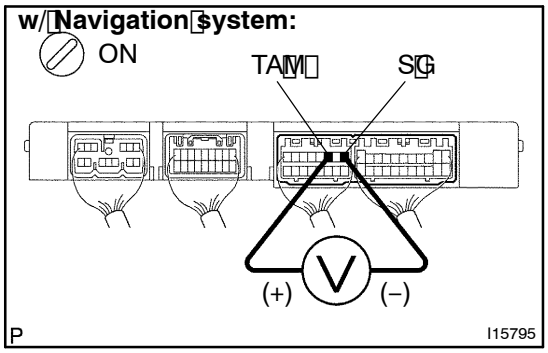
INSPECTION PROCEDURE

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

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 TAM and FrSG (or SG) of A/C amplifier 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:

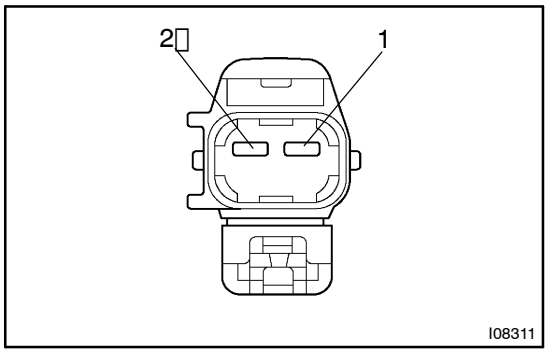
As the temperature increases, the voltage decreases.

NG	Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–130). However, if RrDEF and B/L indicators light up (or DTC 12 displayed), check and replace A/C amplifier.

2	**Check ambient temperature sensor.**



PREPARATION:
Disconnect ambient temperature sensor connector.
CHECK:
Measure 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 50°C (122°F): 0.5 – 0.7 kΩ

HINT:
As the temperature increases, the resistance decreases.
NOTICE:
When installing the ambient temperature sensor, be sure to connect the sensor connector before connecting the battery.

NG → **Replace ambient temperature sensor.**

OK

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

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

OK

Check and replace and A/C amplifier.