DIAQV–01

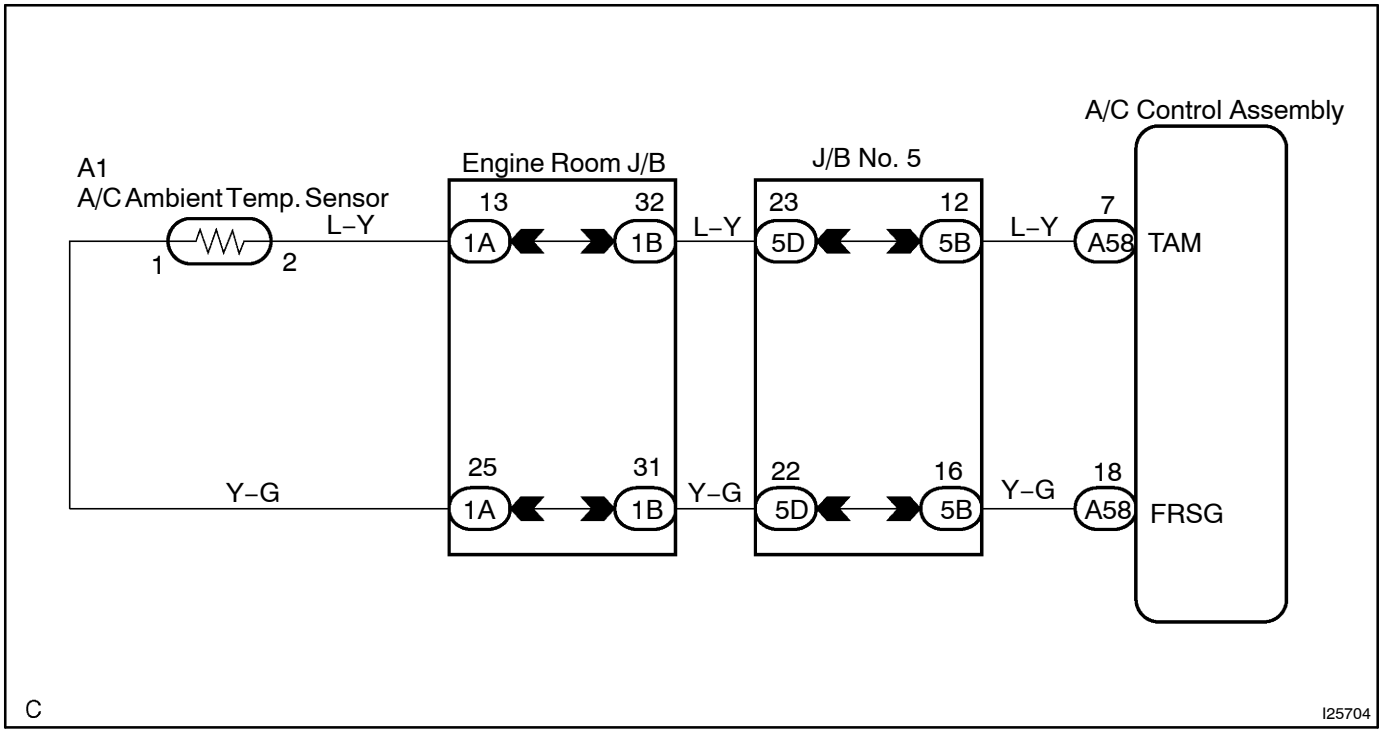
DTC	12	Ambient Temperature Sensor Circuit

CIRCUIT DESCRIPTION

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

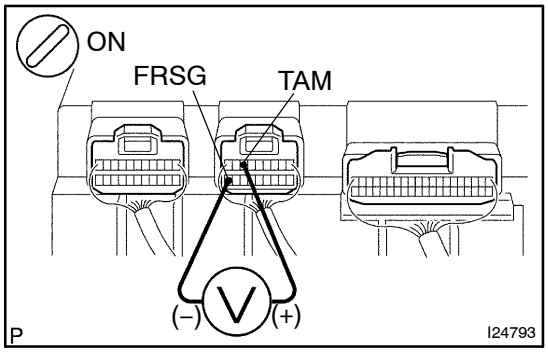
DTC No.	Detection Item	Trouble Area
12	Open or short in ambient temperature sensor circuit	• Ambient temp. sensor • Harness or connector between ambient temp. sensor and A/C amplifier • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check voltage between terminals TAM and FRSG of A/C amplifier.**



PREPARATION:

Remove A/C amplifier with connectors still connected.

CHECK:

(a) Turn ignition switch to ON.

(b) Measure voltage between terminals TAM and FRSG 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:

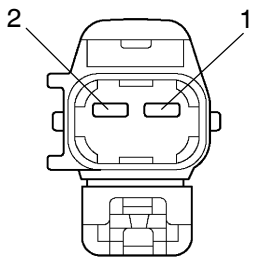
As the temperature increases, the voltage decreases.

NG	**Go to step 2.**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–1238). However, if DTC 12 is 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–38).

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

OK

Check and replace A/C amplifier.