DI8BP–01

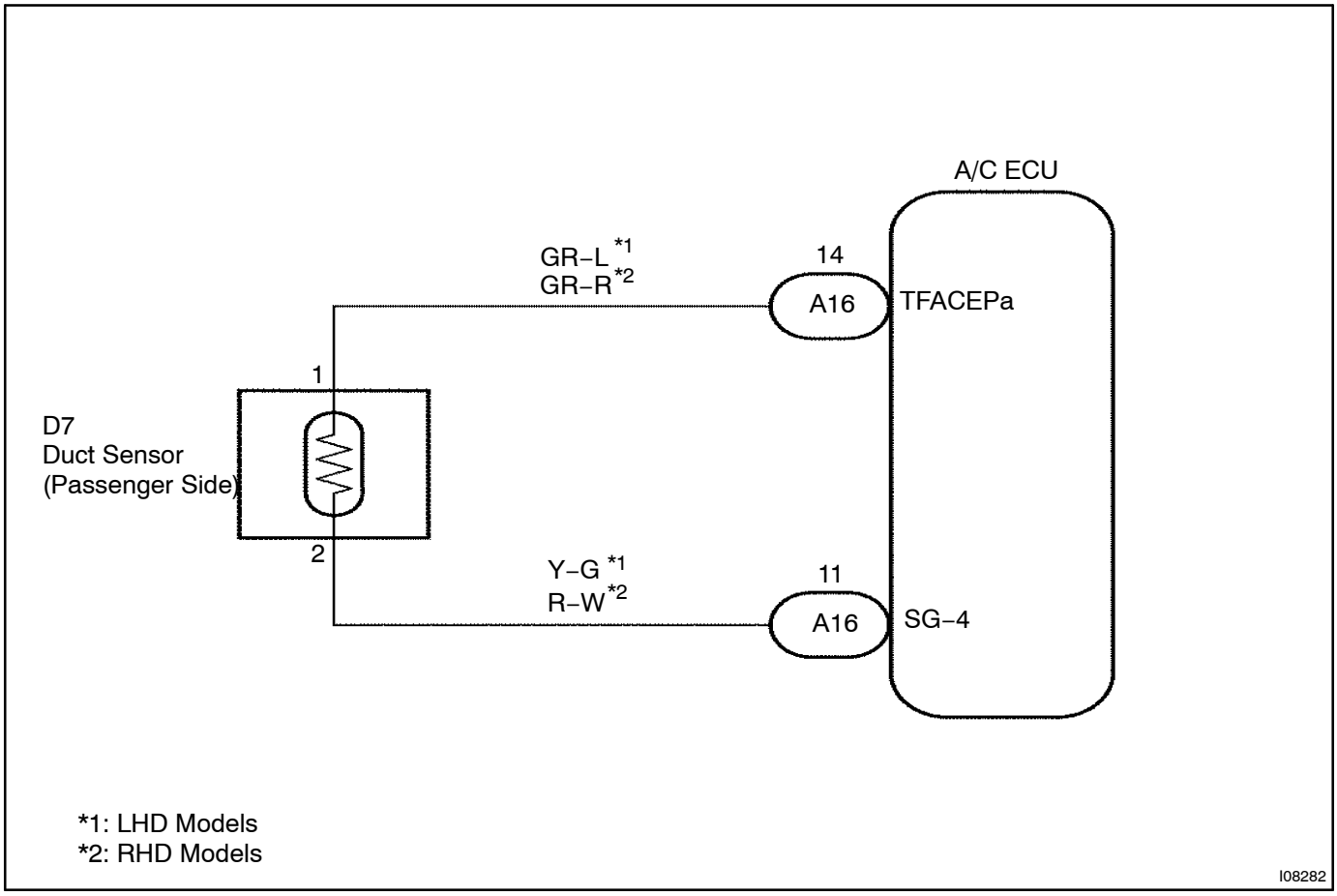
DTC	B1416/16	Air Duct Sensor Circuit (Passenger Side)

CIRCUIT DESCRIPTION

This sensor detects the temperature inside and sends the appropriate signals to the A/C ECU.

DTC No.	Detection Item	Trouble Area
B1416/16	Open or short in duct sensor circuit.	• Duct sensor. • Harness or connector between duct sensor and A/C ECU. • A/C ECU.

WIRING DIAGRAM



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 from step 2.

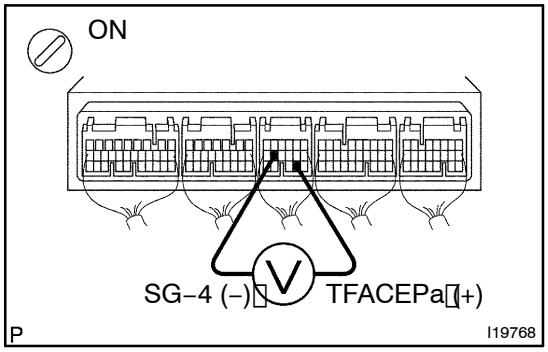
1	**Check air duct sensor using hand–held tester.**

PREPARATION:
Connect the hand–held tester to the DLC3.
CHECK:
Check the air duct sensor using DATA LIST.

OK → **Check and replace A/C ECU.**

NG

2	**Check voltage between terminals TFACE Pa and SG–4 of A/C ECU connector.**



PREPARATION:
Remove A/C ECU with connectors still connected.
CHECK:
(a) Turn ignition switch to ON.
(b) Check voltage between terminals TFACE Pa and SG–4 of A/C ECU connector at each temperature.

OK:

Voltage:
at 25°C (77°F): 1.8 – 2.2 V
at 50°C (122°F): 0.8 – 1.2 V

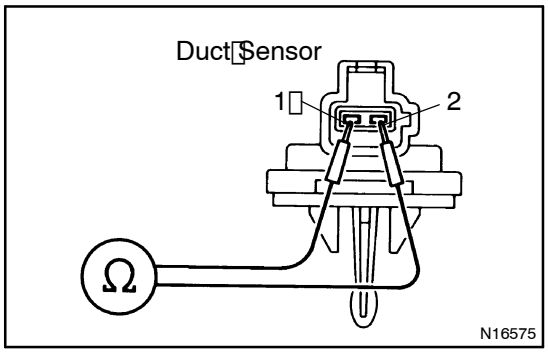
HINT:
As the temperature increases, the voltage decreases.

NG → **Go to step 3.**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page IN–35). However, if DTC B1416/16 is displayed, check and replace A/C ECU.

3	Check duct sensor.



PREPARATION:
Remove duct sensor (See page AC–86).
CHECK:
Check resistance between terminals 1 and 2 of duct sensor connector at each temperature.
OK:

Resistance:
at 0°C (32°F): 14.5 – 19.0 kΩ
at 25°C (77°F): 4.8 – 5.2 kΩ
at 50°C (122°F): 1.6 – 2.0 kΩ

HINT:
As the temperature increases, the resistance decreases.

NG → **Replace duct sensor.**

OK

4	Check harness and connector between A/C ECU and duct sensor (See page IN–35).

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

OK

Check and replace A/C ECU.