DI8BY-03

DTC B1435/35 Cool Air Bypass Damper Position Sensor Circuit (Passenger Side)

CIRCUIT DESCRIPTION



This sensor detects the position of the cool air bypass damper and sends the appropriate signals to the A/C ECU. The position sensor is built into the cool air bypass damper control servomotor assembly.

DTC No.	Detection Item	Trouble Area
B1435/35	Short to ground or to power source circuit in cool air bypass damper position sensor circuit.	 Cool air bypass damper position sensor. Harness or connector between cool air bypass damper control servomotor assembly and A/C ECU. A/C ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1

Check voltage between terminals TPBPa and SG-7 of A/C ECU connector.



PREPARATION:

Remove A/C ECU with connectors still connected. CHECK:

- (a) Turn ignition switch to ON.
- (b) Change the set temperature to activate the cool air bypass damper control servomotor, and measure voltage between terminals TPBPa and SG–7 of A/C ECU every time the set temperature is changed.

<u> 0K:</u>

Set Temperature	Voltage
Max. cool	3.5 – 4.5 V
Max. hot	0.5 – 1.8 V

HINT:

As the set temperature increases, the voltage decreases.

NG Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-1806). However, if DTC B1435/35 is displayed, check and replace A/C ECU.

2

OK



PREPARATION:

Remove cool air bypass damper control servomotor (See page AC-78).

CHECK:

Check cool air bypass damper position sensor.

Measure resistance between terminals 1 and 2 of cool air bypass damper control servomotor assembly connector. **OK:**

Resistance : 4.2 – 7.2 k Ω

CHECK:

While operating cool air bypass damper control servomotor, follow the procedure on page DI–1867 and measure resistance between terminals 2 and 3 of cool air bypass damper control servomotor assembly connector.

<u>OK:</u>

	Resistance	Damper Position
Ω	3.33 – 4.03 kΩ	Max. Cool
Ω	0.80 – 1.60 kΩ	Max. Hot
Ω	3.33 – 4.03 kΩ 0.80 – 1.60 kΩ	Max. Cool Max. Hot

HINT:

As the cool air bypass damper control servomotor moves from the cool side to the hot side, the resistance decreases.

NG

Replace cool air bypass damper control servomotor assembly.

 3
 Check harness and connector between A/C ECU and cool air bypass damper control servomotor assembly (See page IN-34).

 NG
 Repair or replace harness or connector.

 OK