DI8BY–01

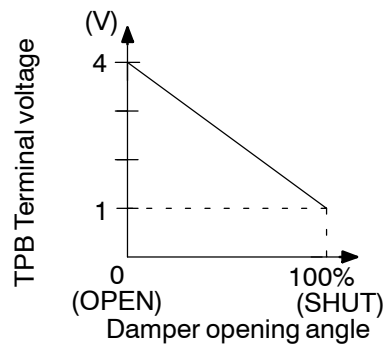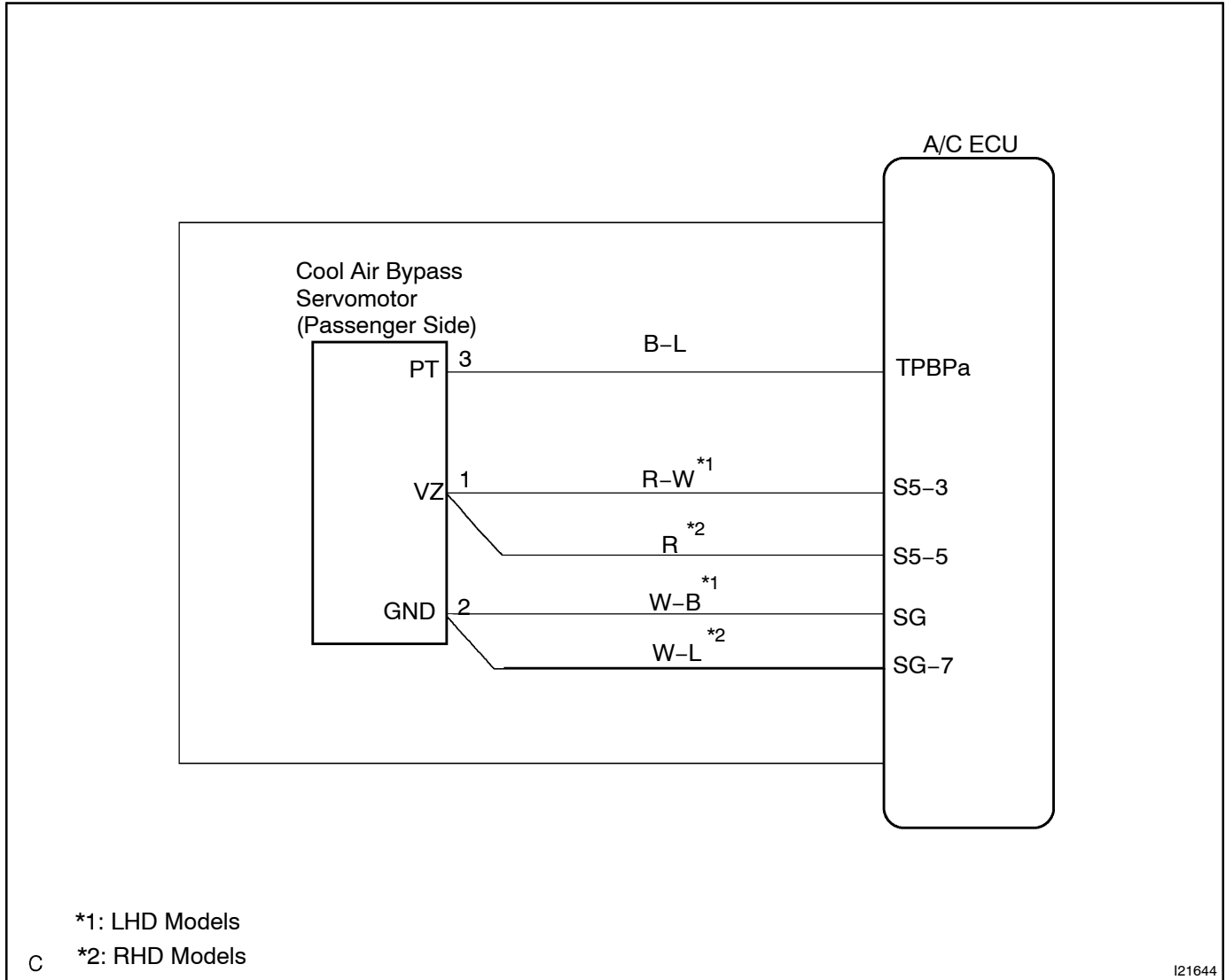| DTC	B1435/35	Cool Air Bypass Damper Position Sensor Circuit (Passenger Side)

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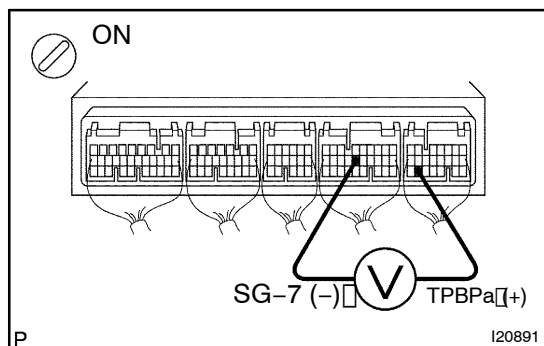
DTC No.	Detection Item	Trouble Area
B1435/35	Short to ground or power source circuit in cool air bypass damper position sensor circuit.	• Cool air bypass damper position sensor. • Harness or connector between cool air bypass damper control servomotor assembly and A/C ECU. • A/C ECU.

WIRING DIAGRAM

Cool Air Bypass Servomotor (Passenger Side)

A/C ECU

Servomotor	Pin	Wire	ECU
PT	3	B–L	TPBPa
VZ	1	R–W *1	S5–3
		R *2	S5–5
GND	2	W–B *1	SG
		W–L *2	SG–7

*1: LHD Models

C *2: RHD Models

I21644

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 by-pass damper control servomotor, and measure voltage between terminals TPBPa and SG–7 of A/C ECU each time when the set temperature is changed.

OK:

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.
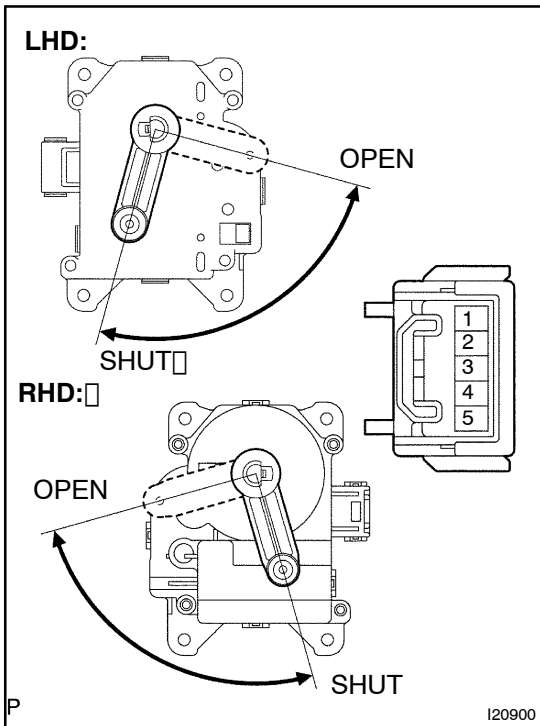
NG	Go to step 2.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–1772). However, if DTC B1435/35 is displayed, check and replace A/C ECU.

2	Check cool air bypass damper position sensor.

LHD:

OPEN

SHUT

RHD:

OPEN

SHUT

1
2
3
4
5

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<u>PREPARATION:</u>
Remove cool air bypass damper control servomotor
(See page AC–79).
<u>CHECK:</u>
Measure resistance between terminals 1 and 2 of cool air bypass damper control servomotor assembly connector.
<u>OK:</u>

Resistance : 4.2 – 7.2 kΩ

<u>CHECK:</u>
While operating cool air bypass damper control servomotor, following the procedure on page DI–1833, measure resistance between terminals 2 and 3 of cool air bypass damper control servomotor assembly connector.
<u>OK:</u>

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

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.**

OK

3	**Check harness and connector between A/C ECU and cool air bypass damper control servomotor assembly (See page IN–35).**

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

OK

Check and replace A/C ECU.