DI8BW–01

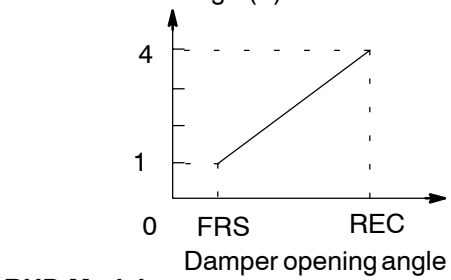
DTC	B1432/32	Air Inlet Damper Position Sensor Circuit

DTC	B1442/42	Air Inlet Damper Position Sensor Circuit

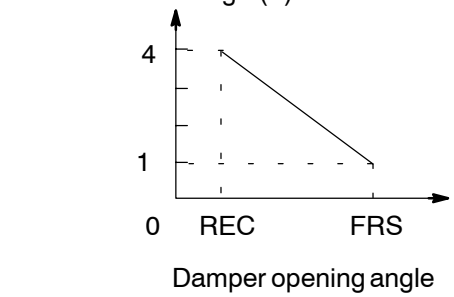
CIRCUIT DESCRIPTION

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

LHD Models:

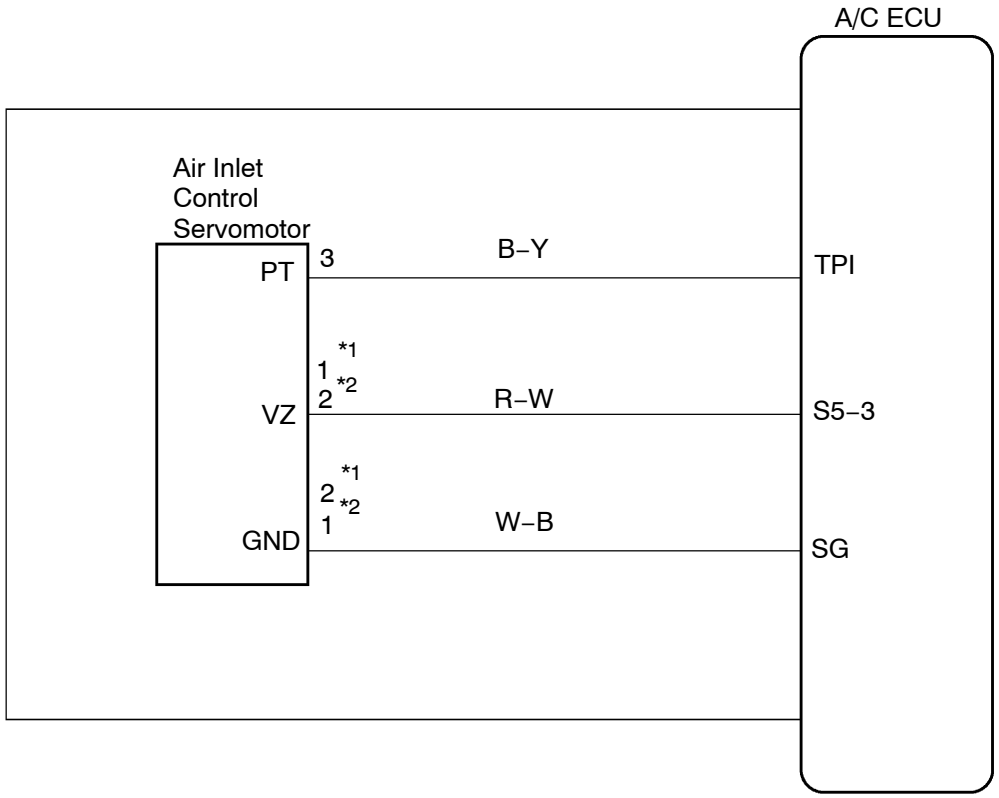


RHD Models:



DTC No.	Detection Item	Trouble Area
B1432/32	Short to ground or power source circuit in air inlet damper position sensor circuit.	• Air inlet damper position sensor. • Harness or connector between air inlet damper control servomotor assembly and A/C ECU. • A/C ECU.
B1442/42	Air inlet damper position sensor value does not change even if A/C ECU operates air inlet damper control servomotor.	

WIRING DIAGRAM



*1: LHD Models
*2: RHD Models

I21190

INSPECTION PROCEDURE

HINT:

In case of using the hand–held tester, start the inspection from step1 and in case of not using the hand–held tester, start from step 2.

1	**Check air inlet damper position using hand–held tester.**

PREPARATION:

Connect the hand–held tester to the DLC3.

CHECK:

Check the current position of air inlet damper and the target position of air inlet damper.

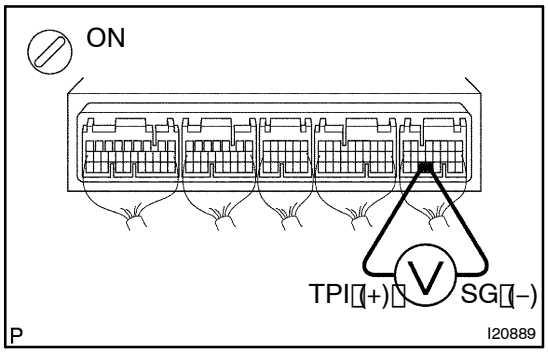
OK:

The current position and target position are almost similar.

OK → **Check and replace A/C ECU.**

NG

2	**Check voltage between terminals TPI and SG of A/C ECU connector.**



PREPARATION:

Remove A/C ECU with connectors still connected.

CHECK:

(a) Turn ignition switch to ON.

(b) Press REC/FRS switch to change air inlet between fresh and recirculation air, and measure voltage between terminals TPI and SG of A/C ECU when the air inlet damper control servomotor operates.

OK:

FRS–REC Switch	Voltage
REC	3.5 – 4.5 V
FRS	0.5 – 1.5 V

HINT:

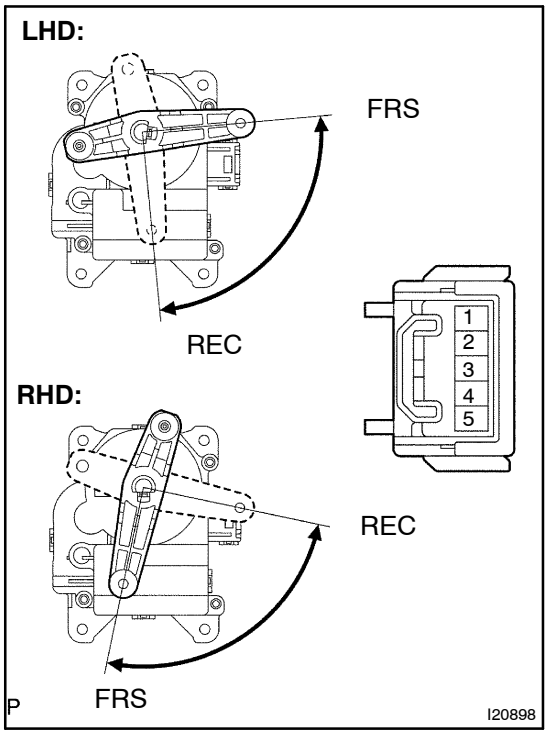
As the air inlet damper control servomotor is moved form REC side to FRS side, the voltage decreases.

NG	**Go to step 3.**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–1772). However, if DTC B1432/32 or B1442/42 is displayed, check and replace A/C ECU.

3	Check air inlet damper position sensor.



PREPARATION:

Remove air inlet servomotor (See page AC–44).

CHECK:

Measure resistance between terminals 1 and 2 of air inlet damper control servomotor assembly connector.

OK:

Resistance: 4.2 – 7.8 kΩ

CHECK:

While operating air inlet damper control servomotor, following the procedure on page DI–1821, measure resistance between terminals 2 and 3 of air inlet damper control servomotor assembly connector.

OK:

Damper Position	Resistance
REC side	3.4 – 6.2 kΩ
FRS side	0.8 – 1.6 kΩ

HINT:

As the air inlet damper control servomotor moves from REC side to FRS side, the resistance decreases.

NG	Replace air inlet damper control servomotor.

OK

4	Check harness and connectors between A/C ECU and air inlet damper control servomotor assembly (See page IN–35).

NG	Repair or replace harness or connector.

OK

Check and replace A/C ECU.