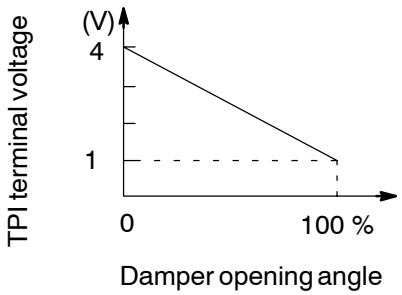
DI26D–02

DTC	B1432/32	Air Inlet Damper Position Sensor Circuit

DTC	B1442/42	Air Inlet Damper Position Sensor Circuit

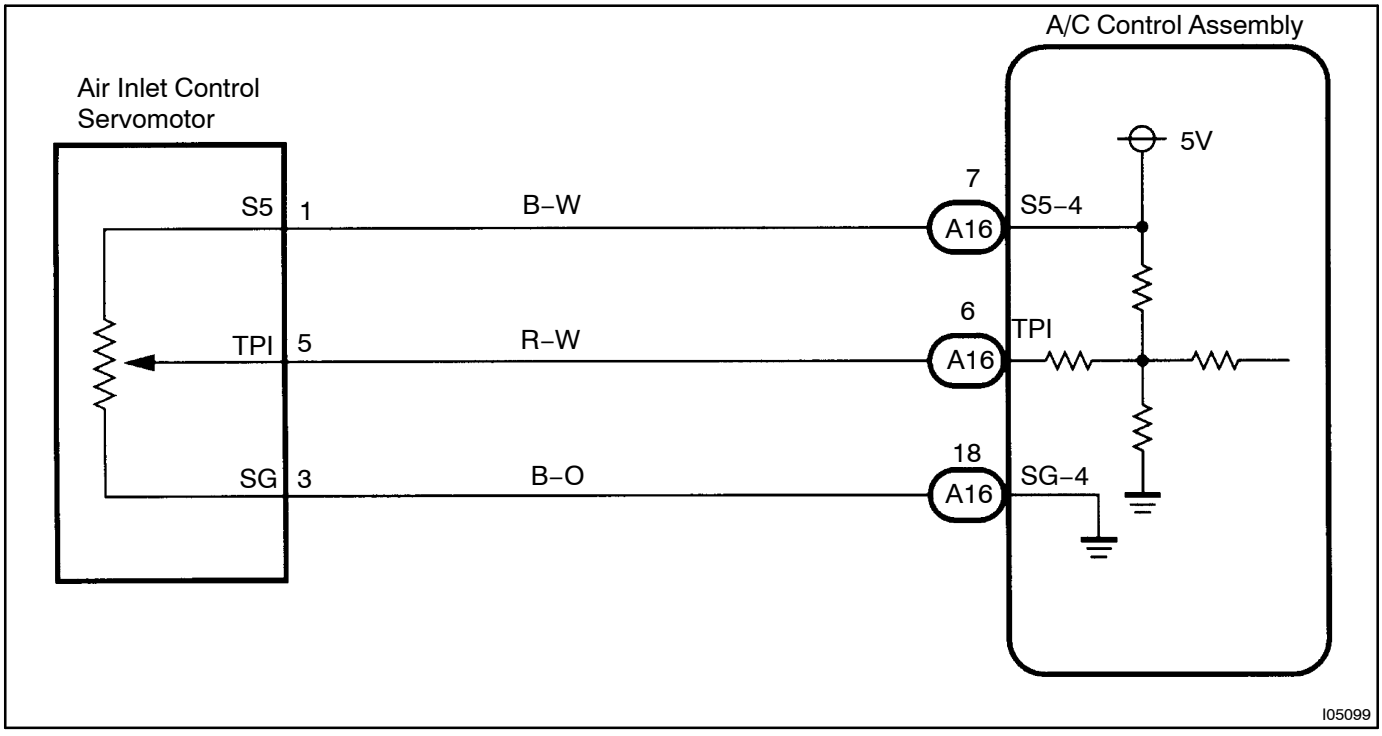
CIRCUIT DESCRIPTION



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

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 control assembly. • A/C control assembly.
B1442/42	Air inlet damper position sensor value does not change even if A/C control assembly operates air inlet damper control servomotor.	

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
In case of using the LEXUS hand–held tester, start the inspection from step 1 and in case of not using the LEXUS hand–held tester, start from step 2.

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

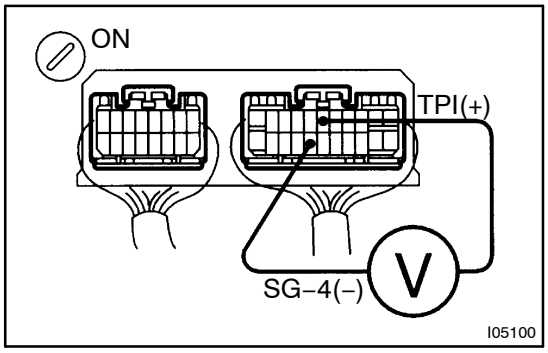
PREPARATION:
Connect the LEXUS hand–held tester to the DLC3.
CHECK:
Check the current position of air inlet damper and the target position of air inlet damper.
OK:

The current position and target position are almost similar.

OK	**Check and replace A/C control assembly.**

NG

2	**Check voltage between terminals TPI and SG–4 of A/C control assembly connector.**



PREPARATION:
Remove A/C control assembly with connectors still connected.
CHECK:
(a) Turn ignition switch ON.
(b) Press REC/FRS switch to change air inlet between fresh and recirculation air, and measure voltage between terminals TPI and SG–4 of A/C control assembly 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

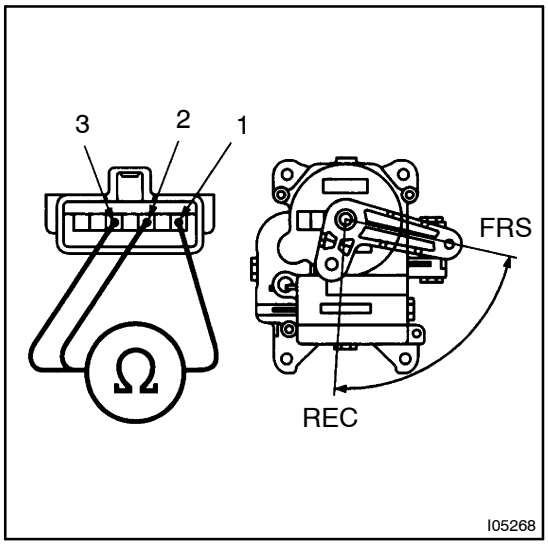
HINT:
As the air inlet damper control servomotor is moved form REC side to FRS side, the voltage decreases.

NG	**Go to step 3.**

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI–912). However, if DTC B1432/32 or B1442/42 is displayed, check and replace A/C control assembly.

3	**Check air inlet damper position sensor.**



PREPARATION:

(a) Remove heater unit (See page AC–26).

(b) Disconnect air inlet damper control servomotor assembly connector.

CHECK:

Measure resistance between terminals 1 and 3 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–953, measure resistance between terminals 1 and 5 of air inlet damper control servomotor assembly connector.

OK:

Resistance

Damper Position	Resistance
REC side	3.1 – 5.8 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 assembly.**

OK

4	**Check harness and connectors between A/C control assembly and air inlet damper control servomotor assembly (See page IN–29).**

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

OK

Check and replace A/C control assembly.