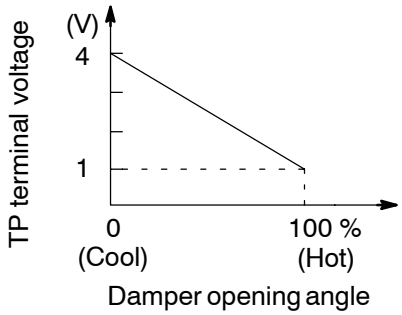
D126F–02

DTC	B1436/36	Air Mix Damper Position Sensor Circuit (Driver side)

DTC	B1446/46	Air Mix Damper Position Sensor Circuit (Driver side)

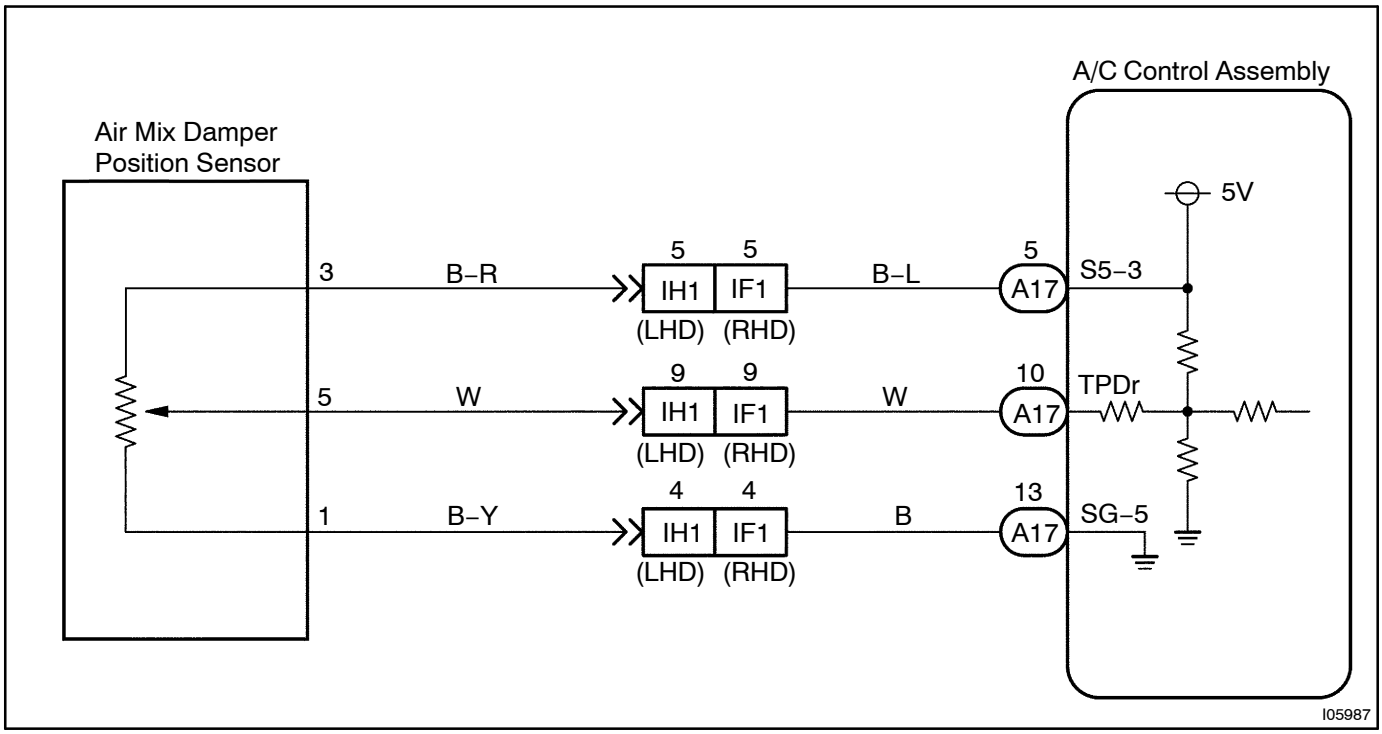
CIRCUIT DESCRIPTION



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

DTC No.	Detection Item	Trouble Area
B1436/36	Short to ground or power source circuit in air mix damper position sensor circuit.	• Air mix damper position sensor. • Harness or connector between air mix damper control servomotor assembly and A/C control assembly. • A/C control assembly.
B1446/46	Air mix damper position sensor value does not change even if A/C control assembly operates air mix damper control servomotor.	

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
In case of using the LEXUS hand–held tester, start the inspection from step1 and in case of not using the LEXUS hand–held tester, start from step2.

1	**Check air mix damper position (Driver Side) using LEXUS hand–held tester.**

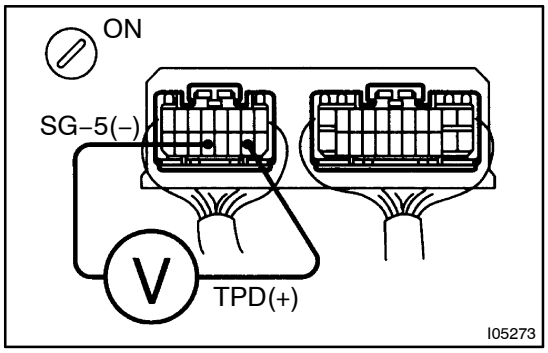
PREPARATION:
Connect the LEXUS hand–held tester to the DLC3.
CHECK:
Check the current position of air mix damper (Driver Side) and the target position of air mix damper (Driver Side).
OK:

The current position and target position are almost similar.

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

NG

2	**Check voltage between terminals TPD and SG–5 of A/C control assembly connector.**



PREPARATION:
Remove A/C control assembly with connectors still connected.
CHECK:
(a) Turn ignition switch ON.
(b) Change the set temperature to activate the air mix damper control servomotor, and measure the voltage between terminals TPD and SG–5 of A/C control assembly connector each time when the set temperature is changed.
OK:

Set Temperature	Voltage
Max. cool	3.5 – 4.5 V
Max. hot	0.5 – 1.5 V

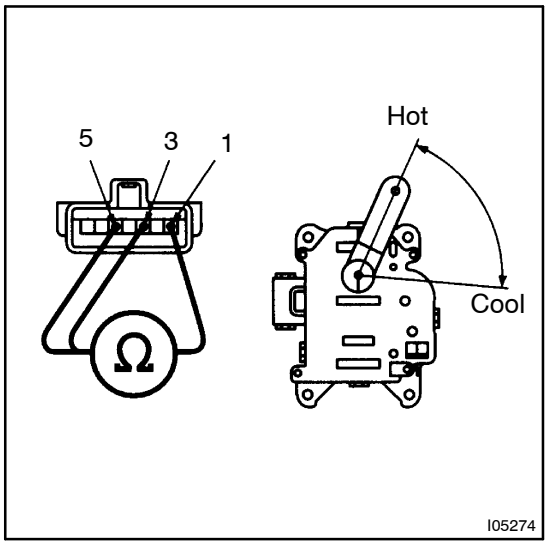
HINT:
As the set temperature increases, the voltage decreases.

NG ⇒ **Go to step 3.**

Ok

Proceed to next circuit inspection shown on problem symptoms table (See page DI–912). However, if DTC B1436/36 or B1446/46 displayed, check and replace A/C control assembly.

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



PREPARATION:

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

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

CHECK:

Measure resistance between terminals 1 and 3 of air mix damper control servomotor assembly connector.

OK:

Resistance: 4.2 – 7.8 kΩ

CHECK:

While operating air mix damper control servomotor, following the procedure on page DI–959, measure resistance between terminals 1 and 5 of air mix damper control servomotor assembly connector.

OK:

Position	Resistance
Max. cool	3.6 – 6.8 kΩ
Max. hot	0.5 – 1.1 kΩ

HINT:

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

NG	**Replace air mix damper control servomotor assembly.**

OK

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

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

OK

Check and replace A/C control assembly.