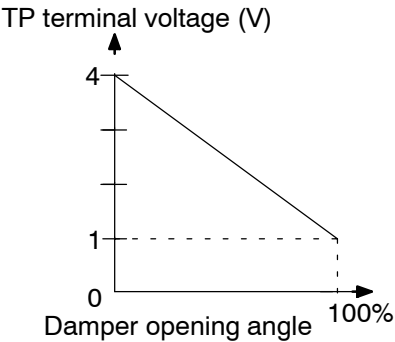


DTC	AUTO,M1	AIR MIX DAMPER POSITION SENSOR CIRCUIT
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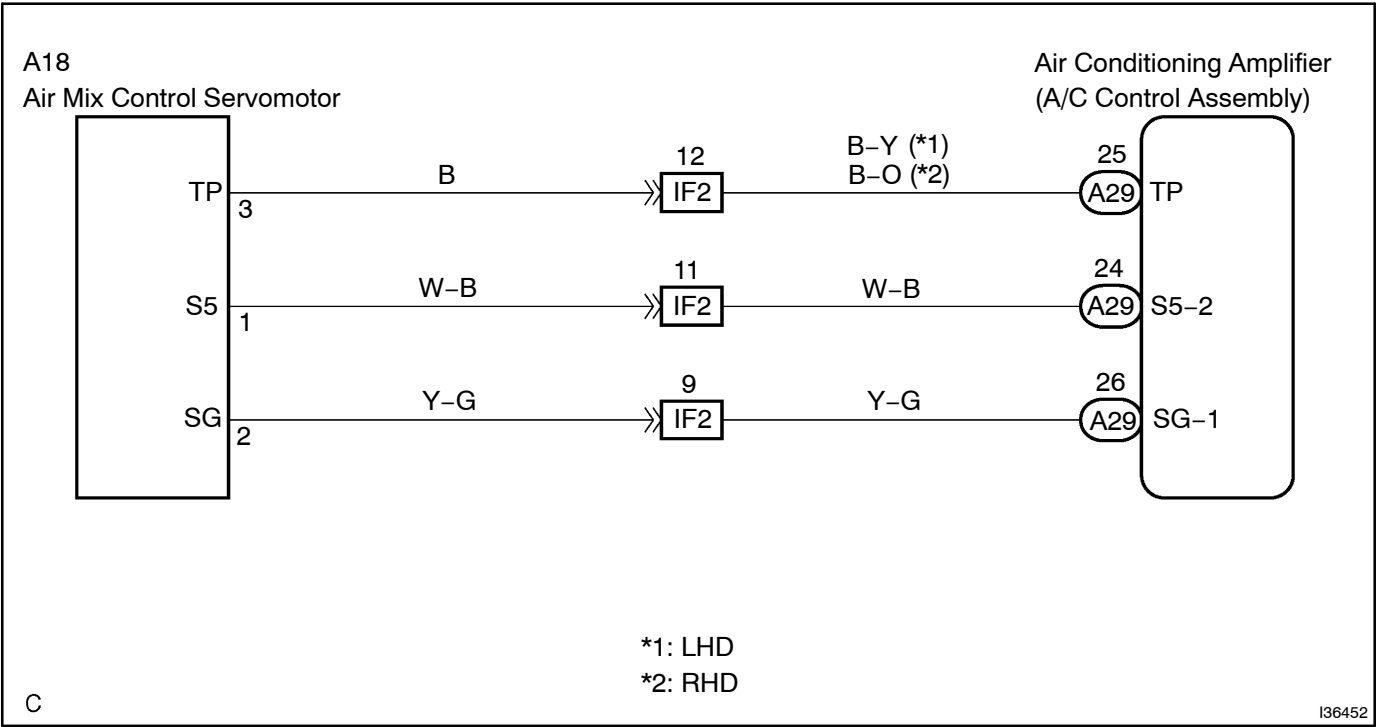
CIRCUIT DESCRIPTION



This sensor detects the position of the air mix control servomotor (air mix damper) and sends the appropriate signals to the A/C amplifier. The position sensor is built in the air mix control servomotor. The position sensor's resistance changes as the air mix control servomotor arm moves. The A/C amplifier reads the arm position with the input voltage from the position sensor.

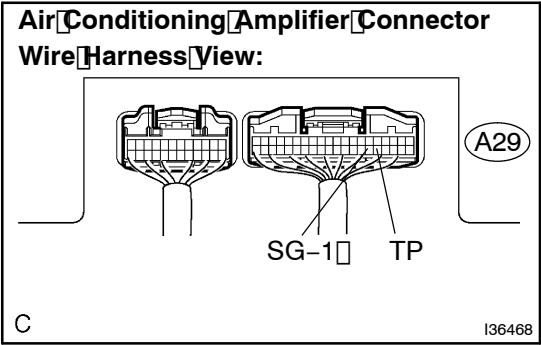
DTC No.	Detection Item	Trouble Area
AUTO, M1	Open or short in power source circuit in air mix control servomotor circuit	<ul style="list-style-type: none">• Air mix control servomotor• Harness or connector between air mix control servomotor and A/C amplifier• A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER (TP - SG-1)



- (a) Remove the A/C amplifier with the connectors still connected.
- (b) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Condition	Specified Condition
A29-25 (TP) - A29-26 (SG-1)	Ignition switch ON MAX COOL position	3.97 to 4.07 V
A29-25 (TP) - A29-26 (SG-1)	Ignition switch ON MAX HOT position	0.97 to 1.03 V

HINT:
As the set temperature increases, the voltage decreases gradually without interruption.

Result:

NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

B

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05-862)

C

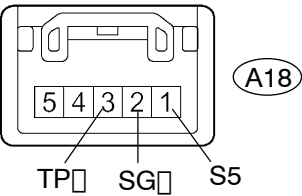
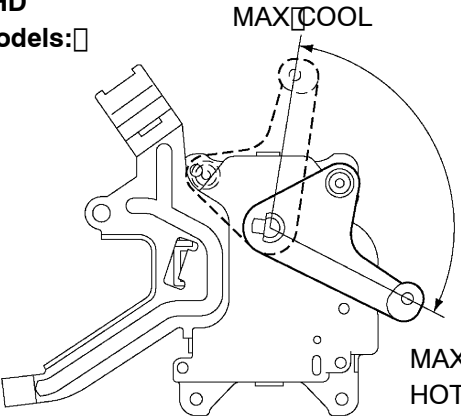
REPLACE AIR CONDITIONING AMPLIFIER
(SEE PUB. NO. RM864E ON PAGE 55-96)

A

2 INSPECT AIR MIX CONTROL SERVOMOTOR

LHD

Models:



H

E56114

- (a) Remove the air mix control servomotor.
- (b) Disconnect the connector from the air mix control servomotor.
- (c) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A18-1 (S5) - A18-2 (SG)	Always	4.2 to 7.2 kΩ

- (d) Measure the resistance according to the value(s) in the table below.

HINT:

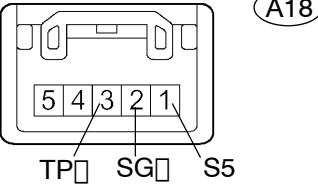
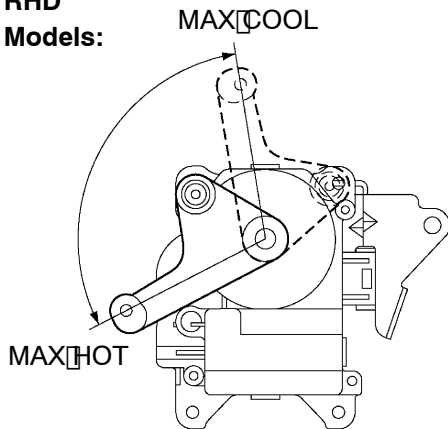
See page 05-909 for operation procedure for the air mix control servomotor.

Standard:

Tester connection	Condition	Specified condition
A18-3 (TP) - A18-2 (SG)	MAX HOT position	0.6 to 1.1 kΩ
A18-3 (TP) - A18-2 (SG)	MAX COOL position	3.6 to 6.7 kΩ

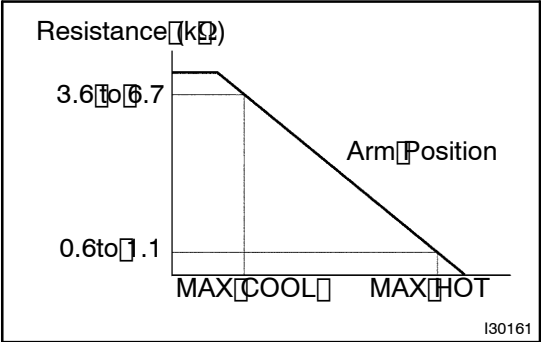
RHD

Models:



H

E56113

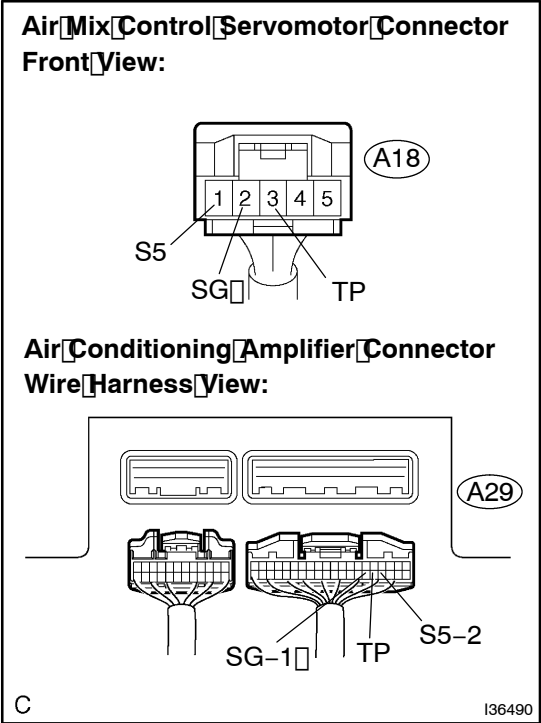


(e) As the air mix control servomotor moves from cool side to hot side, the resistance decreases gradually without interruption.

NG REPLACE AIR MIX CONTROL SERVOMOTOR

OK

3 CHECK HARNESS AND CONNECTOR (AIR MIX CONTROL SERVOMOTOR – AIR CONDITIONING AMPLIFIER) (SEE PAGE 01-32)



- (a) Disconnect the connectors from the air mix control servomotor and A/C amplifier.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A29-25 (TP) – A18-3 (TP)	Always	Below 1 Ω
A29-24 (S5-2) – A18-1 (S5)	Always	Below 1 Ω
A29-26 (SG-1) – A18-2 (SG)	Always	Below 1 Ω
A29-25 (TP) – Body ground	Always	10 kΩ or higher
A29-24 (S5-2) – Body ground	Always	10 kΩ or higher
A29-26 (SG-1) – Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER (SEE PUB. NO. RM864E ON PAGE 55-96)