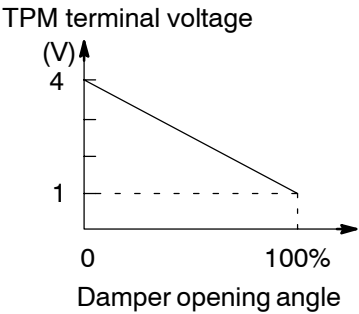


DTC	AUTO,HI	AIR OUTLET DAMPER POSITION SENSOR CIRCUIT
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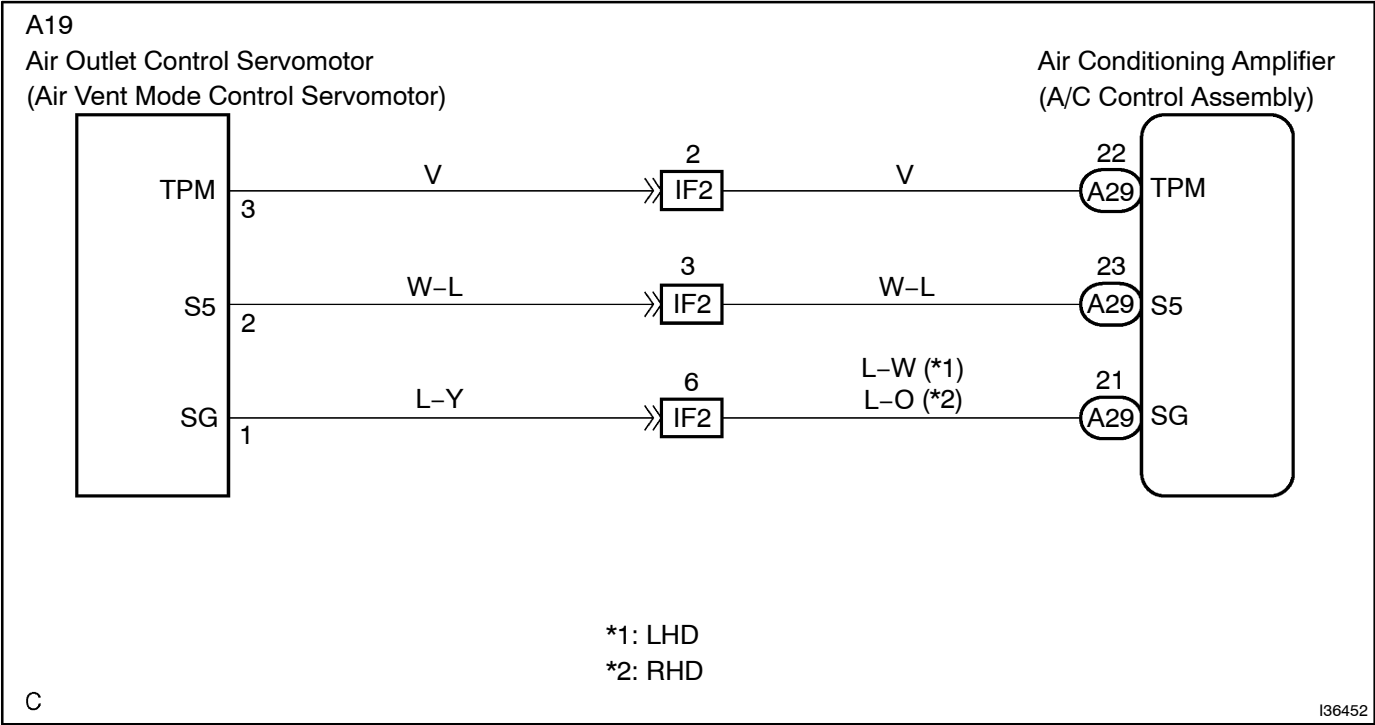
CIRCUIT DESCRIPTION



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

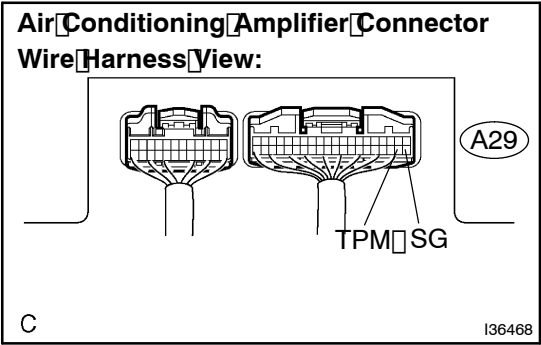
DTC No.	Detection Item	Trouble Area
AUTO, HI	Open or short in power source circuit in air outlet control servomotor	<ul style="list-style-type: none">• Air outlet control servomotor• Harness or connector between air outlet control servomotor and A/C amplifier• A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER (TPM - SG)



- (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
A29-22 (TPM) - A29-21 (SG)	Ignition switch ON FACE position	3.97 to 4.07 V
A29-22 (TPM) - A29-21 (SG)	Ignition switch ON DEF position	0.97 to 1.03 V

HINT:
As the air outlet servomotor is moved from FACE side to DEF side, 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)

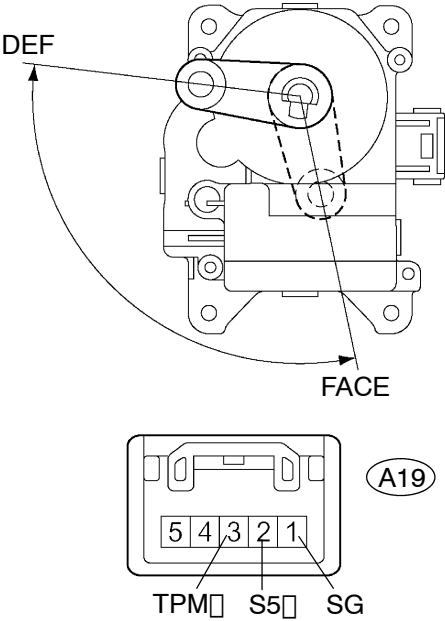
C

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

A

2 INSPECT AIR OUTLET CONTROL SERVOMOTOR

LHD Models:



H

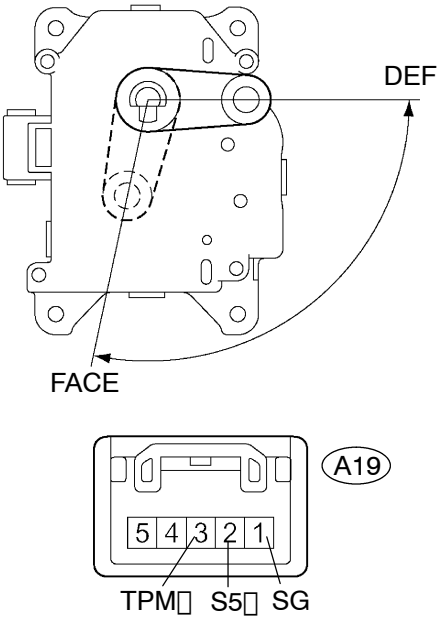
E56112

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

Standard:

Tester connection	Condition	Specified condition
A19-2 (S5) - A19-1 (SG)	Always	4.2 to 7.2 kΩ

RHD Models:



H

E56111

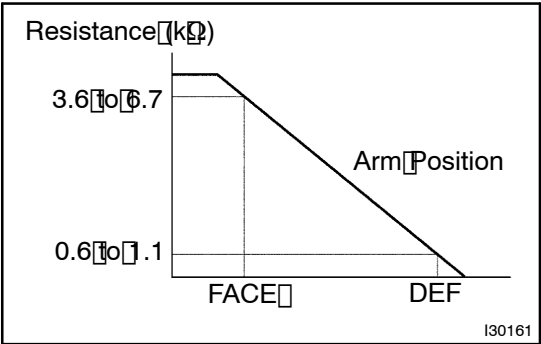
- (d) Measure the resistance according to the value(s) in the table below.

HINT:

See page 05-920 for operation procedure for the air outlet control servomotor.

Standard:

Tester connection	Condition	Specified condition
A19-3 (TPM) - A19-1 (SG)	DEF position	0.6 to 1.1 kΩ
A19-3 (TPM) - A19-1 (SG)	FACE position	3.6 to 6.7 kΩ

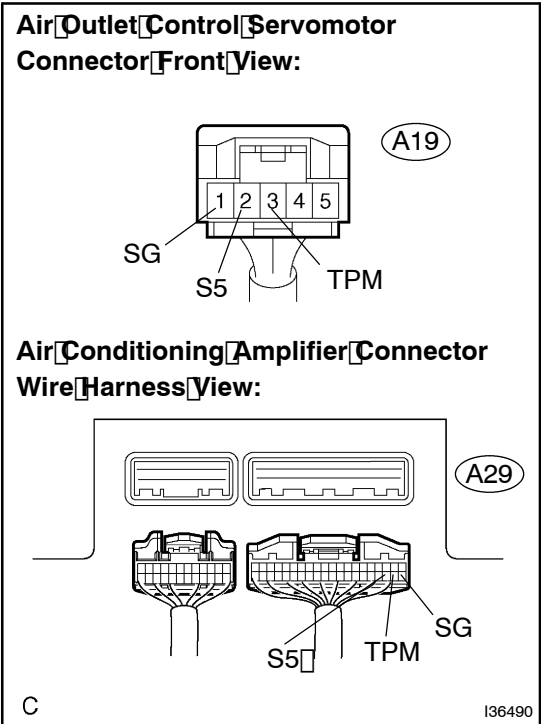


OK

(e) As the air outlet control servomotor moves from DEF side to FACE side, the resistance decreases gradually without interruption.

NG REPLACE AIR OUTLET CONTROL SERVOMOTOR

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



OK

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

Tester connection	Condition	Specified condition
A29-22 (TPM) - A19-3 (TPM)	Always	Below 1 Ω
A29-23 (S5) - A19-2 (S5)	Always	Below 1 Ω
A29-21 (SG) - A19-1 (SG)	Always	Below 1 Ω
A29-22 (TPM) - Body ground	Always	10 kΩ or higher
A29-23 (S5) - Body ground	Always	10 kΩ or higher
A29-21 (SG) - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

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