

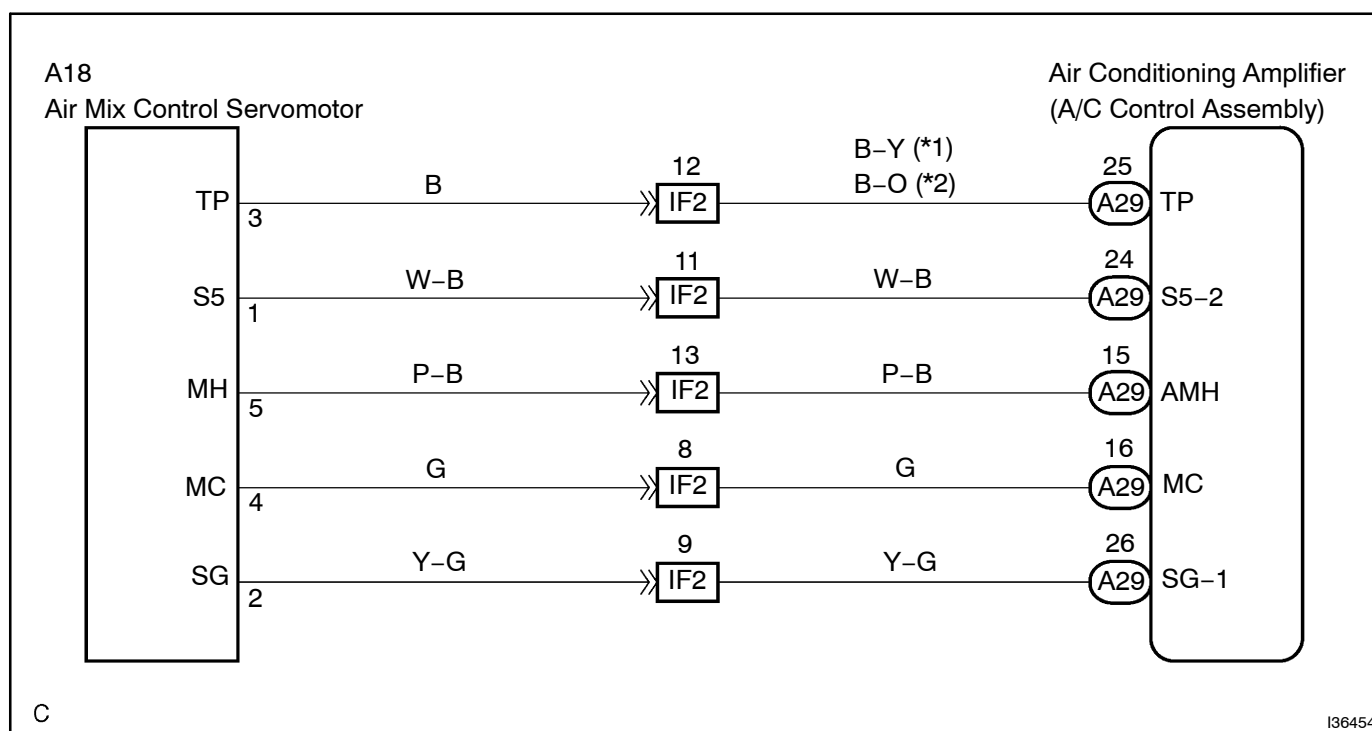
DTC**RrDEF,M1****AIR MIX CONTROL SERVOMOTOR CIRCUIT****CIRCUIT DESCRIPTION**

The air mix control servomotor is controlled by the A/C amplifier.

The air mix control servomotor moves the air mix damper by rotating (normal, reverse) the motor with electrical power from the A/C amplifier.

This adjusts the mix ratio of the air that passes through the evaporator and heater core and controls the air-flow temperature. Air flow temperature changes when moving the air mix damper to the target point. The target point can be detected with the air mix damper position sensor.

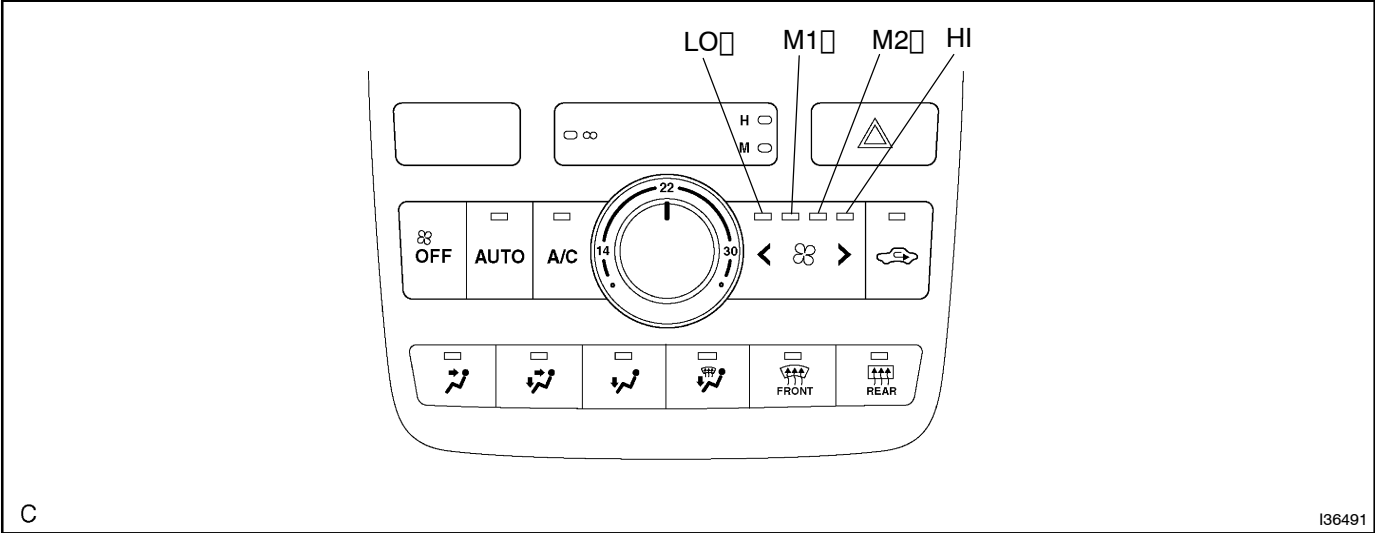
DTC No.	Detection Item	Trouble Area
RrDEF, M1	Air mix control servomotor value does not change even if A/C amplifier operates air mix control servomotor	<ul style="list-style-type: none"> • Air mix control servomotor • Harness or connector between air mix control servomotor and A/C amplifier • A/C amplifier

WIRING DIAGRAM

INSPECTION PROCEDURE

1 PERFORM ACTUATOR CHECK

- (a) Set to the actuator check mode (see page 05-850).
- (b) Press the FACE switch and change to step operation.
- (c) Check the air flow temperature by hand.



The number of indicated blower speed indicator	Air Mix Damper Operation
0	COOL side (9.0% open)
1 (LO)	COOL/HOT side (50% open)
2 (M1)	HOT side (80.0% open)
3 (M2)	HOT side (80.0% open)
4 (HI)	HOT side (80.0% open)

OK:
Air flow temperature changes in accordance with each display code.

Result:

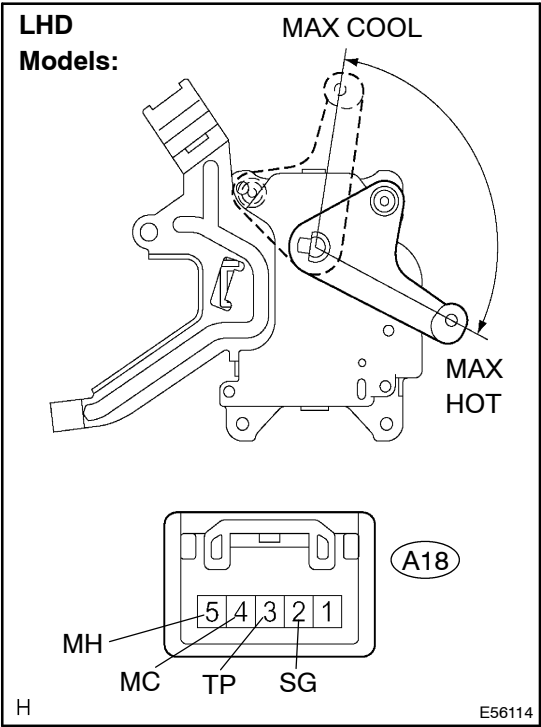
NG	A
OK (Checking from the PROBLEM SYMPTOMS TABLE)	B
OK (Checking from the DTC)	C

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



- (a) Remove the air mix control servomotor.
- (b) Disconnect the connector from the air mix control servomotor.
- (c) Connect the positive (+) lead from the battery to terminal 5 and negative (-) lead to terminal 4, then check that the lever turns to "MAX. HOT" position smoothly.
- (d) Measure the resistance according to the value(s) in the table below.

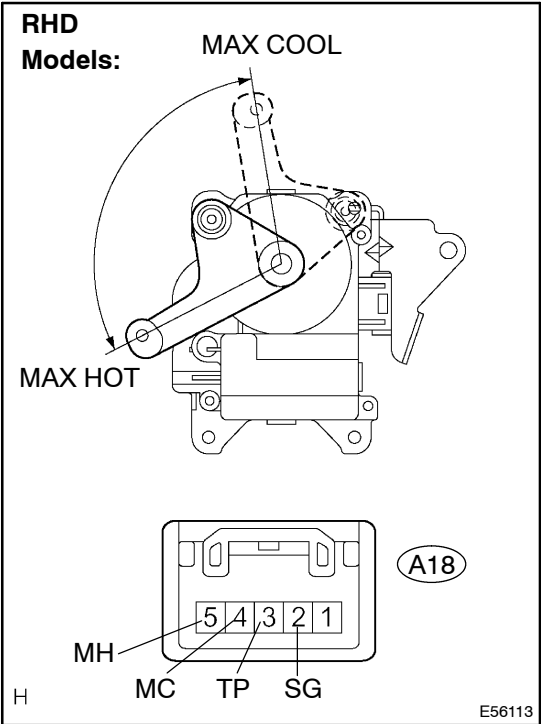
Standard:

Tester connection	Condition	Specified condition
A18-3 (TP) - A18-2 (SG)	MAX HOT position	0.8 to 1.6 kΩ

- (e) Connect the positive (+) lead from the battery to terminal 4 and negative (-) lead to terminal 5, then check that the lever turns to "MAX. COOL" position smoothly.
- (f) Measure the resistance according to the value(s) in the table below.

Standard:

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



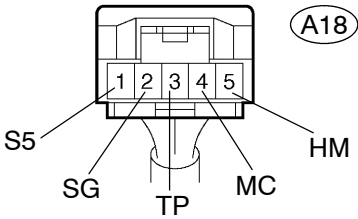
NG

REPLACE AIR MIX CONTROL SERVOMOTOR

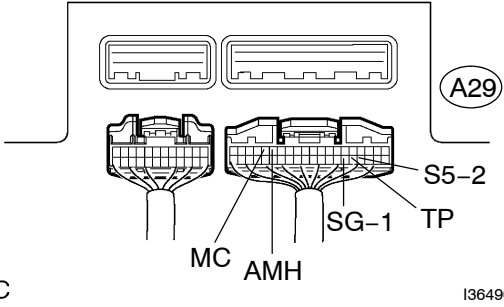
OK

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

Air Mix Control Servomotor Connector
Front View:



Air Conditioning Amplifier Connector
Wire Harness View:



- (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
A29-15 (AMH) – A18-5 (MH)	Always	Below 1 Ω
A29-16 (MC) – A18-4 (MC)	Always	Below 1 Ω
A29-24 (S5-2) – A18-1 (S5)	Always	Below 1 Ω
A29-25 (TP) – A18-3 (TP)	Always	Below 1 Ω
A29-26 (SG-1) – A18-2 (SG)	Always	Below 1 Ω
A29-15 (AMH) – Body ground	Always	10 kΩ or higher
A29-16 (MC) – Body ground	Always	10 kΩ or higher
A29-24 (S5-2) – Body ground	Always	10 kΩ or higher
A29-25 (TP) – 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)