

DTC	RrDEF,M2	AIR INLET CONTROL SERVOMOTOR CIRCUIT
------------	-----------------	---

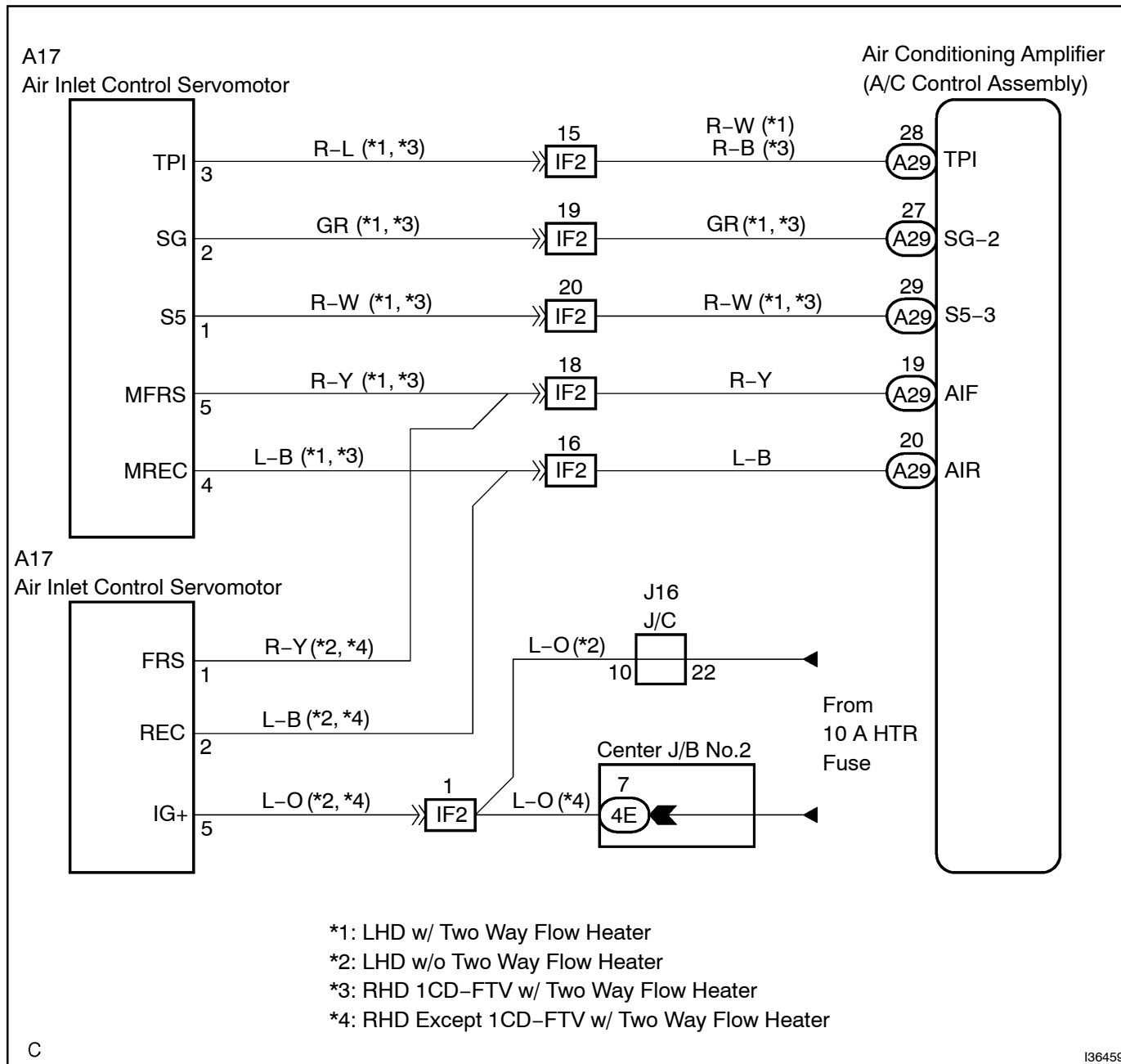
CIRCUIT DESCRIPTION

The air inlet control servomotor is controlled by the A/C amplifier and moves the air inlet control servomotor to the desired position.

The air inlet control servomotor switches between "RECIRCULATION" and "FRESH" by rotating the motor (normal, reverse) with electrical power from the A/C amplifier. This controls intake air and switches "RECIRCULATION", "FRESH" and "HALF-RECIRCULATION".

DTC No.	Detection Item	Trouble Area
RrDEF, M2	Air inlet control servomotor value does not change even if A/C amplifier operates air inlet control servomotor	<ul style="list-style-type: none"> • Air inlet control servomotor • Harness or connector between air inlet control servomotor and A/C amplifier • A/C amplifier

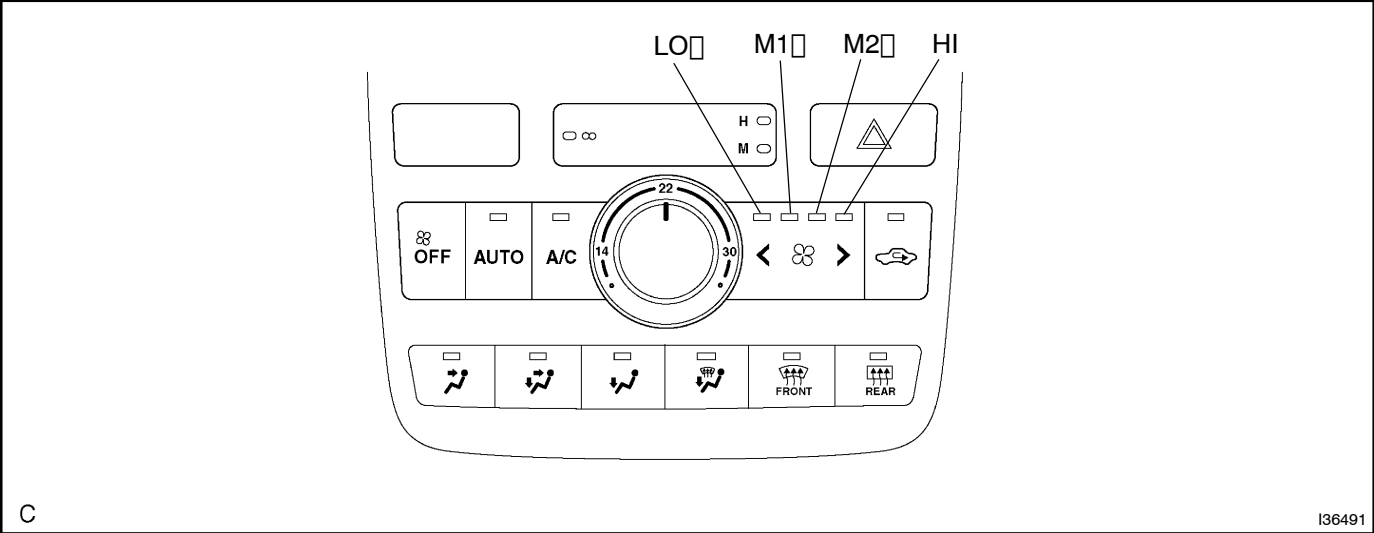
WIRING DIAGRAM



INSPECTION PROCEDURE

1 PERFORM ACTUATOR CHECK

- (a) Remove the glove box to see and check the air inlet control servomotor operation.
- (b) Set to the actuator check mode (see page 05-850).
- (c) Press the DEF switch and change to step operation.
- (d) Press the DEF switch in order and check the operation of the air inlet control servomotor.



The number of indicated blower speed indicator	Recirculation damper position
0	RECIRCULATION
1 (LO)	RECIRCULATION
2 (M1)	FRESH
3 (M2)	FRESH
4 (HI)	FRESH

OK:
Recirculation damper position 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	CONFIRM HEATER TYPE
---	---------------------

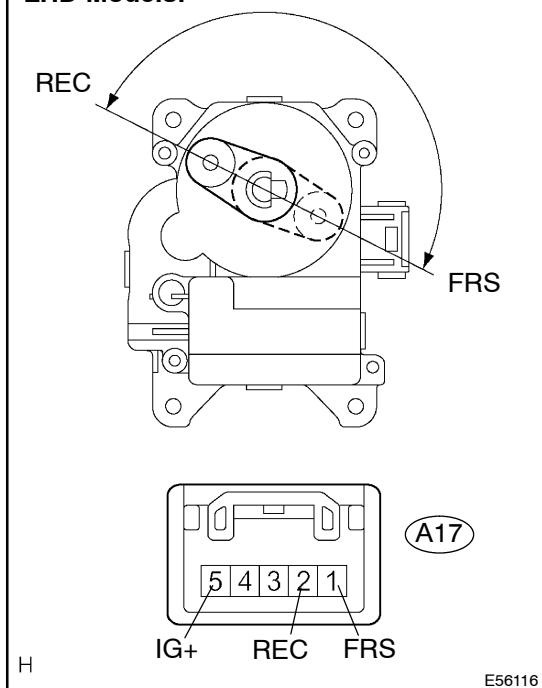
- Result:
- A: w/o two way flow heater models
 - B: w/ two way flow heater models

B	Go to step 4
---	--------------

A

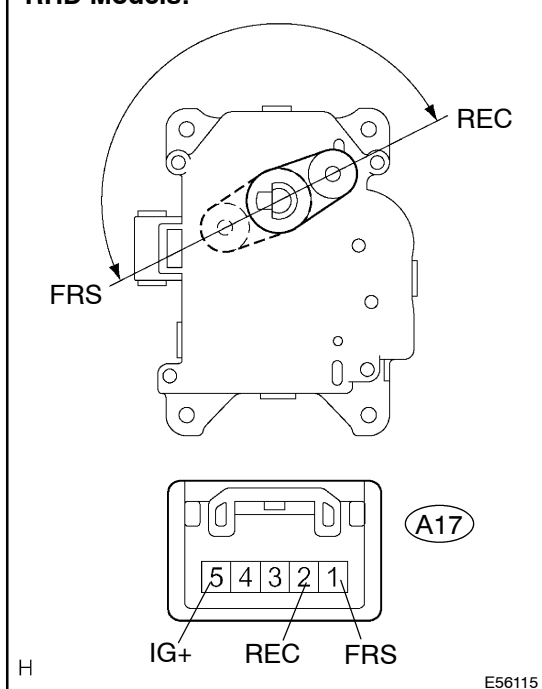
3 INSPECT AIR INLET CONTROL SERVOMOTOR

LHD Models:



- (a) Remove the air inlet control servomotor.
- (b) Disconnect the connector from the air inlet control servomotor.
- (c) Connect the positive (+) lead from the battery to terminal 5 and negative (-) lead to terminal 1, then check that the lever turns to the "FRESH" position smoothly.
- (d) Connect the positive (+) lead from the battery to terminal 5 and negative (-) lead to terminal 2, then check that the lever turns to the "RECIRCULATION" position smoothly.

RHD Models:



NG

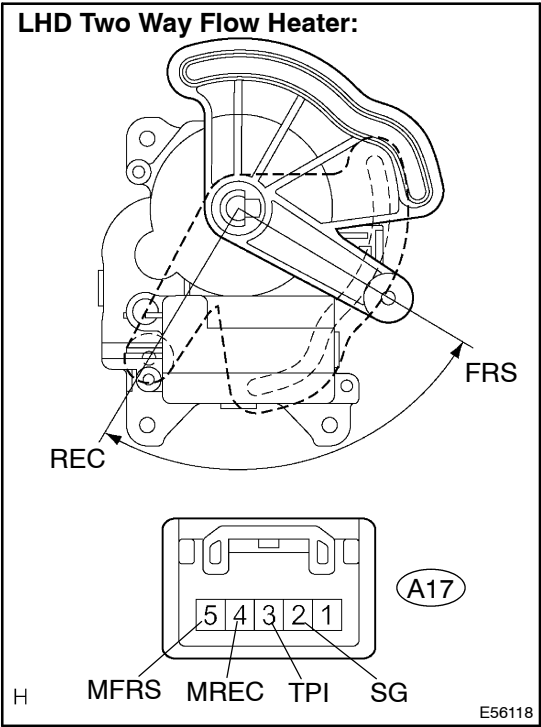
REPLACE AIR INLET CONTROL SERVOMOTOR

OK

Go to step 5

4 INSPECT AIR INLET CONTROL SERVOMOTOR

LHD Two Way Flow Heater:



- (a) Remove the air inlet control servomotor.
- (b) Disconnect the connector from the air inlet 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 "FRESH" position smoothly.
- (d) Measure the resistance according to the value(s) in the table below.

Standard:

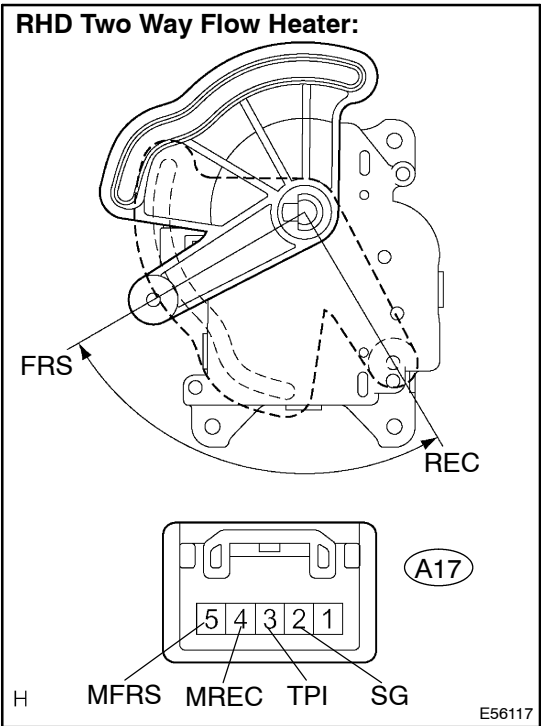
Tester connection	Condition	Specified condition
A17-3 (TPI) – A17-2 (SG)	FRESH position	0.6 to 1.1 Ω

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

Standard:

Tester connection	Condition	Specified condition
A17-3 (TPI) – A17-2 (SG)	RECIRCULATION position	3.6 to 6.7 k Ω

RHD Two Way Flow Heater:



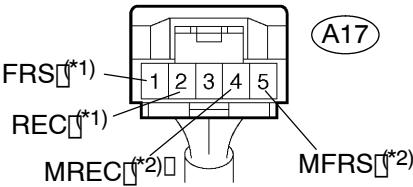
NG

REPAIR AIR INLET CONTROL SERVOMOTOR

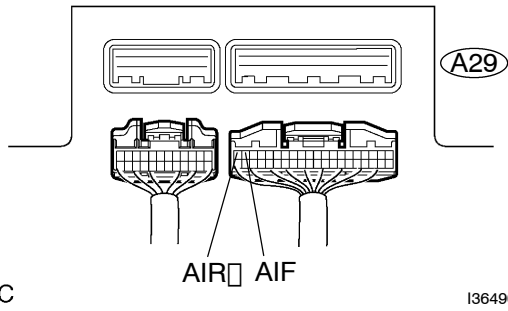
OK

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

Air Inlet Control Servomotor Connector Front View:



Air Conditioning Amplifier Connector Wire Harness View:



- (a) Disconnect the connectors from the air inlet 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
A29-19 (AIF) – A17-1 (FRS) (*1)	Always	Below 1 Ω
A29-20 (AIR) – A17-2 (REC) (*1)	Always	Below 1 Ω
A29-19 (AIF) – A17-5 (MFRS) (*2)	Always	Below 1 Ω
A29-20 (AIR) – A17-4 (MREC) (*2)	Always	Below 1 Ω
A29-19 (AIF) – Body ground	Always	10 k Ω or higher
A29-20 (AIR) – Body ground	Always	10 k Ω or higher

HINT:

*1: w/o Two way flow heater models

*2: w/ Two way flow heater models

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

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