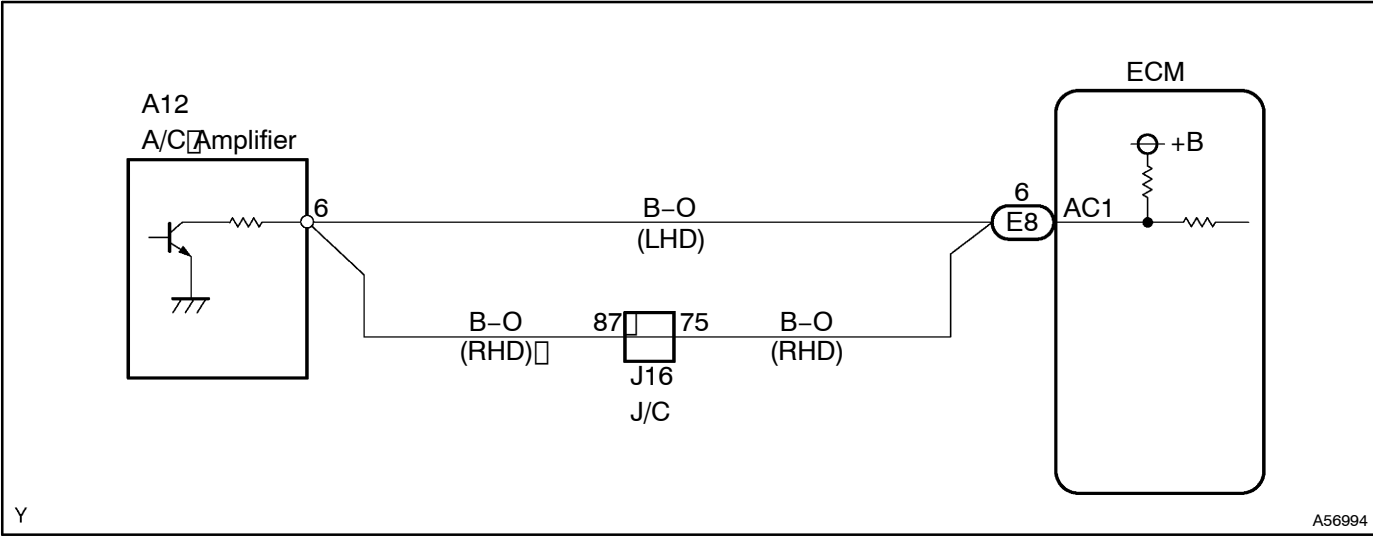


A/C SIGNAL CIRCUIT

CIRCUIT DESCRIPTION

When the A/C compressor is ON, the A/C amplifier sends the A/C signal to the ECM, then ECM increases the fuel injection volume to improve driveability during engine idling.

WIRING DIAGRAM



INSPECTION PROCEDURE

When using hand-held tester:

1 READ VALUE OF HAND-HELD TESTER(CHECK A/C SIGNAL)

(a) Read the A/C signal on the hand-held tester while the A/C compressor is ON.

Result:

A/C Switch Condition	OFF	ON
A/C Signal	OFF	ON

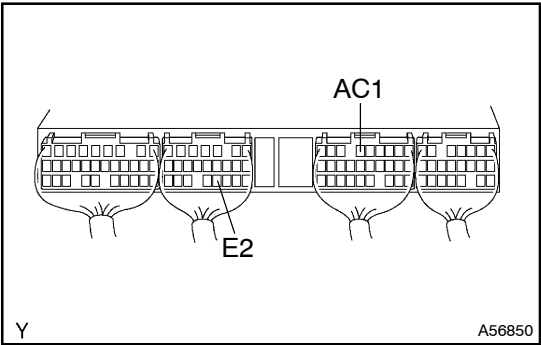
OK

PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN ON PROBLEM SYMPTOM TABLE
(See page 05-170)

NG

2

INSPECT ECM



- (a) Start the engine.
- (b) Measure the voltage between terminal AC1 and E2 of the ECM connector. When the A/C switch is turned to ON and OFF.

Voltage:

A/C Switch Condition	Voltage
ON	Below 1.5 V
OFF	9 – 14 V

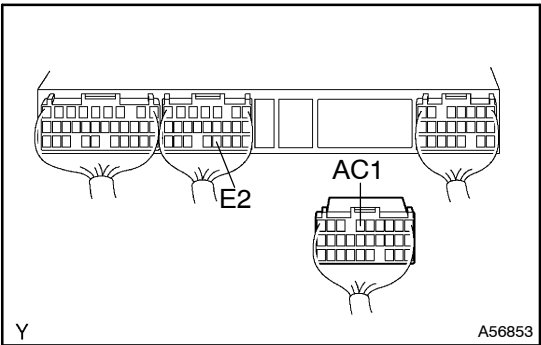
OK

CHECK AND REPLACE ECM

NG

3

CHECK HARNESS AND CONNECTOR (ECM-A/C AMPLIFIER)



- (a) Disconnect the A/C amplifier A12 connector. (See page 55-96)
- (b) Disconnect the ECM E8 connector.
- (c) Check for open between the terminals AC1 of the ECM E8 connector and A12 of the A/C amplifier harness side connector. (Terminal arrangement on 55-2)

Resistance: 1 Ω or less

- (d) Check for short between the terminals AC1 of the ECM E8 connector and E2 of the ECM E10 connector.

Resistance: 1 MΩ or more

NG

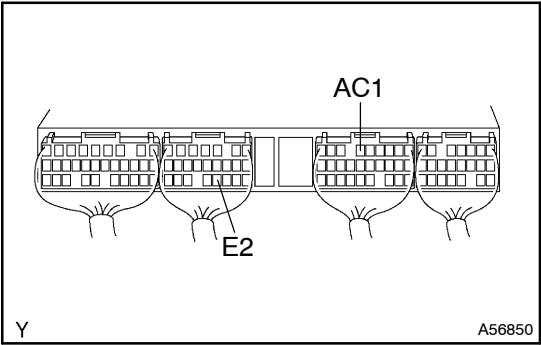
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY

When not using hand-held tester:

1 INSPECT ECM



- (a) Start the engine.
- (b) Measure the voltage between terminal AC1 and E2 of the ECM connector. When the A/C switch is turned to ON and OFF.

Voltage:

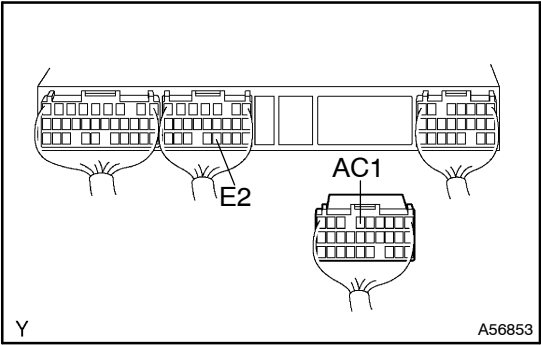
A/C Switch Condition	Voltage
ON	Below 1.5V
OFF	9 - 14 V

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOM TABLE (See page 05-170)

NG

2 CHECK AND REPLACE HARNESS AND CONNECTOR (ECM-A/C AMPLIFIER)



- (a) Disconnect the A/C amplifier A12 connector. (See page 55-96)
- (b) Disconnect the ECM E8 connector.
- (c) Check for open between the terminals AC1 of the ECM E8 connector and A12 of the A/C amplifier harness side connector. (Terminal arrangement on 55-2)

Resistance: 1 Ω or less

- (d) Check for short between the terminals AC1 of the ECM E8 connector and E2 of the ECM E10 connector.

Resistance: 1 MΩ or more

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY