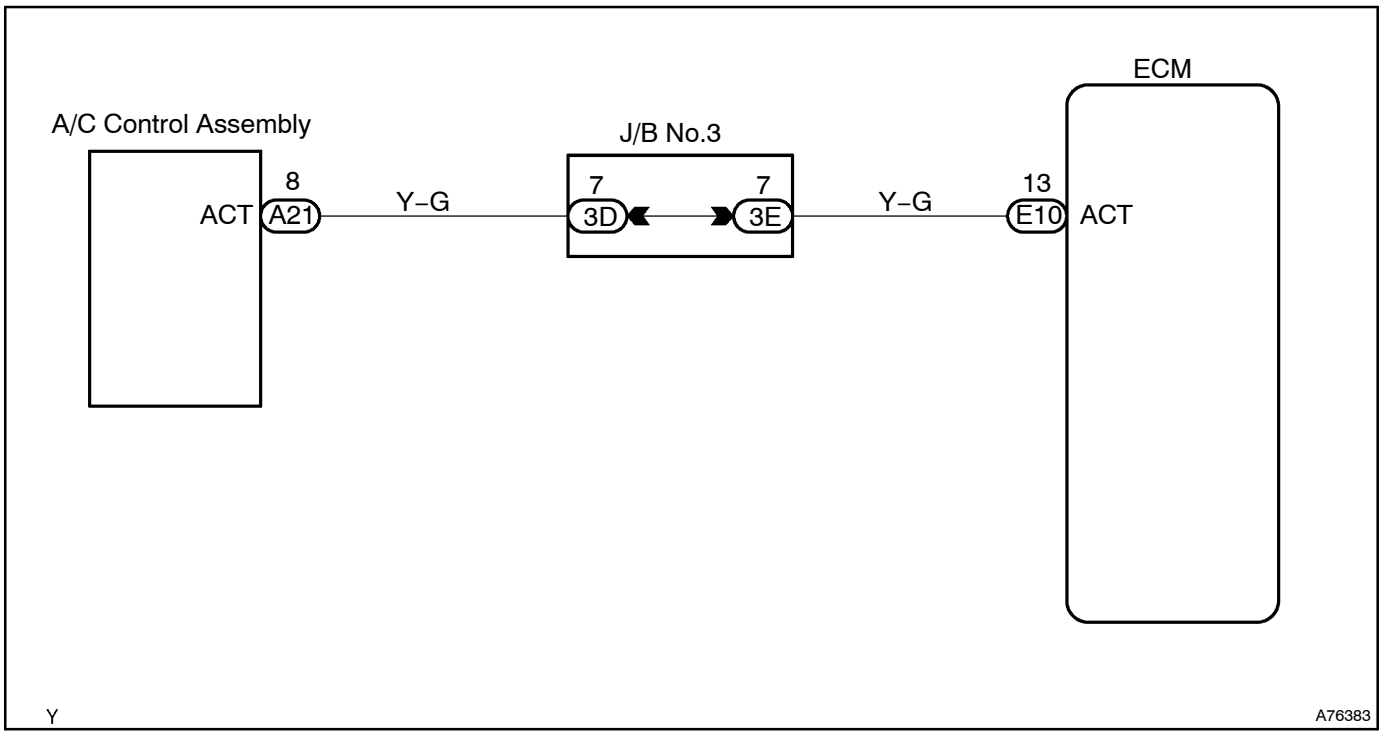
A/C CUT CONTROL CIRCUIT

CIRCUIT DESCRIPTION

This circuit cuts air conditioning operation during vehicle acceleration in order to increase acceleration performance. During acceleration with the vehicle speed at 30 km/h (19 mph) or less and accelerator pedal opening angle at 45° or more, the A/C magnetic switch is turned OFF for several seconds.
The air conditioning is also controlled by the ECM out putting the engine coolant temperature to A/C control assembly.

WIRING DIAGRAM



INSPECTION PROCEDURE

When Using Hand–held Tester:

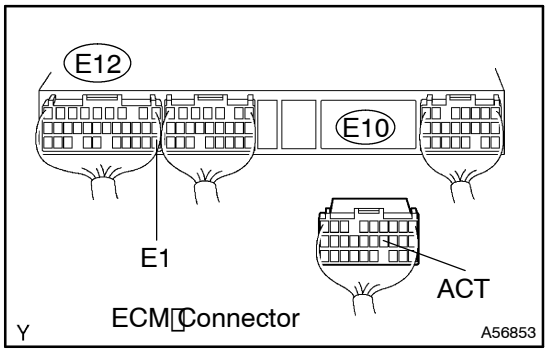
1	READ VALUE OF HAND–HELD TESTER(CHECK OPERATION A/C CUT CONTOROL)

(a) Connect the hand–held tester to the DLC3.
(b) Start the engine and air conditioning switch ON.
HINT:
A/C magnetic clutch is turned ON.
(c) Select the ACTIVE TEST mode on the hand–held tester.
(d) Check operation of A/C magnetic clutch cut when air conditioning cut control is operated by the hand–held tester.
Result: A/C magnet clutch is turned OFF.

OK	PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE (See page 05–316)

NG

2	CHECK HARNESS AND CONNECTOR(ECM – A/C CONTROL ASSEMBLY)



(a) Disconnect the A/C control assembly A21 connector. (See page 55–47)
(b) Disconnect the ECM E10 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A21 – 8) (Terminal arrangement on 55–2) ⇔ ACT (E10 – 13)	Continuity

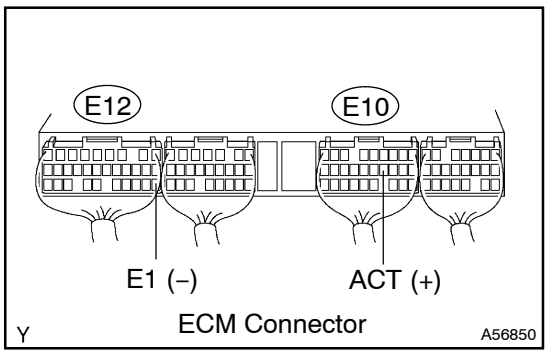
Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E10 – 13) ⇔ E1 (E12 – 22)	No continuity

NG	REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3	INSPECT ECM(CHECK VOLTAGE)



(a) Start the engine.
(b) Measure the voltage between the terminals of ECM connector.

Voltage:

Symbols (Terminal No.)	A/C switch condition	Specified condition
ACT (E10 – 13) ⇔ E1 (E12 – 22)	Engine at idling	9 – 14 V
	IG ON Engine stop	0 – 3 V

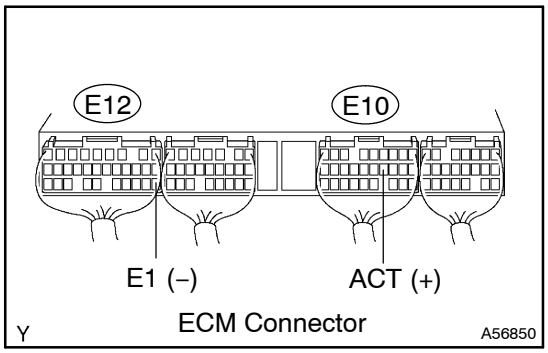
NG → **CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY**

OK

CHECK AND REPLACE ECM

When not using Hand–held Tester:

1	INSPECT ECM(CHECK VOLTAGE)



(a) Start the engine.
(b) Measure the voltage between the terminals of ECM connector.

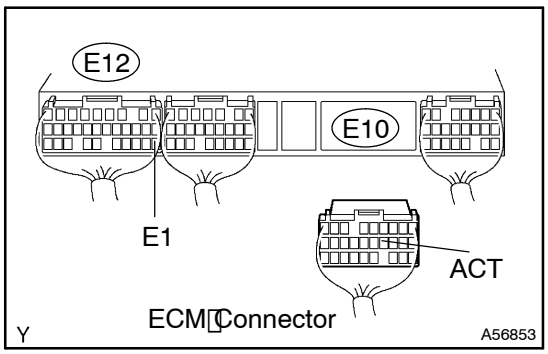
Voltage:

Symbols (Terminal No.)	A/C switch condition	Specified condition
ACT (E10 – 13) ⇔ E1 (E12 – 22)	Engine at idling	9 – 14 V
	IG ON Engine stop	0 – 3 V

OK → **CHECK AND REPLACE ECM**

NG

2	CHECK HARNESS AND CONNECTOR (ECM – A/C CONTROL ASSEMBLY)



(a) Disconnect the A/C control assembly A21 connector. (See page 55–47)

(b) Disconnect the ECM E10 connector.

(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A21 – 8) (Terminal arrangement on 55–2) ⇔ ACT (E10 – 13)	Continuity

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E10 – 13) ⇔ E1 (E12 – 22)	No continuity

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY