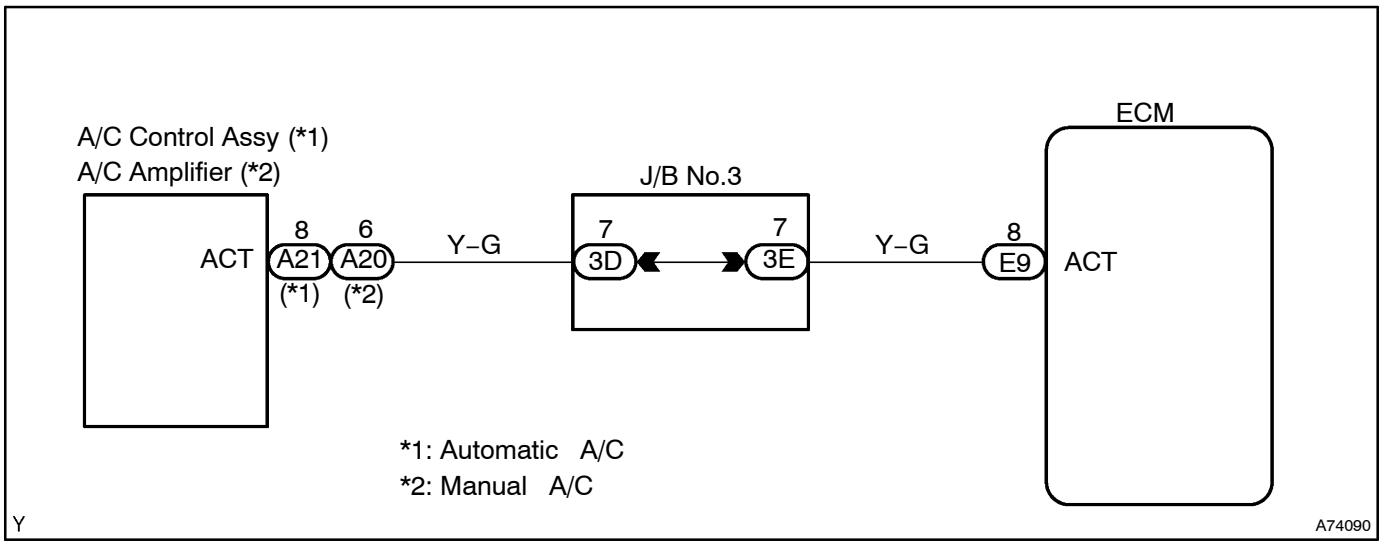
A/C CUT CONTROL CIRCUIT

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 amplifier.

WIRING DIAGRAM



INSPECTION PROCEDURE

When using Hand–held Tester:

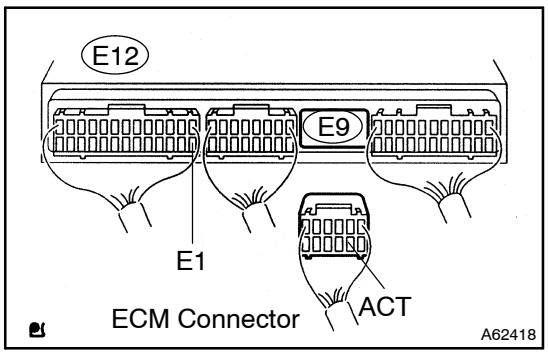
1	**READ VALUE OF HAND–HELD TESTER(CHECK OPERATION A/C CUT CONTOROL)**

(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 05–210)

NG

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



(a) Disconnect the A/C amplifier A20 connector.
(See page 55–127)
(b) Disconnect the ECM E9 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A20 – 6) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 8)	Continuity

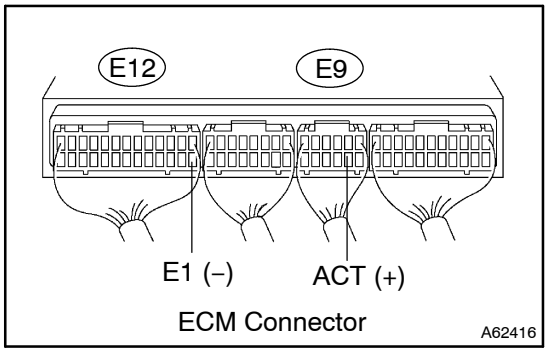
Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E9 – 8) ⇔ E1 (E12 – 14)	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 (E9 – 8) ⇔ E1 (E12 – 14)	Engine at idling	9 – 14 V
	IG ON Engine stop	0 – 3 V

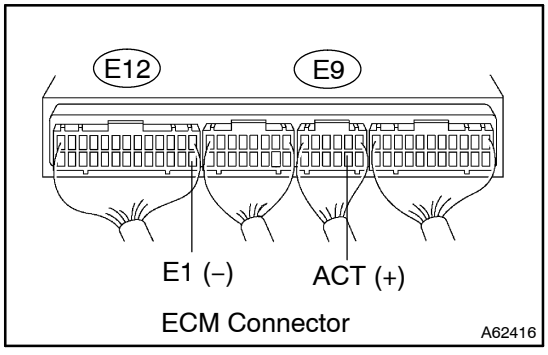
NG → **CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY**

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.

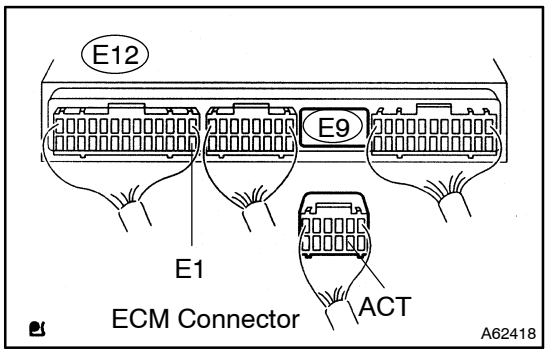
Voltage:

Symbols (Terminal No.)	A/C switch condition	Specified condition
ACT (E9 – 8) ⇔ E1 (E12 – 14)	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 AMPLIFIER)



(a) Disconnect the A/C amplifier A20 connector.
(See page 55–127)
(b) Disconnect the ECM E9 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A20 – 6) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 8)	Continuity

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E9 – 8) ⇔ E1 (E12 – 14)	No continuity

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY