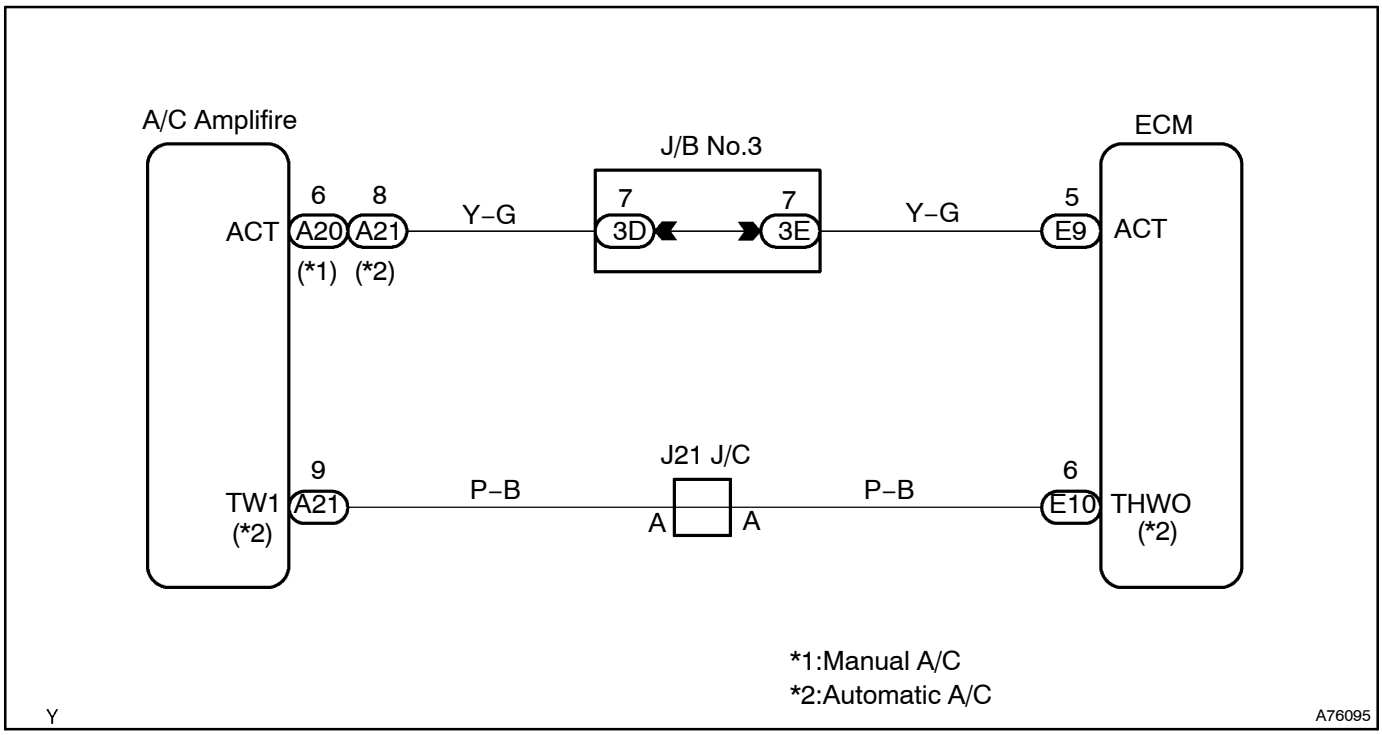
A/C CUT CONTROL CIRCUIT

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:

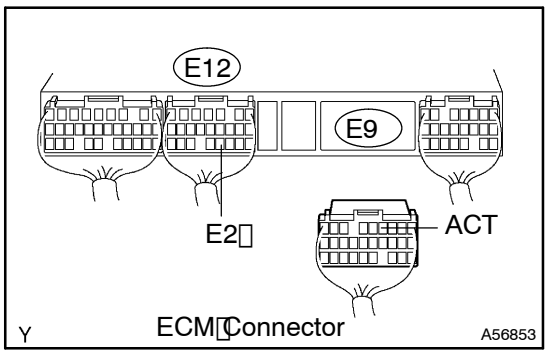
1	HAND–HELD TESTER(CHECK OPERATION A/C CUT CONTOROL)

(a) Start the engine and air conditioning switch ON.
HINT:
A/C magnetic clutch is turned ON.
(b) Select the ACTIVE TEST mode on the hand–held tester.
(c) 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 05–443)**

NG

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



(a) Disconnect the A/C amplifier A20 connector (Manual A/C) (See page 55–127).
(b) Disconnect the A/C amplifter A21 connector (Automatic A/C) (See page 55–47).
(c) Disconnect the ECM E9 connector.
(d) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A20 – 6) (Manual A/C) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 5)	Continuity
ACT (A21 – 6) (Automatic A/C) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 5)	

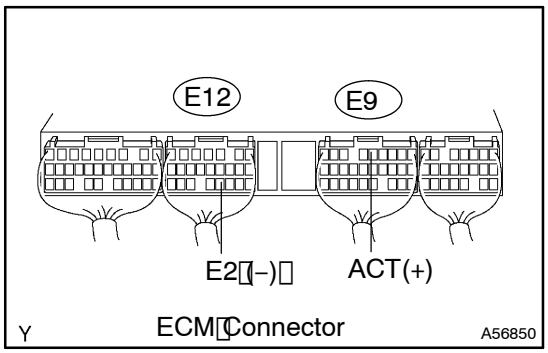
Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E9 – 5) ⇔ E2 (E12 – 20)	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 the ECM E12 and E9 connector.

Voltage:

Symbols (Terminal No.)	Specified condition
ACT (E9 – 5) ⇔ E2 (E12 – 20)	9 – 14 V

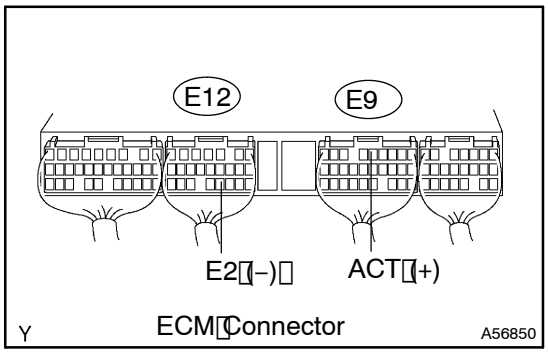
NG → **CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY**

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 the ECM E9 and E12 connector.

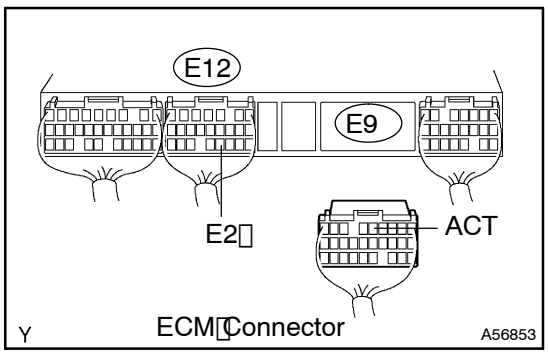
Voltage:

Symbols (Terminal No.)	Specified condition
ACT (E9 – 5) ⇔ E2 (E12 – 20)	9 – 14 V

OK ⇒ CHECK AND REPLACE ECM

NG

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



(a) Disconnect the A/C amplifier A20 connector (Manual A/C) (See page 55–127).
(b) Disconnect the A/C amplifter A21 connector (Automatic A/C) (See page 55–47).
(c) Disconnect the ECM E9 connector.
(d) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
ACT (A20 – 6) (Manual A/C) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 5)	Continuity
ACT (A21 – 6) (Automatic A/C) (Terminal arrangement on 55–2) ⇔ ACT (E9 – 5)	

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
ACT (E9 – 5) ⇔ E2 (E12 – 20)	No continuity

NG ⇒ REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER ASSY