

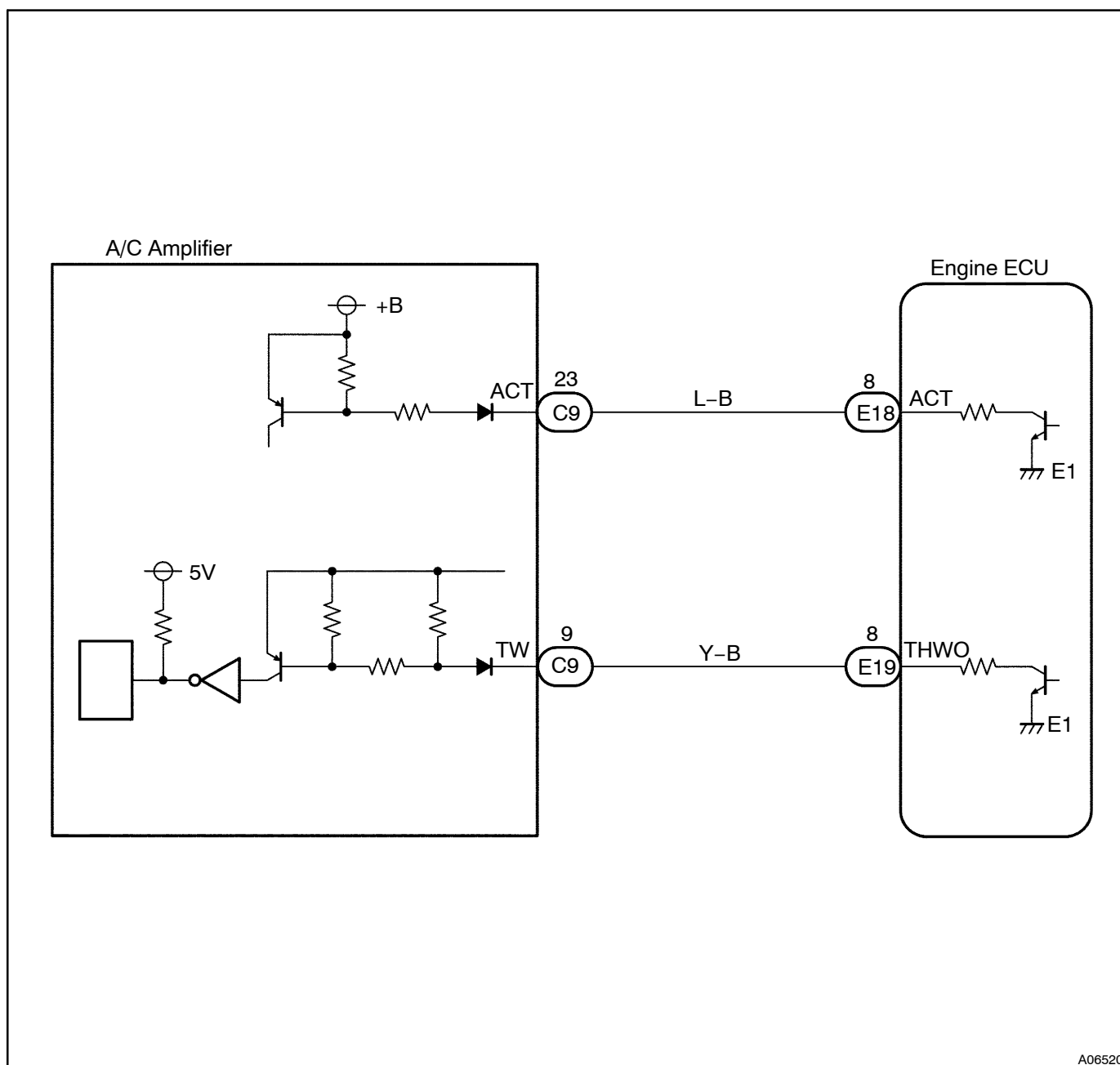
A/C Cut Control Circuit

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 ECU out putting the engine coolant temperature to A/C amplifier.

WIRING DIAGRAM



INSPECTION PROCEDURE

When using hand-held tester

1	Connect the hand-held tester and check operation of air conditioning cut control.
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PREPARATION:

- (a) Connect the hand held tester to the DLC3.
- (b) Turn the ignition switch ON and push the hand-held tester main switch ON.
- (c) Start the engine and air conditioning switch ON.

HINT:

A/C magnetic clutch is turned ON.

- (d) Select the ACTIVE TEST mode on the hand-held tester.

CHECK:

Check operation of A/C magnetic clutch cut when air conditioning cut control is operated by the hand-held tester.

OK:

A/C magnet clutch is turned OFF.

OK

Proceed to next circuit inspection shown on problem symptoms table ([See page DI-19](#)).

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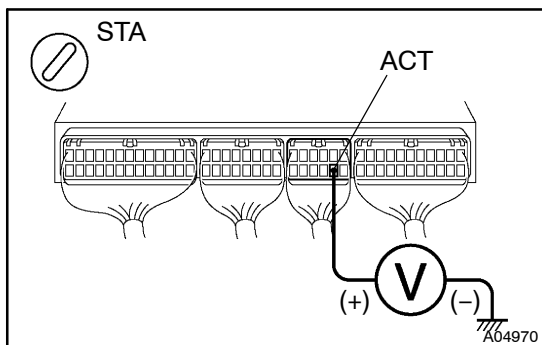
2	Check for open and short in harness and connector between engine ECU and A/C amplifier (See page IN-19).
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Repair or replace harness or connector.

OK

3 Check voltage between terminal ACT of engine ECU and body ground.



PREPARATION:

- Remove the glove compartment door.
- Start the engine.

CHECK:

Measure voltage between terminal ACT of engine ECU connector and body ground when A/C switch is turned to ON and OFF.

OK:

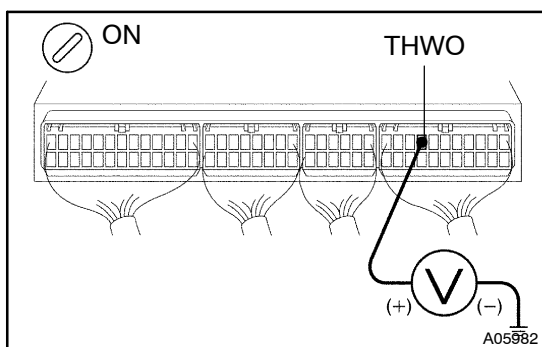
A/C switch condition	Voltage
ON	9 - 14 V
OFF	0 - 3 V

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Check and replace A/C amplifier.

OK

4 Check voltage between terminal THWO of engine ECU and body ground.



PREPARATION:

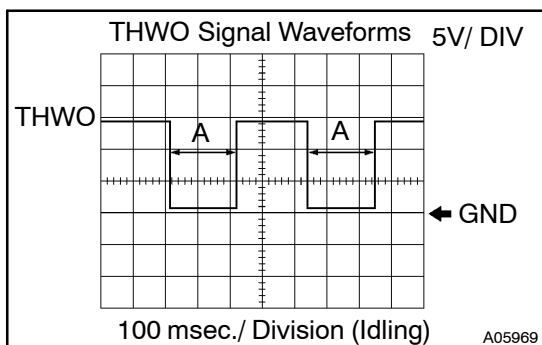
- Remove the glove compartment door.
- Turn the ignition switch ON.

CHECK:

Measure voltage between terminal THWO of engine ECU and body ground.

OK:

Voltage is generated intermittently.



Reference: INSPECTION USING OSCILLOSCOPE

During idling, check waveform between terminals THWO and E1 of engine ECU.

HINT:

The correct waveform is as shown.

Water temp.	30°C or less	Approx. 75°C	90°C or more
A	65 msec.	335.8 msec.	393 msec.

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Check and replace A/C amplifier.

OK

Check and replace engine ECU ([See page IN-19](#)).

When not using hand-held tester

- | | |
|---|--|
| 1 | Check voltage between terminal ACT of engine ECU and body ground (See page DI-96 , Step 3). |
|---|--|

OK

Check and replace engine ECU ([See page IN-19](#)).

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- | | |
|---|---|
| 2 | Check voltage between terminal THWO of engine ECU and body ground (See page DI-96 , Step 4). |
|---|---|

OK

Check and replace engine ECU ([See page IN-19](#)).

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- | | |
|---|--|
| 3 | Check for open and short in harness and connector between engine ECU and A/C amplifier (See page IN-19). |
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Repair or replace harness or connector.

OK

Check and replace A/C amplifier.