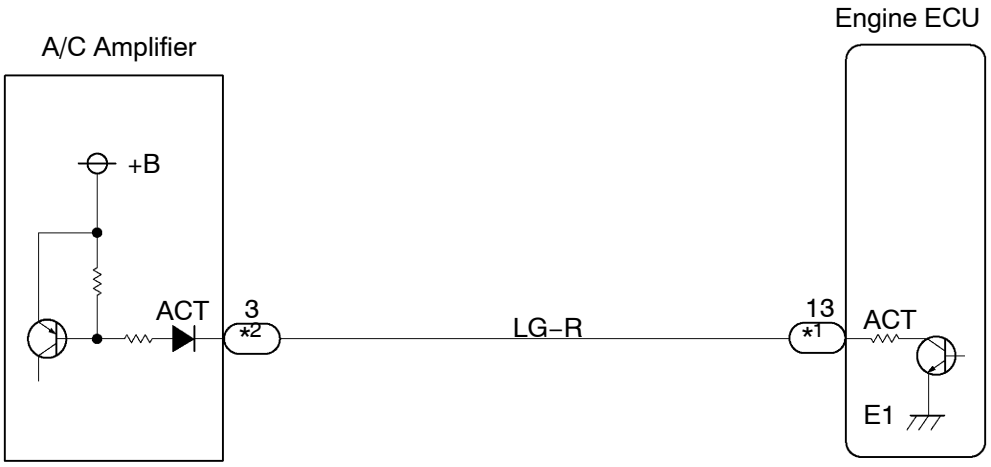
DI8FS–01

A/C Cut Control Circuit

CIRCUIT DESCRIPTION

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

WIRING DIAGRAM



*2
A19 (Hilux)
A36 (4Runner)
A17 (Land Cruiser/Land Cruiser Prado)

*1
E6 (Hilux)
E17 (4Runner)
E7 (Land Cruiser/Land Cruiser Prado)

A05395

INSPECTION PROCEDURE

When using hand–held tester:

1	**Connect hand–held tester, and check operation of air conditioning cut control.**

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 turn the A/C switch ON.

HINT:

A/C magnetic clutch is turned ON.

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

CHECK:

Check the operation of the A/C magnetic clutch cut when the A/C 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–24).**

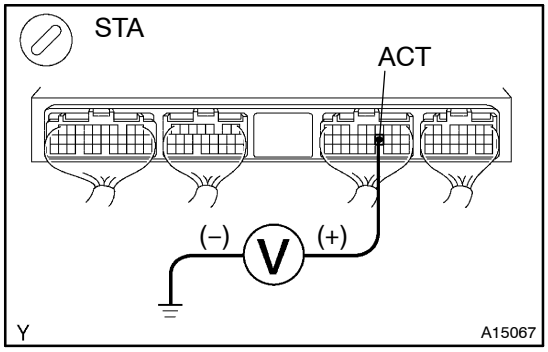
NG

2	**Check for open and short in harness and connector between engine ECU and A/C amplifier (See page IN–20).**

NG → **Repair or replace harness or connector.**

OK

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



PREPARATION:

(a) Remove the glove compartment door.
(b) Start the engine.

CHECK:

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

OK:

A/C Switch Condition	Voltage
ON	9 – 14 V
OFF	0 – 3 V

NG → **Check and replace A/C amplifier.**

OK

Check and replace engine ECU (See page IN–20).

When not using hand–held tester:

1	**Check voltage between terminal ACT of engine ECU connector and body ground (See page DI–128, step 3).**

OK → **Check and replace engine ECU (See page IN–20).**

NG

2	**Check for open and short in harness and connector between engine ECU and A/C amplifier (See page IN–20).**

NG → **Repair or replace harness or connector.**

OK

Check and replace A/C amplifier.