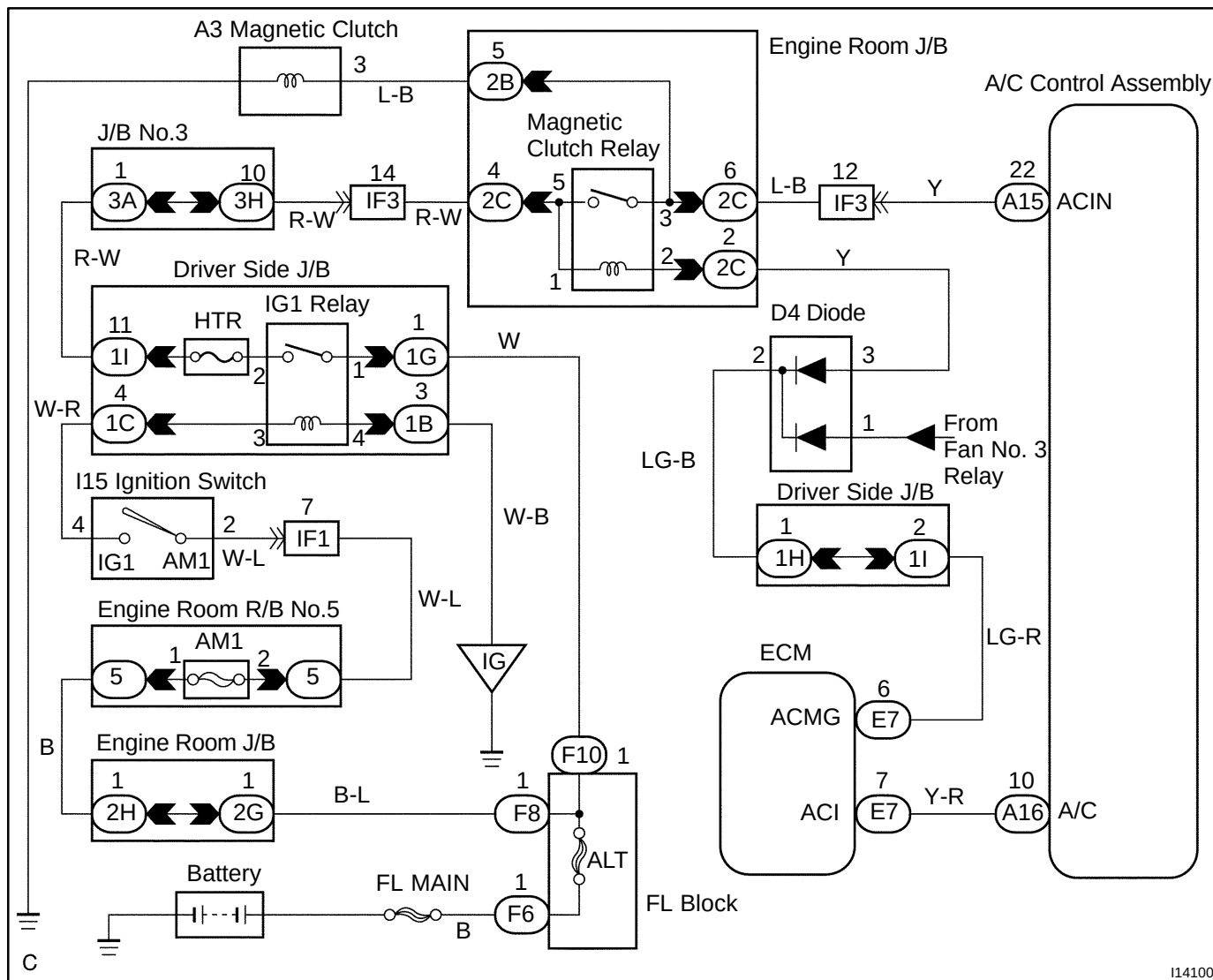


Compressor Circuit

CIRCUIT DESCRIPTION

The A/C control assembly outputs the magnetic clutch ON signal from terminal AC1 to the ECM. When the ECM receives this signal, it sends a signal from terminal ACON and switches the A/C magnetic clutch relay ON, thus turning on the A/C magnetic clutch.

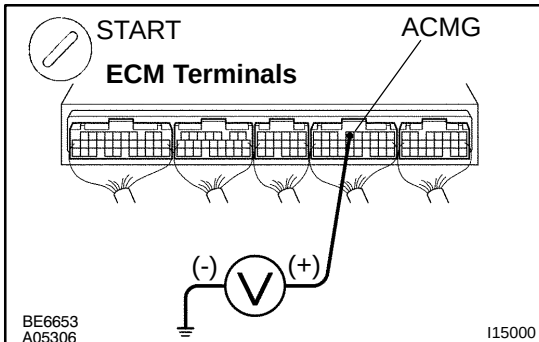
WIRING DIAGRAM



I14100

INSPECTION PROCEDURE

1 Check voltage between terminal ACMG of ECM and body ground.

**CHECK:**

- (a) Start engine.
- (b) Push AUTO SW.
- (c) Measure voltage between terminal ACMG of ECM connector and body ground when A/C switch is On and OFF.

OK:

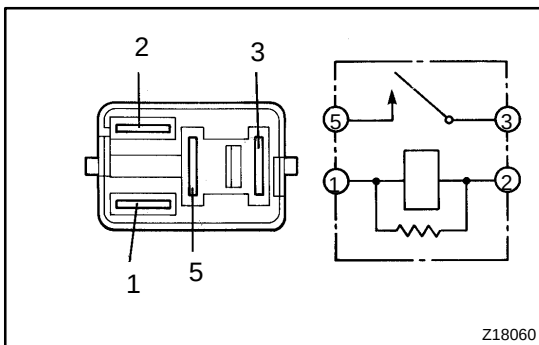
A/C switch	Voltage
ON	10 - 14 V
OFF	0 V

NG

Go to step 5.

OK

2 Check magnetic clutch relay.

**PREPARATION:**

Remove magnetic clutch relay from engine room J/B.

CHECK:

Check continuity between each pair of terminals shown below of magnetic clutch relay.

OK:

Tester connection	Specified condition
1 - 2	62.5 - 90.9 Ω
3 - 5	No continuity

PREPARATION:

Apply battery positive (+) voltage between terminals 1 and 2.

CHECK:

Check continuity between terminals 3 and 5.

OK:

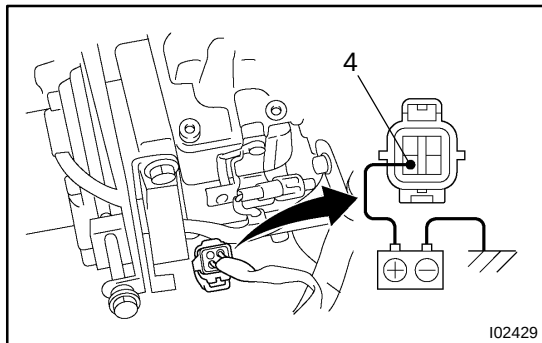
Continuity exists.

NG

Replace magnetic clutch relay.

OK

3 Check A/C magnetic clutch.



PREPARATION:

Disconnect magnetic clutch connector.

CHECK:

Connect positive (+) lead connected to battery to magnetic clutch connector terminal 3.

OK:

Magnetic clutch is energized.

NG

Repair A/C magnetic clutch.

OK

4 Check harness and connector between magnetic clutch relay and ECM, A/C compressor and body ground (See page [IN-31](#)).

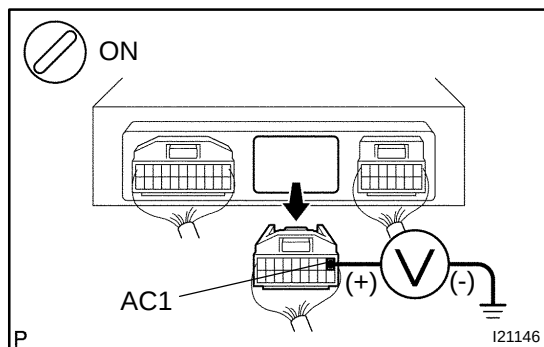
NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page [DI-697](#)).

5 Check voltage between terminal AC1 of A/C control assembly connector side and body ground.



PREPARATION:

(a) Disconnect A/C control assembly connector.

(b) Turn ignition switch ON.

CHECK:

Check voltage between terminal AC1 of A/C control assembly harness side connector.

OK:

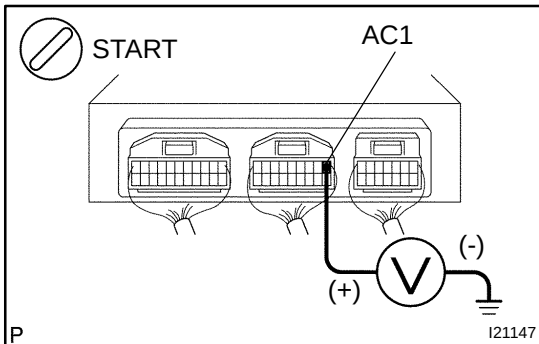
Voltage : 10 - 14 V

NG

Check and replace ECM.

OK

6 Check voltage between terminal AC1 of A/C control assembly connector and body ground.



PREPARATION:

- Remove A/C control assembly with connector still connected.
- Start the engine and push AUTO switch.

CHECK:

Check the voltage between terminal AC1 of A/C control assembly connector and body ground when magnetic clutch is ON and OFF by A/C switch.

OK:

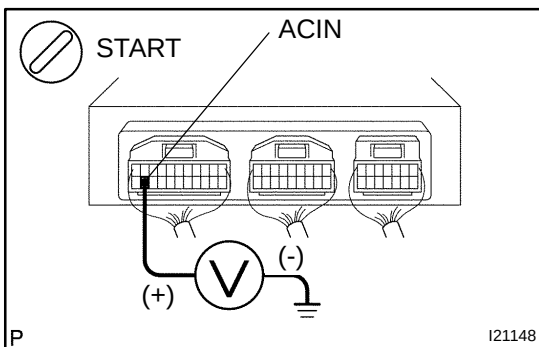
Magnetic clutch	Voltage
ON	Below 1 V
OFF	10 - 14 V

NG

Check and replace A/C control assembly.

OK

7 Check voltage between terminal ACIN of A/C control assembly and body ground.



PREPARATION:

- Remove A/C control assembly with connectors still connected.
- Start the engine and push AUTO switch.

CHECK:

Check the voltage between terminal ACIN of A/C control assembly and body ground.

OK:

Magnetic clutch	Voltage
ON	10 - 14 V
OFF	Below 1.5 V

NG

Check and replace A/C control assembly.

OK

8	Check harness and connector between magnetic clutch relay and A/C control assembly, compressor and body ground (See page IN-21).
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NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page [DI-697](#)).