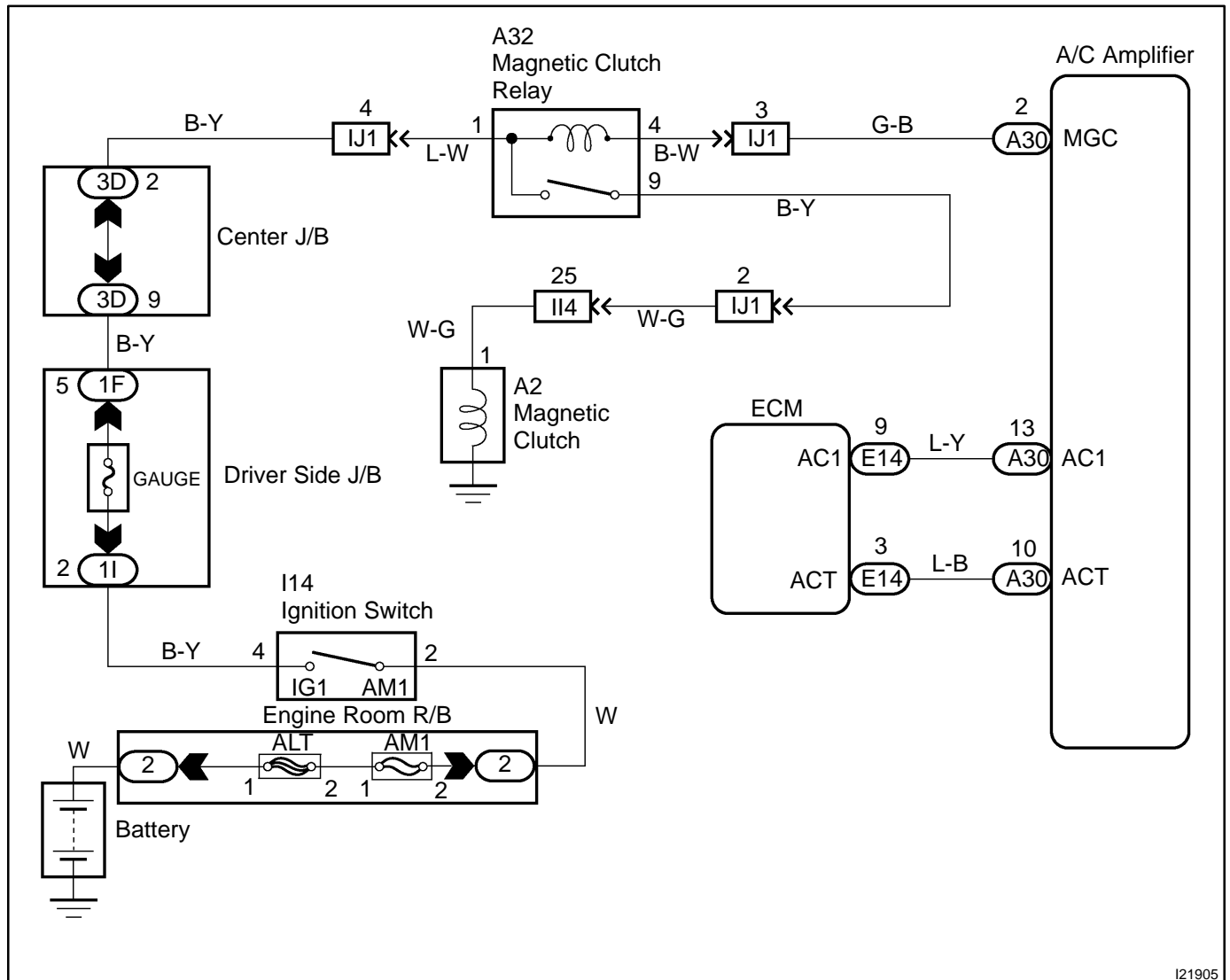


Compressor Circuit

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 ACT and switches the A/C magnetic clutch relay ON, thus turning on the A/C magnetic clutch.

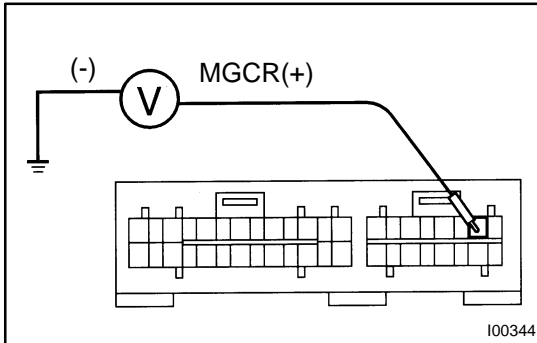
WIRING DIAGRAM



I21905

INSPECTION PROCEDURE

- 1 Check voltage between terminal MGC of A/C control assembly connector and body ground.**

**PREPARATION:**

- (a) Remove A/C control assembly with connectors still connected (See page AC-84).
 (b) Start the engine and push AUTO switch.

CHECK:

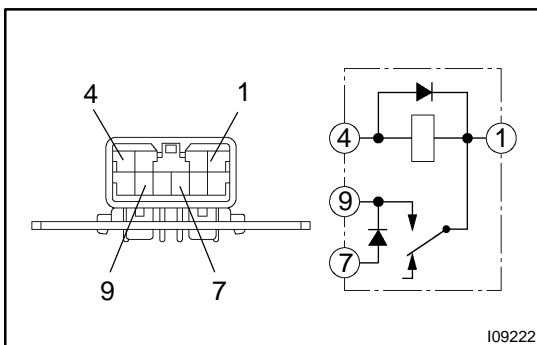
Check voltage between terminal MGC of A/C control assembly connector and body ground when magnetic clutch is ON and OFF by A/C switch.

OK:

A/C switch	Voltage
ON	Below 1 V
OFF	10 - 14 V

NG**Go to step 5.****OK**

- 2 Check magnetic clutch relay.**

**PREPARATION:**

Remove magnetic clutch relay from cooling unit (See page AC-28).

CHECK:

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

OK:

Tester connection	Specified condition
1 - 4	62.5 - 90.9 Ω
7 - 9	Continuity

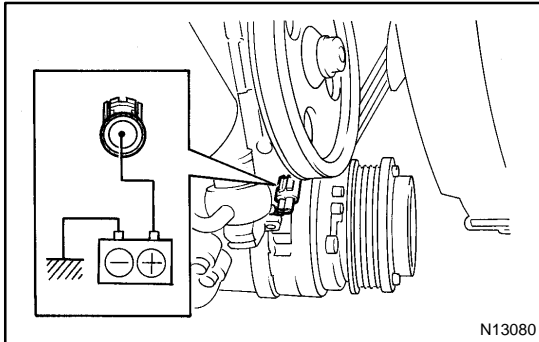
PREPARATION:

Apply battery positive (+) voltage between terminals 1 and 4.

CHECK:

Check continuity between terminals 1 and 9.

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 and negative (-) lead connected to battery to body ground.

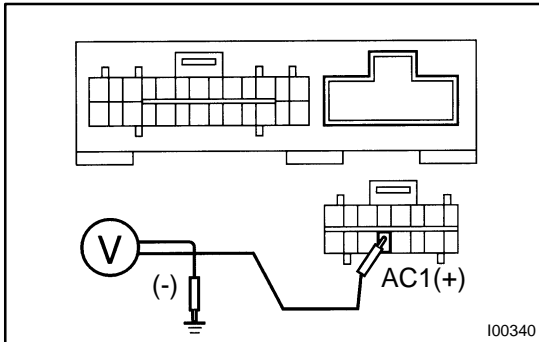
OK:

Magnetic clutch is energized.

NG**Repair A/C magnetic clutch.****OK****4 Check harness and connector between magnetic clutch relay and A/C compressor, A/C compressor and body ground (See page [IN-28](#)).****NG****Repair or replace harness or connector.****OK**

Proceed to next circuit inspection shown on problem symptoms table (See page [DI-586](#)).

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



PREPARATION:

- (a) Disconnect A/C control connector.
- (b) Ignition switch to ON.

CHECK:

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

OK:

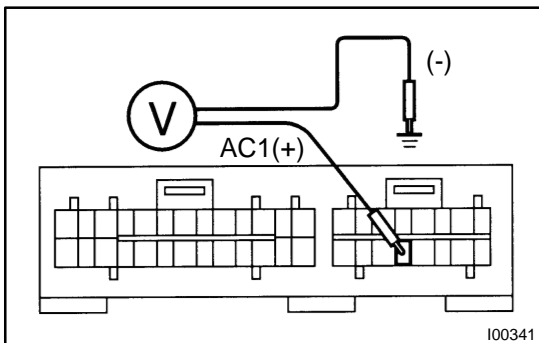
Voltage : 10 - 14 V

NG

Check and replace ECM.

OK

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



PREPARATION:

- (a) Remove A/C control assembly with connector still connected (See page [AC-84](#)).
- (b) 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

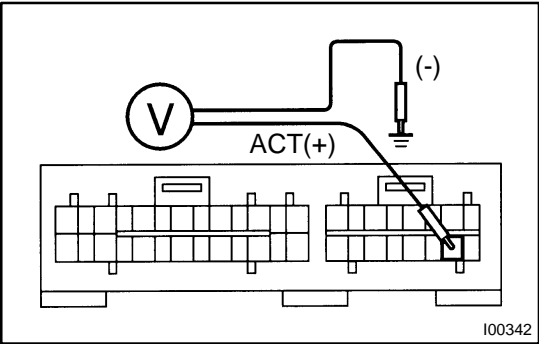
NG

Check and replace A/C control assembly.

OK

7

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



PREPARATION:

- (a) Remove A/C control assembly with connectors still connected (See page AC-84).
- (b) Start the engine and push AUTO switch.

CHECK:

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

OK:

A/C switch	Voltage
ON	10 - 14 V
OFF	Below 1.5 V

NG

Check and replace ECM.

OK

8

Check voltage between terminal ACT of ECM connector and body ground (See page DI-18).

NG

Check and replace ECM.

OK

9

Check harness and connector between A/C control assembly and ECM (See page IN-28).

NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on problem symptoms table (See page DI-586).