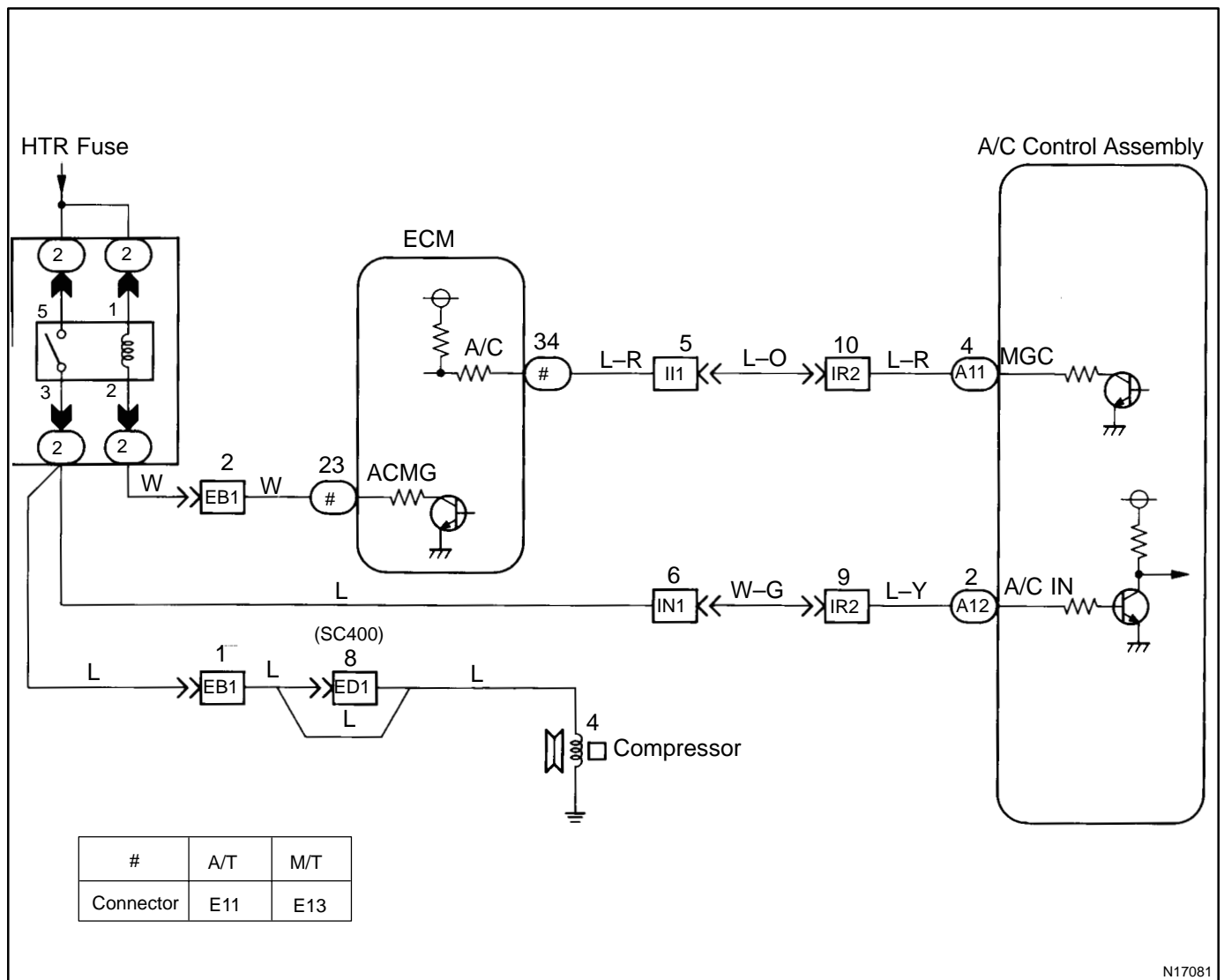


Compressor Circuit

CIRCUIT DESCRIPTION

The air conditioning control assembly outputs the magnetic clutch ON signal from terminal MGC to the ECM. When the ECM receives this signal, it sends a signal from terminal ACMG and switches the air conditioning magnetic clutch relay on, thus turning on the air conditioning compressor magnetic clutch. The air conditioning control assembly also monitors at terminal A/C IN whether or not power is being supplied to the magnetic clutch.

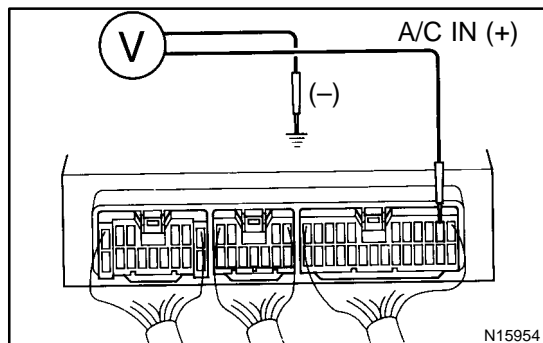
WIRING DIAGRAM



N17081

INSPECTION PROCEDURE

- | | |
|---|--|
| 1 | Check voltage between terminal A/C IN of air conditioning control assembly connector and body ground. |
|---|--|

**PREPARATION:**

- (a) Remove upper console panel.
- (b) Remove A/C control assembly with connectors still connected.
- (c) Start the engine.

CHECK:

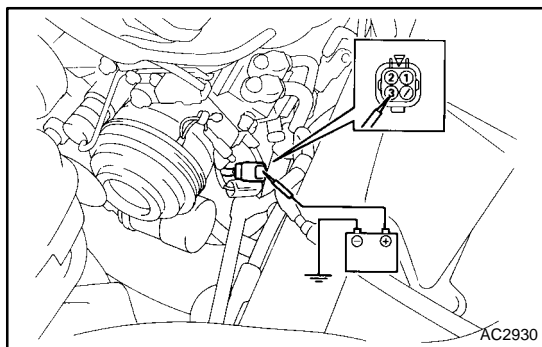
Check voltage between terminal A/C IN of air conditioning control assembly connector and body ground when magnetic clutch is on and off by A/C switch.

OK:

| Magnetic Clutch | Voltage |
|-----------------|-----------|
| ON | 10 – 14 V |
| OFF | Below 1 V |

NG**Go to step 4.****OK**

- | | |
|---|---|
| 2 | Check air conditioning compressor magnetic clutch. |
|---|---|

**PREPARATION:**

Disconnect magnetic clutch connector.

CHECK:

Connect positive \oplus lead from the battery to magnetic clutch connector terminal 3.

OK:

Magnetic clutch is energized.

NG**Repair air conditioning compressor magnetic clutch.****OK**

- 3** Check for open and short in harness and connector between air conditioning compressor and compressor relay (See page IN-29).

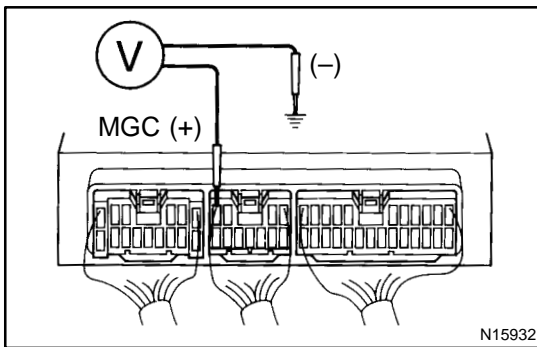
NG

Repair or replace harness or connector.

OK

Proceed to next circuit inspection shown on matrix chart (See page DI-821).

- 4** Check voltage between terminal MGC of air conditioning control assembly connector and body ground.



PREPARATION:

- Remove upper console panel.
- Remove A/C Control Assembly with connectors still connected.
- Start the engine.

CHECK:

Check voltage between terminal MGC of air conditioning control assembly connector and body ground when magnetic clutch is on and off by A/C switch.

OK:

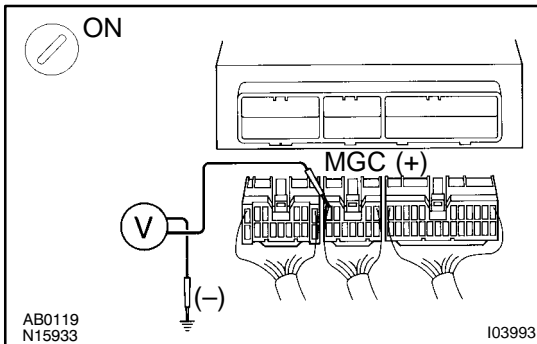
| Magnetic Clutch | Voltage |
|-----------------|-----------|
| ON | Below 1 V |
| OFF | 4 – 6 V |

OK

Go to step 7.

NG

5 Check voltage between terminals MGC of air conditioning control assembly harness side connector and body ground.



PREPARATION:

- (a) Disconnect air conditioning control assembly connector.
- (b) Turn ignition switch ON.

CHECK:

Check voltage between terminal MGC of air conditioning control assembly harness side connector and body ground.

OK:

Voltage: 4 – 6 V

OK

Check and replace air conditioning control assembly.

NG

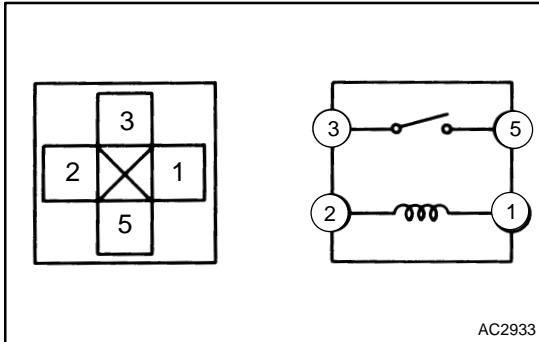
6 Check for open and short in harness and connector between air conditioning control assembly and ECM (See page [IN-29](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM.

7 Check magnetic clutch relay.**PREPARATION:**

Remove magnetic clutch relay from R/B No.2.

CHECK:

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

OK:

| | |
|-------------------|---------------------|
| Terminals 1 and 2 | Approx. 75 Ω |
| Terminals 3 and 5 | Open |

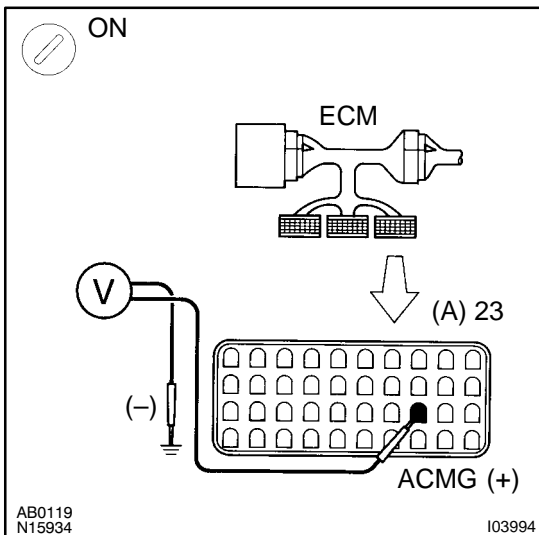
PREPARATION:

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

(b) Check continuity between terminals 3 and 5.

OK:

| | |
|-------------------|------------|
| Terminals 3 and 5 | Continuity |
|-------------------|------------|

NG**Replace magnetic relay.****OK****8 Check voltage between terminal ACMG of ECM and body ground.****PREPARATION:**

(a) Remove ECM with connectors still connected.

(b) Turn ignition switch on.

CHECK:

(a) Push one of the fan speed control switches (Lo, Med or Hi).

(b) Measure voltage between terminal ACMG of ECM connector and body ground.

OK:

| A/C Switch | Voltage |
|------------|----------------------------------|
| ON | Approx. 1.3 V |
| OFF | Battery positive voltage – 1.3 V |

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

| | |
|---|---|
| 9 | Check for open and short in harness and connector between ECM and battery (See page IN-29). |
|---|---|

NG

Go to step 10.

OK

Check and replace ECM.

| | |
|----|--|
| 10 | Check for open and short in harness and connector between air conditioning control assembly and compressor relay, compressor relay and battery (See page IN-29). |
|----|--|

NG

Repair or replace harness or connector.

OK

Check and replace air conditioning control assembly.