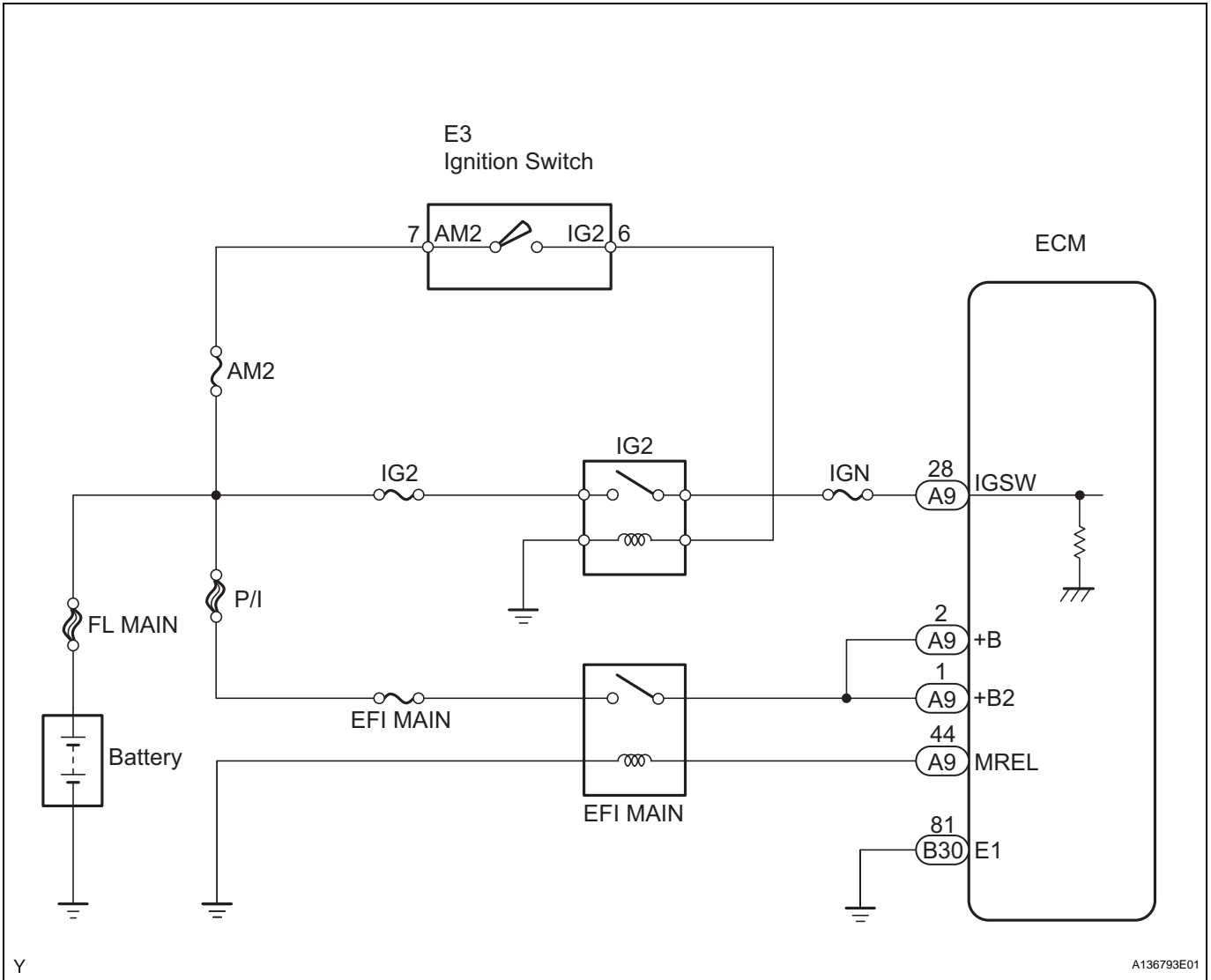


ECM Power Source Circuit

DESCRIPTION

When the ignition switch is turned ON, the battery voltage is applied to the IGSW of the ECM. The output signal from the MREL terminal of the ECM causes a current to flow to the coil, closing the contacts of the integration relay (EFI MAIN relay) and supplying power to either terminal +B or +B2 of the ECM.

WIRING DIAGRAM



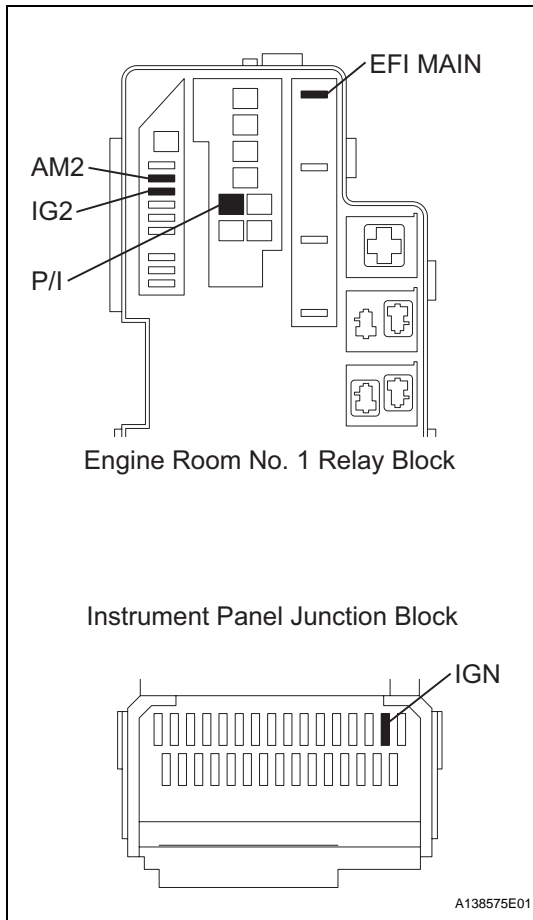
Y

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ES

INSPECTION PROCEDURE

1 INSPECT FUSES (P/I, AM2, IG2, EFI MAIN AND IGN)



- Remove the P/I fuse, AM2 fuse, IG2 fuse and EFI MAIN fuse from the engine room No. 1 relay block.
- Remove the IGN fuse from the instrument panel junction block.
- Measure the resistance of the fuses.
Standard resistance:
Below 1 Ω
- Reinstall the fuses.

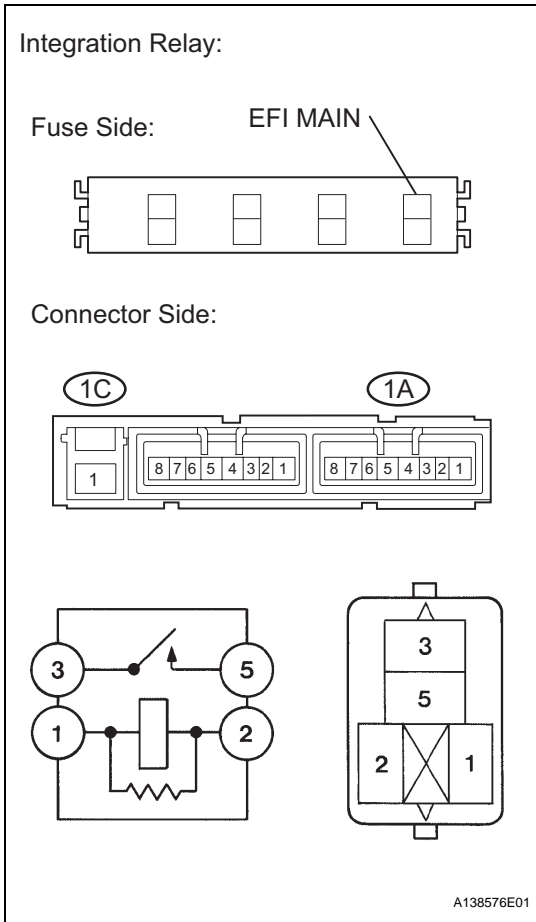
NG

CHECK FOR SHORT IN ALL HARNESSSES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE

OK

ES

2 INSPECT RELAY (IG2, EFI MAIN)



- (a) Remove the integration relay and IG2 relay from the engine room No. 1 relay block.
- (b) Measure the resistance between the terminals of the integration relay.

Standard resistance

Tester Connection	Specified Condition
1C-1 - 1A-4	10 kΩ or higher
	Below 1 Ω (When battery voltage is applied to terminals 1A-2 and 1A-3)

- (c) Measure the resistance between the terminals of the IG2 relay.

Standard resistance

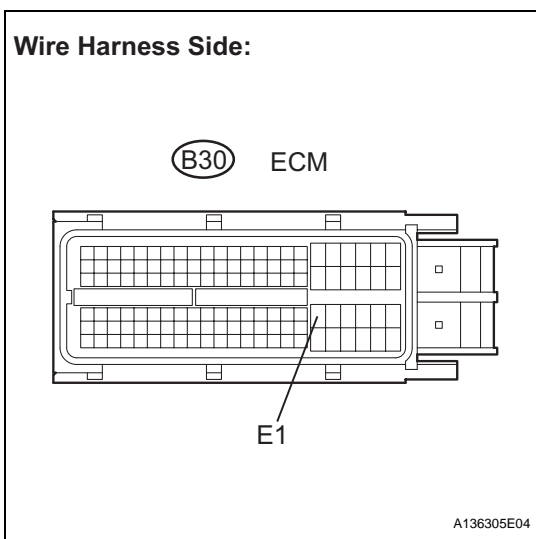
Tester Connection	Specified Condition
3 - 5	10 kΩ or higher
	Below 1 Ω (When battery voltage is applied to terminals 1 and 2)

- (d) Reinstall the relay.

NG → **REPLACE RELAY**

OK

3 CHECK WIRE HARNESS (ECM - BODY GROUND)



- (a) Disconnect the B30 ECM connector.
- (b) Measure the resistance.

Standard resistance

Tester Connection	Specified Condition
B30-81 (E1) - Body ground	Below 1 Ω

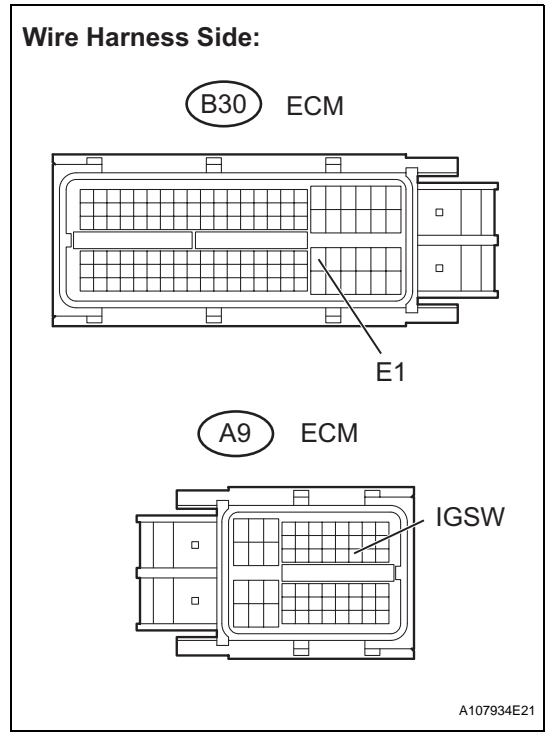
- (c) Reconnect the ECM connector.

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

ES

4 INSPECT ECM (IGSW VOLTAGE)



- (a) Disconnect the B30 and A9 ECM connectors.
- (b) Turn the ignition switch ON.
- (c) Measure the voltage between the terminals of the B30 and A9 ECM connectors.

Standard voltage

Tester Connection	Specified Condition
A9-28 (IGSW) - B30-81 (E1)	9 to 14 V

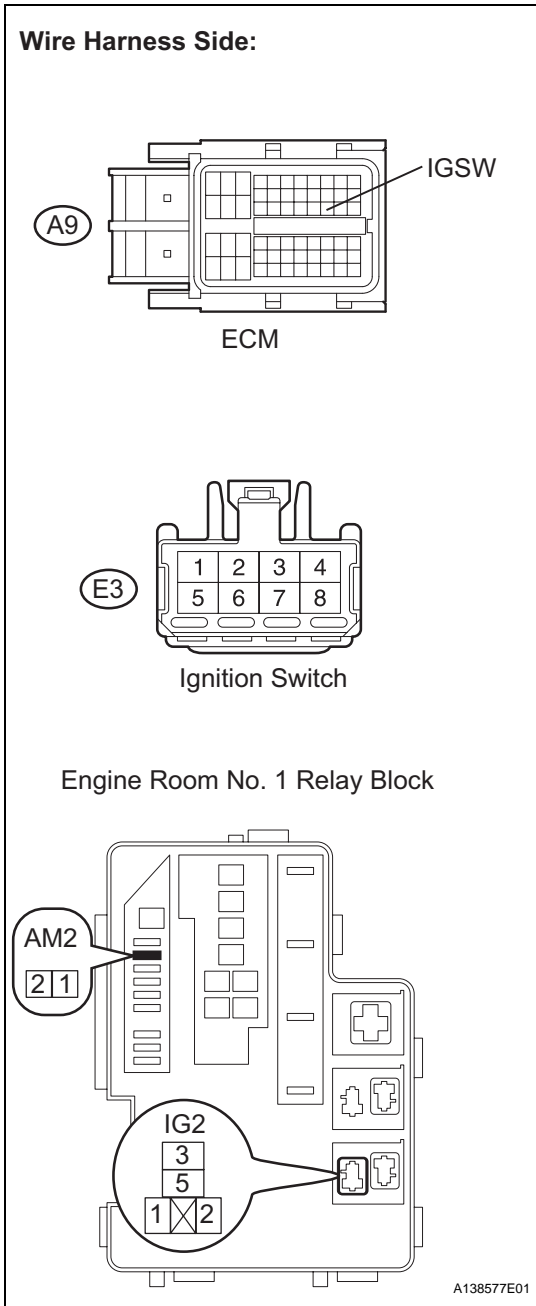
- (d) Reconnect the ECM connector.

OK → **REPLACE ECM**

NG

ES

5 CHECK WIRE HARNESS (RELAY BLOCK, ECM, IGNITION SWITCH, BATTERY)



- (a) Disconnect the A9 ECM connector.
- (b) Disconnect the E3 ignition switch connector.
- (c) Disconnect the cable from the battery positive terminal.
- (d) Remove the AM2 fuse and IG2 relay.
- (e) Measure the resistance between the terminals.

Standard resistance

Tester Connection	Specified Condition
A9-28 (IGSW) - IG2 relay terminal 5	Below 1 Ω
IG2 relay terminal 2 - Body ground	Below 1 Ω
Positive (+) battery cable - IG2 relay terminal 3	Below 1 Ω
Positive (+) battery cable - AM2 fuse terminal 1	Below 1 Ω
E3-7 (AM2) - AM2 fuse terminal 2	Below 1 Ω
E3-6 (IG2) - IG2 relay terminal 1	Below 1 Ω
A9-28 (IGSW) or IG2 relay terminal 5 - Body ground	10 kΩ or higher
Positive (+) battery cable or AM2 fuse terminal 1 - Body ground	10 kΩ or higher
Positive (+) battery cable or IG2 relay terminal 3 - Body ground	10 kΩ or higher
E3-7 (AM2) or AM2 fuse terminal 2 - Body ground	10 kΩ or higher
E3-6 (IG2) or IG2 relay terminal 1 - Body ground	10 kΩ or higher

- (f) Reinstall the relay and fuse.
- (g) Reconnect the connectors.

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

6 INSPECT IGNITION SWITCH (See page ES-303)

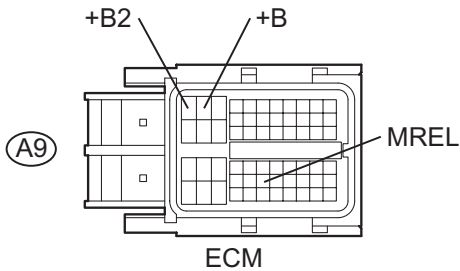
NG REPLACE IGNITION SWITCH

OK

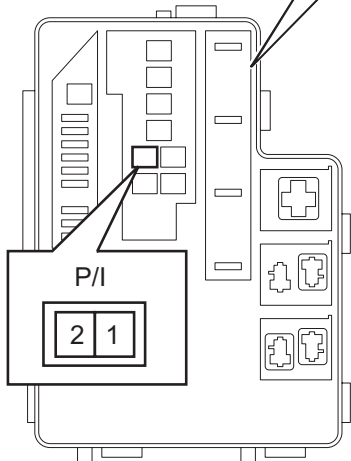
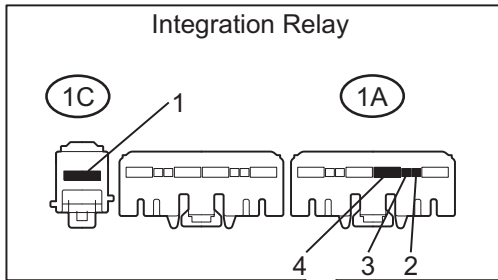
ES

7 CHECK WIRE HARNESS (INTEGRATION RELAY - ECM, BATTERY AND BODY GROUND)

Wire Harness Side:



Engine Room No. 1 Relay Block



A138578E01

- (a) Disconnect the A9 ECM connector.
- (b) Disconnect the cable from the battery positive terminal.
- (c) Remove the integration relay from the engine room No. 1 relay block.
- (d) Disconnect the integration relay connector.
- (e) Remove the P/I fuse from the engine room No. 1 relay block.
- (f) Measure the resistance between the terminals.

Standard resistance (Check for open)

Tester Connection	Specified Condition
A9-2 (+B) - 1A-4	Below 1 Ω
A9-1 (+B2) - 1A-4	Below 1 Ω
A9-44 (MREL) - 1A-2	Below 1 Ω
P/I fuse terminal 2 - 1C-1	Below 1 Ω
P/I fuse terminal 1 - Positive (+) battery cable	Below 1 Ω
1A-3 - Body ground	Below 1 Ω
A9-2 (+B) or 1A-4 - Body ground	10 kΩ or higher
A9-1 (+B2) or 1A-4 - Body ground	10 kΩ or higher
A9-44 (MREL) or 1A-2 - Body ground	10 kΩ or higher
P/I fuse terminal 2 or 1C-1 - Body ground	10 kΩ or higher
P/I fuse terminal 1 or Positive (+) battery cable - Body ground	10 kΩ or higher

- (g) Reconnect the connectors.
- (h) Reconnect the cable to the battery positive terminal.
- (i) Reinstall the integration relay and P/I fuse.

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPAIR OR REPLACE ENGINE ROOM NO. 1 RELAY BLOCK

ES