ECM Power Source Circuit

DESCRIPTION

When the ignition switch is turned ON, battery voltage is applied to terminal IGSW of the ECM. The ECM "MREL" output signal causes current to flow to the coil, closing the contacts of the EFI relay (marked: EFI) and supplying power to terminal +B of the ECM.
If the ignition switch is turned OFF, the ECM holds the EFI relay ON for a maximum of 2 seconds to allow the initial setting of the throttle valve.

WIRING DIAGRAM

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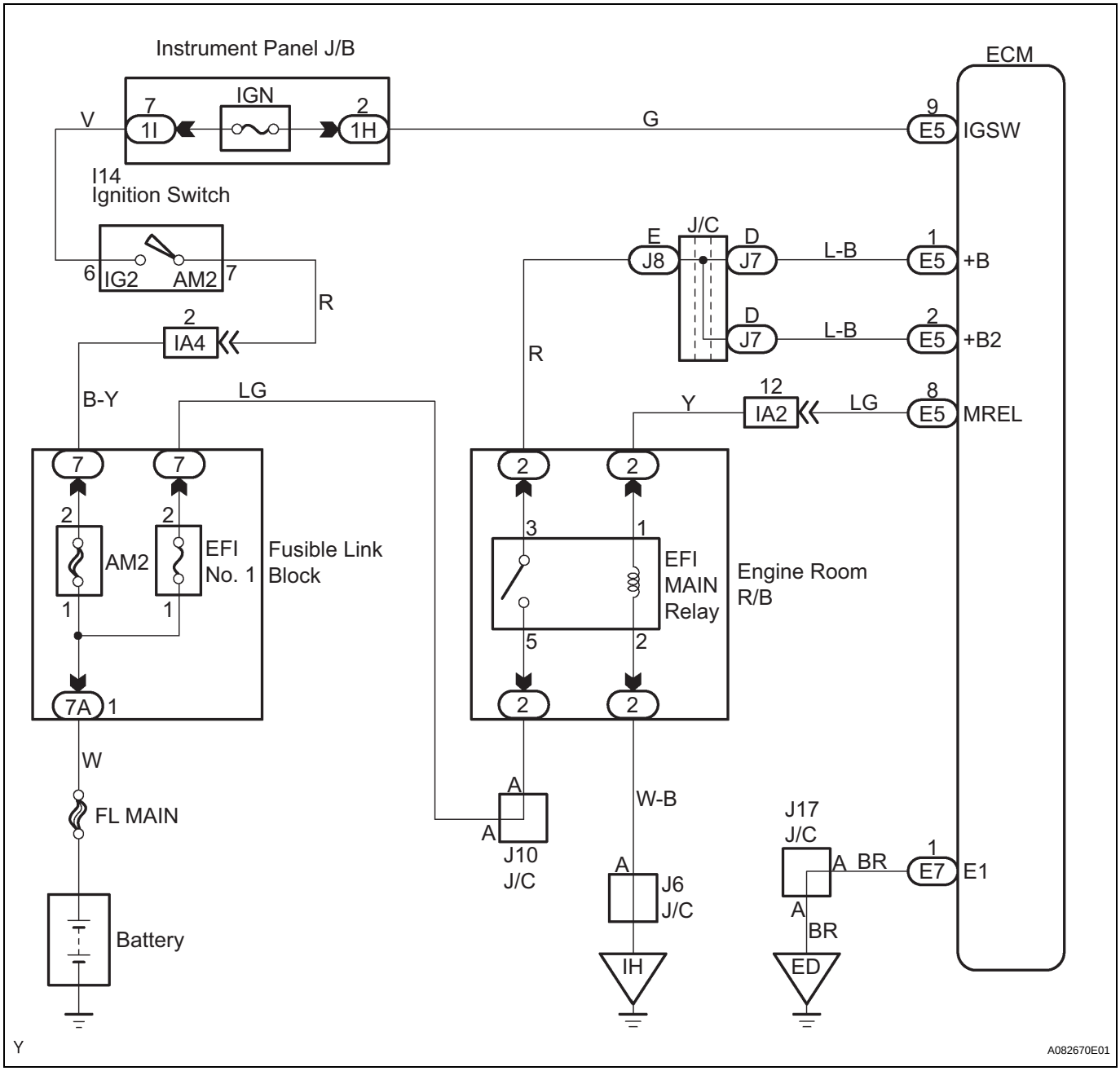
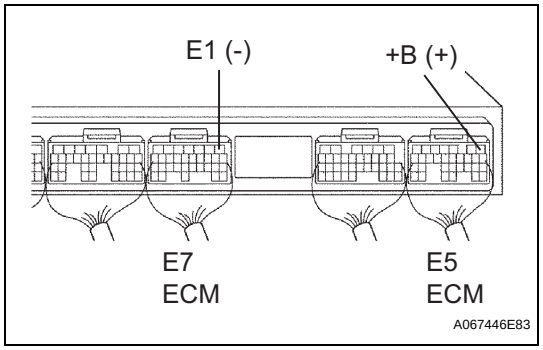


1 INSPECT ECM (+B VOLTAGE)



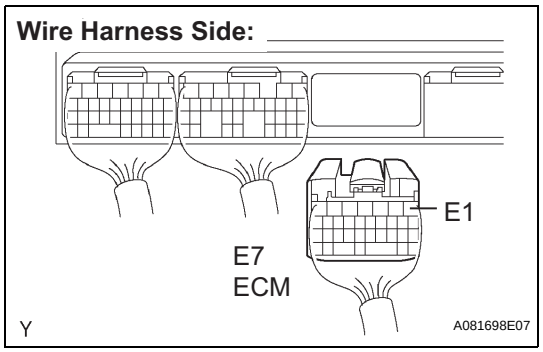
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard voltage

Tester Connection	Specified Condition
E5-1 (+B) - E7-1 (E1)	9 to 14 V

OK → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE**

NG

2 CHECK HARNESS AND CONNECTOR (ECM - BODY GROUND)



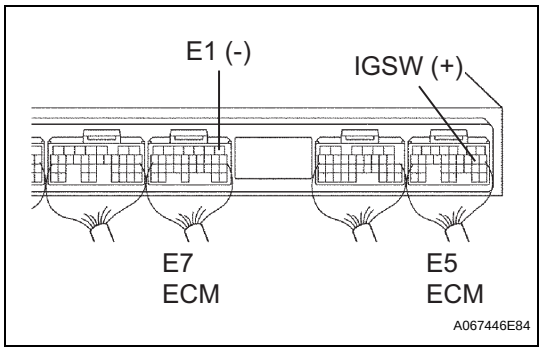
(a) Disconnect the E7 ECM connector.
(b) Measure the resistance of the wire harness side connectors.
Standard resistance

Tester Connection	Specified Condition
E7-1 (E1) - Body ground	Below 1 Ω

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

OK

3 INSPECT ECM (IGSW VOLTAGE)



(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard voltage

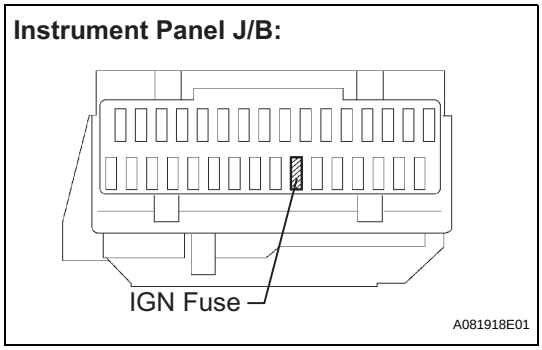
Tester Connection	Specified Condition
E5-9 (IGSW) - E7-1 (E1)	9 to 14 V

OK → **Go to step 6**

NG

ES

4	CHECK IGN FUSE

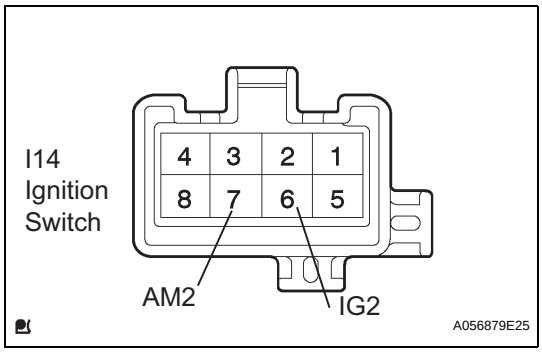


(a) Remove the IGN fuse from the instrument panel J/B.
(b) Measure the resistance of the IGN fuse.
Standard resistance:
Below 1 Ω

NG → **REPLACE IGN FUSE**

OK

5	INSPECT IGNITION OR STARTER SWITCH ASSEMBLY



(a) Measure the resistance of the switch terminals shown in the chart below.
Standard resistance

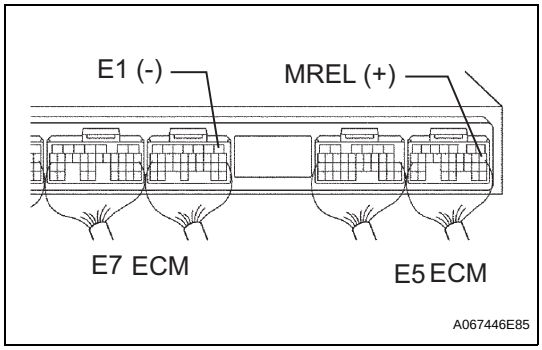
Tester Connection	Switch Condition	Specified Condition
6 (IG2) - 7 (AM2)	LOCK	10 kΩor higher
6 (IG2) - 7 (AM2)	ON	Below 1 Ω

NG → **REPLACE IGNITION OR STARTER SWITCH ASSEMBLY**

OK

CHECK AND REPLACE HARNESS AND CONNECTOR (BATTERY - IGNITION SWITCH, IGNITION SWITCH - ECM)

6	INSPECT ECM (MREL VOLTAGE)



(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard voltage

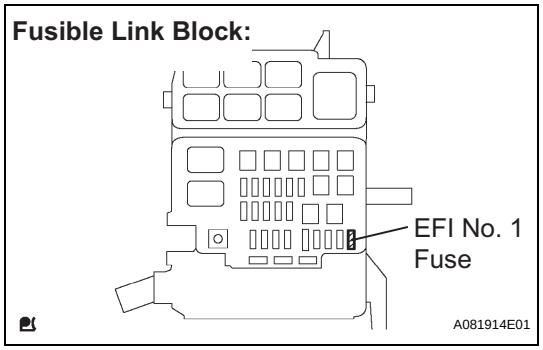
Tester Connection	Specified Condition
E5-8 (MREL) - E7-1 (E1)	9 to 14 V

NG → **REPLACE ECM**

OK

ES

7	CHECK EFI NO.1 FUSE

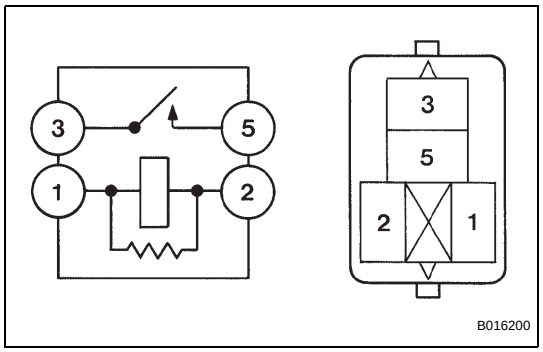


(a) Remove the EFI No. 1 fuse from the fusible link block.
(b) Measure the resistance of the EFI No. 1 fuse.
Standard resistance:
Below 1 Ω
(c) Install the EFI NO. 1 fuse.

NG → **REPLACE EFI NO.1 FUSE**

OK

8	INSPECT EFI MAIN RELAY



(a) Remove the EFI MAIN relay from the engine room R/B.
(b) Measure the resistance of the EFI MAIN relay.
Standard resistance

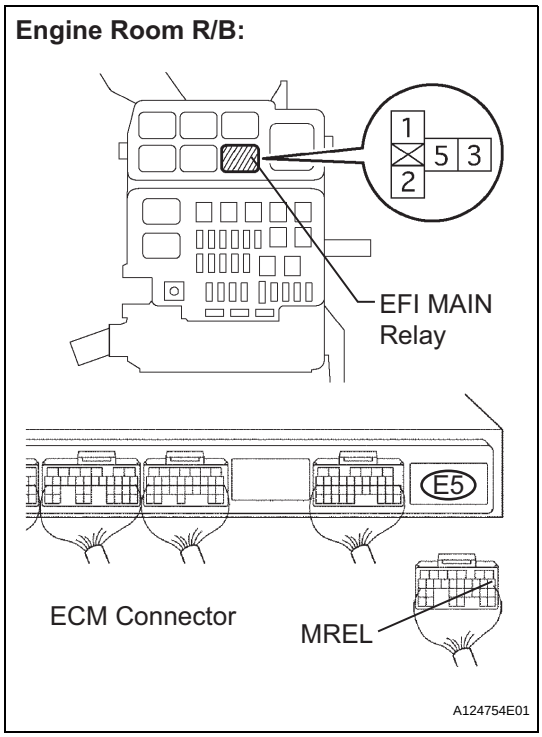
Tester Connection	Specified Condition
1 - 2	Below 1 Ω
3 - 5	10 kΩ or higher
3 - 5	Below 1 Ω (when battery voltage is applied to terminals 1 and 2)

NG → **REPLACE EFI MAIN RELAY**

OK

ES

9	CHECK HARNESS AND CONNECTOR (EFI MAIN RELAY- ECM, EFI MAIN RELAY - BODY GROUND)



(a) Check the wire harness between the EFI MAIN relay and ECM.
  (1) Remove the EFI MAIN relay from the engine room R/B.
  (2) Disconnect the E5 ECM connector.
  (3) Measure the resistance of the wire harness side connectors.
  Standard resistance

Tester Connection	Specified Condition
R/B EFI MAIN relay terminal 1 - E5-8 (MREL)	Below 1 Ω
R/B EFI MAIN relay terminal 1 or E5-8 (MREL) - Body ground	10 kΩ or higher

(b) Check the wire harness between the EFI MAIN relay and body ground.
  (1) Remove the EFI MAIN relay from the engine room R/B.
  (2) Measure the resistance between the wire harness side connector.
  Standard resistance

Tester Connection	Specified Condition
R/B EFI MAIN relay terminal 2 - Body ground	Below 1 Ω

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

OK

CHECK AND REPAIR HARNESS AND CONNECTOR (TERMINAL +B OF ECM - BATTERY POSITIVE TERMINAL)