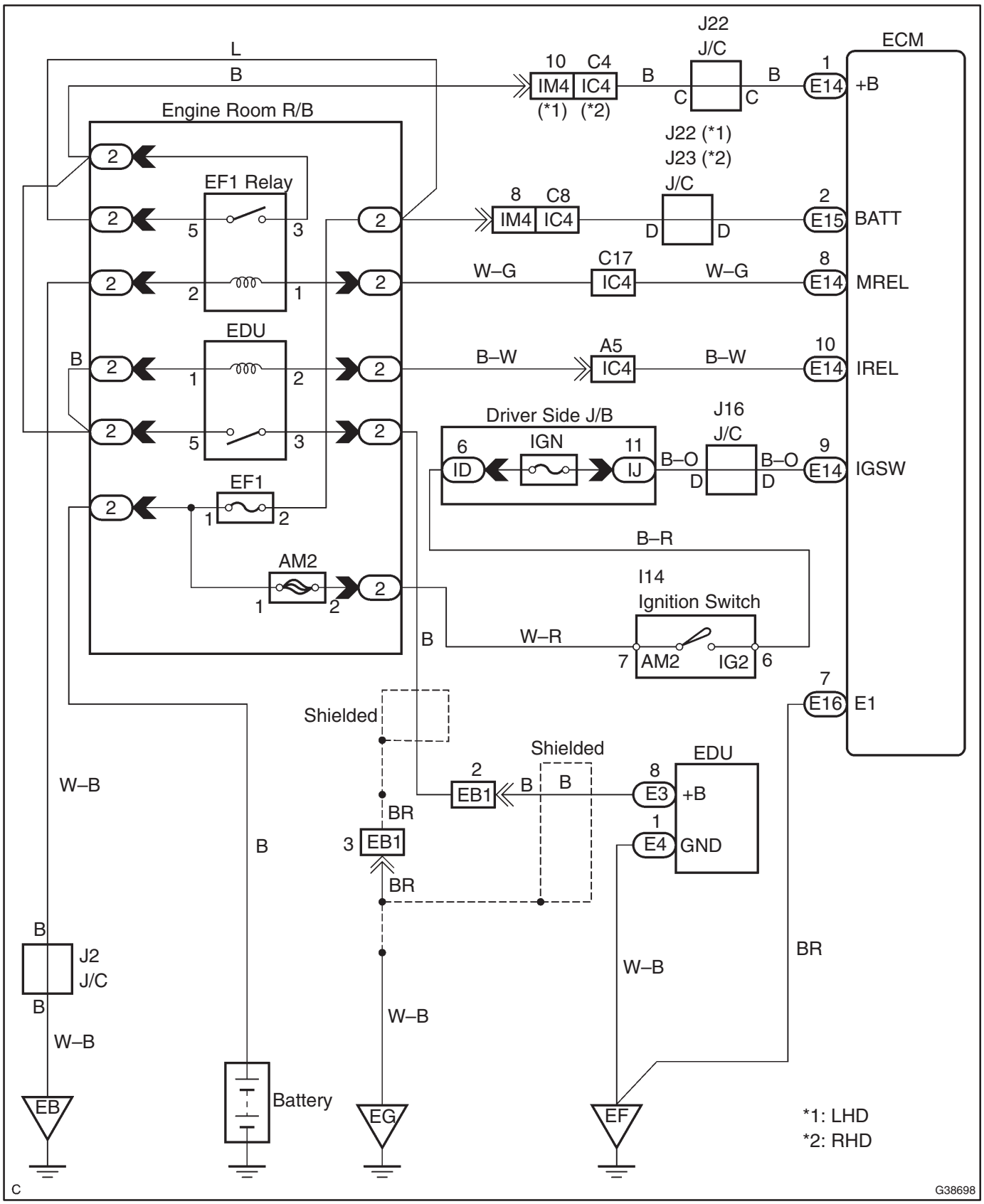
ECM POWER SOURCE CIRCUIT

CIRCUIT DESCRIPTION

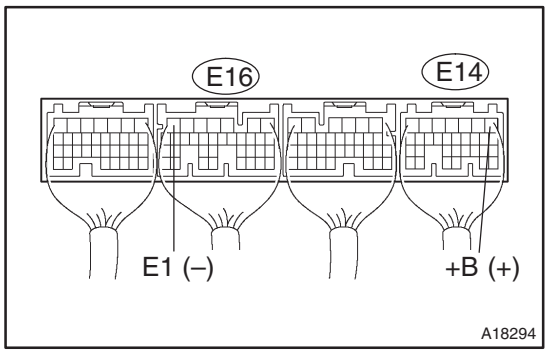
When the ignition switch is turned ON, the battery voltage is applied to terminal IGSW of the ECM. The ECM MREL output signal causes a current to flow to the coil, closing the contacts of the EFI relay and supplying power to terminal +B of the ECM.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK ECM (+B VOLTAGE)



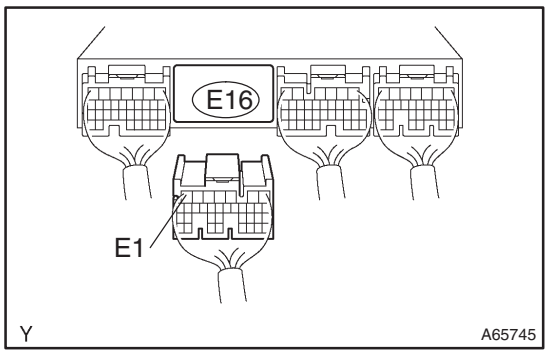
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard:

Tester Connection	Specified Condition
E14–1 (+B) – E16–7 (E1)	9 to 14 V

OK → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (See page 05–455)**

NG

2 CHECK WIRE HARNESS (ECM – BODY GROUND)



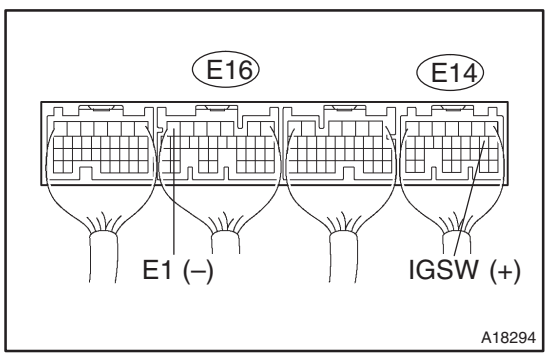
(a) Disconnect the E16 ECM connector.
(b) Measure the resistance of the wire harness side connector.
Standard:

Tester Connection	Specified Condition
E16–7 (E1) – Body ground	Below 1 Ω

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

OK

3 CHECK ECM (IGSW VOLTAGE)



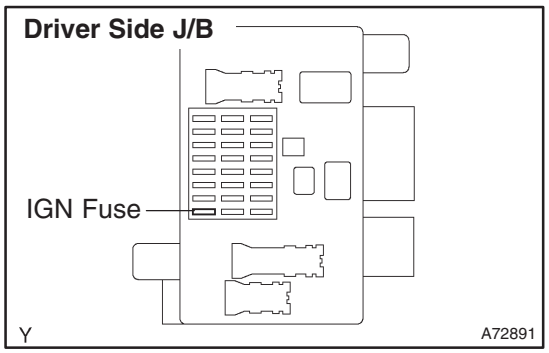
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard:

Tester Connection	Specified Condition
E14–9 (IGSW) – E16–7 (E1)	9 to 14 V

OK → **Go to step 5**

NG

4 INSPECT FUSE (IGN)



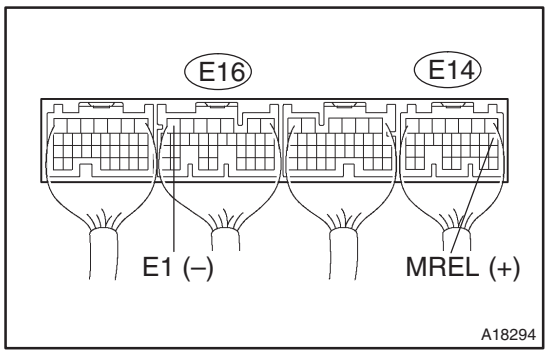
(a) Remove the IGN fuse from the instrument panel J/B.
(b) Measure the resistance of the fuse.
Standard: Below 1 Ω

NG → **CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE, AND REPLACE FUSE**

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR (BATTERY – ECM)

5 CHECK ECM (MREL VOLTAGE)



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

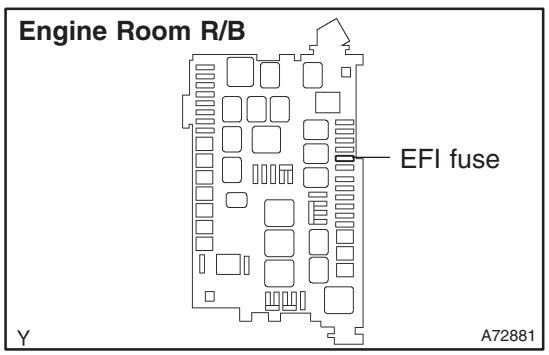
Tester Connection	Specified Condition
E14–8 (MREL) – E16–7 (E1)	9 to 14 V

NG → **REPLACE ECM (See Pub. No. RM990E, page 10–34)**

NOTICE:
After replacing the ECM, allow for ECM learning start the engine and idle it until it is fully warmed up.

OK

6 INSPECT FUSE (EFI)

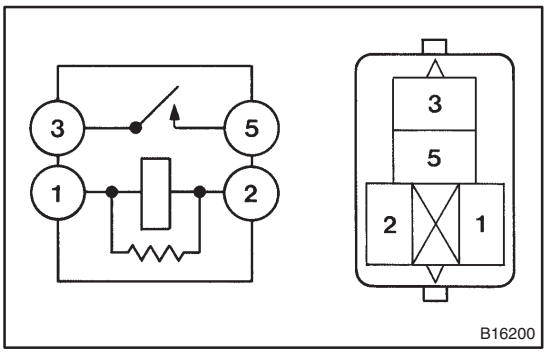


(a) Remove the EFI fuse from the engine room J/B.
(b) Measure the resistance of the fuse.
Standard: Below 1 Ω

NG → **CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE, AND REPLACE FUSE**

OK

7 CHECK EFI RELAY



(a) Remove the EFI relay from the engine room R/B.
(b) Inspect the EFI relay.

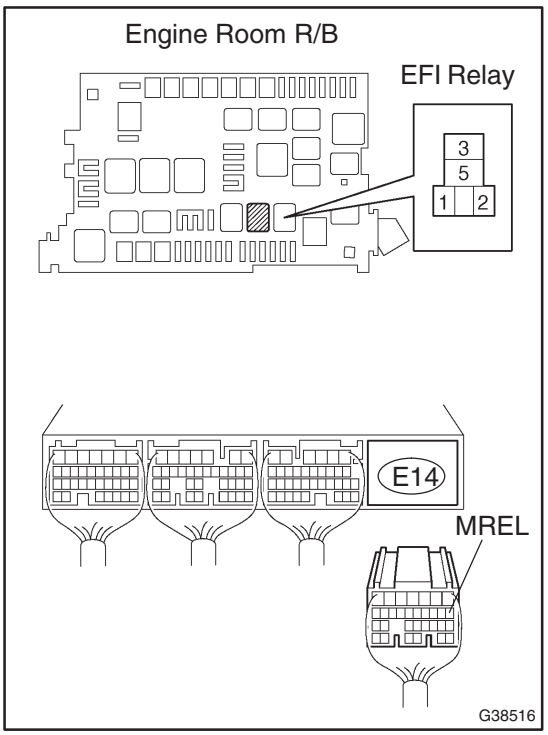
Standard:

Terminal No.	Condition	Specified condition
3 – 5	Usually	10 kΩ or higher
3 – 5	Apply B+ between Terminals 1 and 2	Below 1 Ω

NG → **REPLACE EFI RELAY**

OK

8 CHECK WIRE HARNESS (EFI RELAY – ECM AND BODY GROUND)



(a) Measure the wire harness between the EFI relay and ECM.
(1) Remove the EFI relay from the engine room R/B.
(2) Disconnect the E14 ECM connector.
(3) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
2 – E14–8 (MREL)	Below 1 Ω
2 or E14–8 (MREL) – Body ground	10 kΩ or higher

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

Standard:

Tester Connection	Specified Condition
3 – Body ground	Below 1 Ω

OK → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR (TERMINAL +B OF ECM – BATTERY POSITIVE TERMINAL)