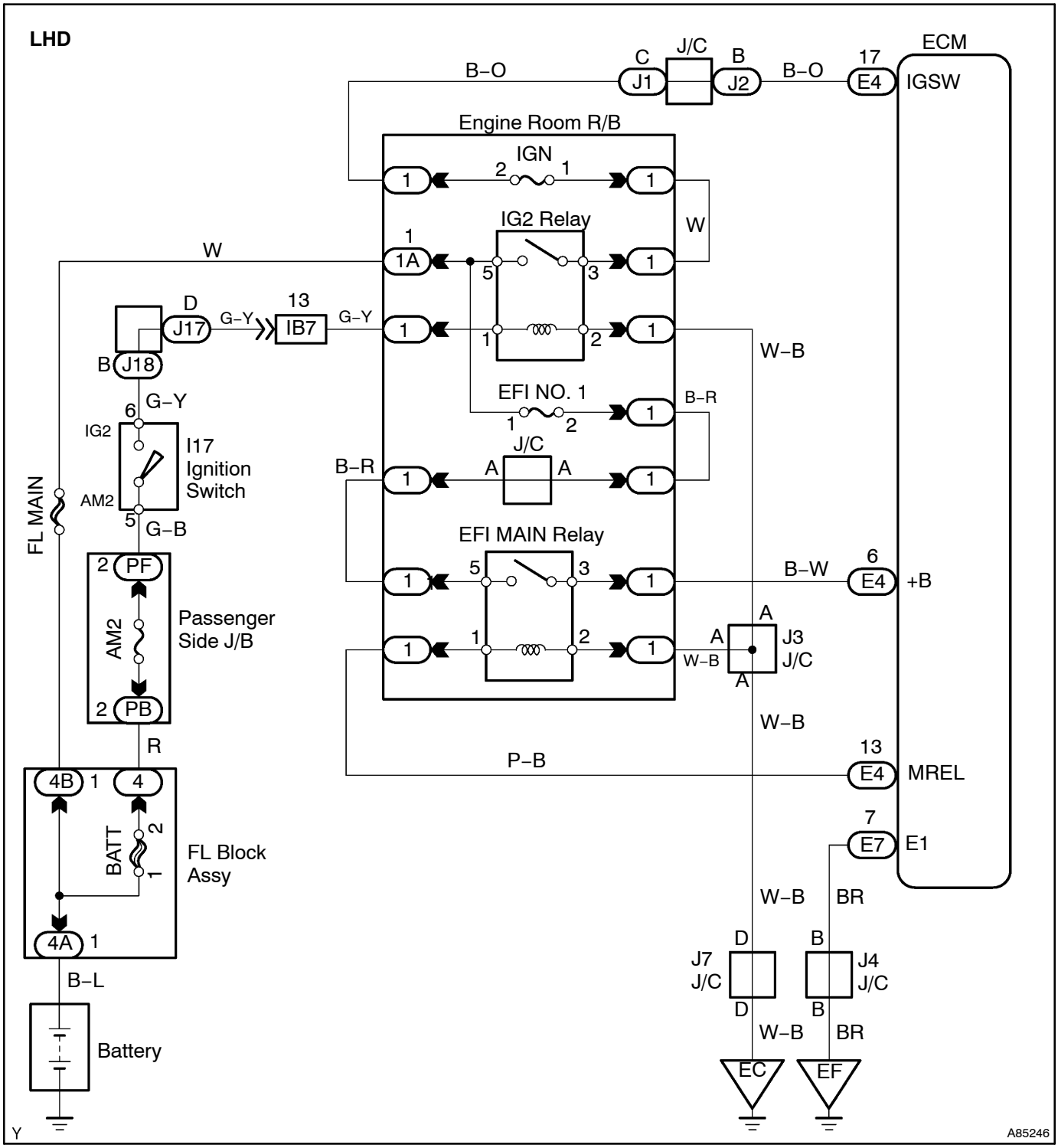
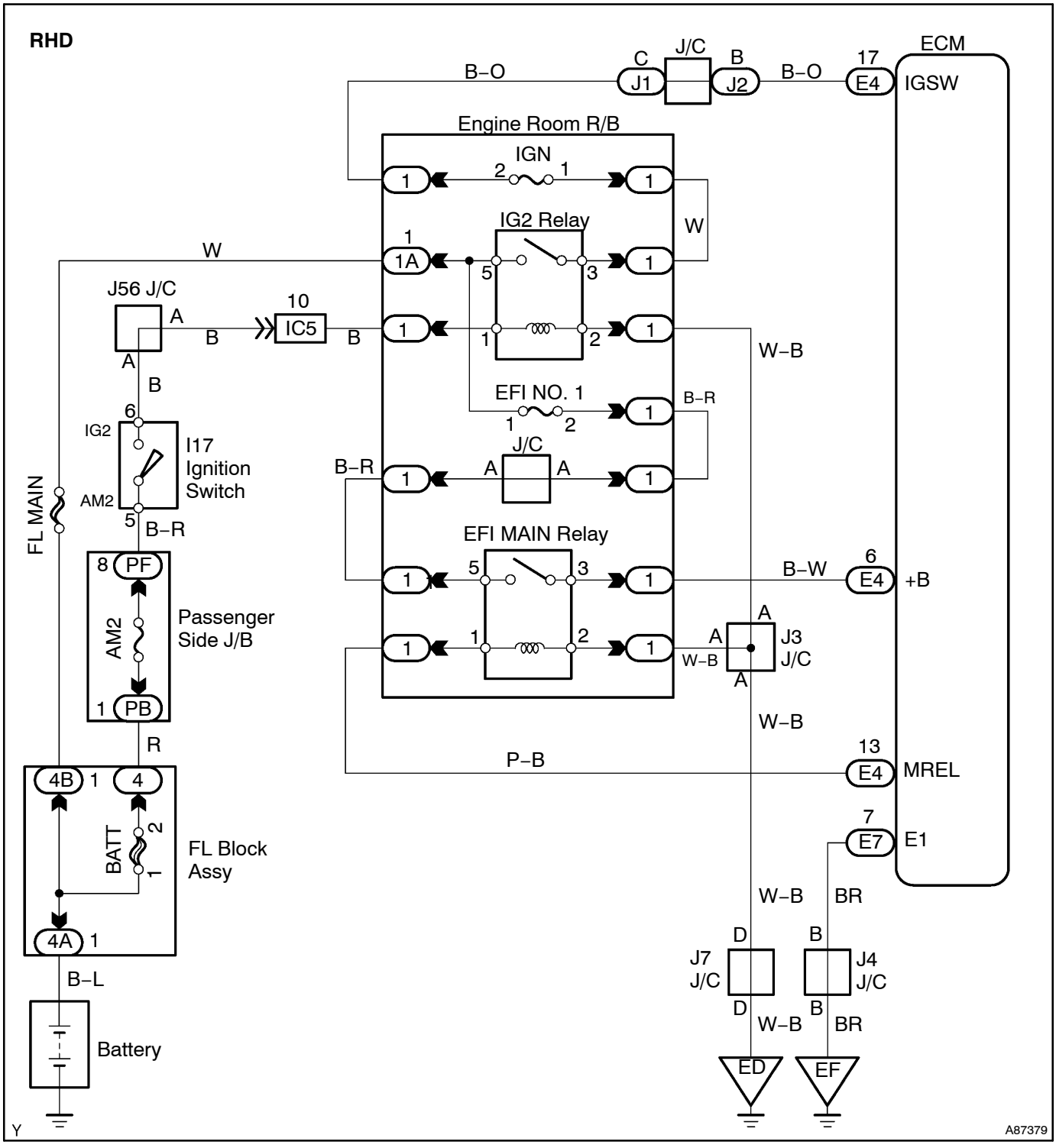
ECM POWER SOURCE CIRCUIT

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 MAIN relay (Marking: EFI MAIN) and supplying power to terminal +B of the ECM.
If the ignition switch is turned OFF, the ECM holds the EFI MAIN relay ON for a maximum of 2 seconds to allow for the initial setting of the throttle valve.

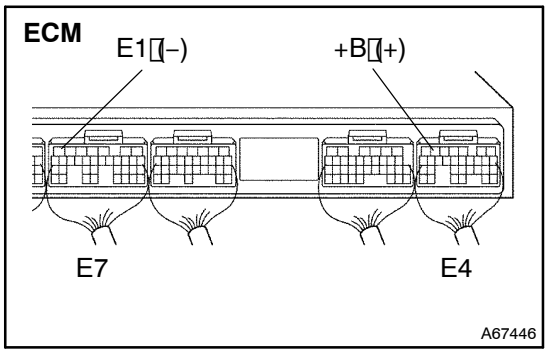
WIRING DIAGRAM




RHD
ECM
J/C
C
B
J1
J2
B–O
B–O
17
E4
IGSW
Engine Room R/B
IGN
2
1
IG2 Relay
1
1A
5
3
1
2
W
W
J56 J/C
A
B
10
IC5
B
W–B
EFI NO. 1
B–R
J/C
B–R
A
A
EFI MAIN Relay
6
E4
+B
B–W
A
J3
J/C
W–B
A
W–B
13
E4
MREL
P–B
7
E7
E1
W–B
BR
D
B
J7
J/C
J4
J/C
D
B
W–B
BR
ED
EF
IG2
I17
Ignition
Switch
AM2
5
B–R
6
FL MAIN
8
PF
AM2
Passenger
Side J/B
1
PB
R
4B
1
4
BATT
2
1
FL Block
Assy
4A
1
B–L
Battery
Y
A87379

INSPECTION PROCEDURE

1 INSPECT ECM (+B VOLTAGE)



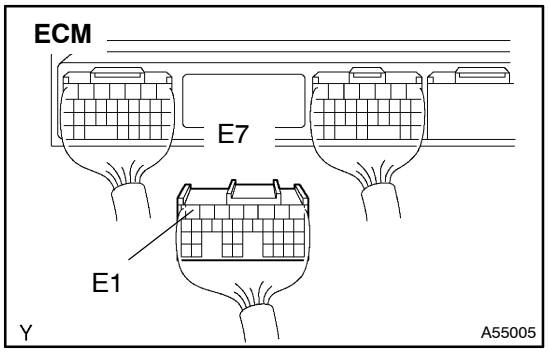
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard:

Tester Connection	Specified Condition
E4–6 (+B) – E7–7 (E1)	9 to 14 V

OK → **PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE** (See page 05–14)

NG

2 CHECK WIRE HARNESS (ECM – BODY GROUND)



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

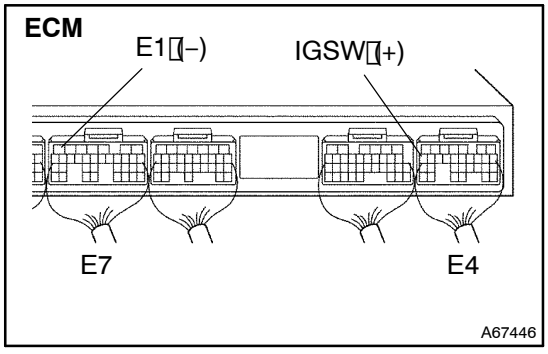
Tester Connection	Specified Condition
E7–7 (E1) – Body ground	Below 1 Ω

(c) Reconnect the ECM connector.

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

OK

3 INSPECT ECM (IGSW VOLTAGE)



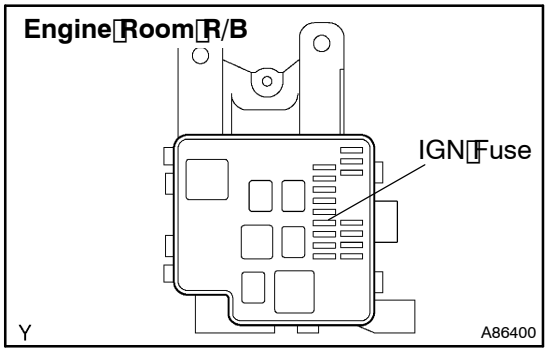
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connectors.
Standard:

Tester Connection	Specified Condition
E4–17 (IGSW) – E7–7 (E1)	9 to 14 V

OK → **Go to step 6**

NG

4 INSPECT FUSE (IGN)

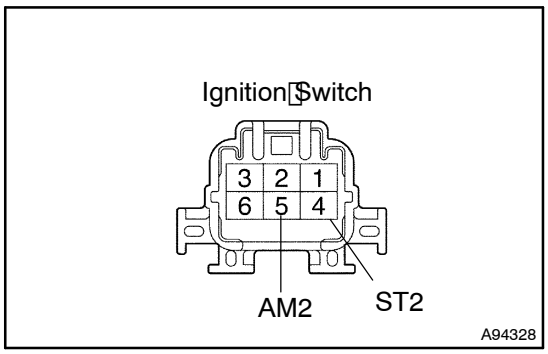


(a) Remove the IGN fuse from the engine room Relay Block (R/B).
(b) Measure the resistance.
Standard: Below 1 Ω
(c) Reinstall the IGN fuse.

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

OK

5 INSPECT IGNITION SWITCH



Measure the resistance of the ignition switch.
Standard:

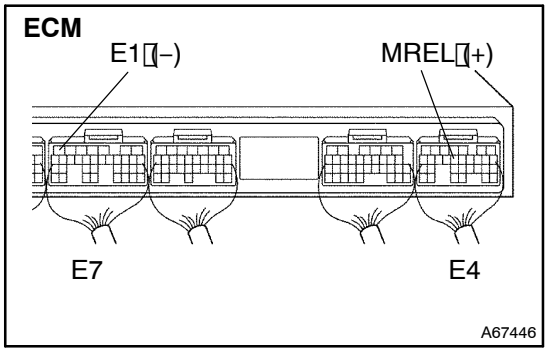
Switch Condition	Tester Connection	Specified Condition
ON	4 – 5	Below 1 Ω
START	4 – 5	10 kΩ or higher

NG → **REPAIR OR REPLACE IGNITION SWITCH**

OK

CHECK AND REPAIR HARNESS AND CONNECTOR (BATTERY – IGNITION SWITCH, IGNITION SWITCH – ECM)

6 INSPECT ECM (MREL VOLTAGE)



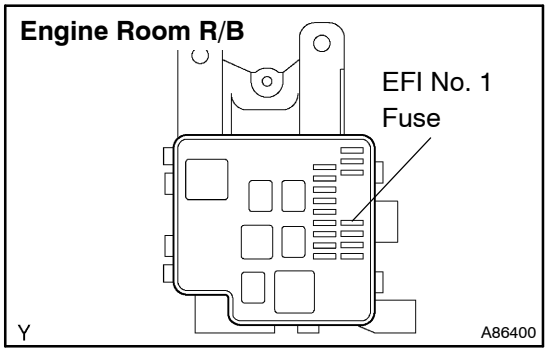
(a) Turn the ignition switch ON.
(b) Measure the voltage of the ECM connector.
Standard:

Tester Connection	Specified Condition
E4–13 (MREL) – E7–7 (E1)	9 to 14 V

NG → **REPLACE ECM (See page 10–21)**

OK

7	CHECK FUSE (EFI NO. 1)

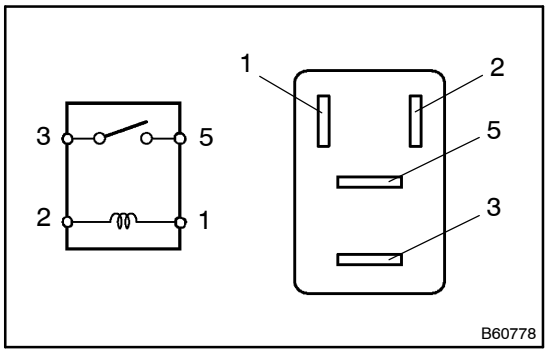


(a) Remove the EFI NO. 1 fuse from the engine room R/B.
(b) Measure the resistance.
Standard: Below 1 Ω

NG → **REPLACE FUSE**

OK

8	INSPECT RELAY (EFI MAIN)



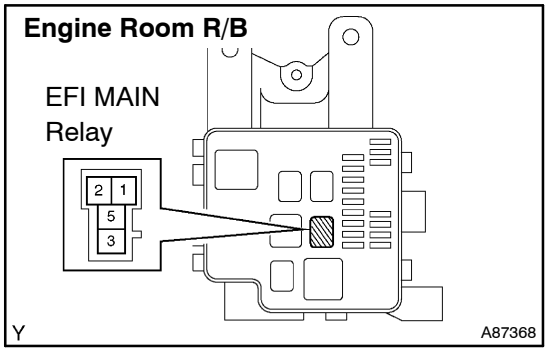
(a) Remove the EFI MAIN relay from the engine room R/B.
(b) Measure the resistance.
Standard:

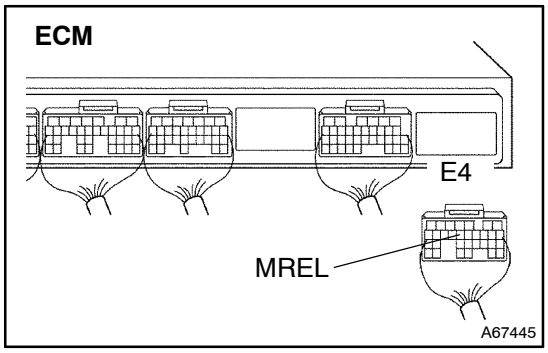
Tester Connection	Specified Condition
3 – 5	10 kΩ or higher
3 – 5	Below 1 Ω (apply battery voltage to terminals 1 and 2)

NG → **REPLACE RELAY**

OK

9	CHECK WIRE HARNESS (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 E4 ECM connector.
  (3) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
R/B EFI MAIN relay terminal 1 – E4–13 (MREL)	Below 1 Ω
R/B EFI MAIN relay terminal 1 or E4–13 (MREL) – Body ground	10 kΩ or higher

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

Standard:

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

NG → **CHECK AND REPAIR HARNESS AND CONNECTOR (TERMINAL +B OF ECM – BATTERY POSITIVE TERMINAL)**

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR