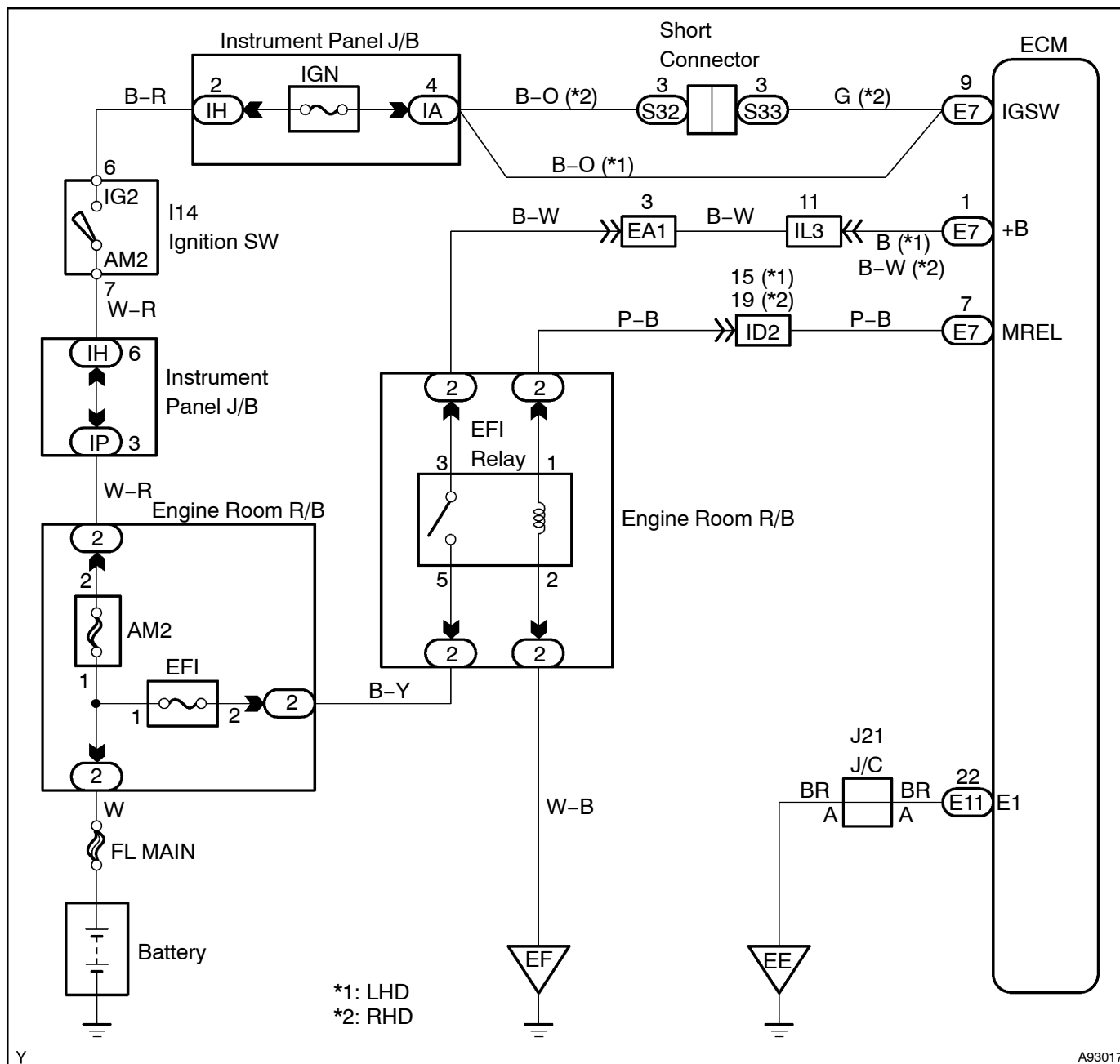


ECM POWER SOURCE CIRCUIT

CIRCUIT DESCRIPTION

When the ignition switch is turned to 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.

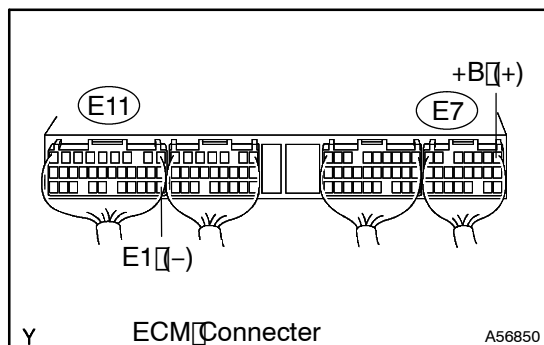
WIRING DIAGRAM



A93017

INSPECTION PROCEDURE

1 INSPECT ECM(+B VOLTAGE)



- (a) Turn the ignition switch to ON.
 (b) Measure the voltage between the specified terminals of the E7 and E11 ECM connectors.

Standard:

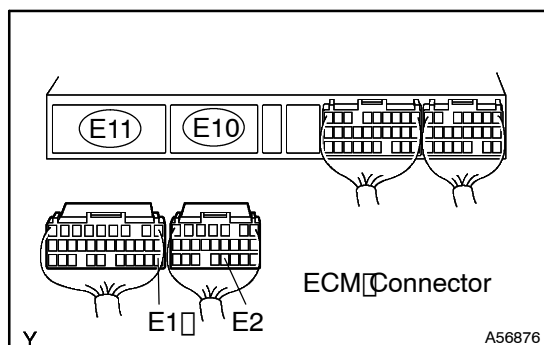
Tester Connection	Specified Condition
+B (E7-1) - E1 (E11-22)	9 to 14 V

OK

**PROCEED TO NEXT CIRCUIT INSPECTION
SHOWN PROBLEM SYMPTOMS TABLE**
 (See page 05-443)

NG

2 CHECK HARNESS AND CONNECTOR (ECM - BODY GROUND)



- (a) Disconnect the E10 and E11 ECM connectors.
 (b) Check the resistance.

Standard (Check for open):

Tester Connection	Specified Condition
E1 (E11-22) - Body ground	Below 1 Ω
E2 (E10-20) - Body ground	Below 1 Ω

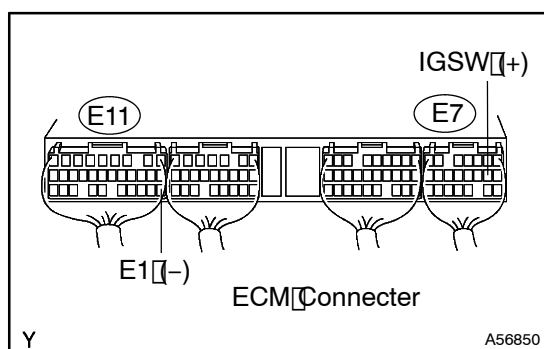
- (c) Reconnect the ECM connectors.

NG

**REPAIR OR REPLACE HARNESS OR
CONNECTOR**

OK

3 INSPECT ECM (IGSW VOLTAGE)



- (a) Turn the ignition switch to ON.
 (b) Measure the voltage between the specified terminals of the E7 and E11 ECM connectors.

Standard:

Tester Connection	Specified Condition
IGSW (E7-9) - E1 (E11-22)	9 to 14 V

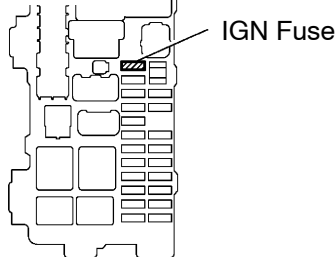
OK

Go to step 6

NG

4 INSPECT FUSE(IGN FUSE)

LHD: Lower Finish Panel:

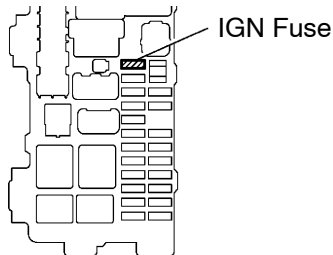


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- Remove the IGN fuse from the lower finish panel or left side of glove box.
- Check the IGN fuse resistance.
Standard: Below 1 Ω
- Reinstall the IGN fuse.

RHD: Left Side of Glove Box:



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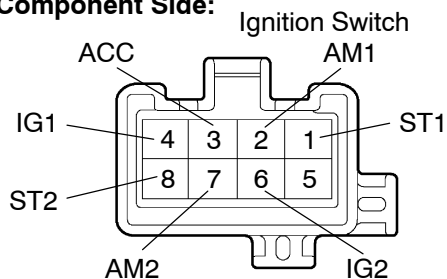
NG

CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE

OK

5 INSPECT IGNITION OR STARTER SWITCH ASSY

Component Side:



A87913

- Disconnect the I14 ignition switch connector.
- Measure the resistance between the connector terminals shown in the table below.

Standard:

Switch Position	Tester Connection	Specified Condition
LOCK	All Terminals	10 k Ω or higher
ACC	2-3	Below 1 Ω
ON	2-3, 2-4, 6-7	Below 1 Ω
START	1-2, 2-4, 6-7, 6-8	Below 1 Ω

- Reconnect the ignition switch connector.

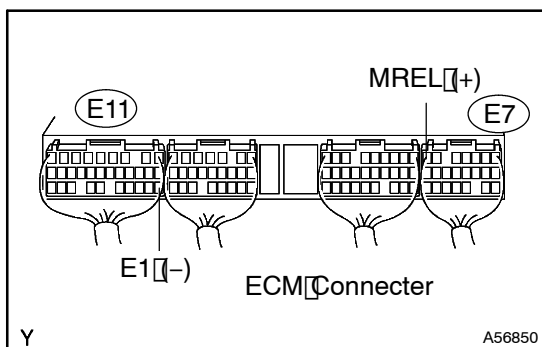
NG

REPLACE IGNITION OR STARTER SWITCH ASSY

OK

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

6 INSPECT ECM (MREL VOLTAGE)



- Turn the ignition switch to ON.
- Measure the voltage between the specified terminals of the E7 and E11 ECM connectors.

Standard:

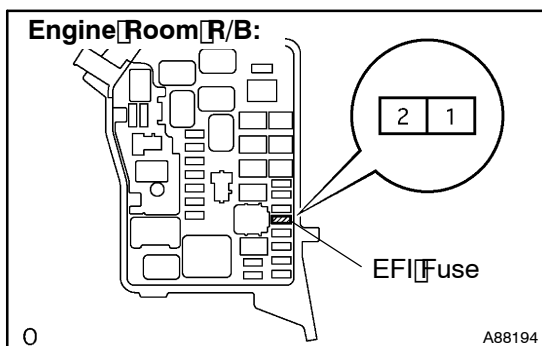
Tester Connection	Specified Condition
MREL(E7-7) - E1(E11-22)	9 to 14 V

NG

REPLACE ECM (See page 10-30)

OK

7 INSPECT FUSE (EFI FUSE)



- Remove the EFI fuse from the engine room R/B.
- Check the EFI fuse resistance.
- Reinstall the EFI fuse.

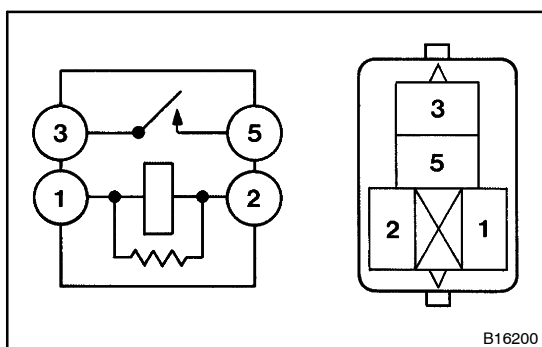
Standard: Below 1 Ω

NG

CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE

OK

8 INSPECT EFI RELAY



- Remove the EFI relay from the engine room R/B.
- Check the EFI relay resistance.

Standard:

Tester Connection	Specified Condition
3 - 5	10 k Ω or higher
3 - 5	Below 1 Ω (Apply battery voltage to terminals 1 and 2)

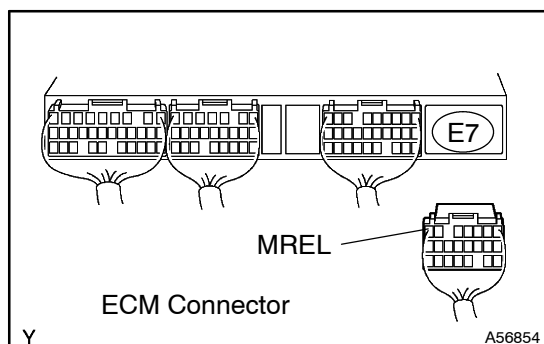
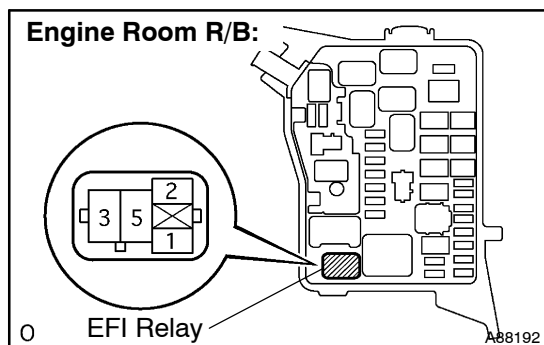
- Reinstall the EFI relay.

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REPLACE EFI RELAY

OK

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



- (a) Check the harness and connectors between the EFI relay and ECM connector.
- (1) Remove the EFI relay from the engine room R/B.
 - (2) Disconnect the E7 ECM connector.
 - (3) Check the resistance.

Standard (Check for open):

Tester Connection	Specified Condition
EFI relay (1) - MREL (E7-7)	Below 1 Ω

Standard (Check for short):

Tester Connection	Specified Condition
EFI relay (1) or MREL (E7-7) - Body ground	10 k Ω or higher

- (b) Reinstall the EFI relay.
- (c) Reconnect the ECM connector.
- (d) Check the harness and connector between the EFI relay and body ground.
- (1) Remove the EFI relay from the engine room R/B.
 - (2) Check the resistance.

Standard (Check for open):

Tester Connection	Specified Condition
EFI relay (2) - Body ground	Below 1 Ω

- (e) Reinstall the EFI relay.

OK

REPAIR OR REPLACE HARNESS OR CONNECTOR

NG

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