

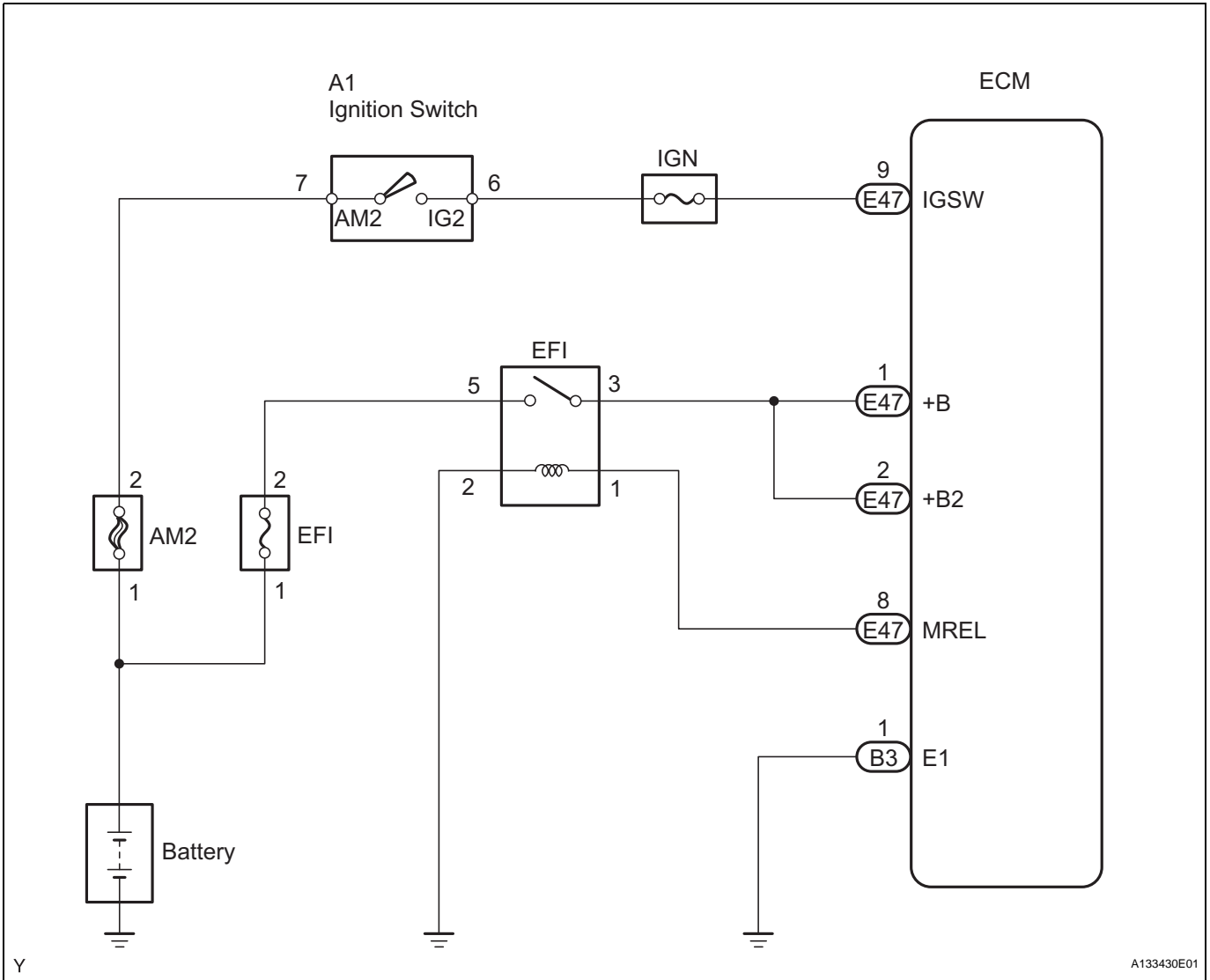
ECM Power Source Circuit

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.

If the ignition switch is turned OFF, the ECM holds the EFI relay ON for a maximum of 2 seconds to allow for the initial setting of the throttle valve.

WIRING DIAGRAM



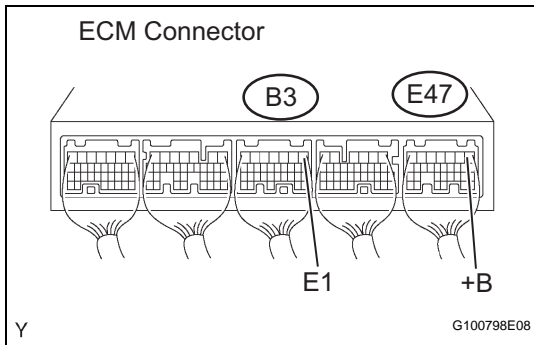
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INSPECTION PROCEDURE

1 INSPECT ECM (+B VOLTAGE)



- (a) Turn the ignition switch ON.
- (b) Measure the voltage between the terminals of the E47 and B3 ECM connectors.

Standard Voltage

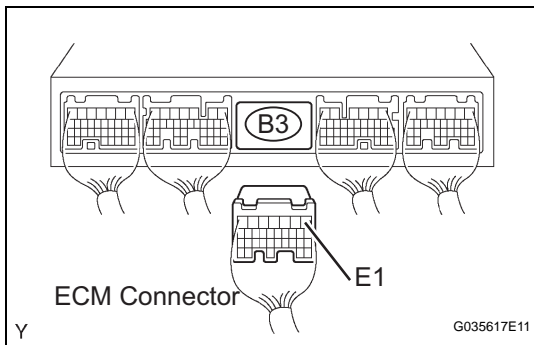
Tester Connections	Specified Conditions
+B (E47-1) - E1 (B3-1)	11 to 14 V

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

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2 CHECK HARNESS AND CONNECTOR (ECM - BODY GROUND)



- (a) Disconnect the B3 ECM connector.
- (b) Check the resistance.

Standard Resistance (Check for open)

Tester Connections	Specified Conditions
E1 (B3-1) - Body ground	Below 1 Ω

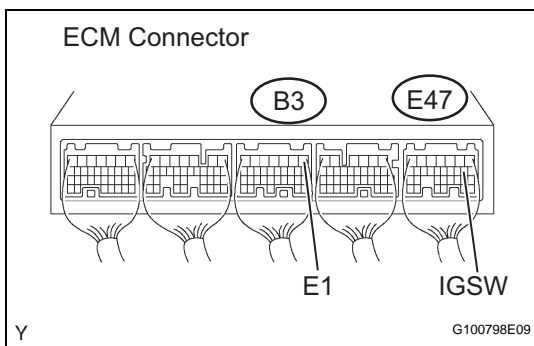
- (c) Reconnect the ECM connector.

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3 INSPECT ECM (IGSW VOLTAGE)



- (a) Turn the ignition switch ON.
- (b) Measure the voltage between the terminals of the E47 and B3 ECM connectors.

Standard Voltage

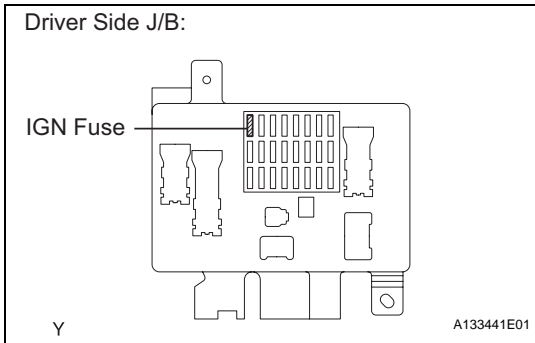
Tester Connections	Specified Conditions
IGSW (E47-9) - E1 (B3-1)	11 to 14 V

OK

Go to step 6

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4 CHECK FUSE (IGN FUSE)

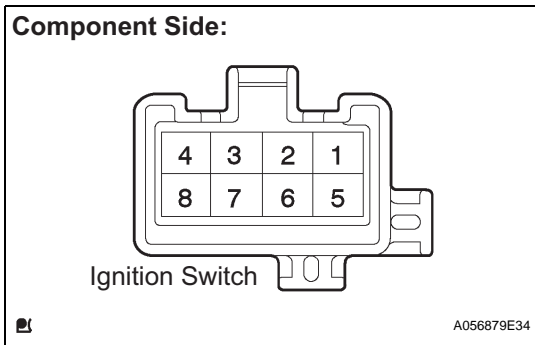


- (a) Remove the IGN fuse from the driver side J/B.
- (b) Check the IGN fuse resistance.
Standard Resistance:
Below 1 Ω
- (c) Reinstall the IGN fuse.

NG **CHECK FOR SHORT IN ALL HARNESES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE**

OK

5 INSPECT IGNITION OR STARTER SWITCH ASSEMBLY



- (a) Disconnect the A1 ignition switch connector.
- (b) Check the resistance.
Standard Resistance

Ignition Switch Positions	Tester Connections	Specified Conditions
LOCK	All Terminals	10 kΩ or higher
ACC	2 - 4	Below 1 Ω
ON	1 - 2, 1 - 4, 5 - 6	
START	1 - 3, 1 - 4, 3 - 4, 5 - 6, 5 - 7, 6 - 7	

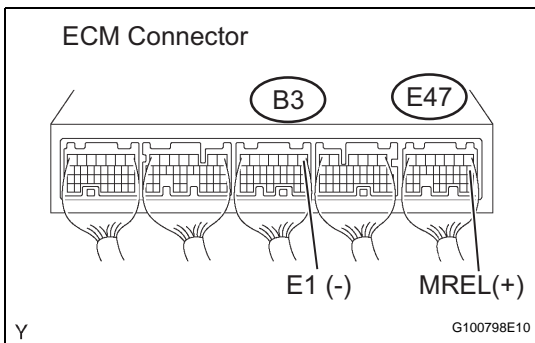
- (c) Reconnect the ignition switch connector.

NG **REPLACE IGNITION OR STARTER SWITCH ASSEMBLY (See page ST-19)**

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 between the terminals of the B3 and E47 ECM connectors.
Standard Voltage

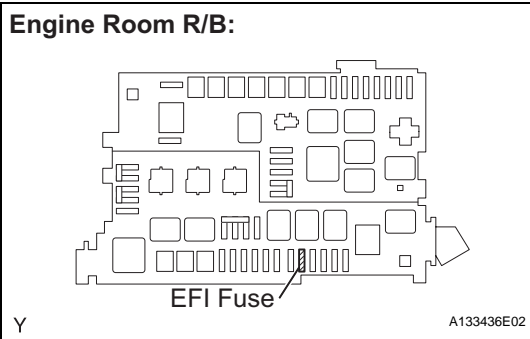
Tester Connections	Specified Conditions
MREL (E47-8) - E1 (B3-1)	11 to 14 V

NG **REPLACE ECM (See page ES-446)**

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OK

7 CHECK FUSE (EFI FUSE)



- (a) Remove the EFI fuse from the engine room R/B.
- (b) Check the EFI fuse resistance.
Standard Resistance:
Below 1 Ω
- (c) Reinstall the EFI fuse.

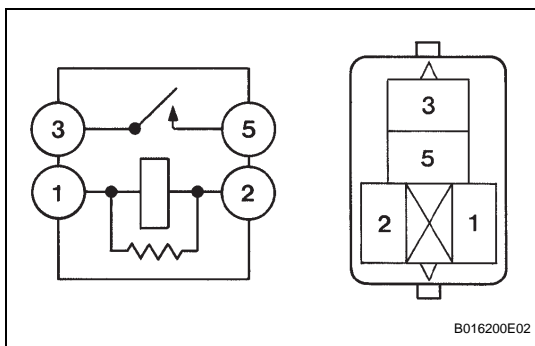
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CHECK FOR SHORT IN ALL HARNESSSES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE

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OK

8 INSPECT EFI RELAY



- (a) Remove the EFI relay from the engine room R/B.
- (b) Check the EFI relay resistance.
Standard Resistance

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

- (c) Reinstall the EFI relay.

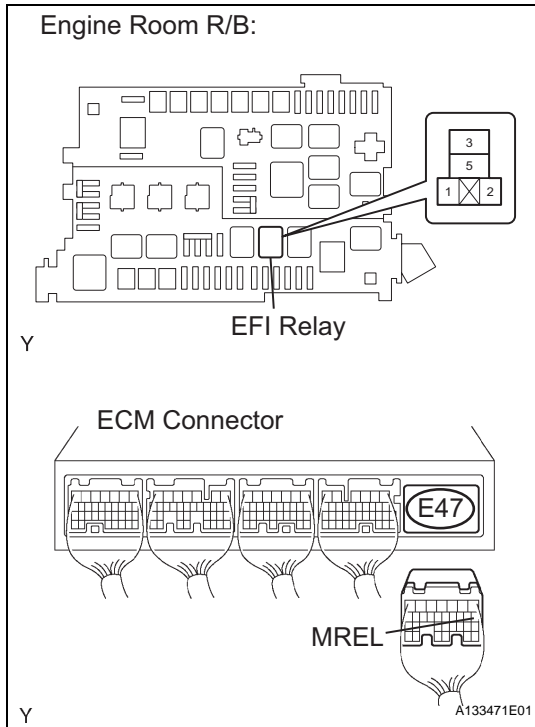
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REPLACE EFI RELAY

OK

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



(a) Check the harness and connector between the EFI relay and ECM.

- (1) Remove the EFI relay from the engine room R/B.
- (2) Disconnect the E47 ECM connector.
- (3) Check the resistance.

Standard Resistance (Check for open)

Tester Connections	Specified Conditions
EFI relay (1) - MREL (E47-8)	Below 1 Ω

Standard Resistance (Check for short)

Tester Connections	Specified Conditions
EFI relay (1) or MREL (E47-8) - Body ground	10 k Ω or higher

- (4) Reinstall the EFI relay.
 - (5) Reconnect the ECM connector.
- (b) 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 Resistance (Check for open)

Tester Connections	Specified Conditions
EFI relay (2) - Body ground	Below 1 Ω

- (3) Reinstall the EFI relay.

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

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

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