ECM Power Source Circuit

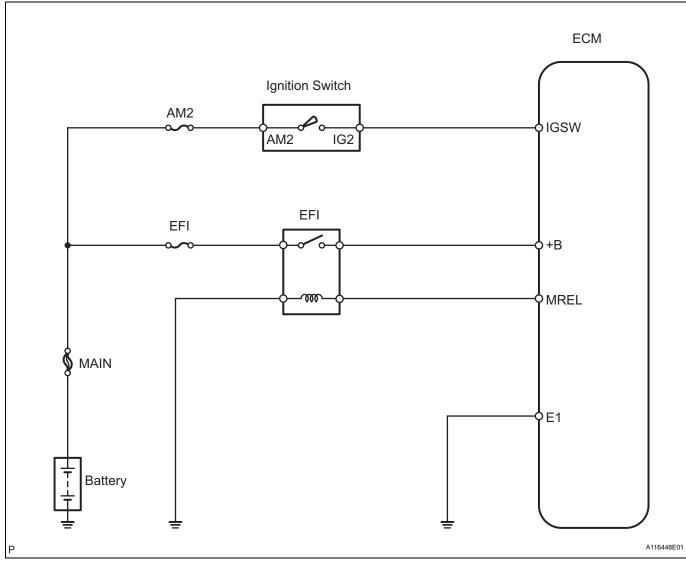
DESCRIPTION

When the ignition switch is turned ON, the positive 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 (Marking: EFI) and supplies power to terminal +B of the ECM.

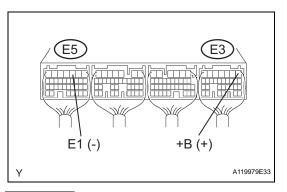
If the ignition switch is turned OFF, the ECM continues to switch on the EFI relay for a maximum of 2 seconds for the initial setting of the throttle valve.

WIRING DIAGRAM





1 INSPECT ECM (+B VOLTAGE)



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

Standard voltage

Tester Connection	Specified Condition
+B (E3-1) - E1 (E5-3)	9 to 14 V

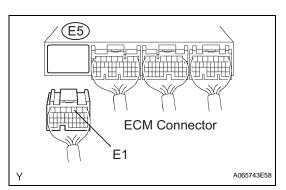


PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

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2 CHECK HARNESS AND CONNECTOR (ECM - BODY GROUND)



- (a) Disconnect the negative (-) battery cable.
- (b) Disconnect the E5 ECM connector.
- (c) Measure the resistance of the wire harness side connector.

Standard resistance (Check for open)

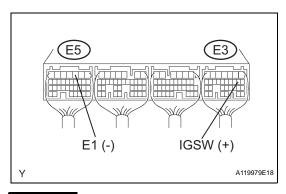
Tester Connection	Specified Condition
E1 (E5-3) - Body ground	Below 1 Ω

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REPAIR OR REPLACE HARNESS OR CONNECTOR

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3 INSPECT ECM (IGSW VOLTAGE)



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

Standard voltage

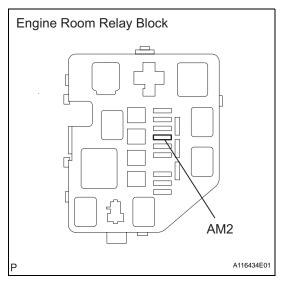
Tester Connection	Specified Condition	
IGSW (E3-9) - E1 (E5-3)	9 to 14 V	

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Go to step 6

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4 CHECK FUSE (AM2)



- (a) Remove the AM2 fuse from the engine room relay block.
- (b) Measure the resistance of the AM2 fuse.

Standard resistance:

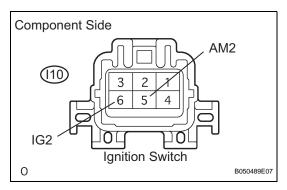
Below 1 Ω

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CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE

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5 INSPECT IGNITION SWITCH ASSEMBLY



- (a) Disconnect the I10 ignition switch connector.
- (b) Measure the resistance of the ignition switch. **Standard resistance**

Ignition Switch Position Tester Connection Specified Condition

 LOCK
 All Terminals
 10 kΩ or higher

 ON
 AM2 (5) - IG2 (6)
 Below 1 Ω

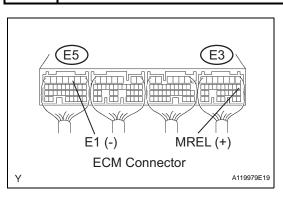
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REPLACE IGNITION SWITCH ASSEMBLY

OK

CHECK HARNESS OR 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

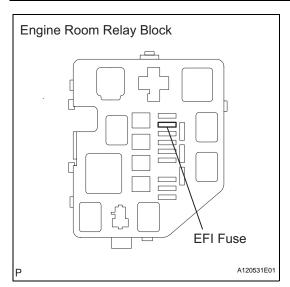
Tester Connection	Specified Condition
MREL (E3-8) - E1 (E5-3)	9 to 14 V

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REPLACE ECM



7 CHECK FUSE (EFI)



- (a) Remove the EFI fuse from the engine room relay block.
- (b) Measure the resistance of the EFI fuse.

Standard resistance:

Below 1 Ω

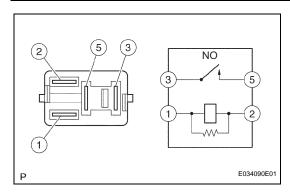
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CHECK FOR SHORT IN ALL HARNESSES AND COMPONENTS CONNECTED TO FUSE

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OK

8 INSPECT EFI RELAY (Marking: EFI)



- (a) Remove the EFI relay from the engine room relay block.
- (b) Measure the resistance of the EFI fuse.

Standard resistance

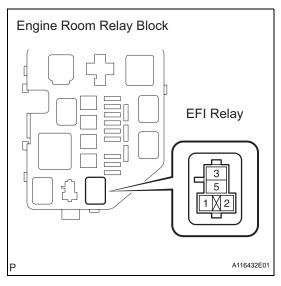
Tester Connection	Specified Condition
3 - 5	10 k Ω or higher
3 - 5	

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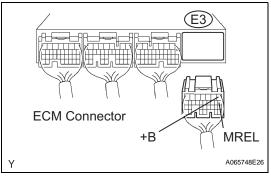
REPLACE EFI RELAY

OK

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



- (a) Check the harness and connector between the EFI relay and ECM.
 - (1) Remove the EFI relay from the engine room relay block.



- (2) Disconnect the E3 ECM connector.
- (3) Measure the resistance of the wire harness side connectors.

Standard resistance (Check for open)

Tester Connections	Specified Conditions
Engine room relay block (EFI relay terminal 2) - MREL (E3-8)	Below 1 Ω
Engine room relay block (EFI relay terminal 3) - +B (E3-1)	Below 1 Ω

Standard resistance (Check for short)

Tester Connections	Specified Conditions
Engine room relay block (EFI relay terminal 2) or MREL (E3-8) - Body ground	10 $\mathbf{k}\Omega$ or higher
Engine room relay block (EFI relay terminal 3) or +B (E3-1) - Body ground	10 k Ω or higher

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

Standard resistance (Check for open)

Tester Connection	Specified condition
Engine room relay block (EFI relay terminal 1) - Body ground	Below 1 Ω

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REPAIR OR REPLACE HARNESS OR CONNECTOR

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OK_

CHECK AND REPLACE HARNESS OR CONNECTOR (TERMINAL 5 OF EFI RELAY - BATTERY POSITIVE TERMINAL)

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