

ECM POWER SOURCE CIRCUIT

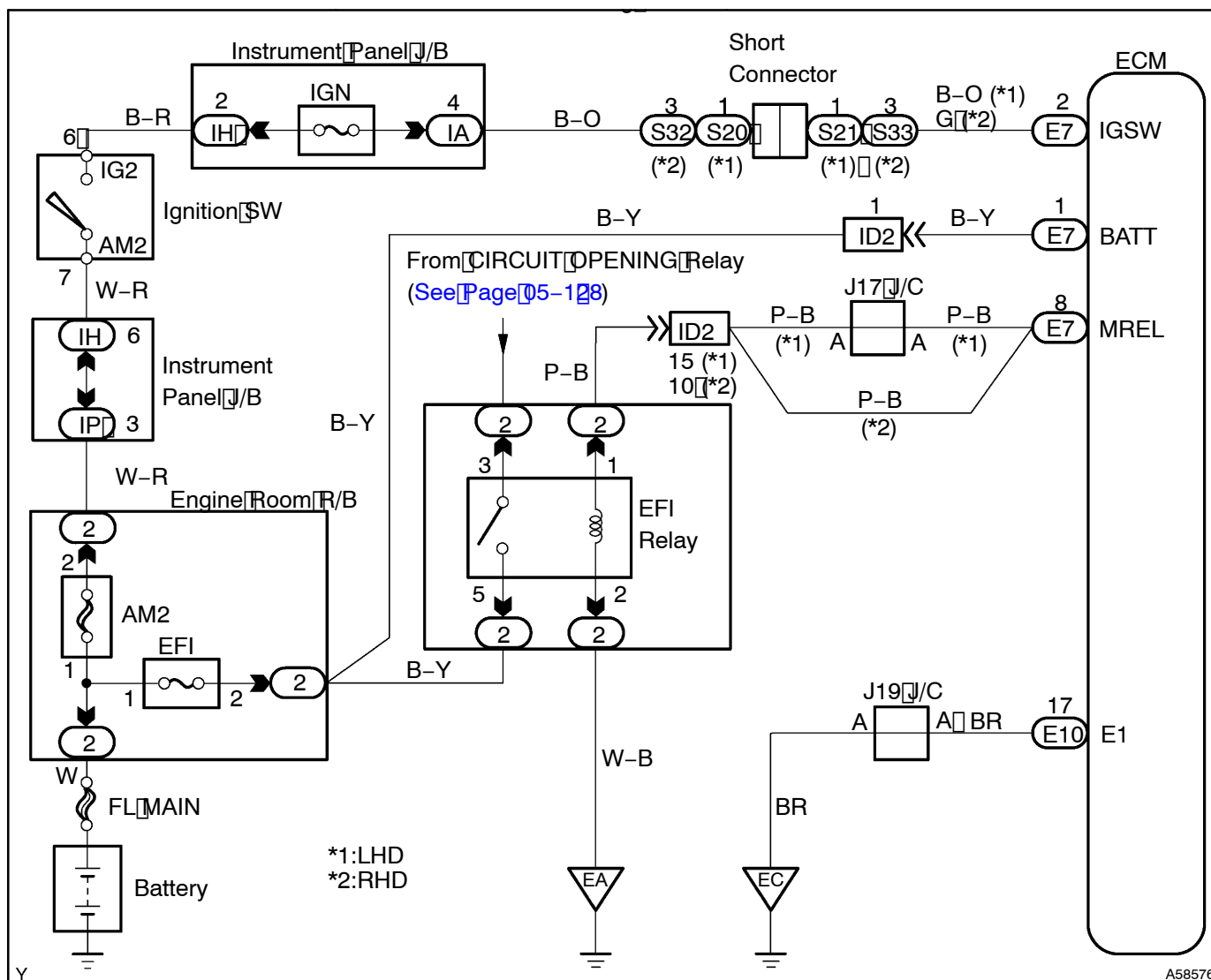
CIRCUIT DESCRIPTION

When the ignition switch is turned on, battery positive voltage is applied to IG2 Relay, terminal IGSW of the ECM and the EFI main relay control circuit in the ECM sends a signal to terminal MREL of the ECM by switching on the EFI main relay.

This signal causes current to flow to the coil, cutting off the contacts of the EFI main relay and supplying power to terminals +B of the ECM.

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

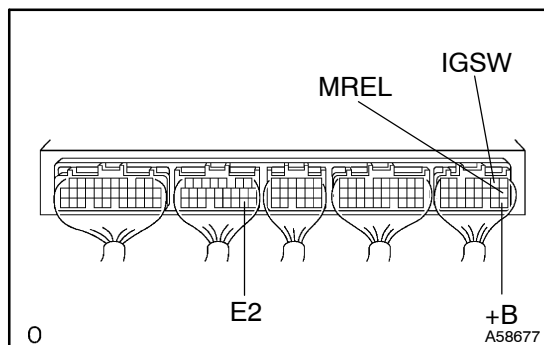
WIRING DIAGRAM



A58576

INSPECTION PROCEDURE

1 INSPECT ECM(CHECK +B VOLTAGE)



- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminals +B of the ECM connector and E2 of the ECM connector.

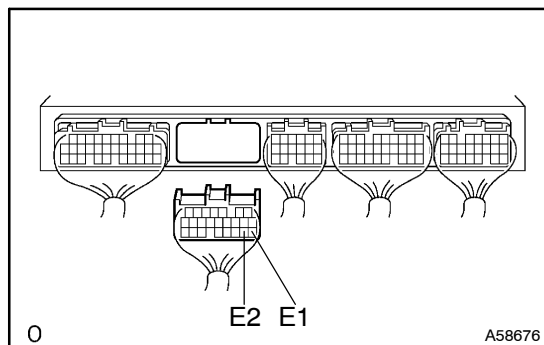
Voltage: 9 - 14 V

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOM TABLE

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2 CHECK WIRE HARNESS OR CONNECTOR(ECM GROUND)



- (a) Disconnect the ECM E10 connector.
- (b) Check for open between the terminals E1 and E2 of the ECM connector and body ground.

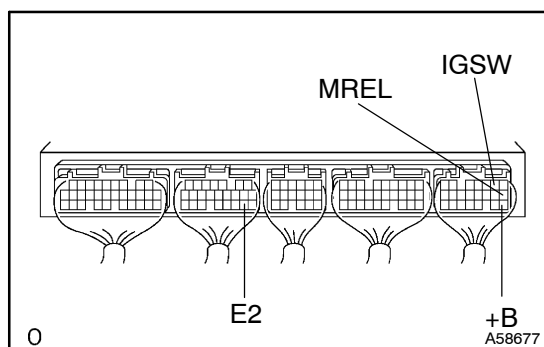
Resistance: 1 Ω or less

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REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

3 INSPECT ECM(CHECK IGSW VOLTAGE)



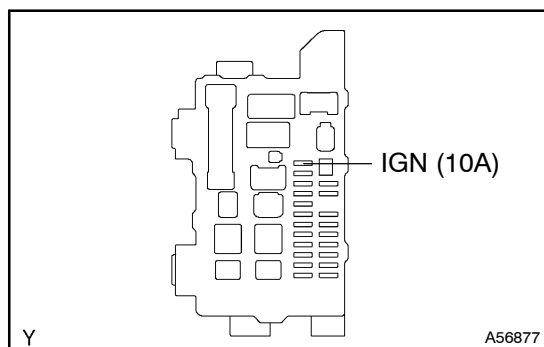
- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminals IGSW of the ECM connector and E2 of the ECM connector.

Voltage: 9 - 14 V

OK

Go to step 7

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4 CHECK FUSE(IGN FUSE)

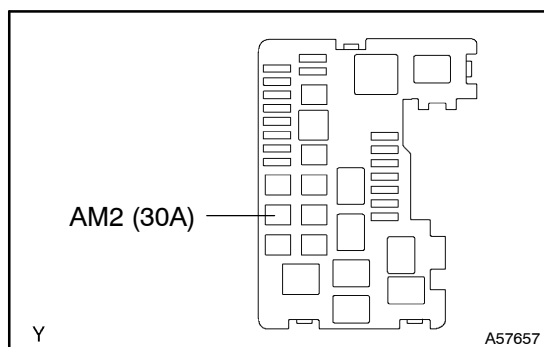
- (a) Remove the IGN fuse from the instrument panel J/B.
 (b) Check the continuity of the IGN fuse.

Result: Continuity

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CHECK FOR SHORT IN ALL HARNESS AND COMPONENTS CONNECTED IGN FUSE

OK

5 CHECK FUSE(AM2 FUSE)

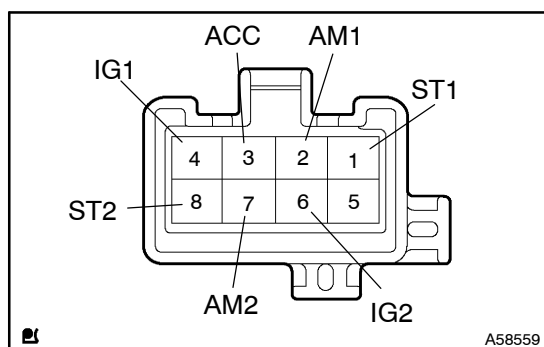
- (a) Remove the AM2 fuse from the engine room J/B.
 (b) Check the continuity of the AM2 fuse.

Result: Continuity

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CHECK FOR SHORT IN ALL HARNESS AND COMPONENTS CONNECTED AM2 FUSE

OK

6 CHECK IGNITION OR STARTER SWITCH ASSY

- (a) Check continuity between the connector terminals shown in the chart below.

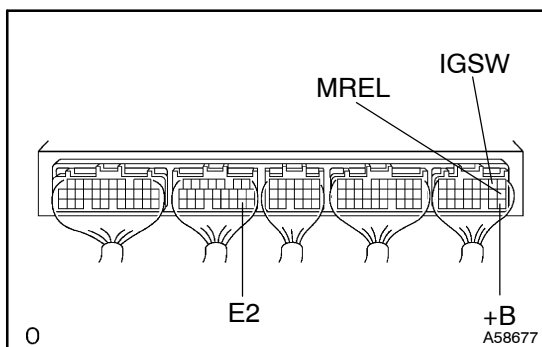
Switch	Terminal No.	Resistance
LOCK	All Terminal to Terminal	1MΩ or more
ACC	2⇔3	1Ω or less
ON	2⇔3⇔4 6⇔7	1Ω or less
START	1⇔2⇔4 6⇔7⇔8	1Ω or less

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REPLACE IGNITION OR STARTER SWITCH ASSY

OK

REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

7 INSPECT ECM(CHECK MREL VOLTAGE)

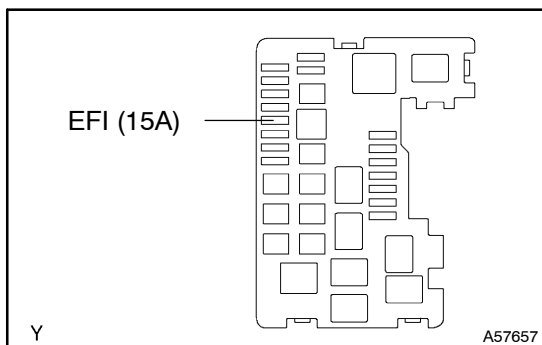
- (a) Turn the ignition switch ON.
- (b) Measure the voltage between terminal MREL of the ECM E5 connector and E2 of the ECM connector.

Voltage: 9 - 14 V

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REPLACE ENGINE ROOM RELAY BLOCK

OK

8 CHECK FUSE(EFI FUSE)

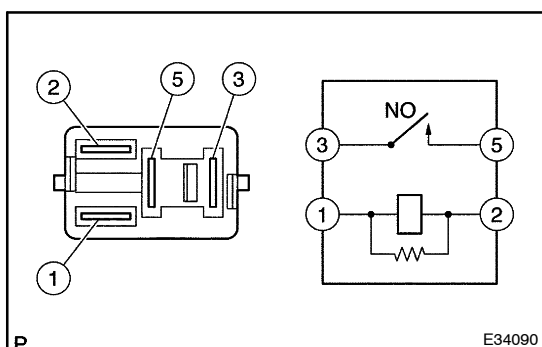
- (a) Remove the EFI fuse from the engine room J/B.
- (b) Check the continuity of the EFI fuse.

Result: Continuity

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CHECK FOR SHORT IN ALL HERNESS AND COMPONENTS CONNECTED EFI FUSE

OK

9 CHECK E.F.I. CIRCUIT OPENING RELAY ASSY

- (a) Remove the EFI relay from the engine room J/B.
- (b) Check continuity between the terminals shown below.

Resistance:

Terminal No.	Resistance
1 - 2	1 Ω or less
3 - 5	1 M Ω or more

- (c) Check continuity between the terminals 3 and 5 of the connector when the battery voltage is applied to the terminals between 1 and 2.

Resistance:

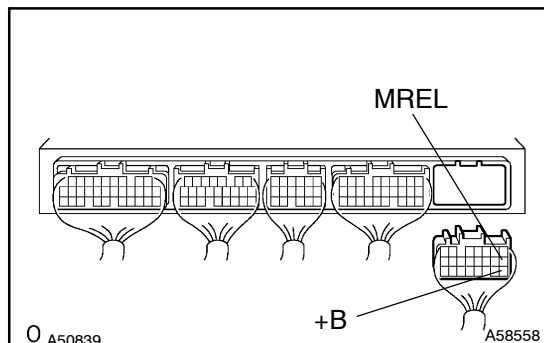
Terminal No.	Resistance
3 - 5	1 Ω or more

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REPLACE E.F.I. CIRCUIT OPENING RELAY ASSY

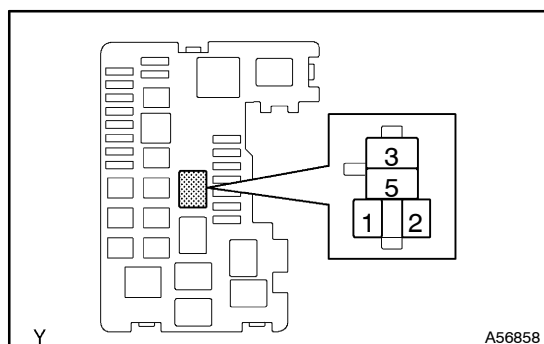
OK

10 CHECK WIRE HARNESS OR CONNECTOR(TERMINAL MREL-BODY GROUND AND TERMINAL +B-EFI RELAY)



- (a) Disconnect the ECM E7 connector.
- (b) Check continuity between the terminal MREL of engine ECM connector and body ground.
RESISTANCE: 1 Ω or less
- (c) Remove the EFI relay.
- (d) Check for short between the terminals MREL and E2 of the engine ECM connector.
RESISTANCE: 1 M Ω or more
- (e) Check continuity between terminals 3 of EFI relay and +B engine ECM connector.

RESISTANCE: 1 Ω or less

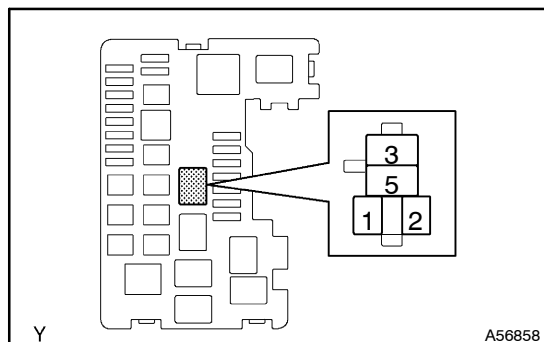


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REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

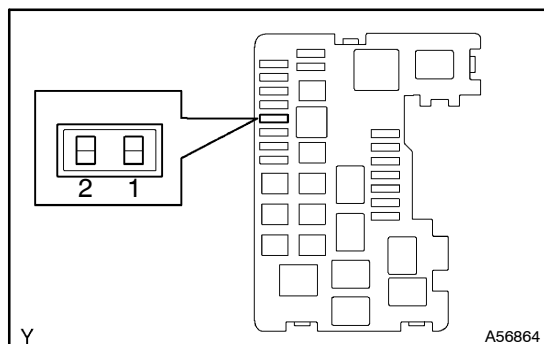
OK

11 CHECK WIRE HARNESS OR CONNECTOR(EFI FUSE-BATTERY AND EFI FUSE-EFI RELAY)



- (a) Remove the EFI relay.
- (b) Remove the EFI fuse.
- (c) Check continuity between terminals 2 of the EFI fuse and 5 of the EFI relay.
RESISTANCE: 1 Ω or less
- (d) Check continuity between terminals 1 of the EFI fuse and positive (+) of the battery.

RESISTANCE: 1 Ω or less



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REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR

OK

REPLACE ENGINE ROOM RELAY BLOCK