

DTC	P0560	SYSTEM VOLTAGE
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MONITOR DESCRIPTION

The battery supplies electricity to the ECM even when the ignition switch is OFF. This electricity allows the ECM to store data such as DTC history, freeze frame data, fuel trim values and other data. If the battery voltage falls below a minimum level, the ECM will conclude that there is a fault in the power supply circuit. The next time the engine starts, the ECM will turn on the MIL and a DTC will be set.

DTC No.	DTC Detection Condition	Trouble Area
P0560	Open in ECM back-up power source circuit (1 trip detection logic)	<ul style="list-style-type: none"> • Open in back-up power source circuit • ECM

HINT:

If DTC P0560 is present, the ECM will not store other DTCs.

MONITOR STRATEGY

Related DTCs	P0560: ECM system voltage
Required sensors / components (Main)	ECM
Required sensors / components (Related)	-
Frequency of operation	Continuous
Duration	3 sec.
MIL operation	Immediate (MIL will illuminate after the next engine start)
Sequence operation	None

TYPICAL ENABLING CONDITIONS

The monitor will run whenever this DTC is not present	See page 05-16
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TYPICAL MALFUNCTION THRESHOLDS

ECM power source	Less than 3.5 V
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The diagram illustrates the electrical system for the ECM (Engine Control Module). It shows the following components and connections:

- Engine Room J/B:** A junction box containing two relays, 2I and 2B, labeled "EFI NO. 1". It is connected to the ECM via a B-W wire.
- FL Block Assy (F7):** A fuse block assembly connected to the Battery via a W wire. It is also connected to the Engine Room J/B via a W wire.
- FL Main:** A main fuse connected to the Battery via a W wire.
- Battery:** The power source for the system, connected to ground.
- IK2:** A relay connected to the Engine Room J/B via a B-W wire and to the ECM via a BR wire.
- J7 J/C:** A junction box connected to the ECM via a BR wire and to ground via an EE terminal.
- ECM (Engine Control Module):** The central control unit, connected to the Battery via a BATT wire and to ground via an E1 terminal.

HINT:

Read freeze frame data using the hand-held tester or the OBD II scan tool. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air-fuel ratio was lean or rich, and other data from the time the malfunction occurred.

Diagram of the Engine Room J/B fuse block. A line points from the text "EFI NO. 1 fuse" to a specific fuse in the block.

- Remove the EFI NO. 1 fuse from the engine room J/B.
 - Measure the resistance of the EFI NO. 1 fuse.
- Standard: Below 1 Ω**

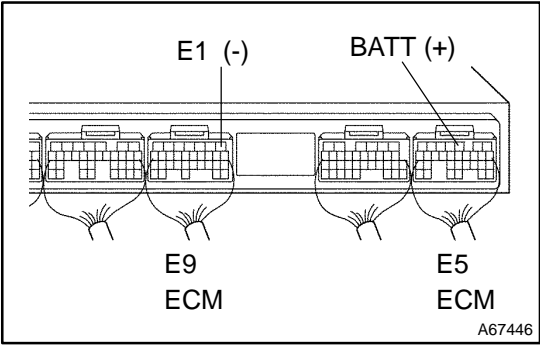
OK

REPLACE FUSE

OK

2

INSPECT ECM (BATT VOLTAGE)



(a) Measure the voltage of the ECM connectors.

Standard:

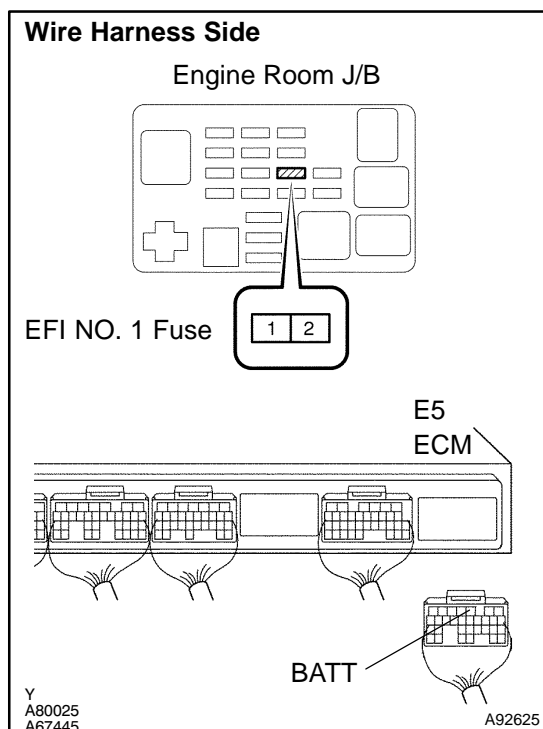
Tester Connection	Specified Condition
E5-3 (BATT) - E9-1 (E1)	9 to 14 V

OK

REPLACE ECM (See page 10-9)

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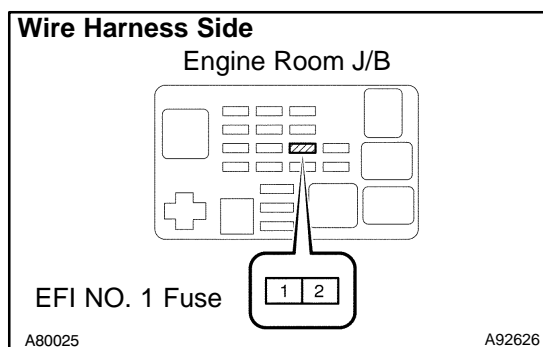
3 CHECK WIRE HARNESS (ECM - EFI NO. 1 FUSE, EFI NO. 1 FUSE - BATTERY)



- (a) Check the wire harness between the EFI NO. 1 fuse and ECM.
- (1) Remove the EFI NO. 1 fuse from the engine room J/B.
 - (2) Disconnect the E5 ECM connector.
 - (3) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
J/B EFI NO. 1 fuse terminal 2 - E5-3 (BATT)	Below 1 Ω
J/B EFI NO. 1 fuse terminal 2 or E5-3 (BATT) - Body ground	10 k Ω or higher



- (b) Check the wire harness between the EFI NO. 1 fuse and battery.
- (1) Remove the EFI NO. 1 fuse from the engine room J/B.
 - (2) Disconnect the battery positive cable.
 - (3) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
Battery positive cable - J/B EFI NO. 1 fuse terminal 1	Below 1 Ω
Battery positive cable or J/B EFI NO. 1 fuse terminal 1 - Body ground	10 k Ω or higher

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REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

CHECK AND REPLACE ENGINE ROOM J/B