DTC	P0560	System Voltage

MONITOR DESCRIPTION

The battery supplies electricity to the ECM even when the ignition switch is off. This power allows the ECM to store data such as DTC history, freeze frame data and fuel trim values. If the battery voltage falls below a minimum level, these memories are cleared and the ECM determines that there is a malfunction in the power supply circuit. When the engine is next started, the ECM illuminates the MIL and sets the DTC.

DTC No.	DTC Detection Condition	Trouble Area
P0560	Open in ECM back up power source circuit (1 trip detection logic)	• Open in back up power source circuit • EFI No. 1 fuse • ECM

ES

HINT:
If DTC P0560 is set, the ECM does 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 seconds
MIL Operation	Immediate (MIL illuminated after next engine start)
Sequence of Operation	None

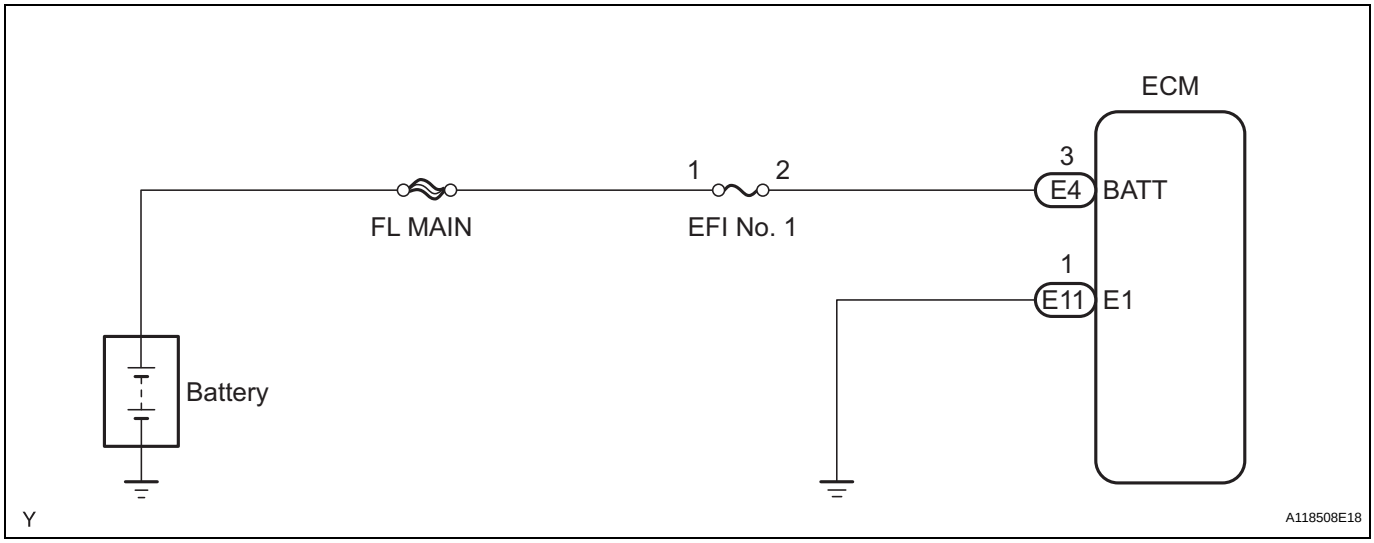
TYPICAL ENABLING CONDITIONS

The monitor will run whenever these DTCs are not present	None
Stand-by RAM	Initialized

TYPICAL MALFUNCTION THRESHOLDS

ECM power source	Less than 3.5 V

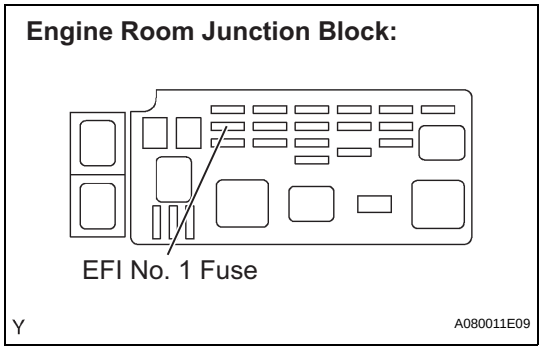
WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:
Read freeze frame data using the intelligent tester. The ECM records vehicle and driving condition information as freeze frame data the moment a DTC is stored. When troubleshooting, freeze frame data can be helpful in determining whether the vehicle was running or stopped, whether the engine was warmed up or not, whether the air-fuel ratio was lean or rich, as well as other data recorded at the time of a malfunction.

1 CHECK FUSE (EFI NO. 1 FUSE)

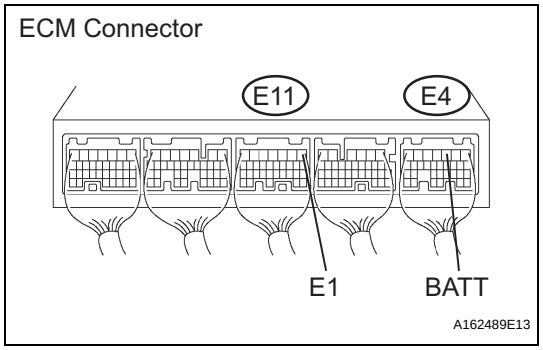


(a) Remove the EFI No. 1 fuse from the engine room junction block.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance:
Below 1 Ω
(c) Reinstall the EFI No. 1 fuse.

NG → **REPLACE FUSE (EFI NO. 1 FUSE)**

OK

2 INSPECT ECM (BATT VOLTAGE)



(a) Measure the voltage according to the value(s) in the table below.
Standard voltage

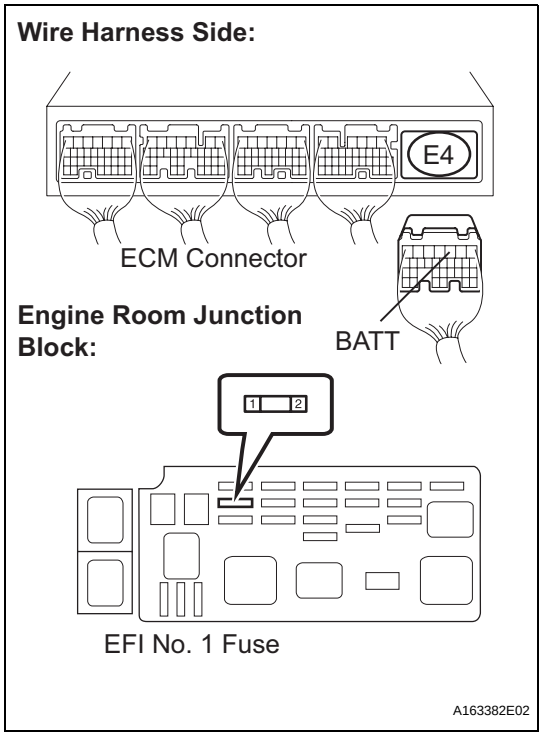
Tester Connection	Specified Condition
BATT (E4-3) - E1 (E11-1)	9 to 14 V

NG → **Go to step 3**

OK

REPLACE ECM (See page ES-498)

3	CHECK HARNESS AND CONNECTOR (ECM - EFI NO. 1 FUSE)



(a) Check the harness and the connector between the EFI No. 1 fuse and ECM.
  (1) Remove the EFI No. 1 fuse from the engine room junction block.
  (2) Disconnect the E4 ECM connector.
  (3) Measure the resistance according to the value(s) in the table below.
  Standard resistance :
  Check for open

Tester Connection	Specified Condition
EFI No. 1 fuse (2) - BATT (E4-3)	Below 1 Ω

Check for short

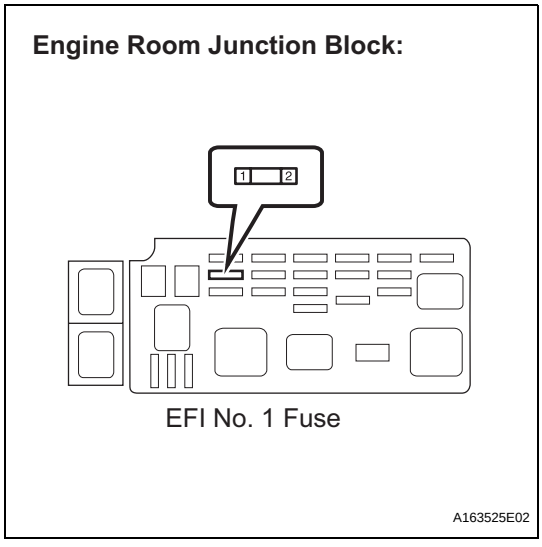
Tester Connection	Specified Condition
EFI No. 1 fuse (2) or BATT (E4-3) - Body ground	10 kΩ or higher

  (4) Reconnect the ECM connector.
  (5) Reinstall the EFI No. 1 fuse.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (ECM - EFI NO. 1 FUSE)**

OK

4	CHECK HARNESS AND CONNECTOR (EFI NO. 1 FUSE - BATTERY)



(a) Check the harness and the connector between the EFI No. 1 fuse and battery.
  (1) Remove the EFI No. 1 fuse from the engine room junction block.
  (2) Disconnect the negative battery cable.
  (3) Measure the resistance according to the value(s) in the table below.
  Standard resistance:
  Check for open

Tester Connection	Specified Condition
Battery positive terminal - EFI No .1 fuse (1)	Below 1 Ω

Check for short

Tester Connection	Specified Condition
Battery positive terminal or EFI No. 1 fuse (1) - Body ground	10 kΩ or higher

  (4) Reconnect the negative battery cable.
  (5) Reinstall the EFI No. 1 fuse.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (EFI NO. 1 FUSE - BATTERY)**

OK

5	INSPECT BATTERY

(a) Check that the battery is not depleted.

NG → REPLACE BATTERY

OK

CHECK AND REPLACE ENGINE ROOM RELAY BLOCK