System Voltage

### DESCRIPTION

The battery supplies electricity to the ECM even when the ignition switch is in the OFF position. 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 Conditions  | Trouble Areas   |
|---|---------|---|---|
| - | P0560   | Open in ECM back up power source circuit (1 trip detection logic) | <ul> <li>Open in back up power source circuit</li> <li>EFI fuse</li> <li>ECM</li> </ul> |

#### 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  |  |

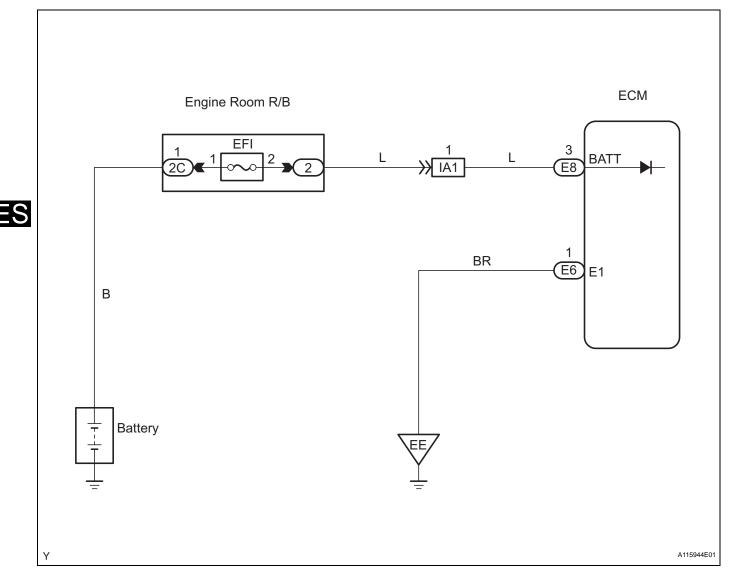
# **TYPICAL ENABLING CONDITIONS**

| Monitor runs whenever following DTCs not present | None        |
|--|-------------|
| Stand-by RAM                                     | Initialized |

# **TYPICAL MALFUNCTION THRESHOLDS**

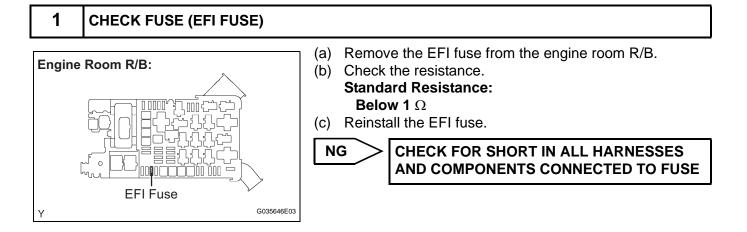
| ECM power source | Less than 3.5 V |
|------------------|-----------------|

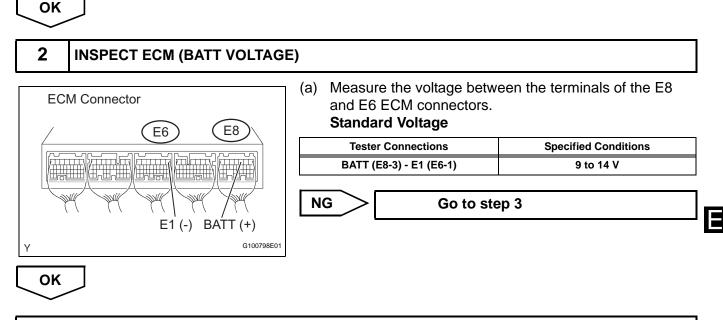
### WIRING DIAGRAM



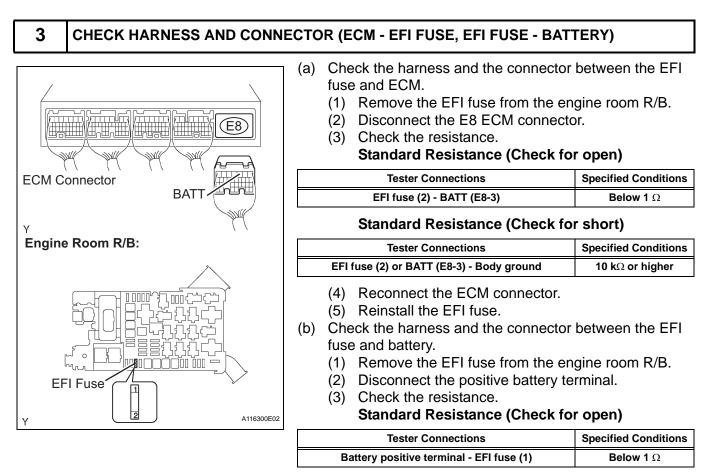
### HINT:

Read freeze frame data using an intelligent tester. Freeze frame data record the engine condition when malfunctions are detected. When troubleshooting, freeze frame data can help determine if the vehicle was moving or stationary, 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.





REPLACE ECM



### Standard Resistance (Check for short)

| Tester Connections   | Specified Conditions    |
|--|-------------------------|
| Battery positive terminal or EFI fuse (1) - Body<br>ground | 10 k $\Omega$ or higher |

(4) Reconnect the positive battery terminal.

