

DTC	P0560/117	SYSTEM VOLTAGE
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CIRCUIT DESCRIPTION

Since the ECU back-up power source is used for DTCs and freeze frame data memory, the back-up power source (BATT) continues to be supplied to the HV control ECU even though the power switch is turned OFF.

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0560	117	HV control ECU back-up power source circuit malfunction	<ul style="list-style-type: none"> • Wire harness or connector • HEV fuse

MONITOR DESCRIPTION

If 3 or more seconds have elapsed with a voltage of 3.3 V or less at the BATT terminal at the HV control ECU, the HV control ECU will determine that a malfunction has occurred in the back-up power supply system, and set a DTC. It will illuminate the MIL the next time the engine is started.

MONITOR STRATEGY

Related DTCs	P0560 (INF 117): Battery signal malfunction
Required sensor/components	Main: Back-up power source circuit Sub: Hybrid vehicle control ECU
Frequency of operation	Continuous
Duration	3 seconds
MIL operation	Immediate after next power switch ON (IG)
Sequence of operation	None

TYPICAL ENABLING CONDITIONS

The monitor will run whenever the following DTCs are not present	TOYOTA's intellectual property
A/D converter	Normal
Auxiliary battery voltage	9.5 V or more

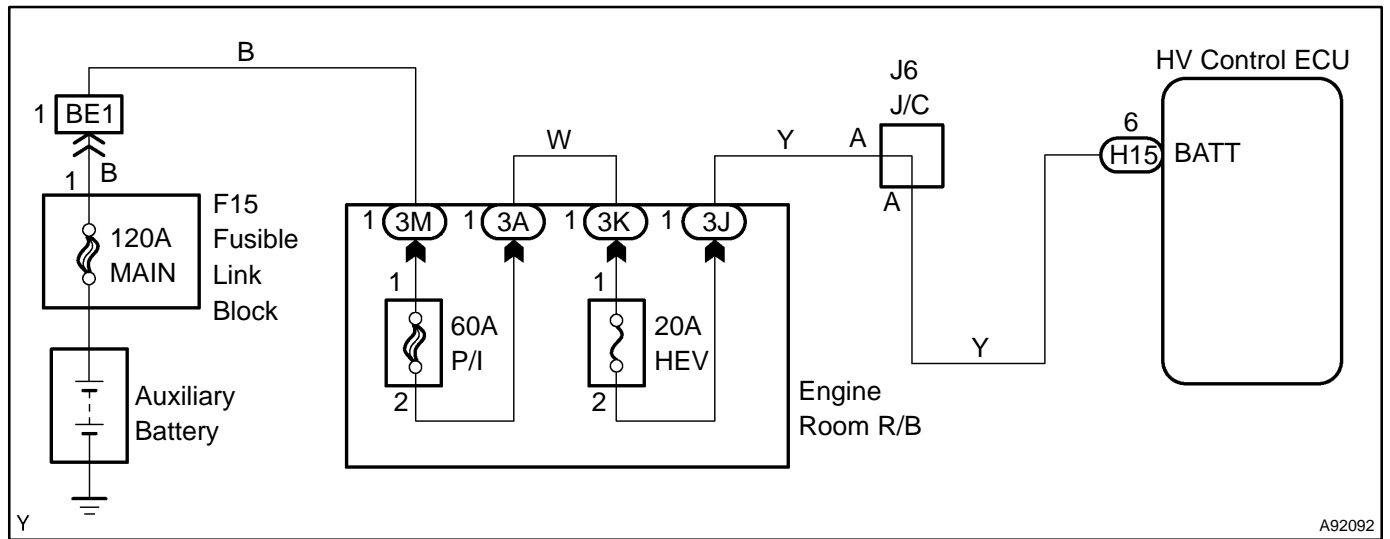
TYPICAL MALFUNCTION THRESHOLDS

Condition (a) or (b) is met	–
(d) Input voltage for BATT signal	Less than 2.5 V
(e) Abnormal flag for SRAM	ON

COMPONENT OPERATING RANGE

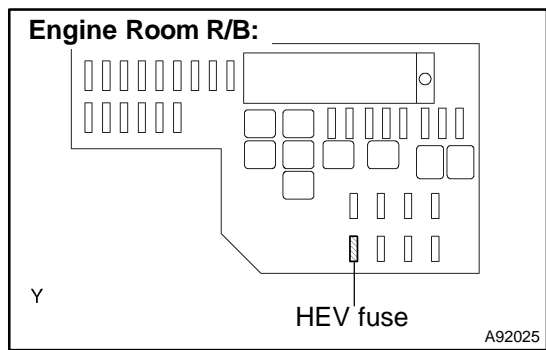
Auxiliary battery voltage	Between 9 and 14 V
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WIRING DIAGRAM



INSPECTION PROCEDURE

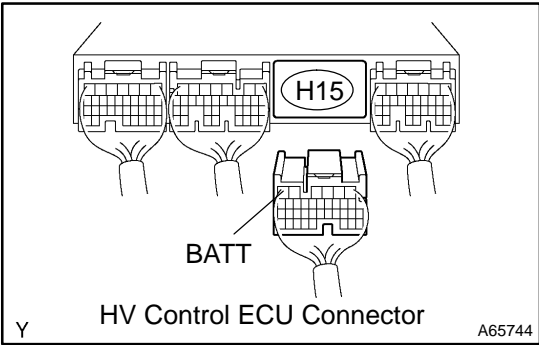
1 CHECK FUSE(HEV 20 A)



- (a) Remove the HEV fuse from the engine room R/B.
 - (b) Check the resistance in the HEV fuse.
Standard: Below 1 Ω
 - (c) Reinstall the HEV fuse.
- NG** → Go to step 3

OK

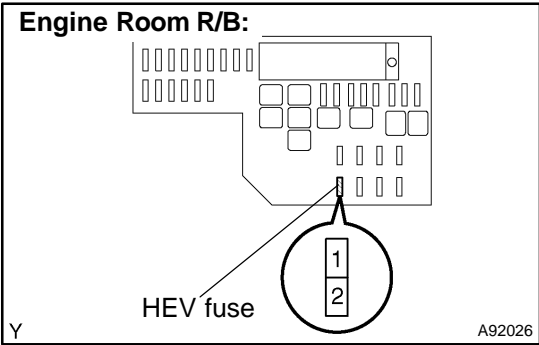
2 CHECK HARNESS AND CONNECTOR(HYBRID VEHICLE CONTROL ECU – AUXILIARY BATTERY)



- (a) Disconnect the negative auxiliary battery terminal.
- (b) Disconnect the positive auxiliary battery terminal.
- (c) Remove the HEV fuse from the engine room R/B.
- (d) Disconnect the H15 HV control ECU connector.
- (e) Check the resistance between the wire harness side connectors.

Standard (Check for open):

Tester Connection	Specified Condition
BATT (H15-6) – HEV fuse (2)	Below 1 Ω

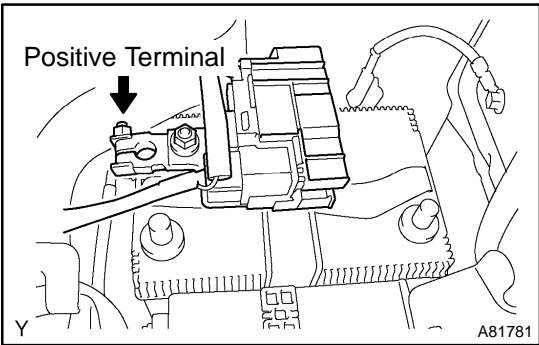


NOTICE:
When taking a measurement with a tester, do not apply excessive force to the tester probe to avoid damaging the holder.

- (f) Check the resistance between the wire harness side connectors.

Standard (Check for open):

Tester Connection	Specified Condition
HEV fuse (1) – positive auxiliary battery terminal	Below 1 Ω



NOTICE:
When taking a measurement with a tester, do not apply excessive force to the tester probe to avoid damaging the holder.

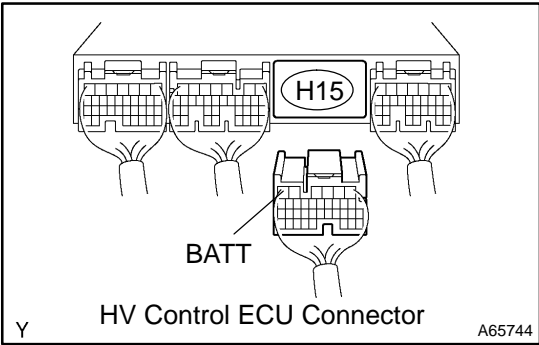
- (g) Reconnect the HV control ECU connector.
- (h) Reinstall the HEV fuse.
- (i) Reconnect the positive auxiliary battery terminal.
- (j) Reconnect the negative auxiliary battery terminal.

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPAIR CONNECTOR CONNECTION

3 CHECK HARNESS AND CONNECTOR(HYBRID VEHICLE CONTROL ECU – HEV FUSE)



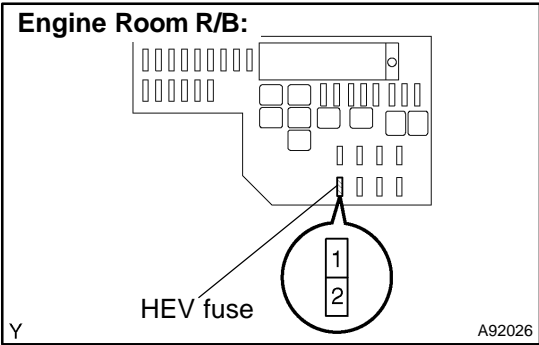
- (a) Disconnect the H15 HV control ECU connector.
- (b) Remove the HEV fuse from the engine room R/B.
- (c) Check the resistance between the wire harness side connectors.

Standard (Check for short):

Tester Connection	Specified Condition
BATT (H15-6) or HEV fuse (2) – Body ground	10 kΩ or higher

NOTICE:
When taking a measurement with a tester, do not apply excessive force to the tester probe to avoid damaging the holder.

- (d) Reinstall the HEV fuse.
- (e) Reconnect the HV control ECU connector.



NG AFTER REPAIRING OR REPLACING HARNESS OR CONNECTOR, REPLACE FUSE (HEV 20A)

OK

REPLACE FUSE (HEV 20 A)