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|------------|------------------|-----------------------|
| DTC | P0560/117 | SYSTEM VOLTAGE |
|------------|------------------|-----------------------|

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 |

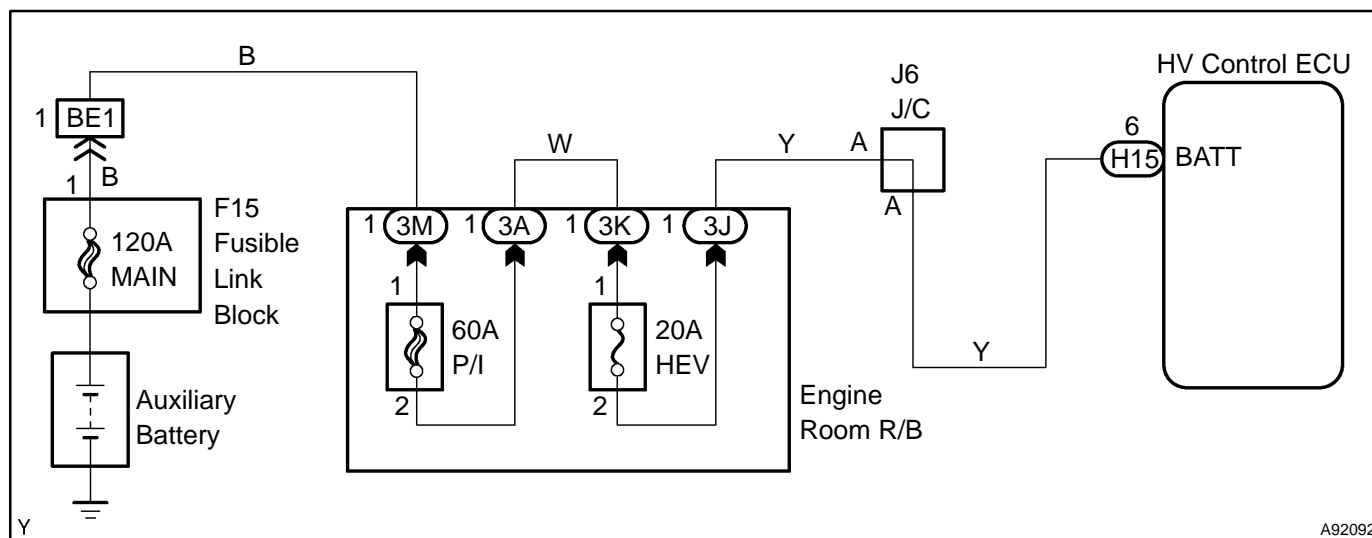
TYPICAL MALFUNCTION THRESHOLDS

| | |
|-----------------------------------|-----------------|
| 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

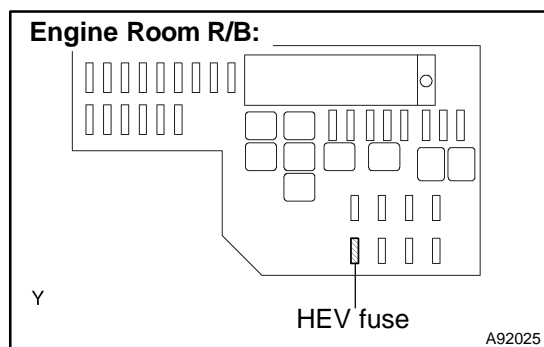
| | |
|---------------------------|--------------------|
| Auxiliary battery voltage | Between 9 and 14 V |
|---------------------------|--------------------|

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK FUSE(HEV 20 A)



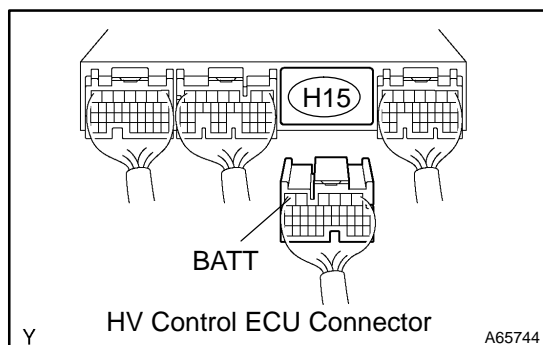
- Remove the HEV fuse from the engine room R/B.
- Check the resistance in the HEV fuse.
Standard: Below 1 Ω
- Reinstall the HEV fuse.

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Go to step 3

OK

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



- Disconnect the negative auxiliary battery terminal.
- Disconnect the positive auxiliary battery terminal.
- Remove the HEV fuse from the engine room R/B.
- Disconnect the H15 HV control ECU connector.
- 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.

- Check the resistance between the wire harness side connectors.

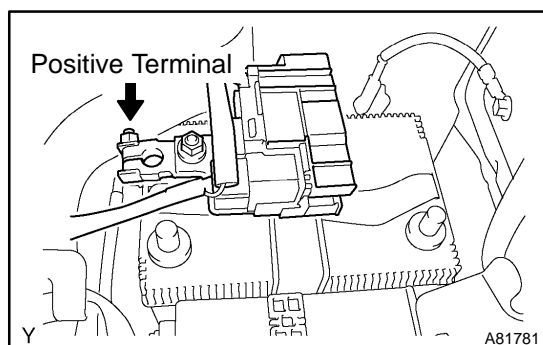
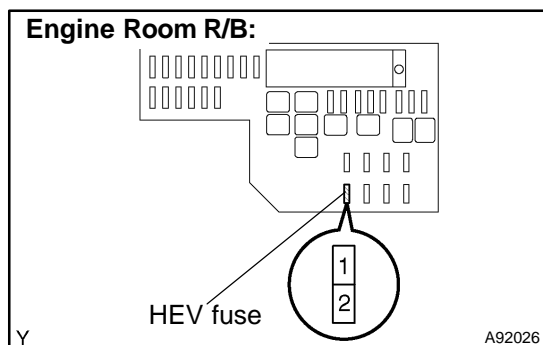
Standard (Check for open):

| 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.

- Reconnect the HV control ECU connector.
- Reinstall the HEV fuse.
- Reconnect the positive auxiliary battery terminal.
- Reconnect the negative auxiliary battery terminal.



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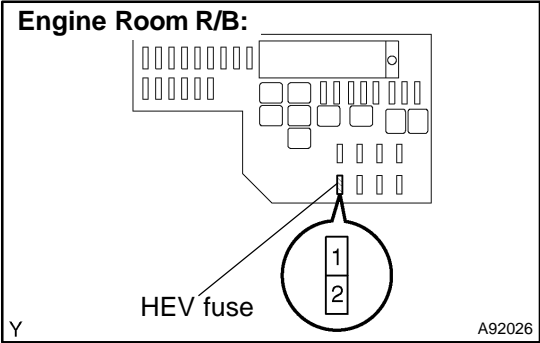
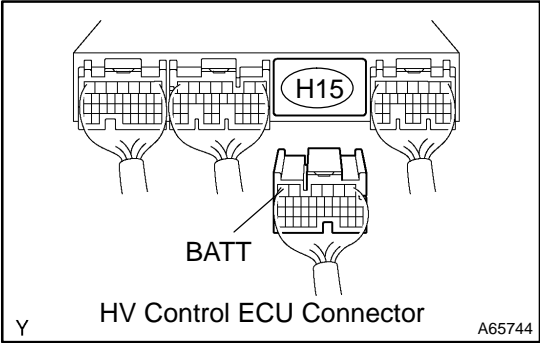
REPAIR OR REPLACE HARNESS OR CONNECTOR

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.

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

OK

REPLACE FUSE (HEV 20 A)