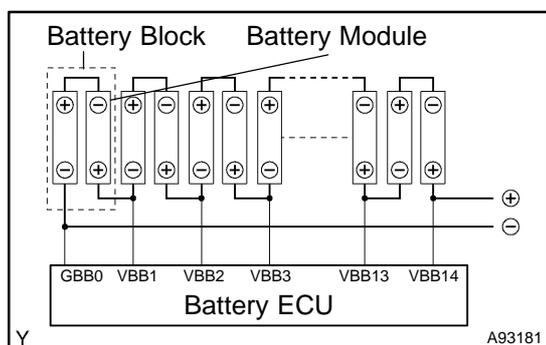


DTC	P0A80	REPLACE HYBRID BATTERY PACK
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CIRCUIT DESCRIPTION



The HV battery assembly consists of nickel hydride batteries. Nickel hydride batteries do not require external charging. The SOC (state of charge) of the HV battery is maintained at a constant voltage level by the HV control ECU while the vehicle is being driven. In the HV battery assembly, 28 modules are connected in series, and each module has six 1.2 V cells that are connected in series. Thus, the HV battery assembly contains a total of 168 cells which produce 201.6 V. The battery ECU, which monitors two modules as a single battery block, detects the battery block voltage at a total of 14 locations.

DTC No.	DTC Detection Condition	Trouble Area
P0A80	Voltage difference between battery blocks is higher than standard (2 trip detection logic)	<ul style="list-style-type: none"> • HV battery assembly • Battery ECU

MONITOR DESCRIPTION

The battery ECU, which monitors the voltage of the battery blocks, determines that malfunction has occurred if a voltage difference between the battery blocks exceeds the standard. When the malfunction detection condition is satisfied, the battery ECU illuminates the MIL and sets a DTC.

MONITOR STRATEGY

Related DTCs	P0A80: HV battery/Rationality
Required sensor/components	Main: Battery voltage sensor inside battery ECU Sub: Battery current sensor, battery temperature sensor
Frequency of operation	Continuous
Duration	TOYOTA's intellectual property
MIL operation	2 driving cycles
Sequence of operation	None

TYPICAL ENABLING CONDITIONS

The monitor will run whenever the following DTCs are not present	TOYOTA's intellectual property
Other conditions belong to TOYOTA's intellectual property	–

TYPICAL MALFUNCTION THRESHOLDS

Battery voltage difference	Exceeds the standard level
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COMPONENT OPERATING RANGE

TOYOTA's intellectual property	–
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INSPECTION PROCEDURE**1 READ OUTPUT DTC(DTC P0A1F IS OUTPUT)**

- (a) Connect the hand-held tester or the OBD II scan tool to the DLC3.
- (b) Turn the power switch ON (IG).
- (c) Turn the hand-held tester or the OBD II scan tool ON.
- (d) On the hand-held tester, enter the following menus: DIAGNOSIS / ENHANCED OBD II / HV BATTERY / DTC INFO / TROUBLE CODES.
For the OBD II scan tool, see its instruction manual.
- (e) Read DTCs.

Result: DTC P0A1F is output

YES

REPLACE BATTERY ECU ASSY
(See page [21-98](#))

NO

REPLACE HV SUPPLY BATTERY ASSY (See page [21-54](#))