DTC	P0A92/606	HYBRID GENERATOR PERFORMANCE

DTC	P0A92/607	HYBRID GENERATOR PERFORMANCE

CIRCUIT DESCRIPTION

See the description of the MG1/MG2 on page 05–671.

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A92	606	MG1 power balance malfunction (small power balance)	• Battery current sensor • Hybrid vehicle generator
P0A92	607	MG1 power balance malfunction (large power balance)	• Battery current sensor • Hybrid vehicle generator

MONITOR DESCRIPTION

The HV control ECU monitors the energy balance of the hybrid vehicle generator (MG1) system. If the HV control ECU detects a malfunction in the amount of electrical energy while the MG1 charges or discharges electricity, it illuminates the MIL and sets a DTC.

MONITOR STRATEGY

Related DTCs	P0A92 (INF 606/607): Hybrid vehicle generator/Power balance malfunction
Required sensor/components	Hybrid vehicle generator, generator resolver
Frequency of operation	Continuous
Duration	TOYOTA's intellectual property
MIL operation	Immediately
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

Hybrid vehicle generator (power balance)	Small or large

COMPONENT OPERATING RANGE

Hybrid vehicle generator	DTC P0A92 (INF 606/607) is not detected

INSPECTION PROCEDURE

CAUTION:

- **Before inspecting the high–voltage system, take safety precautions to prevent electrical shocks, such as wearing insulated gloves and removing the service plug grip. After removing the service plug grip, put it in your pocket to prevent other technicians from reconnecting it while you are servicing the high–voltage system.**
- **After disconnecting the service plug grip, wait at least for 5 minutes before touching any of the high–voltage connectors or terminals.**

HINT:

At least 5 minutes is required to discharge the high–voltage condenser inside the inverter.

1	READ OUTPUT DTC(HV BATTERY)

(a) Connect the hand–held tester to the DLC3.
(b) Turn the power switch ON (IG).
(c) Turn the hand–held tester ON.
(d) On the hand–held tester, enter the following menus: DIAGNOSIS / ENHANCED OBD II / HV BATTERY / DTC INFO / TROUBLE CODES.
(e) Read DTCs.
Result: DTCs are output

YES → **GO TO RELEVANT DTC CHART (See page 05–893)**

NO

2	READ OUTPUT DTC(HV ECU)

(a) Connect the hand–held tester to the DLC3.
(b) Turn the power switch ON (IG).
(c) Turn the hand–held tester ON.
(d) On the hand–held tester, enter the following menus: DIAGNOSIS / ENHANCED OBD II / HV ECU / DTC INFO / TROUBLE CODES.
(e) Read DTCs.
Result: DTC P0A92 (INF 606 or 607) and other DTCs are output

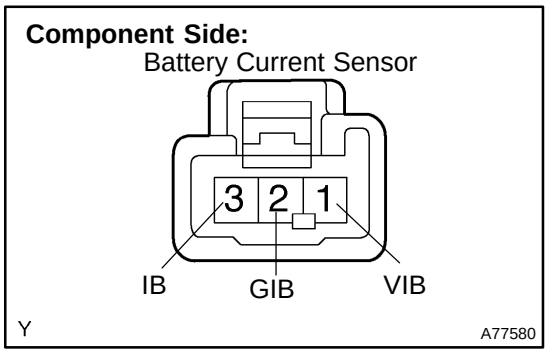
HINT:
If any other codes besides P0A92 (INF 606 or 607) are output, perform troubleshooting for those DTCs first.

YES → **GO TO RELEVANT DTC CHART (See page 05–440)**

NO

3	INSPECT BATTERY CURRENT SENSOR

Component Side:



(a) Remove the battery current sensor (see page 21–95).
(b) Measure the resistance between terminals 1 (VIB) and 2 (GIB).
Standard:

Tester Connection	Resistance
Positive probe to terminal 1 (VIB) Negative probe to terminal 2 (GIB)	3.5 to 4.5 kΩ
Positive probe to terminal 2 (GIB) Negative probe to terminal 1 (VIB)	5 to 7 kΩ or more

(c) Measure the resistance between terminals 1 (VIB) and 3 (IB).
Standard:

Tester Connection	Resistance
Positive probe to terminal 1 (VIB) Negative probe to terminal 3 (IB)	3.5 to 4.5 kΩ
Positive probe to terminal 3 (IB) Negative probe to terminal 1 (VIB)	5 to 7 kΩ or more

(d) Measure the resistance between terminals 2 (GIB) and 3 (IB).

Standard: 0.2 kΩ or less

NOTICE:

Even if the probes are changed around, the resistance will not vary.

(e) Reinstall the battery current sensor (see page 21–95).

NG → **REPLACE BATTERY CURRENT SENSOR (See page 21–95)**

OK

REPLACE HYBRID VEHICLE GENERATOR ASSY