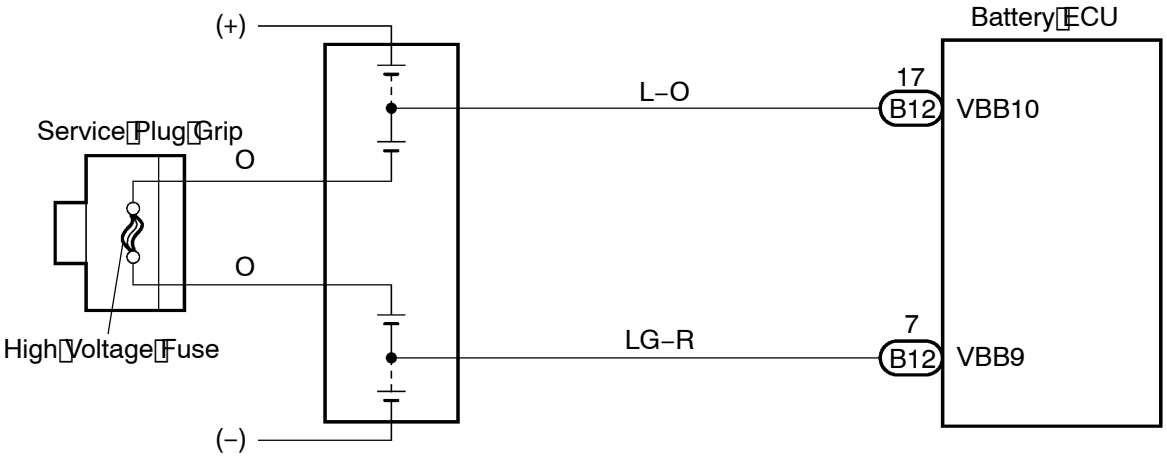
DTC P0A1F/129 BATTERY ENERGY CONTROL MODULE

CIRCUIT DESCRIPTION

The battery ECU transmits information on the HV battery voltage to the HV control ECU via CAN communication.

DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A1F	129	HV battery voltage circuit malfunction	• HV battery voltage circuit • Service plug grip • High voltage fuse • Battery plug • Battery ECU

WIRING DIAGRAM



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 intelligent tester II to the DLC3.
(b) Turn the power switch ON (IG).
(c) Turn the intelligent tester II ON.
(d) On the intelligent tester II, enter the following menus: Powertrain / HV Battery / DTC.
(e) Read DTCs.
Result: DTCs are output

YES → **GO TO RELEVANT DTC CHART (See page 05–665)**

NO

2 READ OUTPUT DTC(HYBRID CONTROL)

(a) Connect the Intelligent tester II to the DLC3.
(b) Turn the power switch ON (IG).
(c) Turn the Intelligent tester II ON.
(d) On the Intelligent tester II, enter the following menus: Powertrain / Hybrid Control / DTC.
(e) Read DTCs.

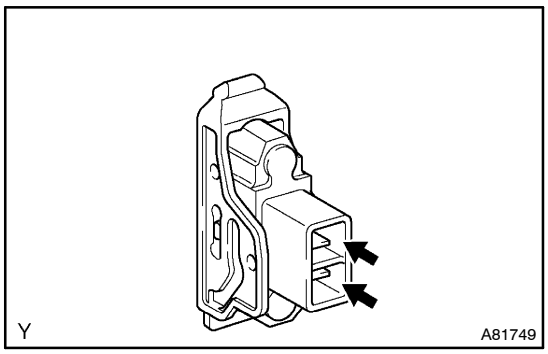
Result: DTCs listed in the table below are output.

DTC No.	INF Code	Detection Item	See Page
P0AA1	226	Hybrid Battery Positive Contactor Circuit Stuck Closed	05–540
P0AA2	227	Hybrid Battery Positive Contactor Circuit Stuck Open	05–540
P0AA4	228	Hybrid Battery Negative Contactor Circuit Stuck Closed	05–544
P0AA5	229	Hybrid Battery Negative Contactor Circuit Stuck Open	05–544

YES → **GO TO THE PAGE NUMBER SHOWN IN THE TABLE ABOVE**

NO

3 INSPECT SERVICE PLUG GRIP



CAUTION:
Wear insulated gloves before performing the following operation.

(a) Turn the power switch OFF.
(b) Remove the service plug grip (see page 21–120).

NOTICE:
Turning the power switch ON (READY) with the service plug grip removed could cause malfunction. Therefore, never turn the power switch ON (READY) in this state.

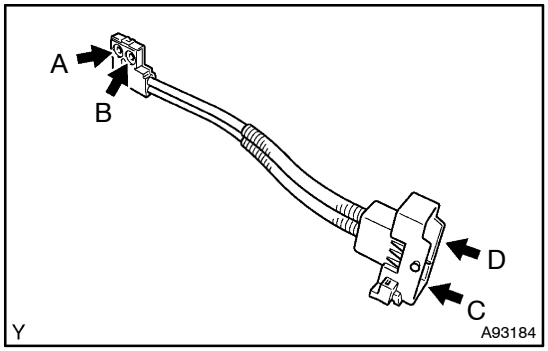
(c) Check the resistance between the terminals of the service plug grip.

Standard: Below 1 Ω

NG → **Go to step 5**

OK

4	INSPECT BATTERY PLUG



CAUTION:
Wear insulated gloves and goggles before performing the following operation.

(a) Remove the HV battery assembly (see page 21–56).
(b) Remove the battery plug (see page 21–79).
(c) Check the resistance between the terminals of the battery plug.
Standard:

Tester Connection	Specified Condition
A – C	Below 1 Ω
B – D	Below 1 Ω

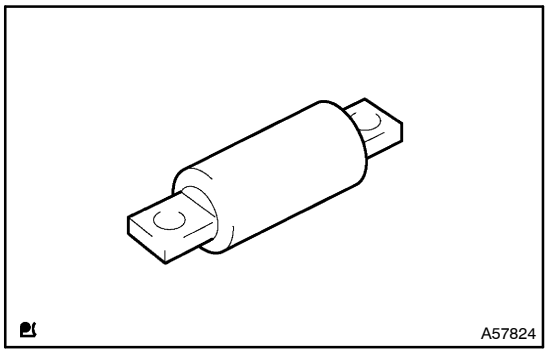
(d) Reinstall the battery plug (see page 21–79).
(e) Reinstall the HV battery assembly (see page 21–56).

NG → **REPLACE BATTERY PLUG**

OK

REPLACE BATTERY ECU ASSY (See page 21–100)

5	INSPECT HIGH VOLTAGE FUSE



CAUTION:
Wear insulated gloves before performing the following operation.

(a) Remove the high voltage fuse (see page 21–120).
HINT:
The high voltage fuse is enclosed in the service plug grip.
(b) Check the resistance between the terminals of the high voltage fuse.
Standard: Below 1 Ω
(c) Reinstall the high voltage fuse (see page 21–120).

NG → **REPLACE HIGH VOLTAGE FUSE**

OK

REPLACE SERVICE PLUG GRIP