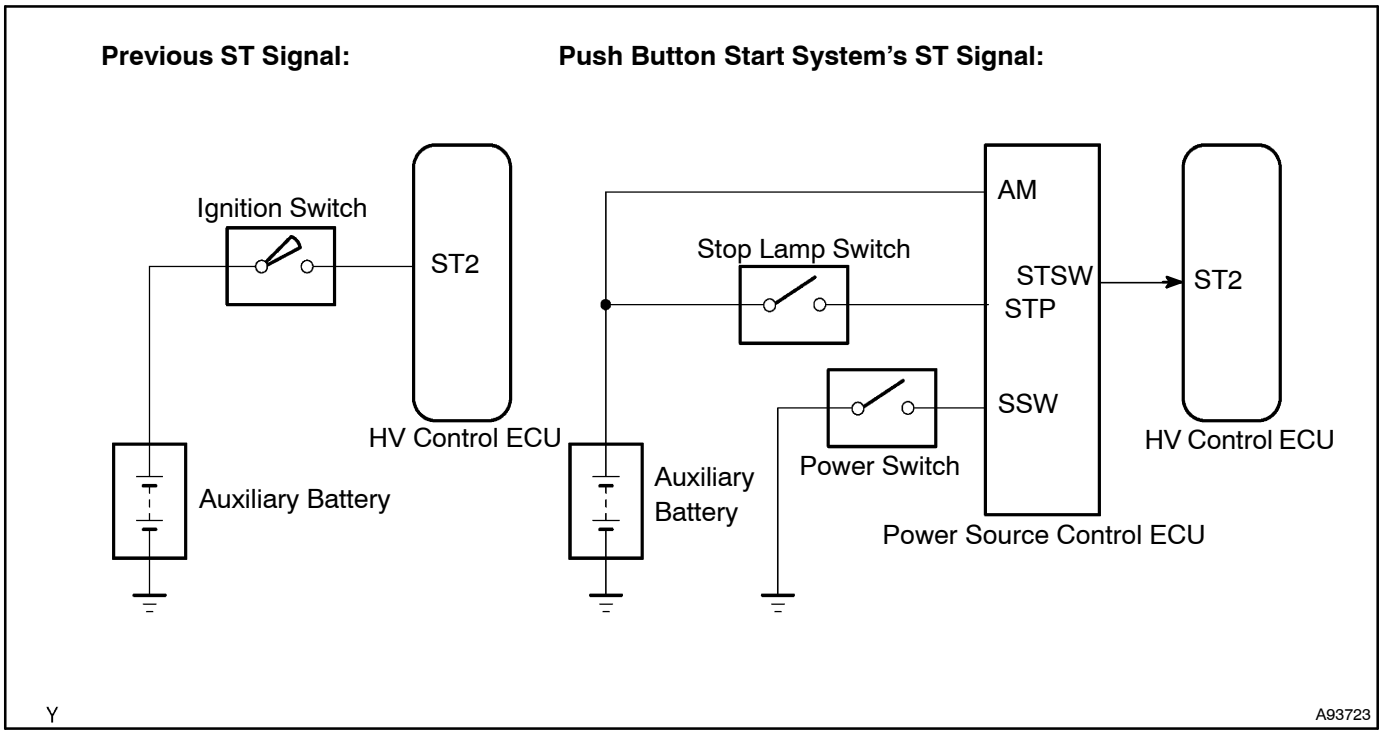
DTC	P0A1D/142	HYBRID POWERTRAIN CONTROL MODULE

CIRCUIT DESCRIPTION

When the ST turned ON at the ignition switch on the previous model, the ignition switch transmitted the ST signal to the HV control ECU.

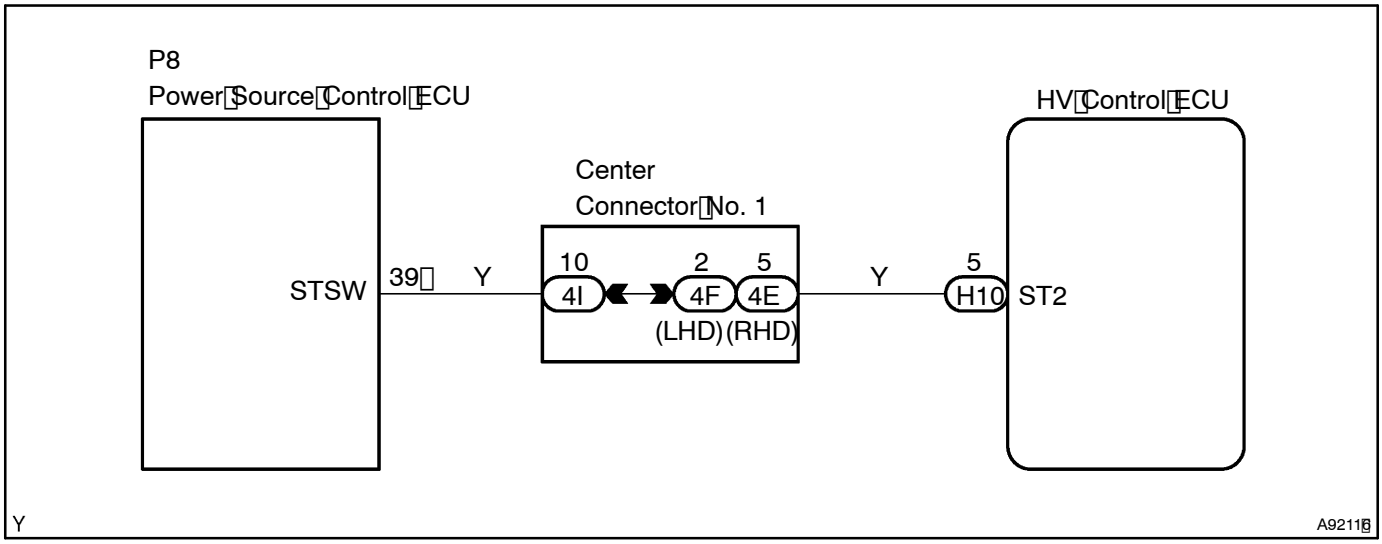
The new Prius has adopted a push button start system. When the driver pushes on the power switch while depressing the brake pedal, the power source control ECU transmits the ST signal to the HV control ECU.



The HV control ECU monitors the ST signal to detect malfunction. If the ST signal is shorted to the +B power supply, the ST will be constantly ON, which will cause the HV system to start by merely turning the power switch ON (IG). The HV control ECU monitors the ST signal to prevent this from occurring.

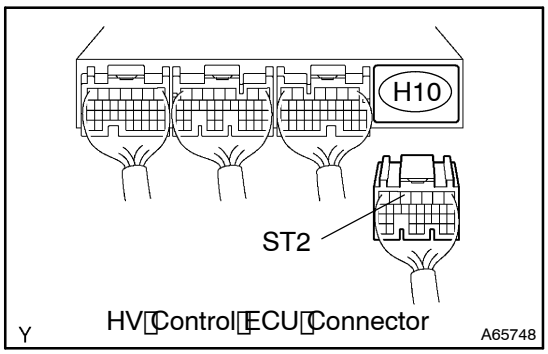
DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A1D	142	ST signal of HV control ECU is ON with power switch OFF	• Wire harness or connector • Power source control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT HYBRID VEHICLE CONTROL ECU(ST2 VOLTAGE)



(a) Disconnect the H10 HV control ECU connector.

(b) Measure the voltage between the terminal of the HV control ECU connector and body ground with the power switch turned OFF.

Standard:

Tester Connection	Specified Condition
ST2 (H10–5) – Body ground	Below 1 V

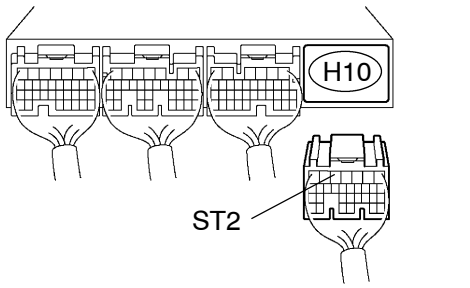
(c) Reconnect the HV control ECU connector.

NG → **Go to step 2**

OK

CHECK FOR INTERMITTENT PROBLEMS (See page 05–232)

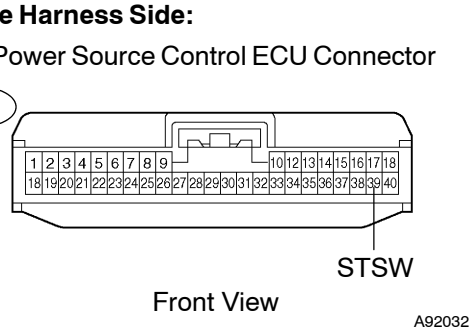
2	CHECK HARNESS AND CONNECTOR(HYBRID VEHICLE CONTROL ECU – POWER SOURCE CONTROL ECU)



(a) Disconnect the H10 HV control ECU connector.
(b) Disconnect the P8 power source control ECU connector.
(c) Measure the voltage between the terminal of the HV control ECU connector or power source control ECU and body ground with the power switch turned OFF.
Standard:

Tester Connection	Specified Condition
ST2 (H10–5) or STSW (P8–39) – Body ground	Below 1 V

(d) Reconnect the power source control ECU connector.
(e) Reconnect the HV control ECU connector.



NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE POWER SOURCE CONTROL ECU