DTC	P0A09/591	DC/DC CONVERTER STATUS CIRCUIT LOW INPUT

DTC	P0A10/592	DC/DC CONVERTER STATUS CIRCUIT HIGH INPUT

CIRCUIT DESCRIPTION

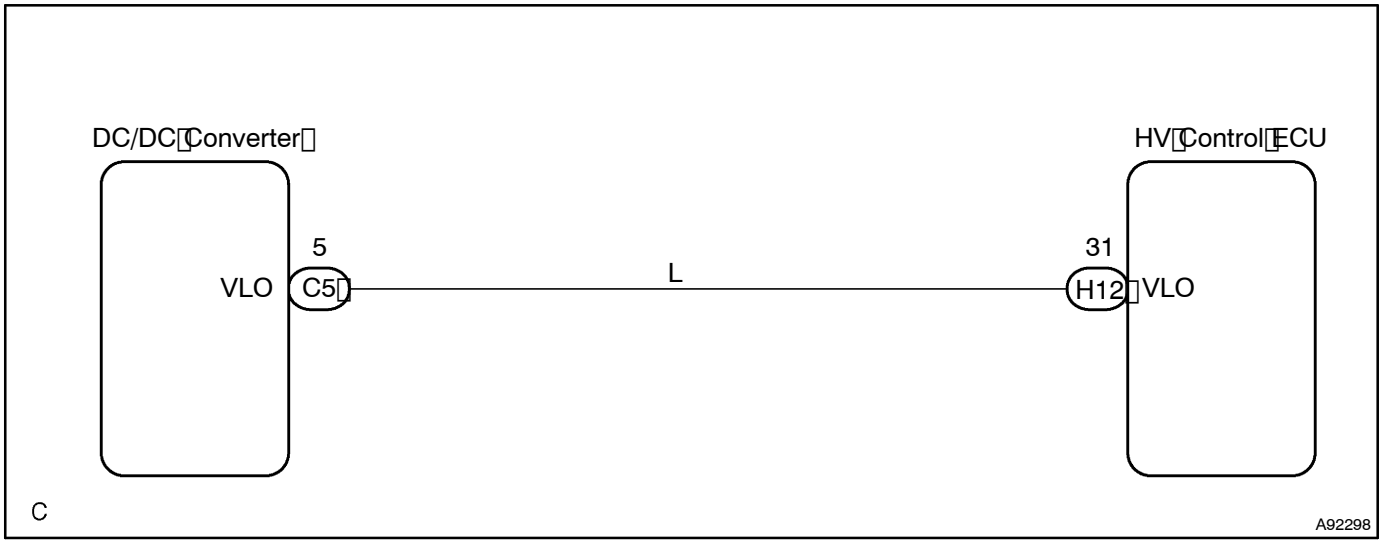
See the description of the DC/DC converter on page 05–310.

The HV control ECU sends the output voltage switch signal to the DC/DC converter via the VLO signal line in order to switch output voltage according to vehicle status.

If the vehicle is being driven with an inoperative DC/DC converter, the voltage of the auxiliary battery will drop, which will prevent the continued operation of the vehicle. Therefore, the HV control ECU monitors the operation of the DC/DC converter and alerts the driver if it detects malfunction.

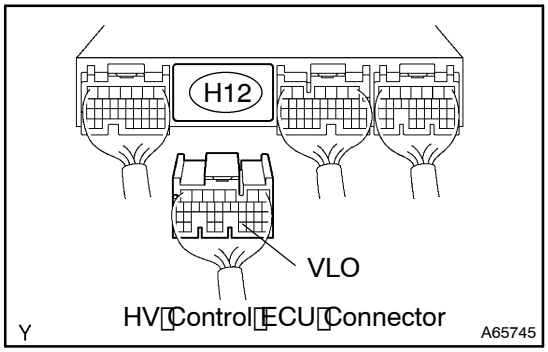
DTC No.	INF Code	DTC Detection Condition	Trouble Area
P0A09	591	Open or GND short in VLO signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly
P0A10	592	+B short in VLO signal circuit of DC/DC converter	• Wire harness or connector • w/ converter inverter assembly

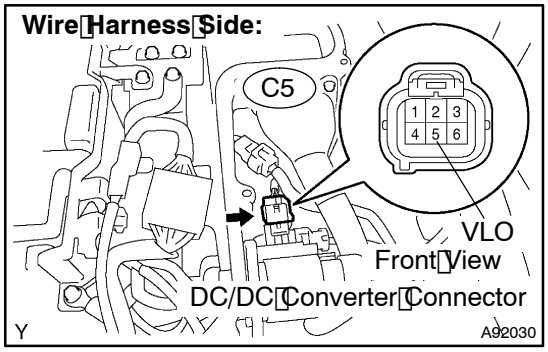
WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK HARNESS AND CONNECTOR(HYBRID VEHICLE CONTROL ECU – DC/DC CONVERTER)





(a) Disconnect the H12 HV control ECU connector.
(b) Disconnect the C5 DC/DC converter connector.
(c) Turn the power switch ON (IG).
(d) Measure the voltage between the terminal of the HV control ECU connector and body ground.

Standard:

Tester Connection	Specified Condition
VLO (H12–31) – Body ground	Below 1 V

(e) Turn the power switch OFF.
(f) Check the resistance between the wire harness side connectors.

Standard (Check for open):

Tester Connection	Specified Condition
VLO (H12–31) – VLO (C5–5)	Below 1 Ω

Standard (Check for short):

Tester Connection	Specified Condition
VLO (H12–31) or VLO (C5–5) – Body ground	10 kΩ or higher

(g) Reconnect the DC/DC converter connector.
(h) Reconnect the HV control ECU connector.

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

OK

REPLACE W/CONVERTER INVERTER ASSY (See page 21–25)