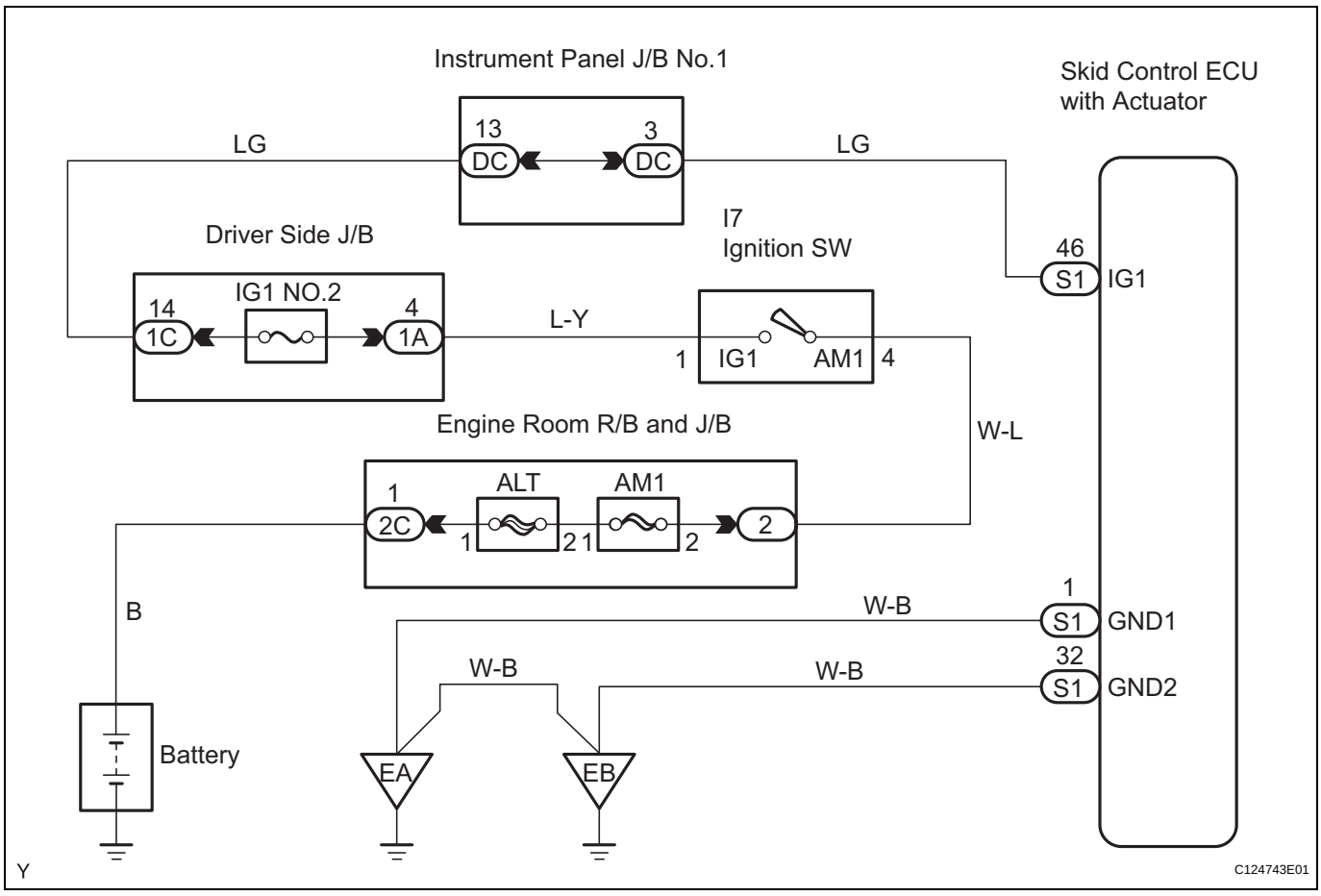
DTC	C1241/41	Low Battery Positive Voltage

DESCRIPTION

If there is a problem with the brake actuator (skid control ECU) power supply circuit, the skid control ECU outputs a DTC and prohibits operation under the fail safe function.
If the voltage supplied to the IG1 terminal is not within the DTC detection threshold due to malfunctions in parts such as the battery or alternator circuit, this DTC is stored.

DTC No.	DTC Detecting Conditions	Trouble Areas
C1241/41	• At vehicle speed of 2 mph (3 km/h) or more, voltage at IG1 terminal remains at 9.5 V or less for 10 seconds or more. • When solenoid relay ON, voltage at IG1 terminal 0.5 V or less, and contact of relay OFF for 0.2 seconds or more. • When voltage at IG1 terminal 9.5 V or less, voltage of speed sensor power supply decreases for 60 seconds or more.	• Battery • Charging system • Power source circuit

WIRING DIAGRAM



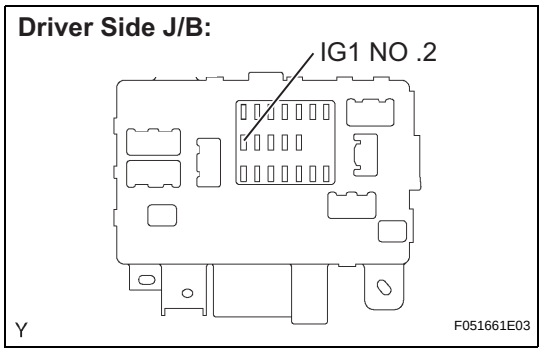
1	INSPECT BATTERY

(a) Check the battery voltage.
Standard Voltage:
11 to 14 V

NG → INSPECT CHARGING SYSTEM

OK

2 INSPECT FUSE (IG1 NO. 2)



(a) Remove the IG1 NO . 2 fuse from the driver side J/B.
(b) Measure the resistance of the IG1 NO. 2 fuse.
Standard Resistance:
Below 1 Ω
(c) Reinstall the IG1 NO. 2 fuse.

NG → **CHECK FOR SHORTS IN ALL HARNESSES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE**

OK

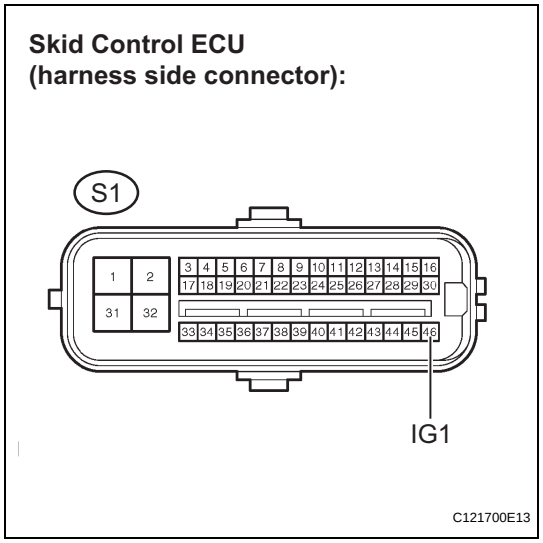
3 INSPECT SKID CONTROL ECU TERMINAL VOLTAGE (IG1 TERMINAL)

(a) When using intelligent tester:
(1) Start the engine.
(2) Connect the intelligent tester to the DLC3.
(3) Turn the intelligent tester ON.
(4) Select the DATA LIST mode on the intelligent tester.
(5) Measure the voltage condition output from the ECU displayed on the intelligent tester.

BC

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
IG VOLTAGE	ECU power supply voltage: TOO LOW / NORMAL / TOO HIGH	TOO HIGH: 14 V or more NORMAL: 9.5 V or 14 V TOO LOW: Below 9.5 V	-

OK:
"Normal" is displayed.



(b) When not using intelligent tester:
(1) Disconnect the skid control ECU connector.
(2) Turn the ignition switch to the ON position.
(3) Measure the voltage.
Standard Voltage

Tester Connection	Specified Condition
S1-46 (IG1) - Body ground	10 to 14 V

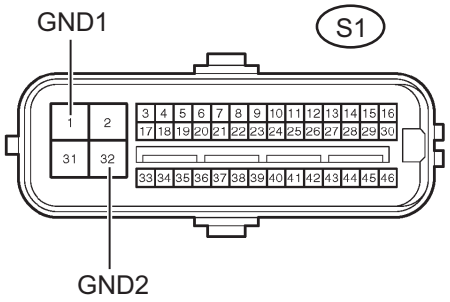
(4) Turn the ignition switch to OFF.
(5) Reconnect the skid control ECU connector.

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

OK

4	CHECK HARNESS AND CONNECTOR (GND TERMINAL CONTINUITY)

Skid Control ECU
(harness side connector):



C121700E06

(a) Disconnect the skid control ECU connector.
(b) Measure the resistance.
Standard Resistance

Tester Connection	Specified Condition
S1-1 (GND1) - Body ground	Below 1 Ω
S1-32 (GND2) - Body ground	Below 1 Ω

(c) Reconnect the skid control ECU connector.

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

OK

5	RECONFIRM DTC

(a) Clear the DTCs (See page BC-16).
(b) Drive the vehicle at 1.9 mph (3 km/h) or more for 10 seconds or more.
(c) Check if the same DTCs are detected.

Result	Proceed to
DTC output	A
DTC not output	B

NG → **END**

A

REPLACE BRAKE ACTUATOR

BC