

DTC	B1810/53	Short in Driver Side Squib 2nd Step Circuit
DTC	B1811/53	Open in Driver Side Squib 2nd Step Circuit
DTC	B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit
DTC	B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit

DESCRIPTION

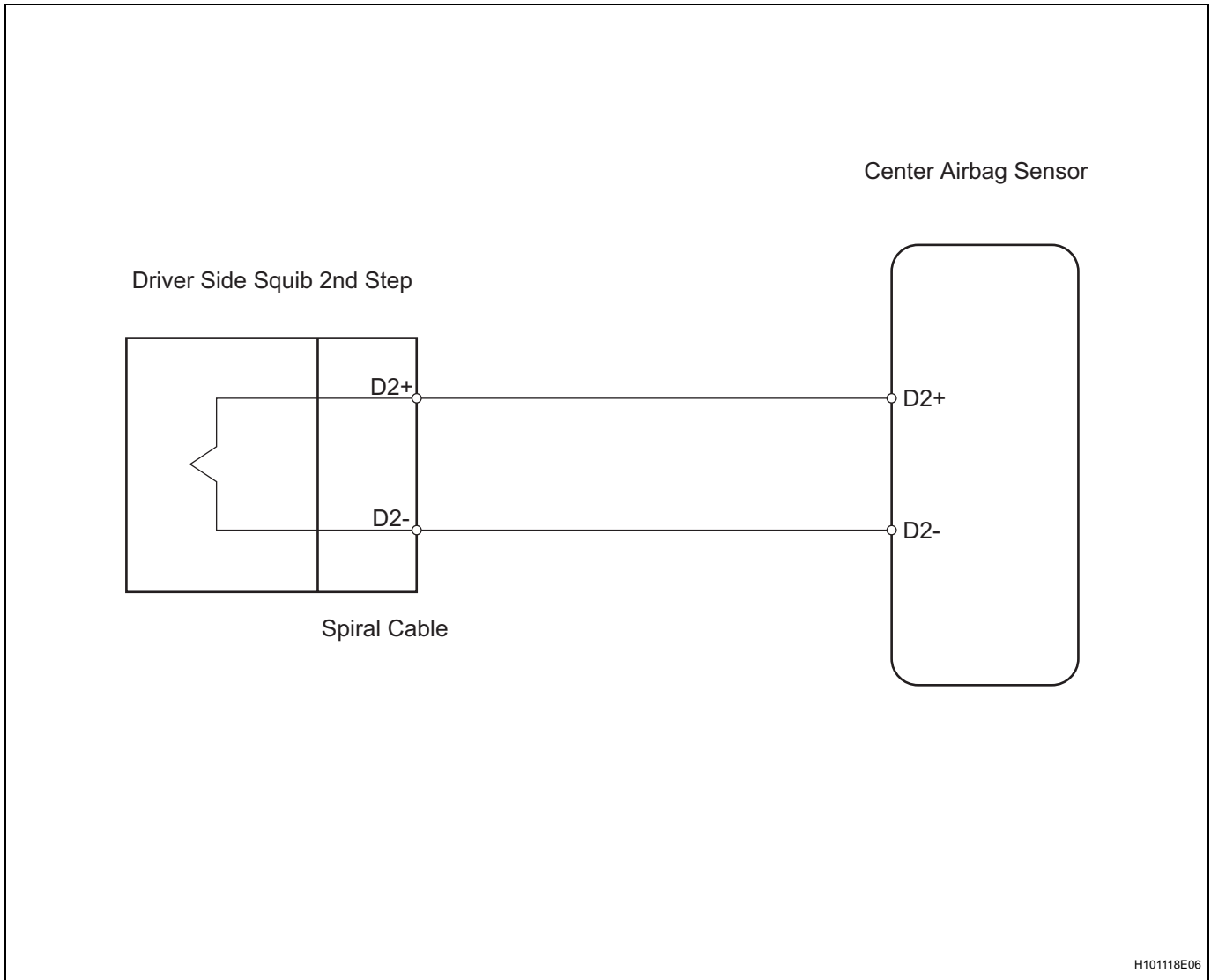
The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable and the steering pad.

The circuit instructs the SRS to deploy when the deployment conditions are met.

These DTCs are recorded when a malfunction is detected in the driver side squib 2nd step circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1810/53	Center airbag sensor receives a line short signal 5 times in the driver side squib 2nd step circuit during primary check.	<ul style="list-style-type: none"> • Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor
B1811/53	Center airbag sensor receives an open signal in the driver side squib 2nd step circuit for 2 seconds.	<ul style="list-style-type: none"> • Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor
B1812/53	Center airbag sensor assembly receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> • Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor
B1813/53	Center airbag sensor assembly receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds.	<ul style="list-style-type: none"> • Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor

WIRING DIAGRAM



RS

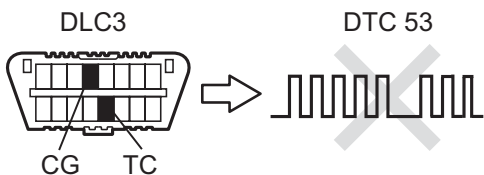
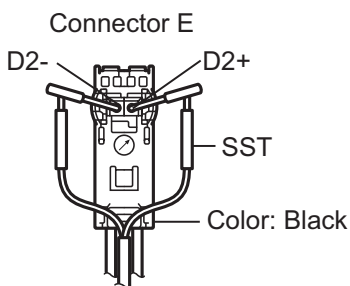
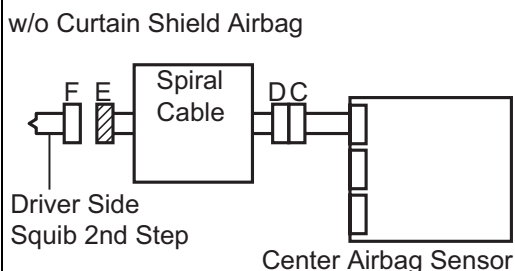
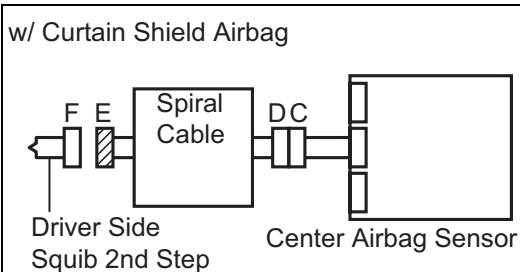
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INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting the "CHECK MODE" (signal check) with the intelligent tester (see page [RS-52](#)).
- After selecting the "CHECK MODE" (signal check), perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page [RS-52](#)).

1 CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)



C128646E02

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the steering pad.
- (d) Connect the white wire side of SST to the spiral cable connector E.

CAUTION:

Never connect a tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- Do not forcibly insert SST into the terminals of the connector when connecting.
- Insert SST straight into the terminals of the connector.

SST 09843-18060

- (e) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (f) Turn the ignition switch ON, and wait for at least 60 seconds.
- (g) Clear the DTCs (see page RS-49).
- (h) Turn the ignition switch OFF.
- (i) Turn the ignition switch ON, and wait for at least 60 seconds.
- (j) Check the DTCs (see page RS-49).

OK:

DTC B1810, B1811, B1812, B1813 or 53 is not output.

HINT:

DTCs other than DTC B1810, B1811, B1812, B1813 or 53 may be output at this time, but they are not related to this check.

OK → **REPLACE STEERING PAD**

RS

NG

2 CHECK CONNECTOR

- (a) Turn the ignition switch OFF.
- (b) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (c) Disconnect SST from the spiral cable.
- (d) Check that the spiral cable connector (on the steering pad side) is not damaged.

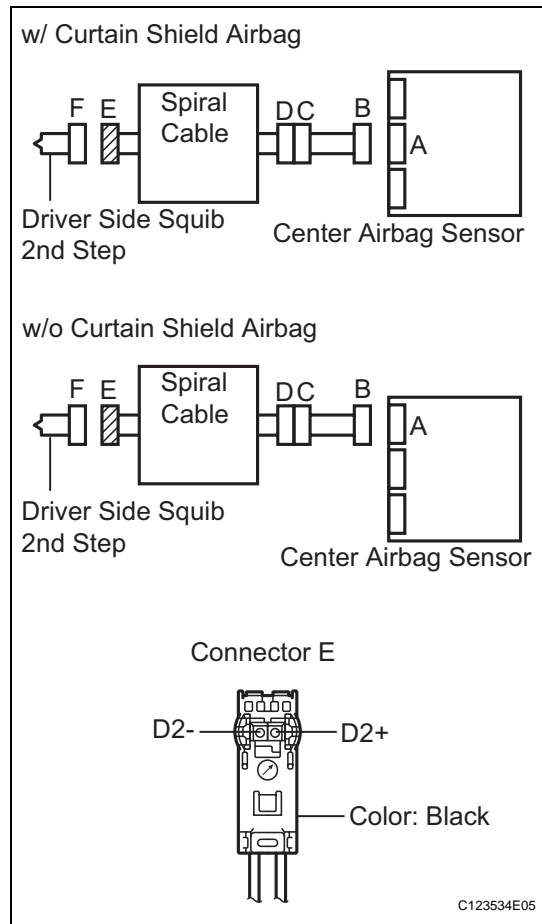
OK:

Lock button is not disengaged, and claw of lock is not deformed or damaged.

NG **REPLACE SPIRAL CABLE**

OK

3 CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT



- (a) Disconnect the connector from the center airbag sensor.
 - (b) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
 - (c) Turn the ignition switch ON.
 - (d) Measure the voltage of the wire harness side connector.
- Standard voltage**

Tester Connection	Specified Condition
D2+ - Body ground	Below 1 V
D2- - Body ground	Below 1 V

- (e) Turn the ignition switch OFF.
 - (f) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
 - (g) Measure the resistance of the wire harness side connector.
- Standard resistance**

Tester Connection	Specified Condition
D2+ - D2-	Below 1 Ω
D2+ - Body ground	1 MΩ or higher
D2- - Body ground	1 MΩ or higher

- (h) Release the activation prevention mechanism built into connector B (see page RS-37).
 - (i) Measure the resistance of the wire harness side connector.
- Standard resistance**

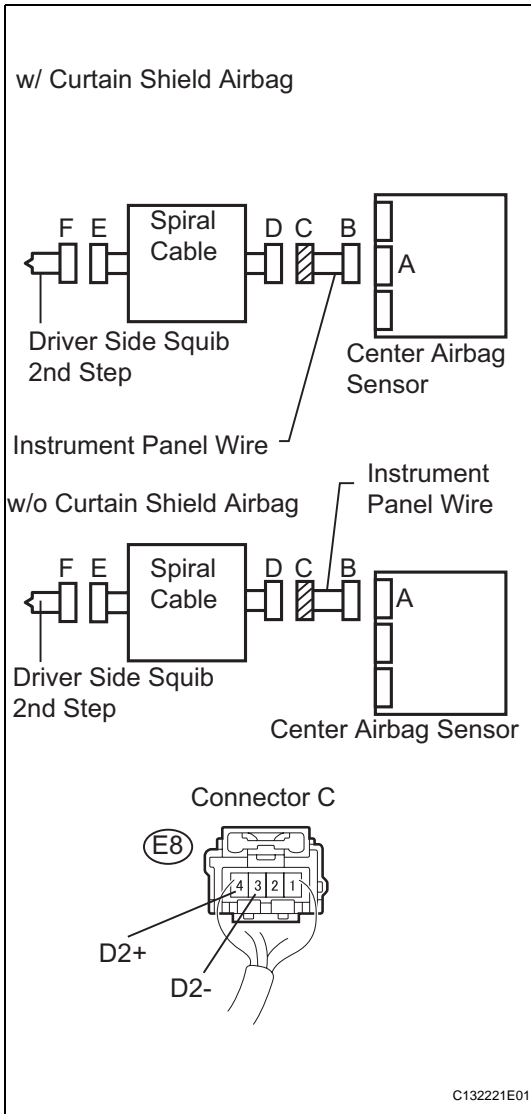
Tester Connection	Specified Condition
D2+ - D2-	1 MΩ or higher

OK **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

4 CHECK INSTRUMENT PANEL WIRE



- (a) Restore the released activation prevention mechanism of connector B to its original position.
- (b) Disconnect the instrument panel wire connector from the spiral cable.
- (c) Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.
- (d) Turn the ignition switch ON.
- (e) Measure the voltage of the wire harness side connector.

Standard voltage

Tester Connection	Specified Condition
E8-4 (D2+) - Body ground	Below 1 V
E8-3 (D2-) - Body ground	Below 1 V

- (f) Turn the ignition switch OFF.
- (g) Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.
- (h) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E8-4 (D2+) - E8-3 (D2-)	Below 1 Ω
E8-4 (D2+) - Body ground	1 MΩ or higher
E8-3 (D2-) - Body ground	1 MΩ or higher

- (i) Release the activation prevention mechanism built into connector B (see page RS-37).
- (j) Measure the resistance of the wire harness side connector.

Standard resistance

Tester Connection	Specified Condition
E8-4 (D2+) - E8-3 (D2-)	1 MΩ or higher

NG REPAIR OR REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

REPLACE SPIRAL CABLE

RS