

DTC	B1651/33	Manual Cut off Switch Trouble
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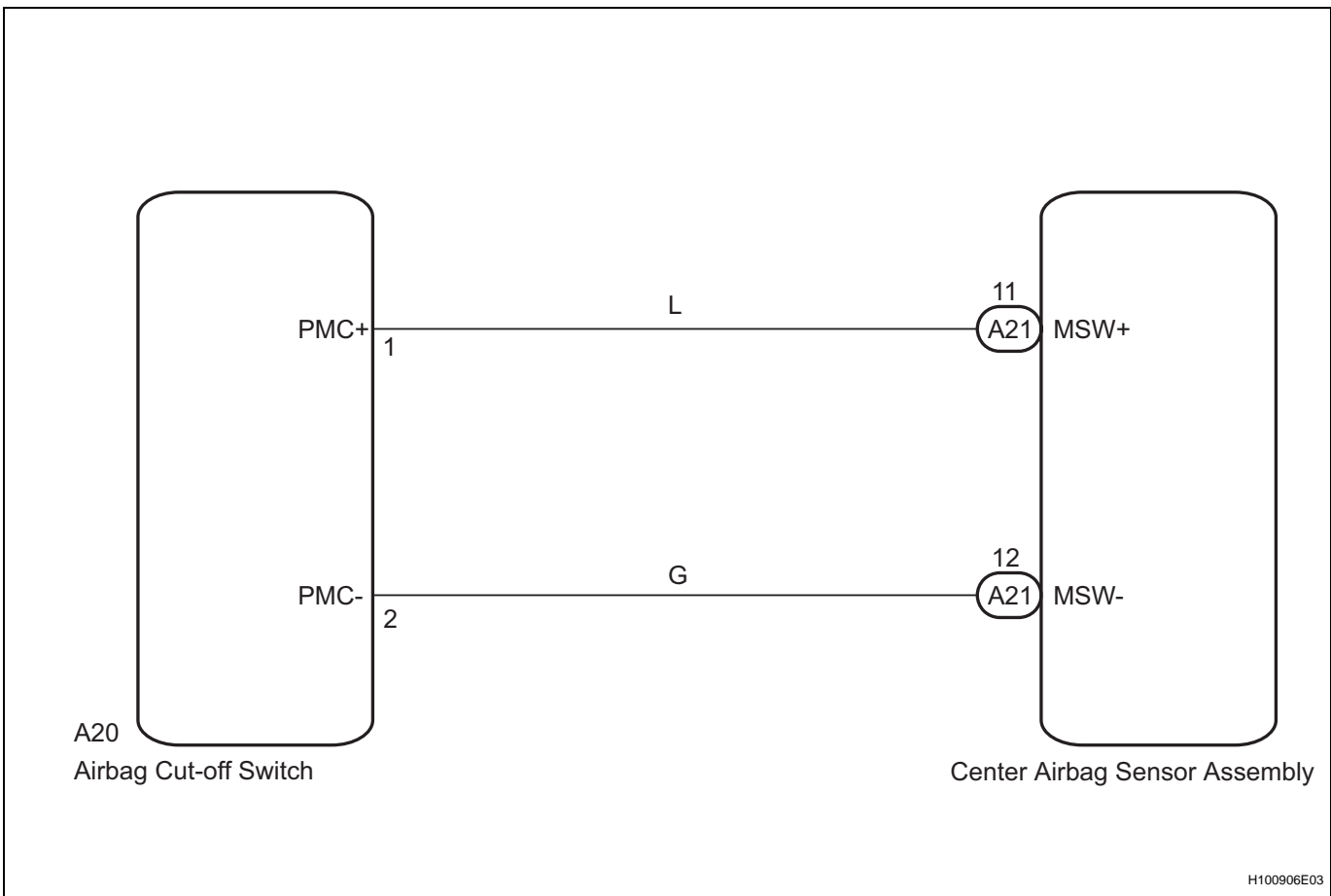
DESCRIPTION

The airbag cut-off switch circuit consists of the center airbag sensor assembly and the airbag cut off switch.

DTC B1651/33 is set when a malfunction is detected in the airbag cut off switch circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1651/31	<ul style="list-style-type: none"> The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the airbag cut off switch circuit for 2 seconds Airbag cut off switch malfunction Center airbag sensor assembly malfunction 	<ul style="list-style-type: none"> Instrument panel wire Airbag cut-off switch Center airbag sensor assembly

WIRING DIAGRAM



RS

H100906E03

CAUTION:

In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Disconnect the connectors from the center airbag sensor assembly.
- (d) Disconnect the connectors from the steering pad.

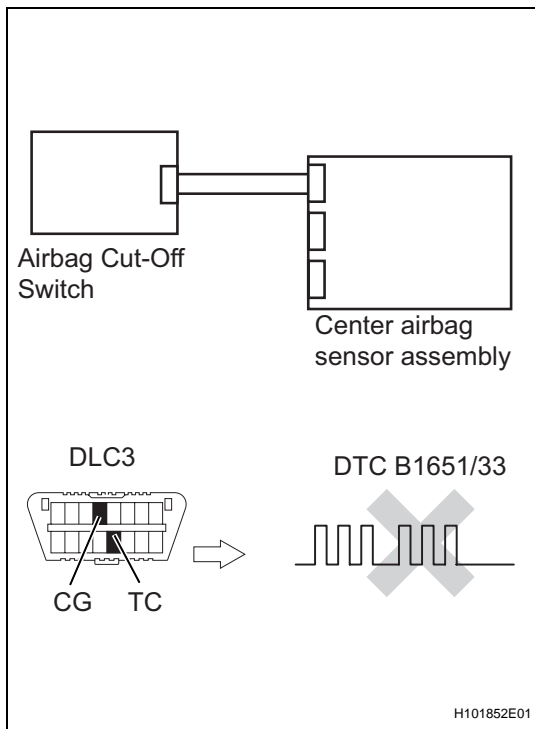
- (e) Disconnect the connector from the front passenger airbag assembly.
- (j) Disconnect the connector from the front seat outer belt assembly LH.
- (k) Disconnect the connector from the front seat outer belt assembly RH.

HINT:

Skip the following steps if side and curtain shield airbags are not fitted.

- (f) Disconnect the connector from the front seat airbag assembly LH.
- (g) Disconnect the connector from the front seat airbag assembly RH.
- (h) Disconnect the connector from the curtain shield airbag assembly LH.
- (i) Disconnect the connector from the curtain shield airbag assembly RH.

1 CHECK DTC



- (a) Turn the ignition switch to the ON position.
- (b) Clear any DTCs stored in the memory (See page RS-34).
- (c) Turn the ignition switch to the LOCK position.
- (d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
- (e) Check for DTCs (See page RS-34).

OK:

DTC B1651/33 is not output.

HINT:

DTCs other than B1651/33 may be output at this time, but they are not related to this check.

OK

USE SIMULATION METHOD TO CHECK

NG

2 CHECK CONNECTION OF CONNECTORS

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor assembly and the airbag cut off switch.

OK:

The connectors are properly connected.

NG

CONNECTION OF CONNECTORS

OK

3 CHECK CONNECTORS

- (a) Check that the connectors (on the center airbag sensor assembly side and airbag cut-off switch side) are not damaged (See page [IN-34](#)).

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

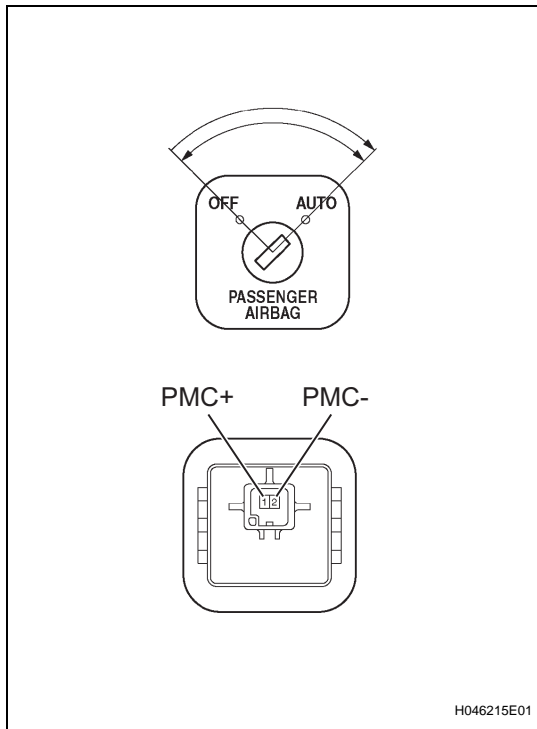
4 INSPECT AIRBAG CUT-OFF SWITCH

- (a) Disconnect the A20 airbag cut-off switch connector.
- (b) Measure the resistance.

Standard resistance

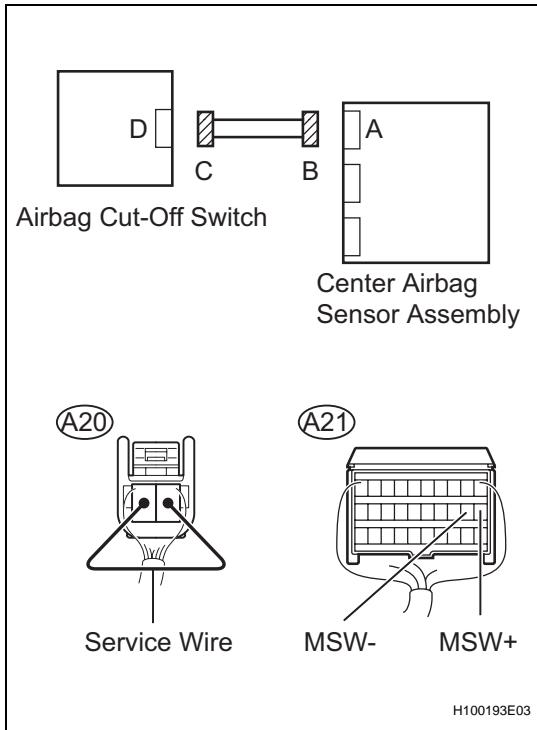
Switch Condition	Tester Condition	Specified Condition
OFF	1(PMC+) - 2(PMC-)	80 to 120 Ω
AUTO	1(PMC+) - 2(PMC-)	320 to 480 Ω

NG → **REPLACE AIRBAG CUT-OFF SWITCH**



OK

5 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



- (a) Disconnect the instrument panel wire connector from the airbag cut off switch.
- (b) Using a service wire, connect A20-1 (PMC+) and A20-2 (PMC-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting.

- (c) Measure the resistance.

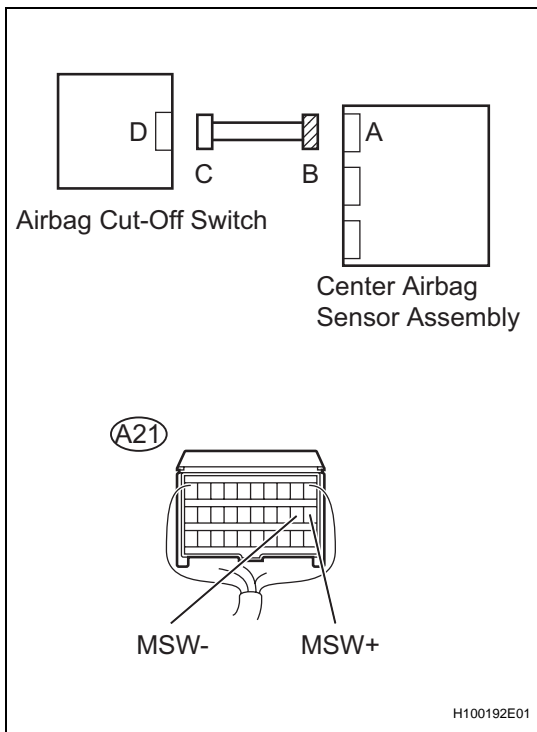
Standard resistance

Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - A21-12 (MSW-)	Always	Below 1Ω

NG REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

6 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance.

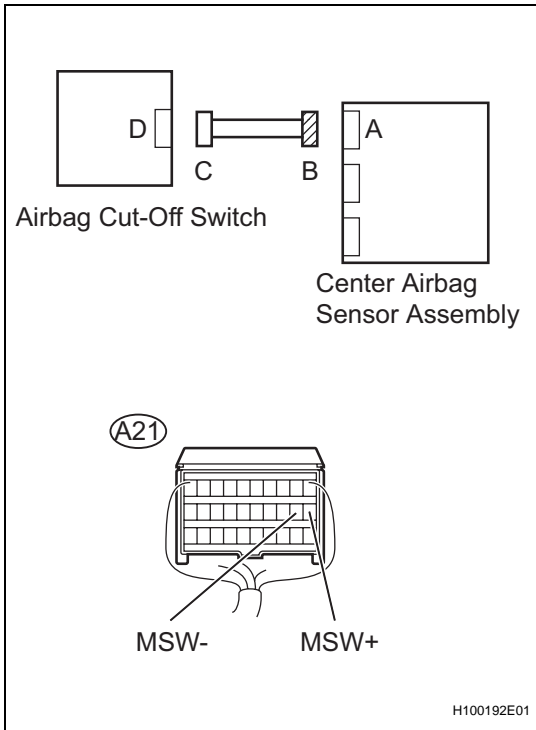
Standard resistance

Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - A21-12 (MSW-)	Always	1 MΩ or Higher

NG REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

7 CHECK INSTRUMENT PANEL WIRE (TO B+)



- (a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the voltage.

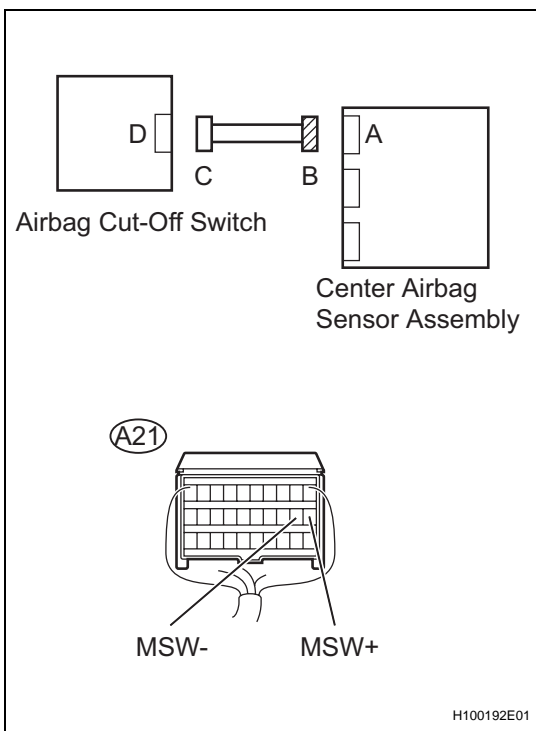
Standard voltage

Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - Body ground	Ignition switch ON	Below 1 V
A21-12 (MSW-) - Body ground	Ignition switch ON	Below 1 V

NG REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

8 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Measure the resistance.

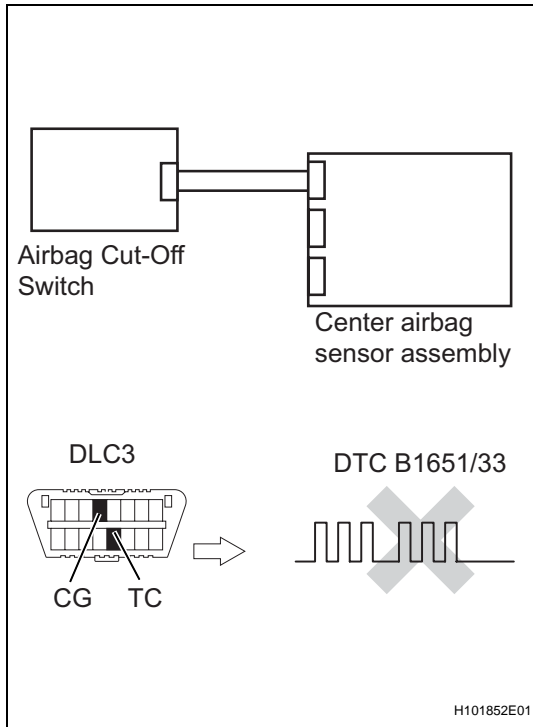
Standard resistance

Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - Body ground	Always	1 MΩ or Higher
A21-12 (MSW-) - Body ground	Always	1 MΩ or Higher

NG REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

9 CHECK CENTER AIRBAG SENSOR ASSEMBLY



- Connect the connectors to the center airbag sensor assembly and airbag cut off switch.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Clear any DTCs stored in the memory (See page [RS-34](#)).
- Turn the ignition switch to the LOCK position.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Check for DTCs (See page [RS-34](#)).

OK:

DTC B1651/33 is not output.

HINT:

DTCs other than B1651/33 may be output at this time, but they are not related to this check.

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

OK

USE SIMULATION METHOD TO CHECK