DTC	B1805/52	Short in Front Passenger Side Squib Circuit

DTC	B1806/52	Open in Front Passenger Side Squib Circuit

DTC	B1807/52	Short to GND in Front Passenger Side Squib Circuit

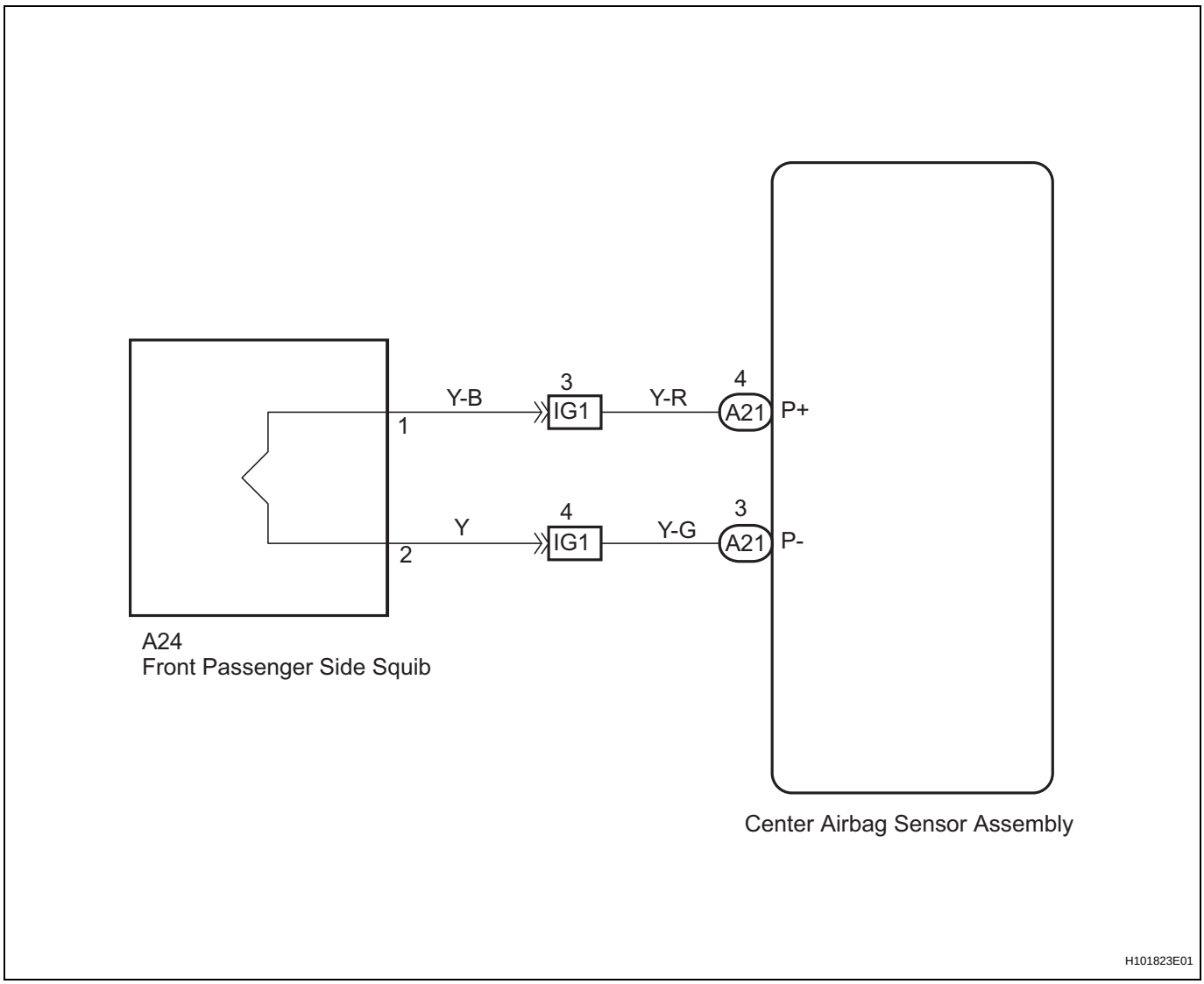
DTC	B1808/52	Short to B+ in Front Passenger Side Squib Circuit

DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor assembly and the front passenger airbag assembly.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the front passenger side squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1805/52	• The center airbag sensor assembly receives a line short circuit in the front passenger side squib circuit for 2 seconds. • Front passenger side squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1806/52	• The center airbag sensor assembly receives an open circuit signal in the front passenger side squib circuit for 2 seconds. • Front passenger side squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1807/52	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side squib circuit for 0.5 seconds. • Front passenger side squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1808/52	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side squib circuit for 0.5 seconds. • Front passenger side squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly

WIRING DIAGRAM



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.

RS

(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.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.
(1) If using the intelligent tester (read the 5-digit DTCs): Using the intelligent tester, check for DTCs (See page RS-34).
Result

Result	Proceed to
DTC B1805 is output.	A
DTC B1806 is output.	B
DTC B1807 is output.	C
DTC B1808 is output.	D

(2) If not using the intelligent tester (read the 2-digit DTCs): Check for DTCs (See page RS-34).
Result

Result	Proceed to
DTC 52 is output.	E

B → Go to step 7
C → Go to step 11
D → Go to step 15
E → Go to step 21

A

2	CHECK CONNECTOR

(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 instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

RS

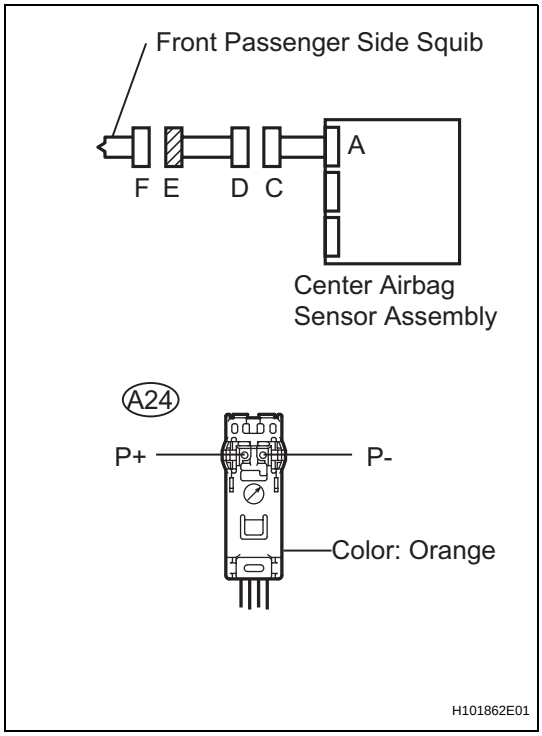
3	CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the instrument panel wire assembly.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

4	CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR SHORT)



(a) Disconnect the instrument panel wire assembly connectors from the instrument panel wire and front passenger airbag assembly.
(b) Release the activation prevention mechanism built into connector D (See page RS-28).
(c) Measure the resistance.
Standard resistance

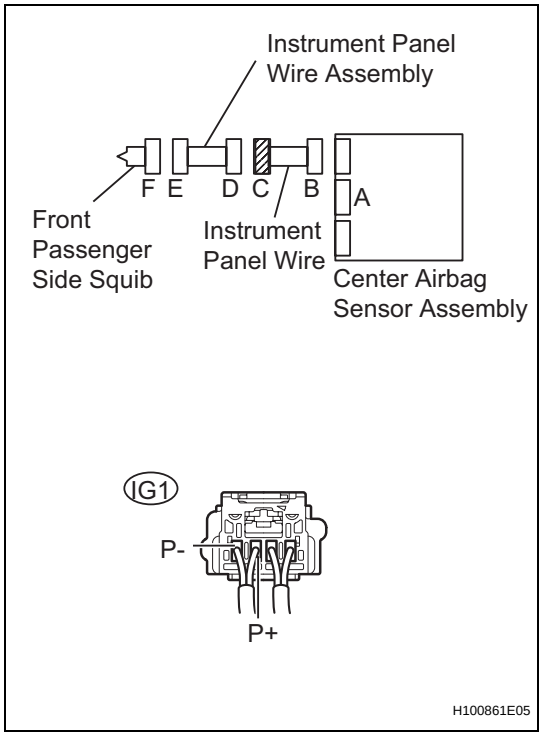
Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2 (P-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

5 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



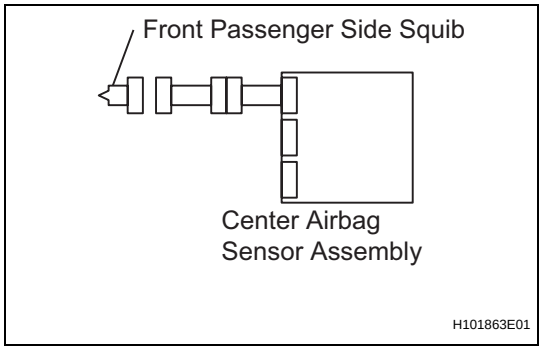
(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Release the activation prevention mechanism built into connector B (See page RS-28).
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IG1-3 (P+) - IG1-4 (P-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

6 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the instrument panel wire connectors to the center airbag sensor assembly and instrument panel wire assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).
OK:
DTC B1805 is not output.

HINT:
DTCs other than B1805 may be output at this time, but they are not related to this check.

OK → **Go to step 20**

RS

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

7	CHECK CONNECTOR

(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 instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

OK:

The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

8	CHECK CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the instrument panel wire assembly.

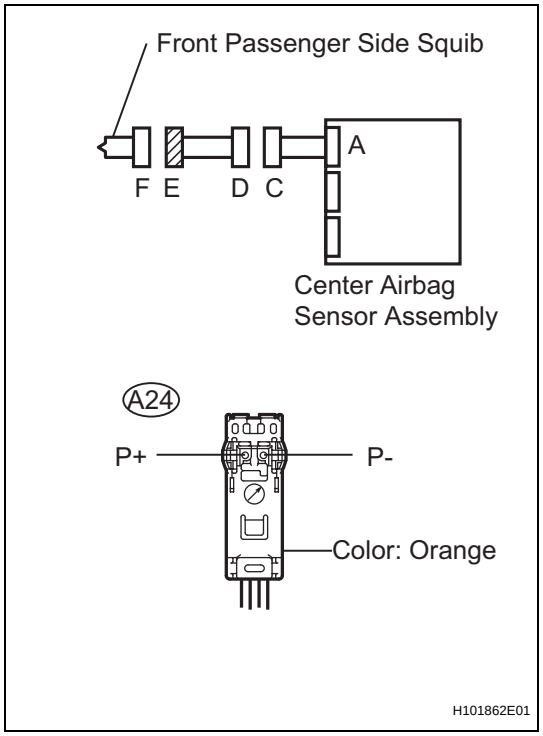
OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

9 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR OPEN)



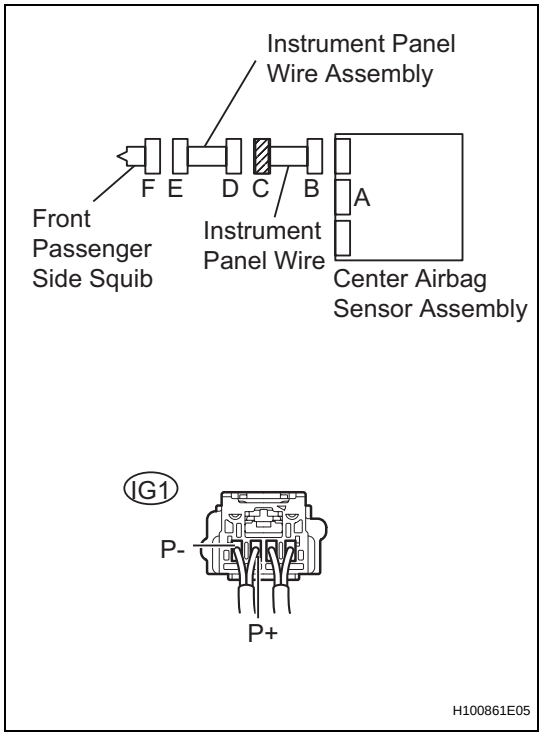
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2(P-)	Always	Below 1 Ω

MG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

10 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IG3 (P+) - IG3-2 (P-)	Always	Below 1 Ω

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11	CHECK CONNECTOR

(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 instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

OK:

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

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

12	CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the instrument panel wire assembly.

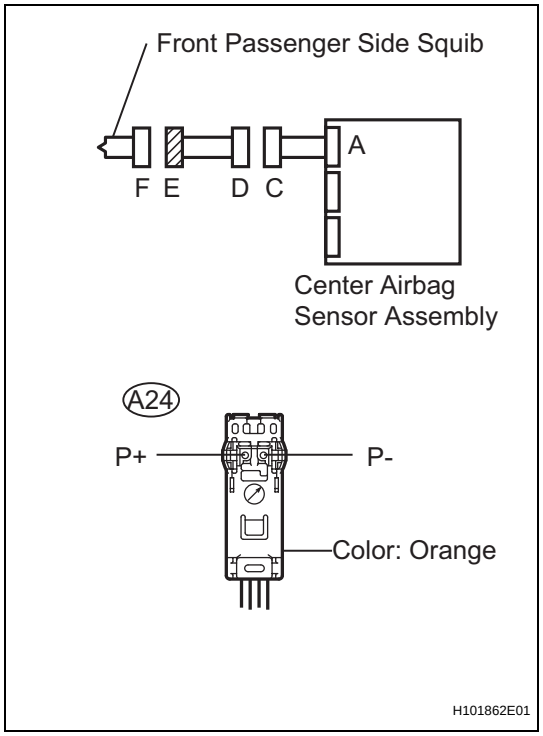
OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

13 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO GROUND)



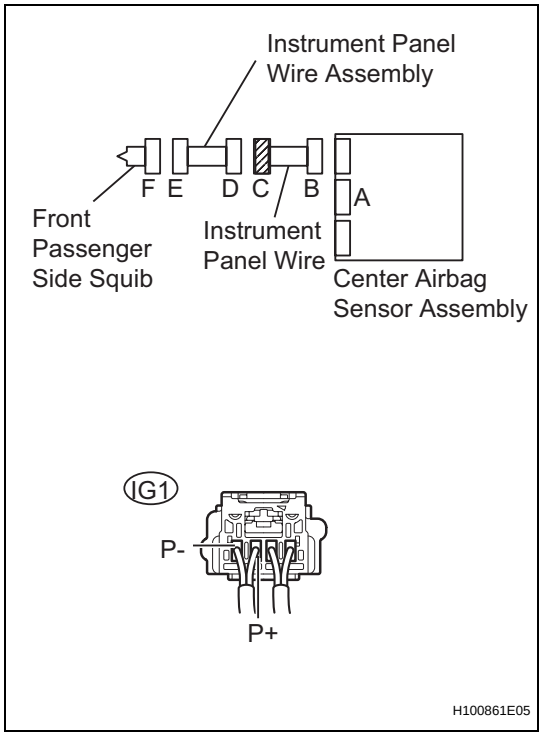
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A24-1 (P+) - Body ground	Always	1 MΩ or Higher
A24-2(P-) - Body ground	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

14 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IG1-3 (P+) - Body ground	Always	1 MΩ or Higher
IG1-4 (P-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

15 **CHECK CONNECTOR**

(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 instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

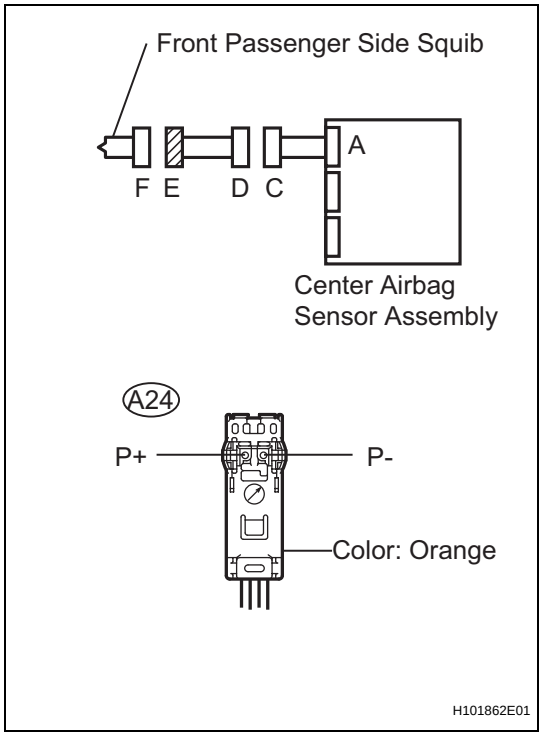
16 **CHECK CONNECTION OF CONNECTORS**

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the instrument panel wire assembly.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

17 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO B+)



(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

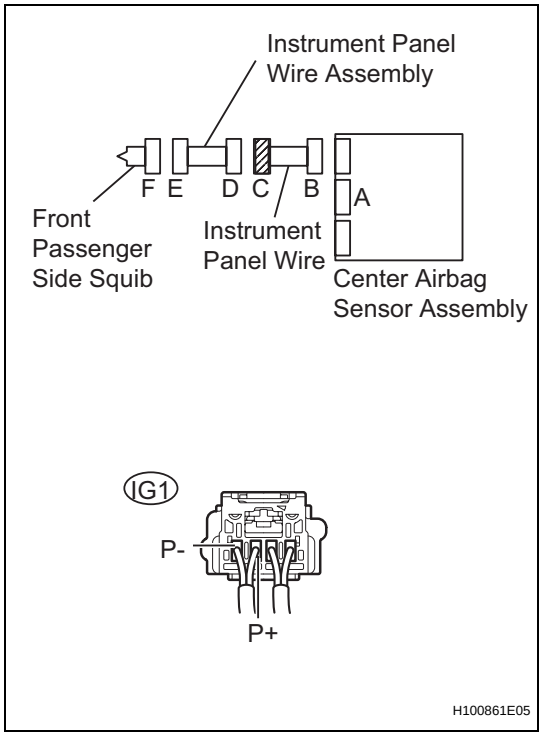
Standard voltage

Tester Connection	Condition	Specified Condition
A24-1 (P+) - Body ground	Ignition switch ON	Below 1 V
A24-2(P-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

18 CHECK INSTRUMENT PANEL WIRE (TO B+)



(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 instrument panel wire connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

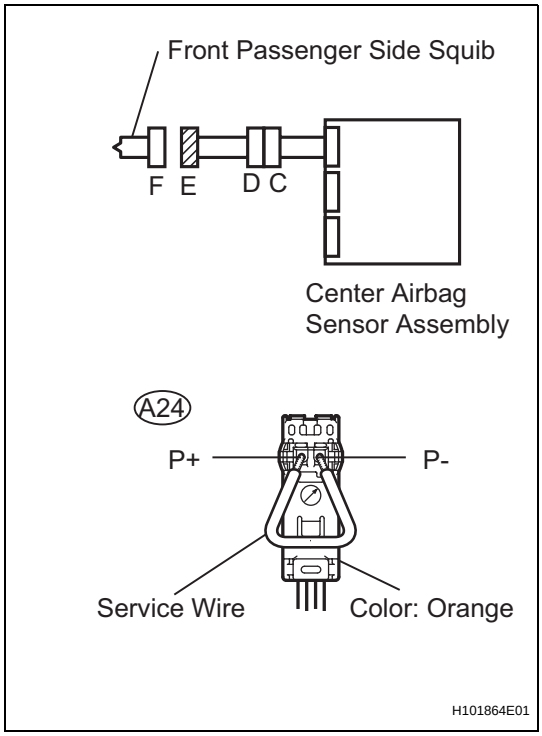
Tester Connection	Condition	Specified Condition
IG1-3 (P+) - Body ground	Ignition switch ON	Below 1 V
IG1-4 (P-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

RS

19 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 18, begin from (a). If continuing from any other step, begin from (c).
(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) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect A24-1 (P+) and A24-2 (P-) of connector E.

NOTICE:
- **Twist the end of the service wire in order to insert it into the connector.**
- **Do not forcibly insert the twisted service wire into the terminals of the connector when connecting.**

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).
OK:
DTC B1806, B1807 and B1808 are not output.

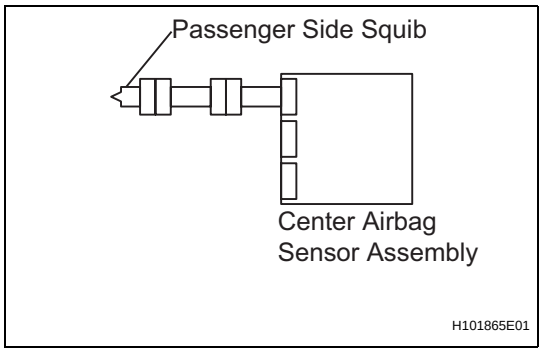
HINT:
DTCs other than B1806, B1807 or B1808 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

20 CHECK FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB)



HINT:
If continuing from step 19, begin from (c). If continuing from any other step, being from (a).
(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 SST from connector C.
(d) Connect the connectors to the front passenger airbag assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).
OK:
DTCs B1805, B1806, B1807 and B1808 are not output.

HINT:
DTCs other than B1805, B1806, B1807 or B1808 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT PASSENGER AIRBAG ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

21	CHECK CONNECTOR

(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 instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

22	CHECK CONNECTORS

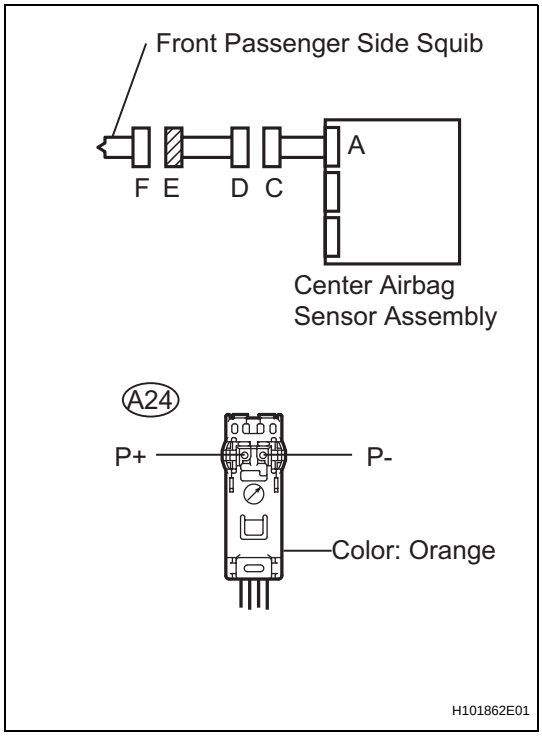
RS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the instrument panel wire assembly.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

23 CHECK INSTRUMENT PANEL WIRE ASSEMBLY



(a) Disconnect the instrument panel wire assembly connectors from the instrument panel wire and front passenger airbag assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
A24-1 (P+) - Body ground	Ignition switch ON	Below 1 V
A24-2(P-) - Body ground	Ignition switch ON	Below 1 V

(e) Turn the ignition switch to the LOCK position.
(f) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(g) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2 (P-)	Always	Below 1 Ω
A24-1 (P+) - Body ground	Always	1 MΩ or Higher
A24-2(P-) - Body ground	Always	1 MΩ or Higher

(h) Release the activation prevention mechanism built into connector D (See page RS-28).
(i) Measure the resistance
Standard resistance

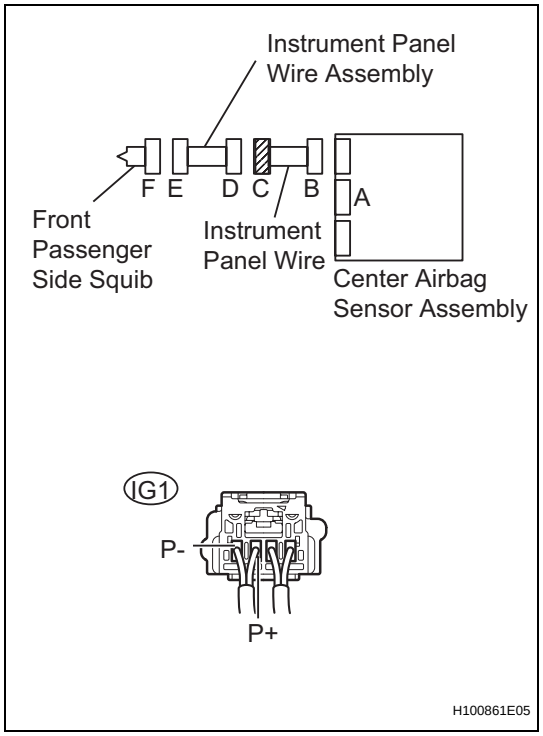
Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2 (P-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

24 CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER SIDE SQUIB)



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

Standard voltage

Tester Connection	Condition	Specified Condition
IG1-3 (P+) - Body ground	Ignition switch ON	Below 1 V
IG1-4 (P-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
IG1-3 (P+) - IG1-4 (P-)	Always	Below 1 Ω
IG1-3 (P+) - Body ground	Always	1 MΩ or Higher
IG1-4 (P-) - Body ground	Always	1 MΩ or Higher

(i) Release the activation prevention mechanism built into connector B (See page RS-28).
(j) Measure the resistance.

Standard resistance

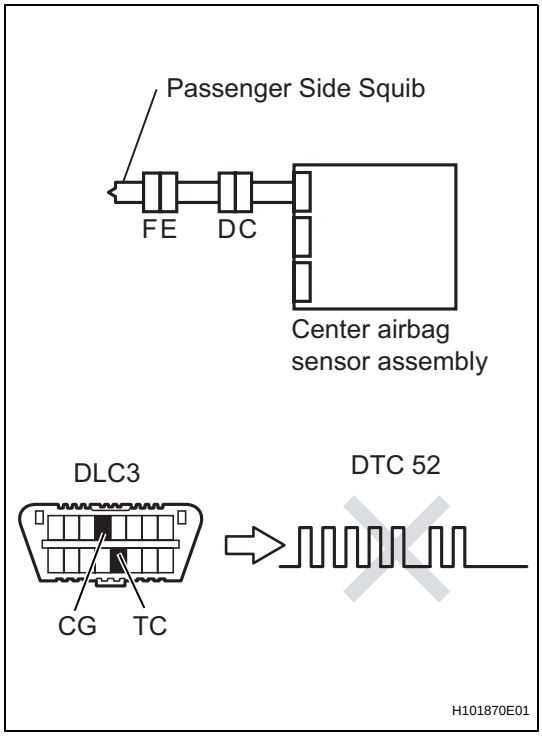
Tester Connection	Condition	Specified Condition
IG1-3 (P+) - IG1-4 (P-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

RS

25	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Replace the front passenger airbag assembly (See page RS-574).

HINT:
Perform the inspection using parts from a normal vehicle when possible.

(b) Connect the instrument panel wire to the center airbag sensor assembly and spiral cable.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Clear any DTCs stored in the memory (See page RS-34).
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(i) Check for DTCs (See page RS-34).

OK:

DTC 52 is not output.

HINT:
DTCs other than 52 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS