DTC	B1805/52	SHORT IN P SQUIB CIRCUIT

DTC	B1806/52	OPEN IN P SQUIB CIRCUIT

DTC	B1807/52	SHORT IN P SQUIB CIRCUIT (TO GROUND)

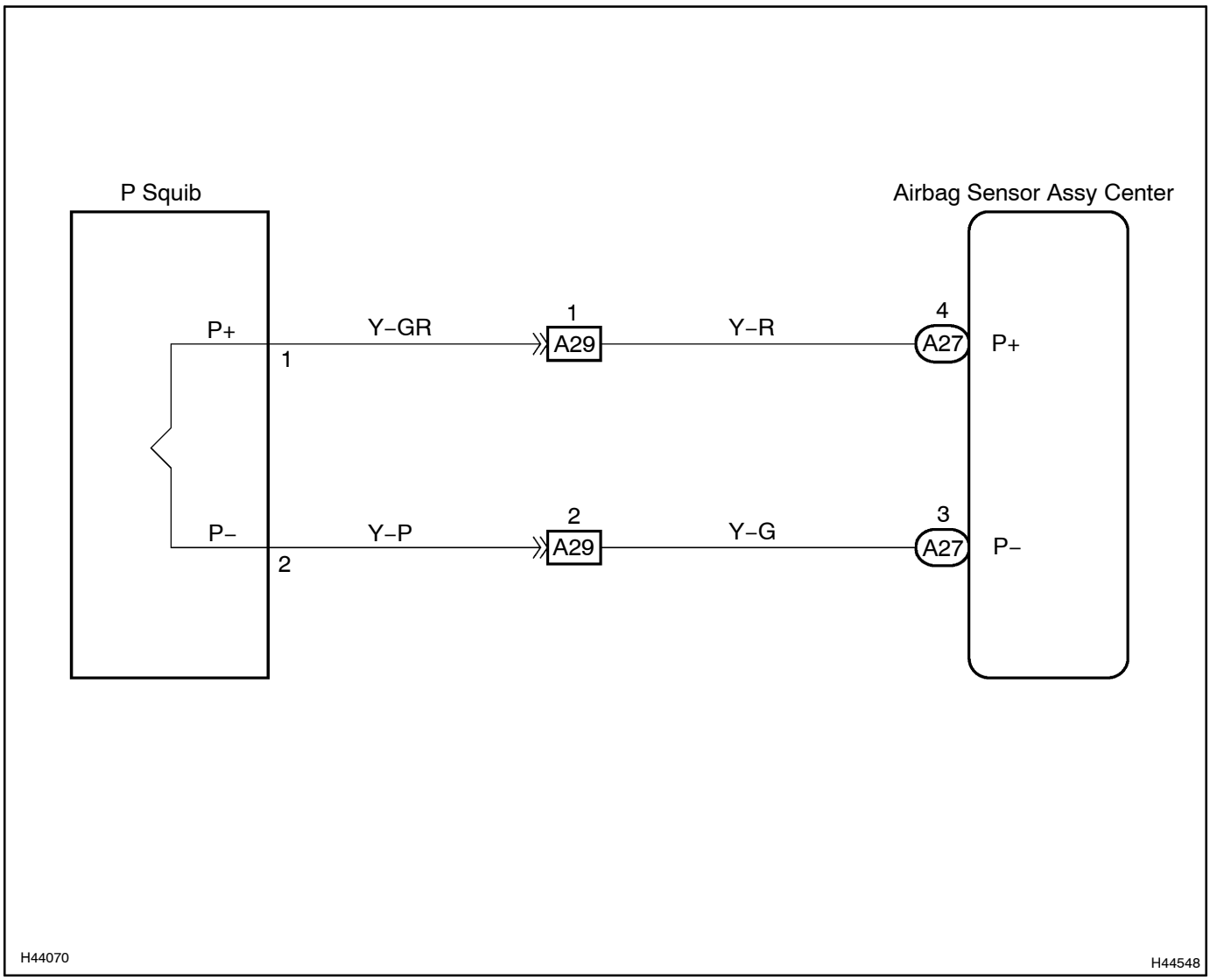
DTC	B1808/52	SHORT IN P SQUIB CIRCUIT (TO B+)

CIRCUIT DESCRIPTION

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

DTC No.	DTC Detecting Condition	Trouble Area
B1805/52	• The airbag sensor assy center receives a line short circuit signal 5 times in the P squib circuit during primary check. • P squib malfunction • Airbag sensor assy center malfunction	• Instrument panel wire • Instrument panel wire No.2 • Front passenger airbag assy (P squib) • Airbag sensor assy center
B1806/52	• The airbag sensor assy center receives an open circuit signal in the P squib circuit for 2 seconds. • P squib malfunction • Airbag sensor assy center malfunction	• Instrument panel wire • Instrument panel wire No.2 • Front passenger airbag assy (P squib) • Airbag sensor assy center
B1807/52	• The airbag sensor assy center receives a short circuit to ground signal in the P squib circuit for 0.5 second. • P squib malfunction • Airbag sensor assy center malfunction	• Instrument panel wire • Instrument panel wire No.2 • Front passenger airbag assy (P squib) • Airbag sensor assy center
B1808/52	• The airbag sensor assy center receives a short circuit to B+ signal in the P squib circuit for 0.5 second. • P squib malfunction • Airbag sensor assy center malfunction	• Instrument panel wire • Instrument panel wire No.2 • Front passenger airbag assy (P squib) • Airbag sensor assy center

WIRING DIAGRAM



INSPECTION PROCEDURE

CAUTION:

Be sure to perform the following procedures before troubleshooting to avoid unexpected airbag deployment.

(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 airbag sensor assy center.
(d) Disconnect the connectors from the horn button assy.
(e) Disconnect the connectors from the front passenger airbag assy.
(f) Disconnect the connector from the front seat airbag assy LH.
(g) Disconnect the connector from the front seat airbag assy RH.
(h) w/ Curtain shield airbag:
Disconnect the connector from the curtain shield airbag assy LH.
(i) w/ Curtain shield airbag:
Disconnect the connector from the curtain shield airbag assy RH.
(j) Disconnect the connector from the front seat outer belt assy LH.
(k) Disconnect the connector from the front seat outer belt assy RH.

1	CHECK READ METHOD OF DTC

(a) Proceed to each step according to DTC readings.
(1) If using the intelligent tester II (read the 5–digit of DTC):
Using the intelligent tester II, check the DTCs (see page 05–16).

Result:

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 II (read the 2–digit of DTC):
Check the DTCs (see page 05–16).

Result:

DTC 52 is output.	E

B → **Go to step 4**

C → **Go to step 5**

D → **Go to step 6**

E → **Go to step 7**

A

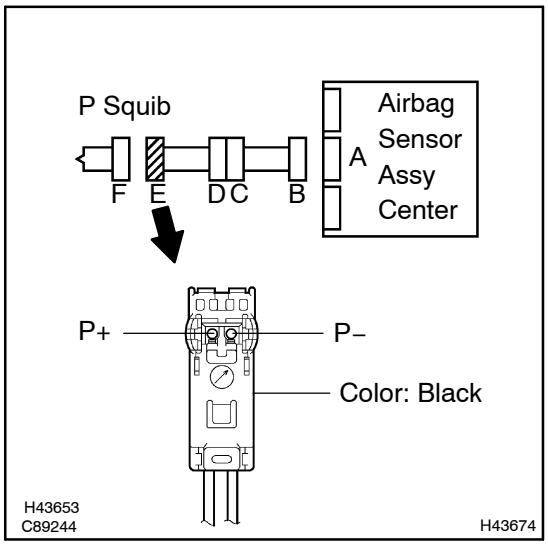
2	CHECK CONNECTOR

(a) Check that the instrument panel wire No.2 connectors (on the front passenger airbag assy side) are not damaged.
OK:
The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

OK

3	CHECK P SQUIB CIRCUIT (SHORT)



(a) Release the activation prevention mechanism built into connector "B" (see page 05–10).
(b) Measure the resistance according to the value(s) in the table below.
Standard:

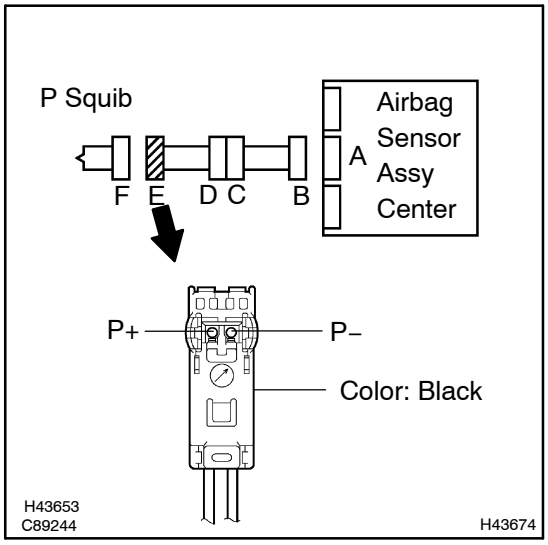
Tester connection	Condition	Specified condition
P+ – P–	Always	1 MΩ or Higher

NG → **Go to step 13**

OK

GO TO STEP 10

4 CHECK P SQUIB CIRCUIT (OPEN)



(a) Measure the resistance according to the value(s) in the table below.

Standard:

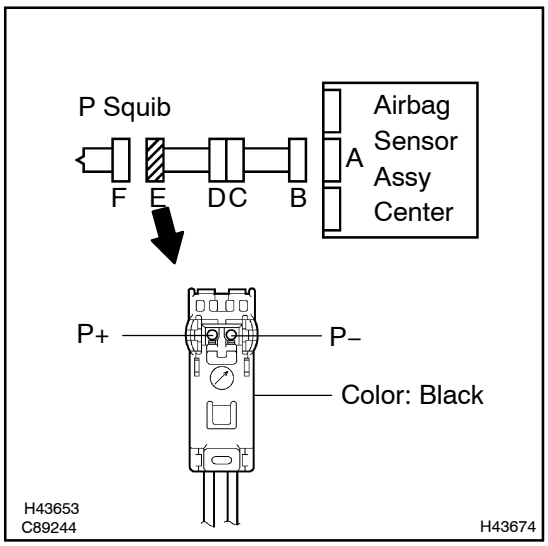
Tester connection	Condition	Specified condition
P+ – P–	Always	Below 1 Ω

NG → **Go to step 15**

OK

GO TO STEP 11

5 CHECK P SQUIB CIRCUIT (TO GROUND)



(a) Measure the resistance according to the value(s) in the table below.

Standard:

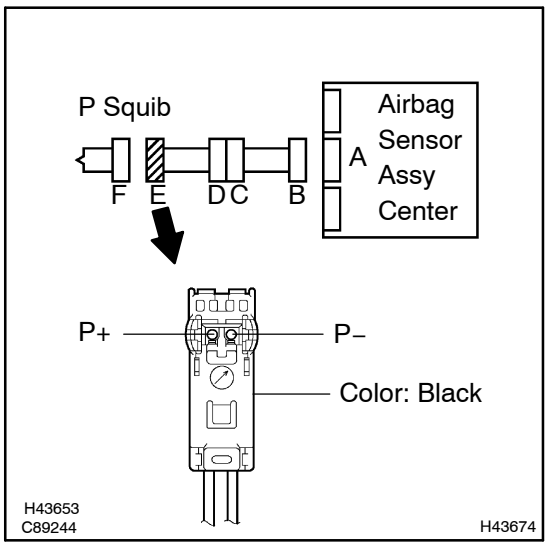
Tester connection	Condition	Specified condition
P+ – Body ground	Always	1 MΩ or Higher
P– – Body ground	Always	1 MΩ or Higher

NG → **Go to step 17**

OK

GO TO STEP 11

6	CHECK P SQUIB CIRCUIT (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 according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – Body ground	Ignition switch ON	Below 1 V
P– – Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 19**

OK

GO TO STEP 11

7 CHECK CONNECTOR

(a) Check that the instrument panel wire No.2 connectors (on the front passenger airbag assy side) are not damaged.

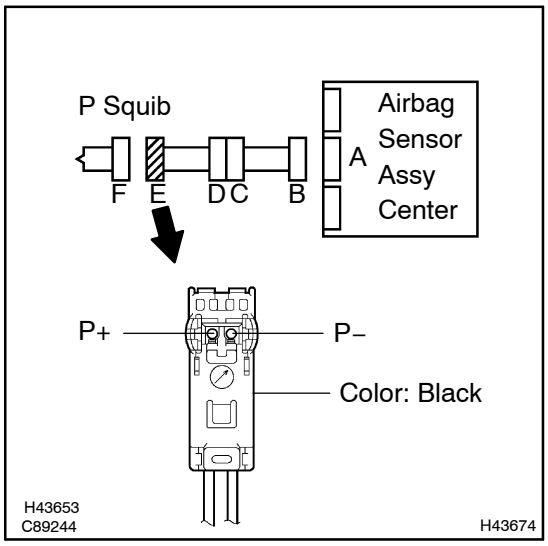
OK:

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

NG	REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2

OK

8 CHECK P SQUIB CIRCUIT



(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 according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – Body ground	Ignition switch ON	Below 1 V
P– – Body ground	Ignition switch ON	Below 1 V

(d) Turn the ignition switch to the LOCK position.

(e) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.

(f) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	Below 1 Ω
P+ – Body ground	Always	1 MΩ or Higher
P– – Body ground	Always	1 MΩ or Higher

(g) Release the activation prevention mechanism built into connector "B" (see page 05–10).

(h) Measure the resistance according to the value(s) in the table below.

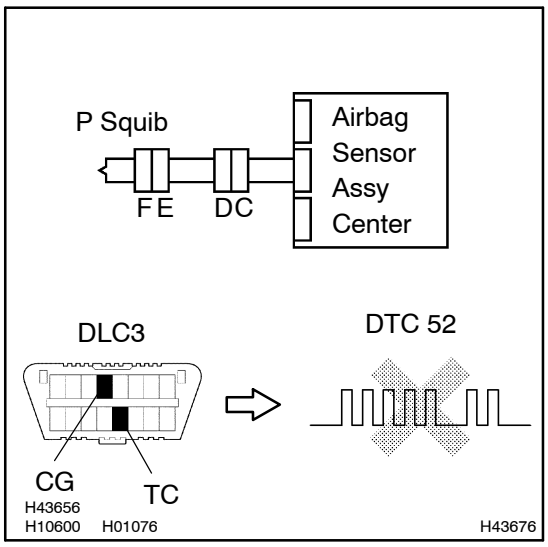
Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	1 MΩ or Higher

NG	Go to step 21

OK

9	REPLACE FRONT PASSENGER AIRBAG ASSY (P SQUIB)



(a) Replace the front passenger airbag assy (see page 60–31).

HINT:

Perform the inspection using parts from a normal vehicle if possible.

(b) Connect the connectors to the airbag sensor assy center.

(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, and wait for at least 60 seconds.

(e) Clear the DTCs stored in memory (see page 05–16).

(f) Turn the ignition switch to the LOCK position.

(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

(h) Check the DTCs (see page 05–16).

OK:

DTC 52 is not output.

HINT:

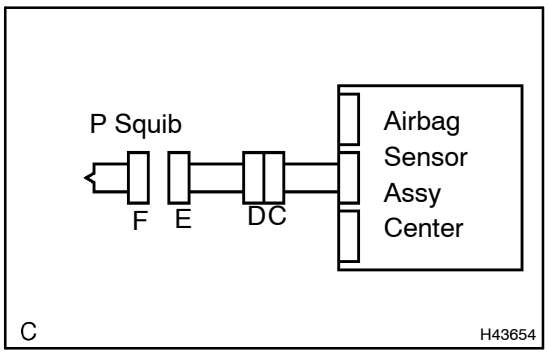
Codes other than code 52 may be output at this time, but they are not related to this check.

NG	REPLACE AIR BAG SENSOR ASSY CENTER (SEE PAGE 60–40)

OK

END

10	CHECK AIR BAG SENSOR ASSY CENTER



(a) Connect the connectors to the airbag sensor assy center.
(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 the DTCs stored in memory (see page 05–16).
(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 the DTCs (see page 05–16).
OK:
DTC B1805 is not output.

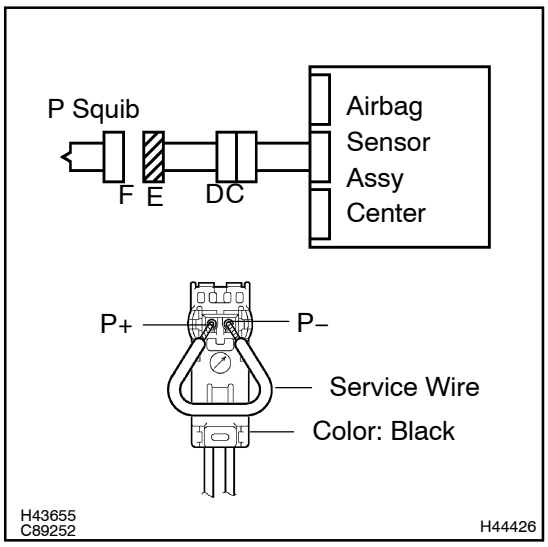
HINT:
Codes other than code B1805 may be output at this time, but they are not related to this check.

NG → **REPLACE AIR BAG SENSOR ASSY CENTER (SEE PAGE 60–40)**

OK

GO TO STEP 12

11 CHECK AIR BAG SENSOR ASSY CENTER



(a) From the step 6:
Turn the ignition switch to the LOCK position.

(b) From the step 6:
Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.

(c) Connect the connectors to the airbag sensor assy center.

(d) Using a service wire, connect P+ and 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 the DTCs stored in memory (see page 05–16).

(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.

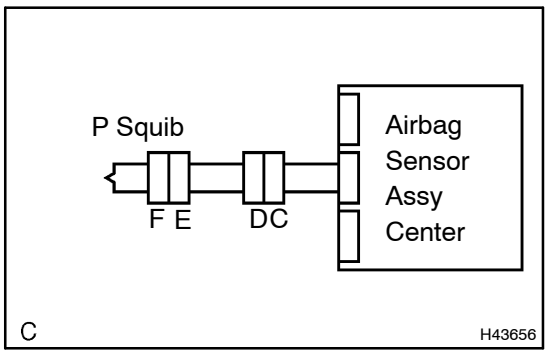
(j) Check the DTCs (see page 05–16).
OK:
DTC B1806, B1807 or B1808 is not output.

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

NG → **REPLACE AIR BAG SENSOR ASSY CENTER (SEE PAGE 60–40)**

OK

12 CHECK FRONT PASSENGER AIRBAG ASSY (P SQUIB)



(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) From the step 11:
Disconnect the service wire from connector "E".
(d) Connect the connectors to the front passenger airbag assy.
(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 the DTCs stored in memory (see page 05–16).
(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 the DTCs (see page 05–16).
OK:
DTC B1805, B1806, B1807 or B1808 is not output.

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

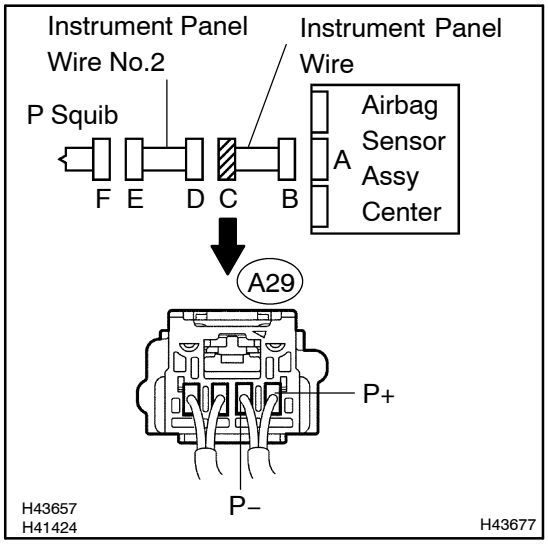
NG → **REPLACE FRONT PASSENGER AIRBAG ASSY (SEE PAGE 60–31)**

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–16)

HINT:
- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–19).

13 CHECK INSTRUMENT PANEL WIRE (SHORT)



(a) Disconnect the instrument panel wire connector from the instrument panel wire No.2.

HINT:

The activation prevention mechanism of connector "B" has already been released.

(b) Measure the resistance according to the value(s) in the table below.

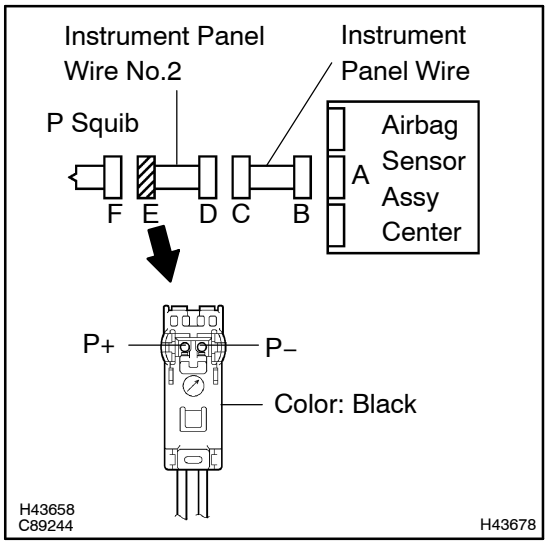
Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – A29–2 (P–)	Always	1 MΩ or Higher

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

OK

14 CHECK INSTRUMENT PANEL WIRE NO.2 (SHORT)



(a) Release the activation prevention mechanism built into connector "D" (see page 05–10).

(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

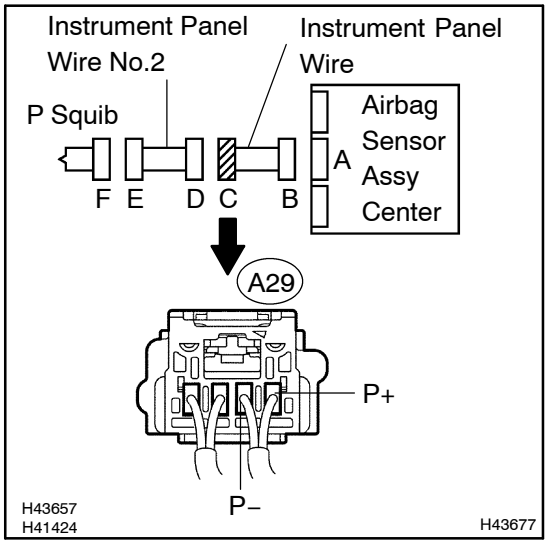
OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–10)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–19).

15 CHECK INSTRUMENT PANEL WIRE (OPEN)



(a) Disconnect the instrument panel wire connector from the instrument panel wire No.2.

(b) Measure the resistance according to the value(s) in the table below.

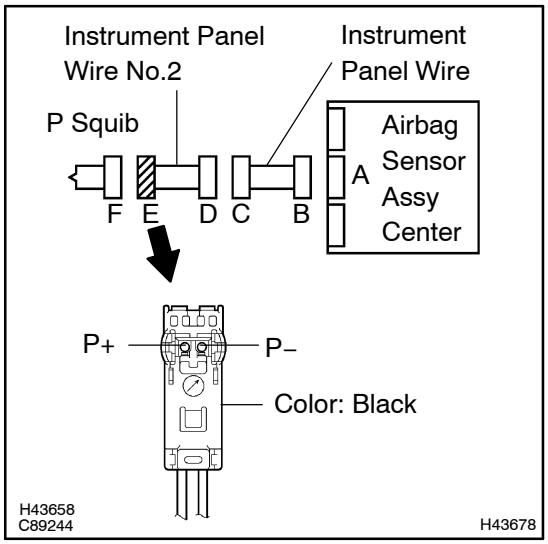
Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – A29–2 (P–)	Always	Below 1 Ω

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

OK

16 CHECK INSTRUMENT PANEL WIRE NO.2 (OPEN)



(a) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	Below 1 Ω

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

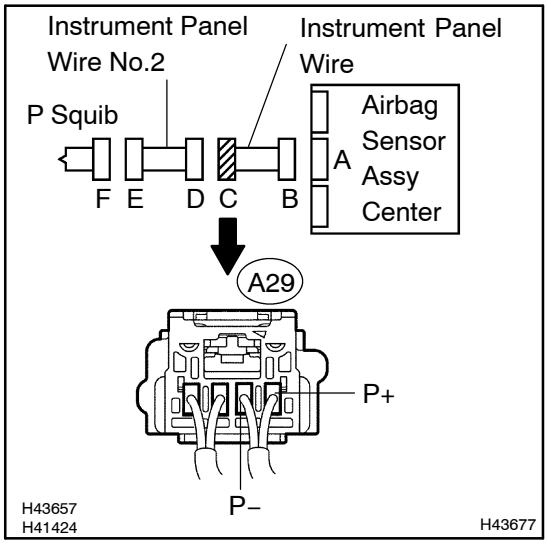
OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–10)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the air-bag system or driving the vehicle on a city or rough road (see page 05–19).

17 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



(a) Disconnect the instrument panel wire connector from the instrument panel wire No.2.

(b) Measure the resistance according to the value(s) in the table below.

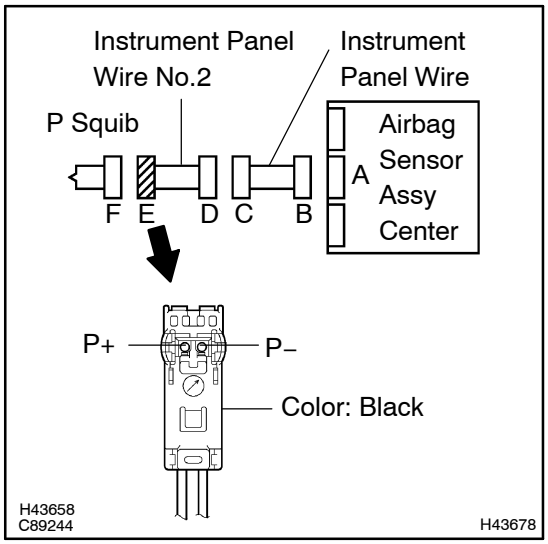
Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – Body ground	Always	1 MΩ or Higher
A29–2 (P–) – Body ground	Always	1 MΩ or Higher

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

OK

18 CHECK INSTRUMENT PANEL WIRE NO.2 (TO GROUND)



(a) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – Body ground	Always	1 MΩ or Higher
P– – Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

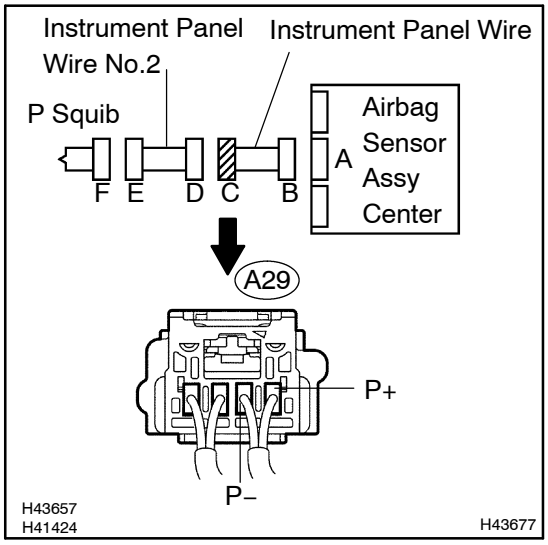
OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–10)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the air-bag system or driving the vehicle on a city or rough road (see page 05–19).

19 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 instrument panel wire No.2.
(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 according to the value(s) in the table below.

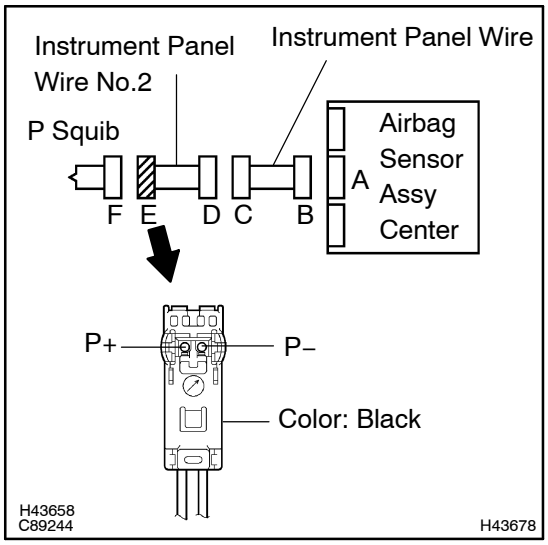
Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – Body ground	Ignition switch ON	Below 1 V
A29–2 (P–) – Body ground	Ignition switch ON	Below 1 V

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

OK

20 CHECK INSTRUMENT PANEL WIRE NO.2 (TO B+)



(a) Measure the voltage according to the value(s) in the table below when the ignition switch is in the ON position.

Standard:

Tester connection	Condition	Specified condition
P+ – Body ground	Ignition switch ON	Below 1 V
P– – Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

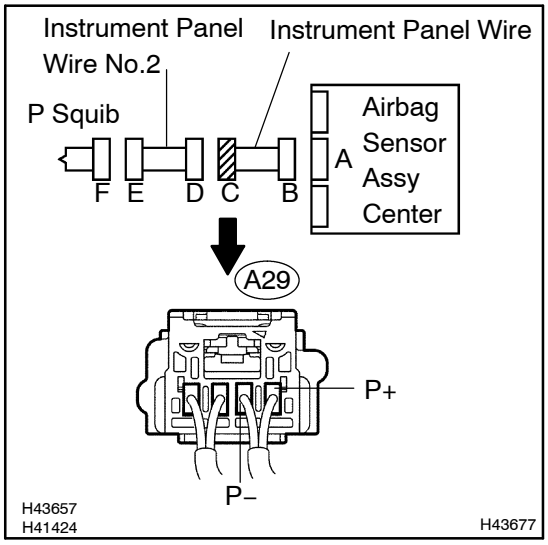
OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–10)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–19).

21 CHECK INSTRUMENT PANEL WIRE



(a) Restore the released activation prevention mechanism of connector "B" to the original condition.
(b) Disconnect the instrument panel wire connector from the instrument panel wire No.2.
(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 according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – Body ground	Ignition switch ON	Below 1 V
A29–2 (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 according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – A29–2 (P–)	Always	Below 1 Ω
A29–1 (P+) – Body ground	Always	1 MΩ or Higher
A29–2 (P–) – Body ground	Always	1 MΩ or Higher

(i) Release the activation prevention mechanism built into connector "B" (see page 05–10).
(j) Measure the resistance according to the value(s) in the table below .

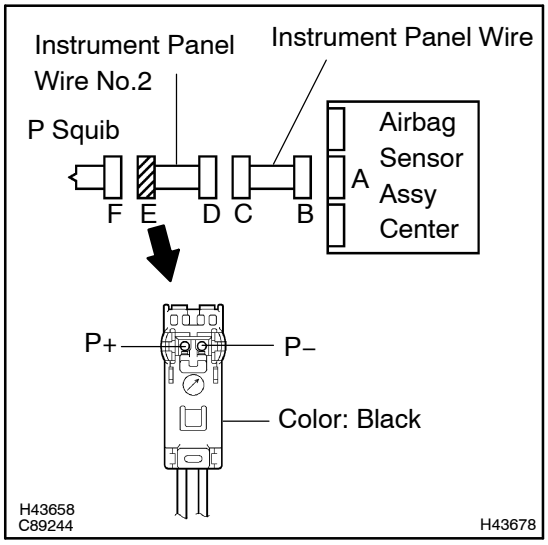
Standard:

Tester connection	Condition	Specified condition
A29–1 (P+) – A29–2 (P–)	Always	1 MΩ or Higher

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

OK

22 CHECK INSTRUMENT PANEL WIRE NO.2



(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 according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – Body ground	Ignition switch ON	Below 1 V
P– – Body ground	Ignition switch ON	Below 1 V

(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (–) terminal cable from the battery, and wait for at least 90 seconds.
(f) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	Below 1 Ω
P+ – Body ground	Always	1 MΩ or Higher
P– – Body ground	Always	1 MΩ or Higher

(g) Release the activation prevention mechanism built into connector "D" (see page 05–10).
(h) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
P+ – P–	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE NO.2**

OK

USE SIMULATION METHOD TO CHECK (SEE PAGE 05–10)

HINT:

- Perform the simulation method by selecting the check mode with the intelligent tester II (see page 05–19).
- After selecting the check mode, perform the simulation method by wiggling each connector of the airbag system or driving the vehicle on a city or rough road (see page 05–19).