DTC	B1830/57	Short in Driver Side Curtain Shield Squib Circuit
DTC	B1831/57	Open in Driver Side Curtain Shield Squib Circuit
DTC	B1832/57	Short to GND in Driver Side Curtain Shield Squib Circuit
DTC	B1833/57	Short to B+ in Driver Side Curtain Shield Squib Circuit

## **DESCRIPTION**

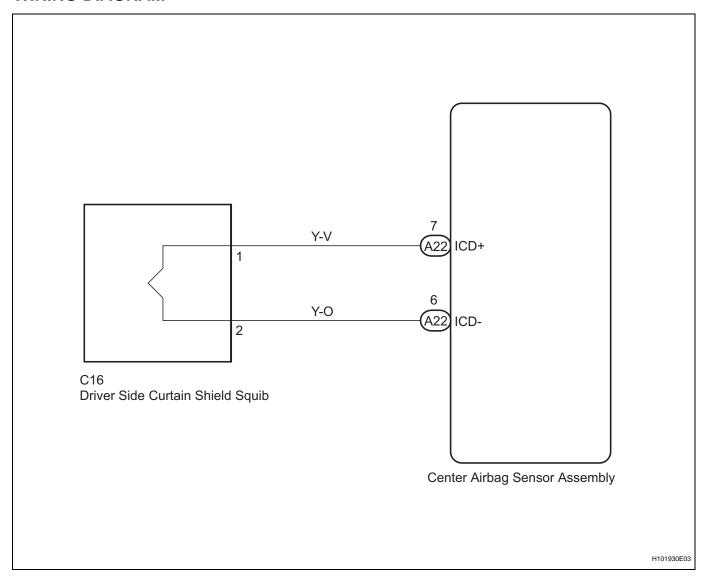
The curtain shield airbag (driver seat side) squib circuit consists of the center airbag sensor assembly and the curtain shield airbag assembly LH.

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

These DTCs are set when a malfunction is detected in the curtain shield airbag (driver seat side) squib circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1830/57	The center airbag sensor assembly receives a line short circuit signal in the curtain shield airbag (Driver seat side) squib circuit for 2 seconds Curtain shield airbag (Driver seat side) squib malfunction Center airbag sensor assembly malfunction	No. 2 floor wire     Curtain shield airbag assembly LH (Curtain shield airbag [Driver seat side] squib)     Center airbag sensor assembly
B1831/57	The center airbag sensor assembly receives an open circuit signal in the curtain shield airbag (Driver seat side) squib circuit for 2 seconds Curtain shield airbag (Driver seat side) squib malfunction Center airbag sensor assembly malfunction	No. 2 floor wire     Curtain shield airbag assembly LH (Curtain shield airbag [Driver seat side] squib)     Center airbag sensor assembly
B1832/57	The center airbag sensor assembly receives a short circuit to ground signal in the curtain shield airbag (Driver seat side) squib circuit for 0.5 seconds  Curtain shield airbag (Driver seat side) squib malfunction  Center airbag sensor assembly malfunction	No. 2 floor wire     Curtain shield airbag assembly LH (Curtain shield airbag [Driver seat side] squib)     Center airbag sensor assembly
B1833/57	The center airbag sensor assembly receives a short circuit to B+ signal in the curtain shield airbag (Driver seat side) squib circuit for 0.5 seconds Curtain shield airbag (Driver seat side) squib malfunction Center airbag sensor assembly center malfunction	No. 2 floor wire     Curtain shield airbag assembly LH (Curtain shield airbag [Driver seat 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.

- (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 next step according to DTC readings.
  - 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 B1830 is output.	A
DTC B1831 is output.	В
DTC B1832 is output.	С
DTC B1833 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 57 is output.	E

В	Go to step 4
C	Go to step 5
	Go to step 6
E	Go to step 7



# 2 CHECK CONNECTOR

(a) Check that the floor wire connector (on the curtain shield airbag assembly LH side) is not damaged.

## OK:

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

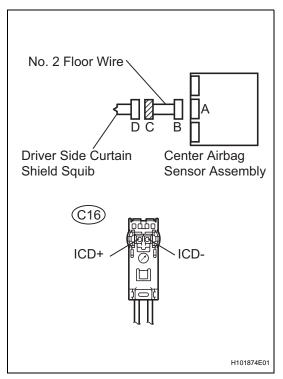


**REPAIR OR REPLACE NO. 2 FLOOR WIRE** 

OK



## 3 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



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

## Standard resistance

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	1 M $\Omega$ or Higher

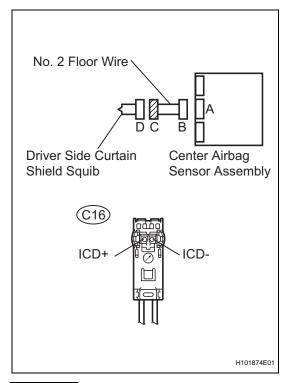
OK >	Go to step 10	
	Go to step 10	

NG

**REPAIR OR REPLACE NO. 2 FLOOR WIRE** 



# 4 CHECK NO. 2 FLOOR WIRE (FOR OPEN)



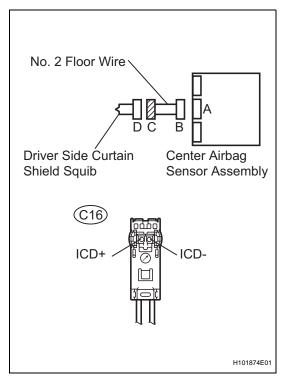
# (a) Measure the resistance. **Standard resistance**

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	Below 1 $\Omega$

NG

## **REPAIR OR REPLACE NO. 2 FLOOR WIRE**

# 5 CHECK NO. 2 FLOOR WIRE (TO GROUND)



## (a) Measure the resistance.

## Standard resistance

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - Body ground	Always	1 M $\Omega$ or Higher
C16-2 (ICD-) - Body ground	Always	1 M $\Omega$ or Higher

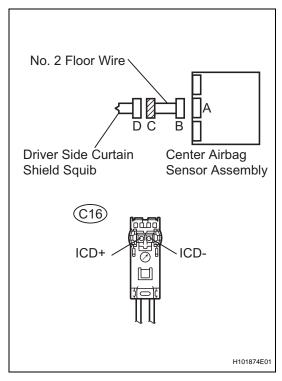
ок	Go to step 11

NG

## **REPAIR OR REPLACE NO. 2 FLOOR WIRE**



# 6 CHECK NO. 2 FLOOR 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
C16-1 (ICD+) - Body ground	Ignition switch ON	Below 1 V
C16-2 (ICD-) - Body ground	Ignition switch ON	Below 1 V

OK	Go to step 11

NG

### **REPAIR OR REPLACE NO. 2 FLOOR WIRE**

# 7 CHECK CONNECTOR

(a) Check that the No. 2 floor wire connector (on the curtain shield airbag assembly LH side) is not damaged.

### OK:

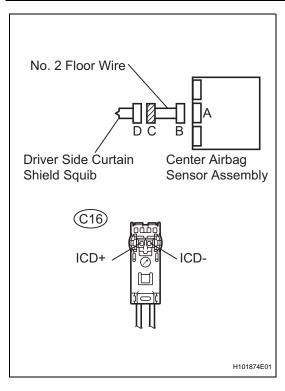
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG

**REPAIR OR REPLACE NO. 2 FLOOR WIRE** 



## 8 CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG (D SEAT SIDE) SQUIB)



- (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
C16-1 (ICD+) - Body ground	Ignition switch ON	Below 1 V
C16-2 (ICD-) - 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.

### Standard resistance

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	Below 1 Ω
C16-1 (ICD+) - Body ground	Always	1 M $\Omega$ or Higher
C16-2 (ICD-) - Body ground	Always	1 M $\Omega$ or Higher

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

### Standard resistance

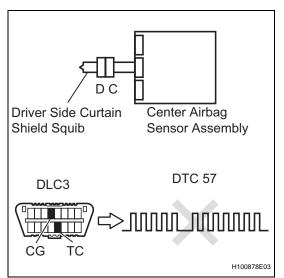
Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	1 MΩ or Higher



REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

# 9 REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (CURTAIN SHIELD AIRBAG (D SEAT SIDE) SQUIB)



(a) Replace the curtain shield airbag assembly LH (See page RS-587).

#### HINT:

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

- (b) Connect the connectors to 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, and wait for at least 60 seconds.
- (e) Clear any DTCs stored in the memory (See page RS-34).
- (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 for DTCs (See page RS-34).

#### OK:

## DTC 57 is not output.

## HINT:

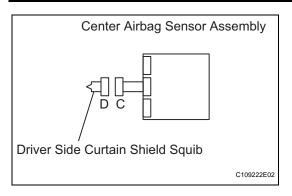
DTCs other than 57 may be output at this time, but they are not related to this check.





**END** 

# 10 CHECK CENTER AIRBAG SENSOR ASSEMBLY



- (a) Connect the connectors to the center airbag sensor 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 B1830 is not output.

#### HINT:

DTCs other than B1830 may be output at this time, but they are not related to this check.

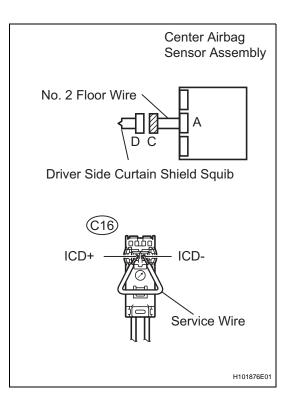


Go to step 12

NG

#### REPLACE CENTER AIRBAG SENSOR ASSEMBLY

## 11 CHECK CENTER AIRBAG SENSOR ASSEMBLY



#### HINT:

If continuing from step 6, 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 connector to the center airbag sensor assembly.
- (d) Using a service wire, connect C16-1 (ICD+) and C16-2 (ICD-) of connector C.

#### 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 B1831, B1832 and B1833 are not output.

#### HINT:

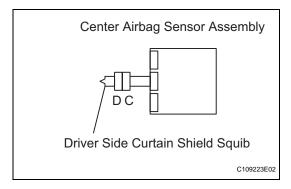
DTCs other than B1831, B1832 or B1833 may be output at this time, but they are not related to this check.



REPLACE CENTER AIRBAG SENSOR ASSEMBLY



# 12 CHECK CURTAIN SHIELD AIRBAG ASSEMBLY LH (CURTAIN SHIELD AIRBAG (DRIVER SEAT SIDE) SQUIB)



HINT:

If continuing from step 11, 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 service wire from connector C.
- (d) Connect the connector to the curtain shield airbag assembly LH.
- (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 B1830, B1831, B1832 and B1833 are not output.

HINT:

DTCs other than B1830, B1831, B1832 or B1833 may be output at this time, but they are not related to this check.



REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH

OK

OTHERS USE SIMULATION METHOD TO CHECK