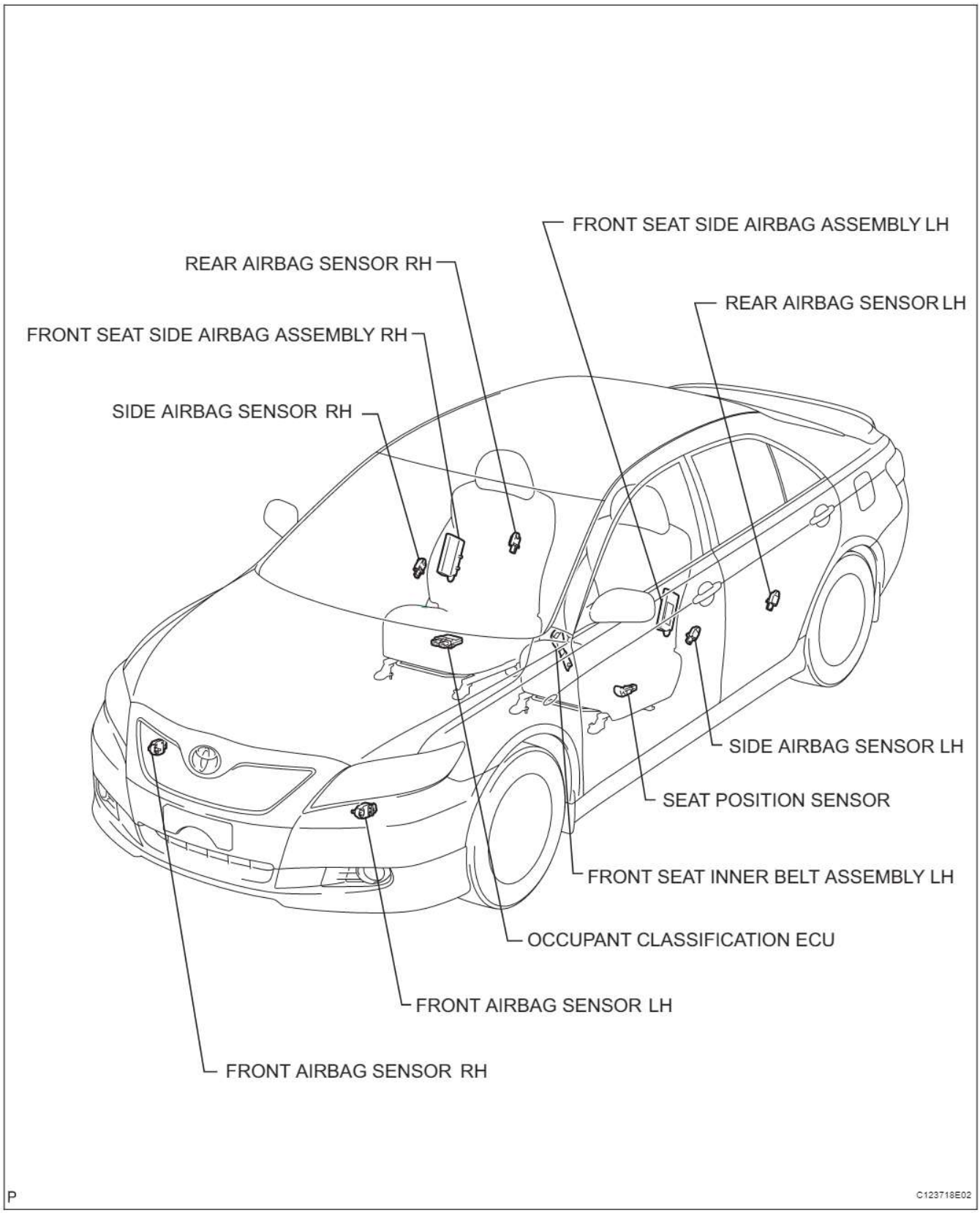
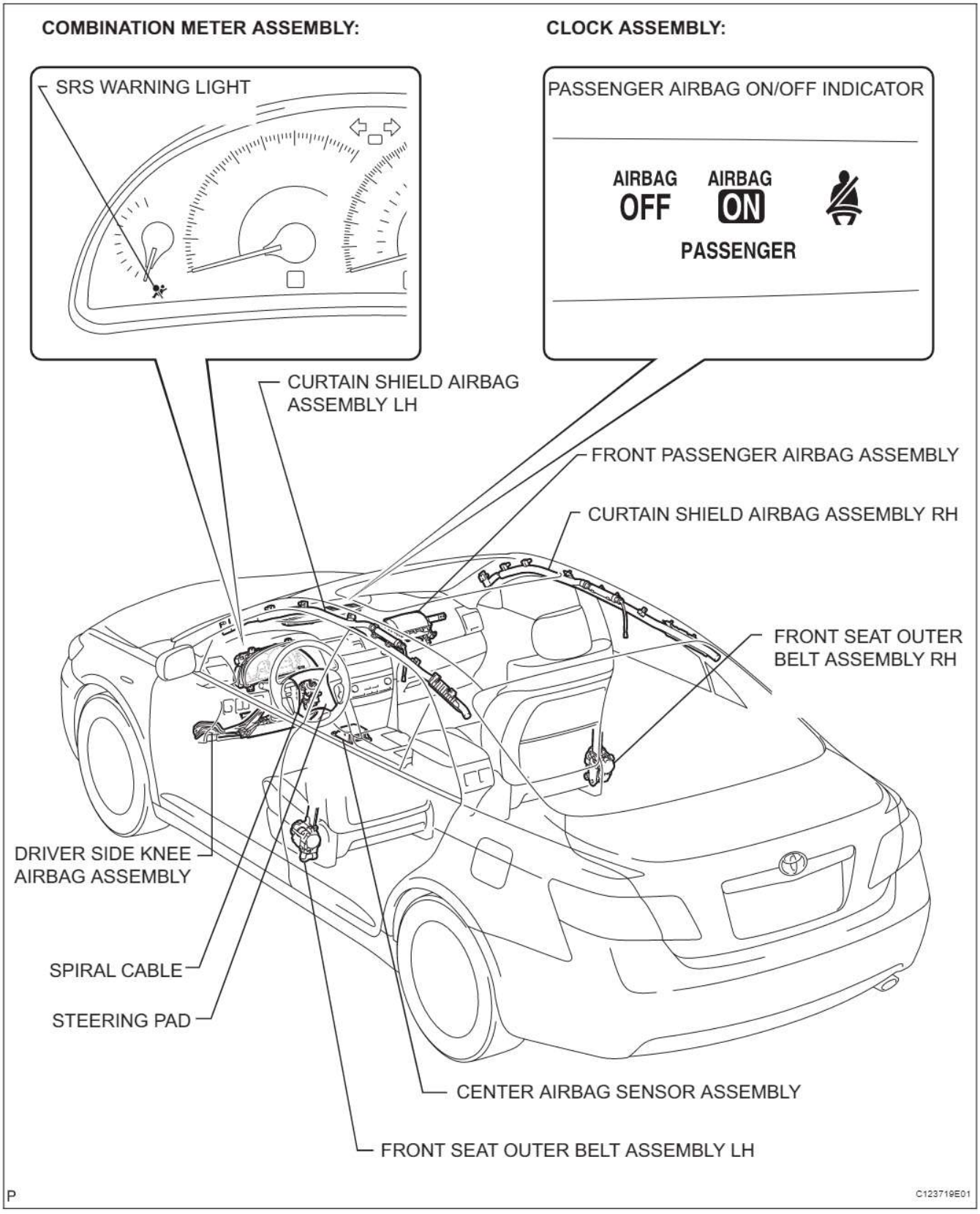
PARTS LOCATION



RS


COMBINATION METER ASSEMBLY:
SRS WARNING LIGHT
CLOCK ASSEMBLY:
PASSENGER AIRBAG ON/OFF INDICATOR
AIRBAG OFF
AIRBAG ON
PASSENGER
CURTAIN SHIELD AIRBAG ASSEMBLY LH
FRONT PASSENGER AIRBAG ASSEMBLY
CURTAIN SHIELD AIRBAG ASSEMBLY RH
FRONT SEAT OUTER BELT ASSEMBLY RH
DRIVER SIDE KNEE AIRBAG ASSEMBLY
SPIRAL CABLE
STEERING PAD
CENTER AIRBAG SENSOR ASSEMBLY
FRONT SEAT OUTER BELT ASSEMBLY LH
P
C123719E01

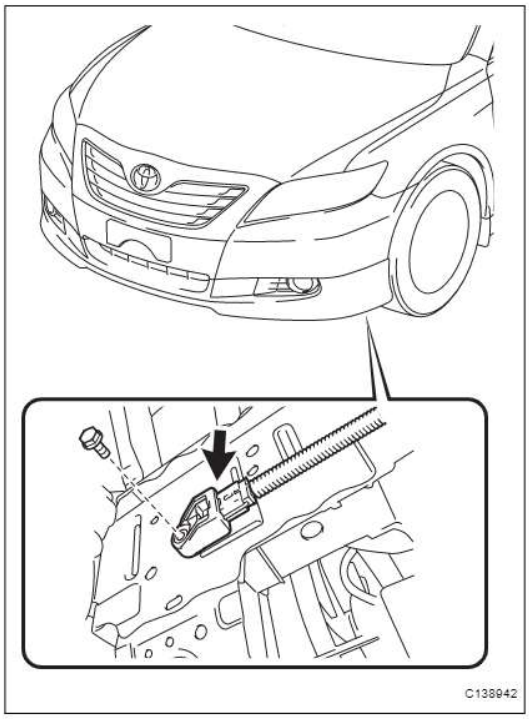
RS

REMOVAL

HINT:

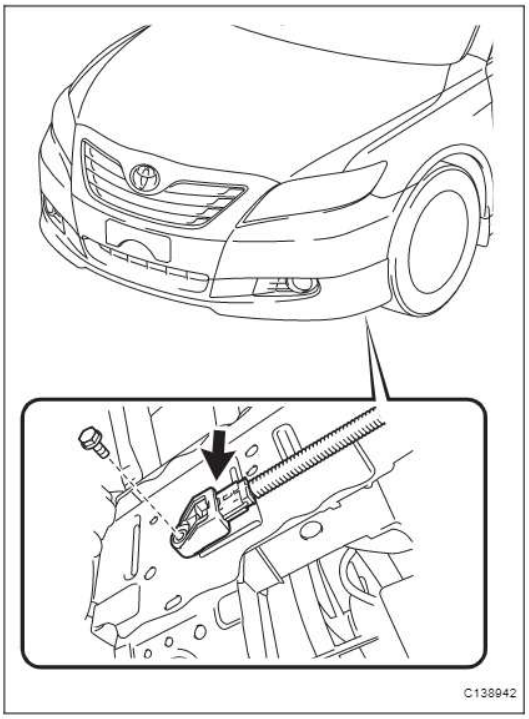
- Use the same procedure for the RH side and the LH side.
- The procedure listed below are for the LH side.

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE ENGINE UNDER COVER RH**
4. **REMOVE ENGINE UNDER COVER LH**
5. **REMOVE FRONT AIRBAG SENSOR**
   (a) Remove the bolt and front airbag sensor from the body.
   (b) Disconnect the connector from the front airbag sensor.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.



RS

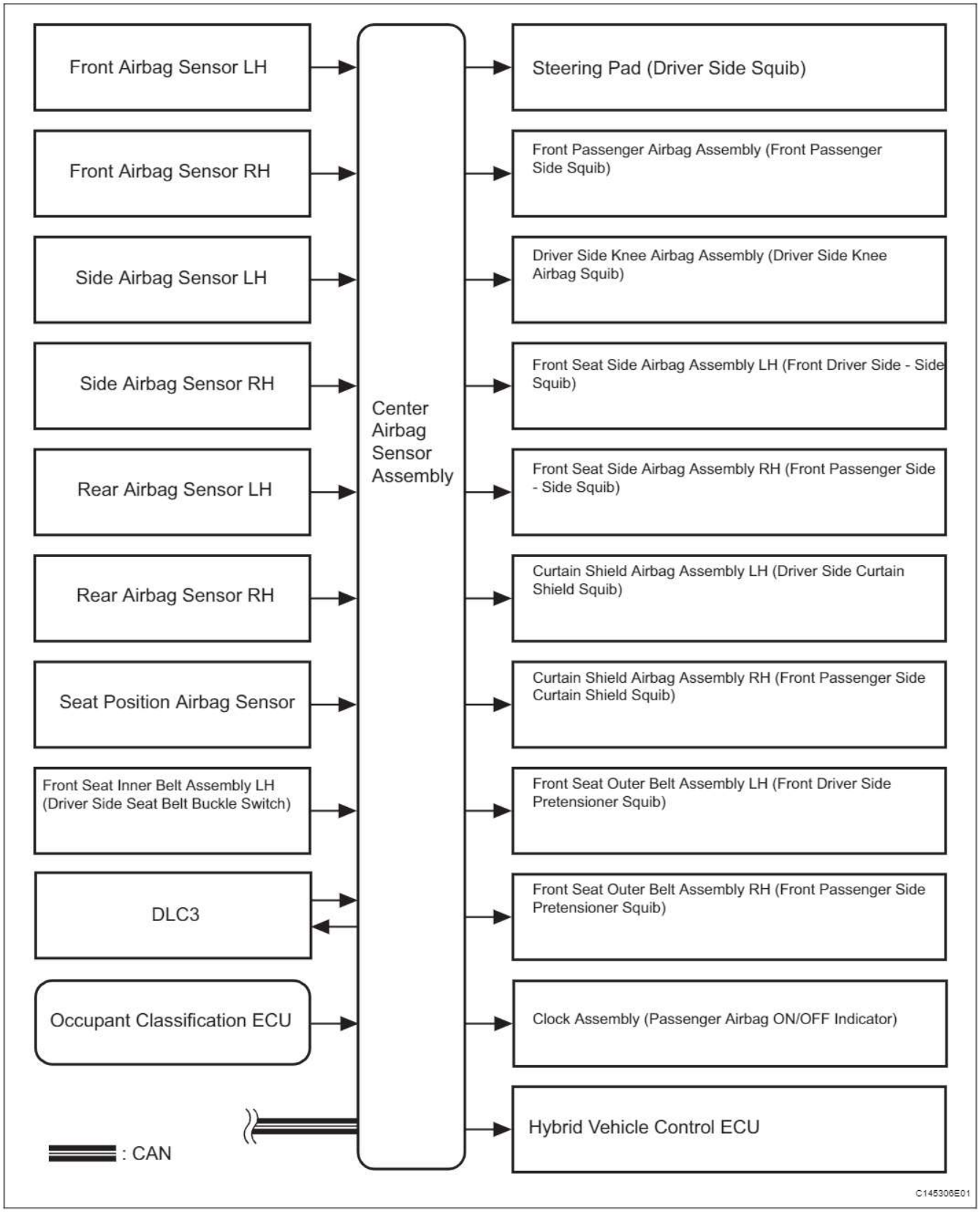
INSTALLATION



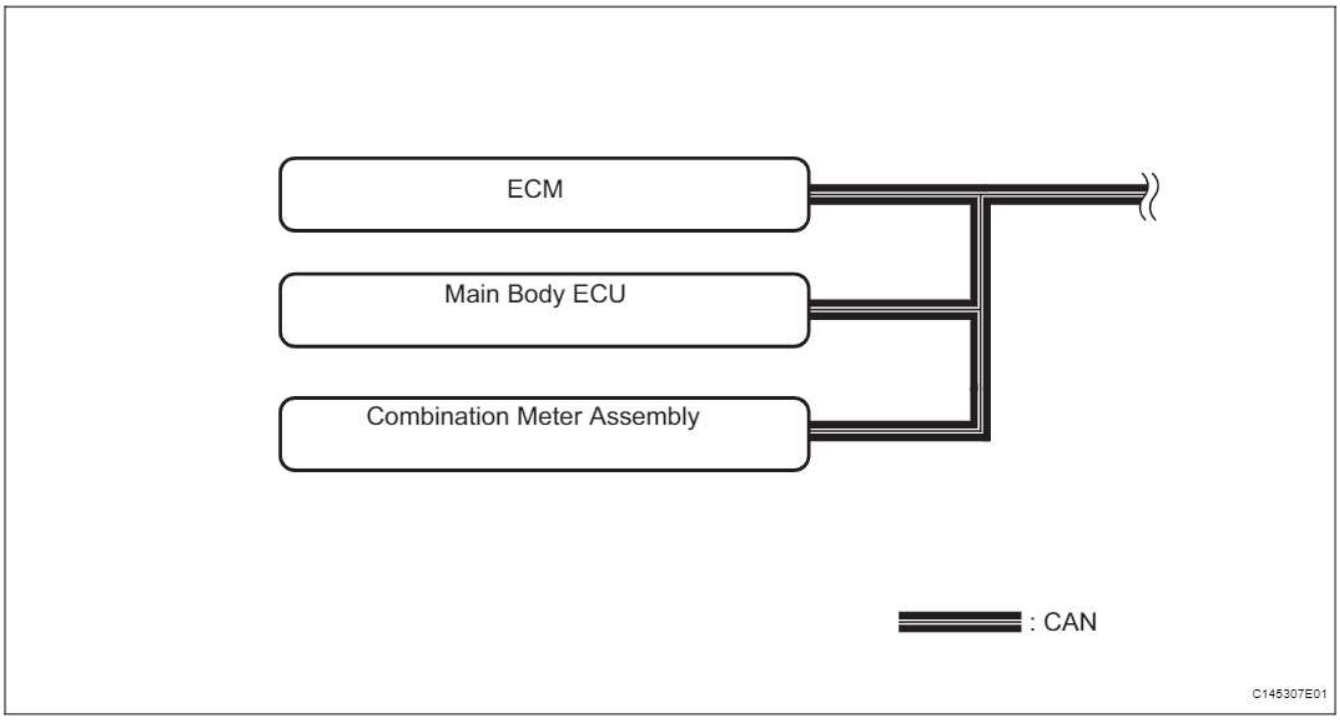
1. **INSTALL FRONT AIRBAG SENSOR**
   (a) Check that the power switch is turned off.
   (b) Check that the battery negative (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (c) Connect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (d) Install the front airbag sensor with the bolt.
   Torque: 17.5 N*m (179 kgf*cm, 13 ft.*lbf)
   NOTICE:
   - **If the front airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
   - **When installing the front airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
   (e) Check that there is no looseness in the installation parts of the front airbag sensor.
2. **INSTALL ENGINE UNDER COVER LH**
3. **INSTALL ENGINE UNDER COVER RH**
4. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
5. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.
6. **INSPECT SRS WARNING LIGHT**
   (a) Inspect the SRS warning light (See page RS-33).

RS

SYSTEM DIAGRAM



RS



Transmitting ECU (Transmitter)	Receiving ECU	Signals	Communication method
Center Airbag Sensor Assembly	Hybrid Vehicle Control ECU	Crash detection signal	CAN
Center Airbag Sensor Assembly	Main Body ECU	Driver seat buckle switch signal	
Center Airbag Sensor Assembly	Combination Meter Assembly	• SRS warning light ON demand signal • SRS warning light blink demand signal • Passenger seat occupant detection signal • Passenger seat buckle switch signal • Diagnosis signal (DTC)	
Combination Meter Assembly	Center Airbag Sensor Assembly	• Vehicle speed signal • Meter diagnoses polling signal	
Hybrid Vehicle Control ECU	Center Airbag Sensor Assembly	• Accelerator opening angle information • Accelerator opening angle signal • Shift position signal • Test mode signal • Stop signal	
ECM	Center Airbag Sensor Assembly	Engine speed signal	

RS

SYSTEM DESCRIPTION

1. GENERAL

(a) In conjunction with impact absorbing structure for a front collision, the SRS (Supplemental Restraint System) driver airbag, front passenger airbag, and driver side knee airbag were designed to supplement seat belts in the event of a front collision in order to help reduce shock to the head and chest of the driver and front passenger and knee of the driver. This system is a 3-sensor type airbag system to detect the impact during a front collision using the center airbag sensor assembly and front airbag sensors. It also operates the airbag system and seat belt pretensioner.

(b) In order to detect the extent of the collision during the initial stages of the collision in further details, the front airbag sensors have been changed from mechanical type to electrical type deceleration sensors. Accordingly, the deployment of the driver airbag and front passenger airbag is controlled in two stages according to the severity of the impact.

(c) In conjunction with impact absorbing structure for a side collision, the side airbag and curtain shield airbag were designed to help reduce shock to the driver, front passenger, and rear outer passengers in the event of a side collision.

(d) The curtain shield airbag that helps reduce shock to the front and rear seat occupants with a single curtain shield airbag has been adopted. In conjunction with this system, the side airbag sensors have been installed at the bottom of the center pillars and the rear airbag sensors have been installed at the bottom of the rear pillars.

(e) In this system, a front side collision is detected by the side airbag sensor in order to simultaneously deploy the side and curtain shield airbags. A rear side collision is detected by the rear airbag sensor and the center airbag sensor assembly in order to deploy the curtain shield airbag.

(f) The center airbag sensor assembly sends the airbag deployment signal to the hybrid vehicle control ECU through CAN (Controller Area Network) to operate the fuel pump control.

(g) The center airbag sensor assembly sends the airbag deployed signal to cut the hybrid system's high voltage.

2. CONSTRUCTION AND OPERATION

(a) FRONT AIRBAG SENSOR

(1) The front airbag sensors are installed on the right and left radiator supports respectively.

(2) The front airbag sensor consists of the deceleration sensor.

RS

(3) The deceleration sensor is built into the front airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a frontal collision. Accordingly, the extent of the initial collision can be detected in detail.

(b) SIDE AIRBAG SENSOR

(1) The side airbag sensors are installed on the bottom of the right and left center pillars respectively.

(2) The side airbag sensor consists of the deceleration sensor and ignition control circuit.

(3) The deceleration sensor is built into the side airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a front side collision. Accordingly, the extent of the initial collision can be detected in detail.

(c) REAR AIRBAG SENSOR

(1) The rear airbag sensors are installed on the right and left rear pillars respectively.

(2) The rear airbag sensor consists of the deceleration sensor and ignition control circuit.

(3) The deceleration sensor is built into the rear airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a rear side collision. Accordingly, the extent of the initial collision can be detected in detail.

(d) CENTER AIRBAG SENSOR ASSEMBLY

(1) General

- The center airbag sensor assembly is installed on the center floor under the instrument panel.
- The center airbag sensor assembly consists of the deceleration sensor, safing sensor, electronic safing sensor, ignition control circuit, and diagnostic circuit.
- The center airbag sensor assembly receives signals from the deceleration sensor and safing sensor built into the center airbag sensor assembly and front airbag sensor. Then the center airbag sensor assembly determines whether the driver airbag, front passenger airbag, driver side knee airbag, and front seat belt pretensioners should be activated, and diagnoses system malfunctions.
- The center airbag sensor assembly causes the front seat side airbag assembly and the curtain shield airbag assembly to deploy when receiving signals from the side airbag sensor.

RS

- The center airbag sensor assembly receives signals from the deceleration sensor and the electronic safing sensor built into the center airbag sensor assembly and the rear airbag sensor, and determines whether the curtain shield airbag should be activated, and diagnoses system malfunctions.
- The center airbag sensor assembly sends the airbag deployment signal to the ECM through CAN to operate the fuel pump control.
- The center airbag sensor assembly sends the airbag deployed signal to cut the hybrid system's high voltage.

(2) Deceleration sensor and ignition control circuit
- The deceleration sensor is built into the center airbag sensor assembly.
- The ignition control circuit performs calculations based on the signal output from the deceleration sensors of the center airbag sensor assembly and front airbag sensor. If the calculated values are greater than the specified values, it activates ignition operation.

(3) Safing sensor
- The safing sensor is built into the center airbag sensor assembly. During a front collision, the sensor turns on and outputs an ON signal to the center airbag sensor assembly if a deceleration rate sent to the safing sensor is greater than the specified value.

(4) Electronic safing sensor
- The electronic safing sensor is built into the center airbag sensor assembly. During a side collision, the sensor turns on and outputs an ON signal to the center airbag sensor assembly if a deceleration rate sent to the electronic safing sensor is greater than the specified value.

(5) Backup power source
- The backup power source consists of a power supply capacitor and a DC-DC converter. When the power system does not function during a collision, the power supply capacitor discharges and supplies electric power to the system. The DC-DC converter operates as a boosting transformer when the battery voltage falls below a predetermined level.

RS

(6) Diagnostic circuit
- This circuit constantly diagnoses system malfunctions. When a malfunction is detected, it turns on the SRS warning light on the combination meter assembly to inform the driver.

(7) Memory circuit
- When a malfunction is detected in the diagnostic circuit, it is coded and stored in the memory circuit.

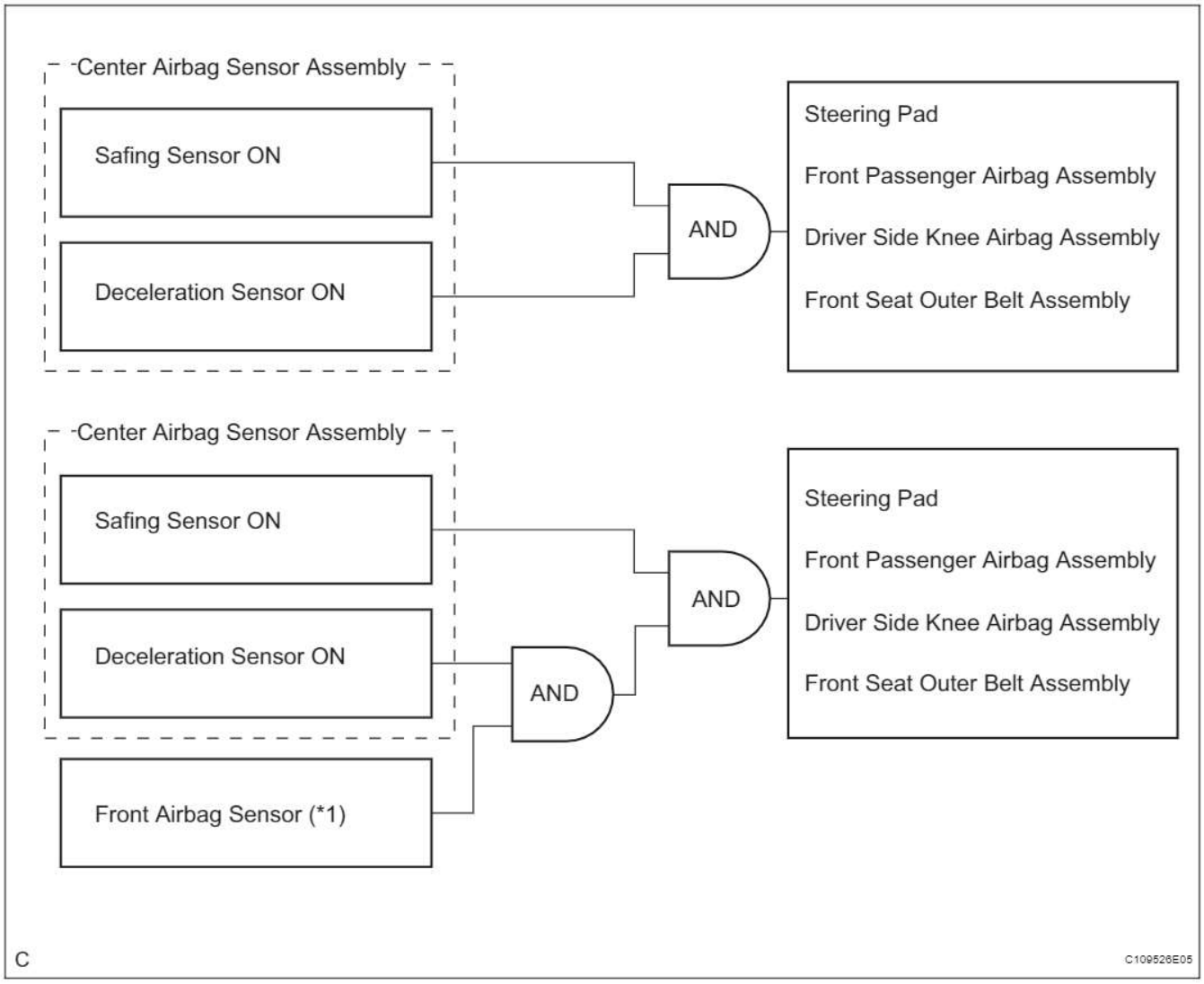
(e) SRS WARNING LIGHT

(1) The SRS warning light is located on the combination meter assembly. It comes on to inform the driver of system trouble when a malfunction is detected in self-diagnosis of the center airbag sensor assembly. Under normal operating conditions when the power switch is turned on (IG), it comes on for approximately 6 seconds and then goes off.

3. DEPLOYMENT CONDITION

When the vehicle collides and the shock is greater than the specified value, the SRS is activated automatically. The center airbag sensor assembly includes the safing sensor and deceleration sensor. The safing sensor is designed to turn on at a smaller deceleration rate than the deceleration sensor.

(a) The center airbag sensor assembly determines whether ignition is necessary based on signals from the deceleration sensor and the front airbag sensor (*1). If the safing sensor turns on simultaneously, current flows to the squibs to deploy the SRS as shown in the illustration below.

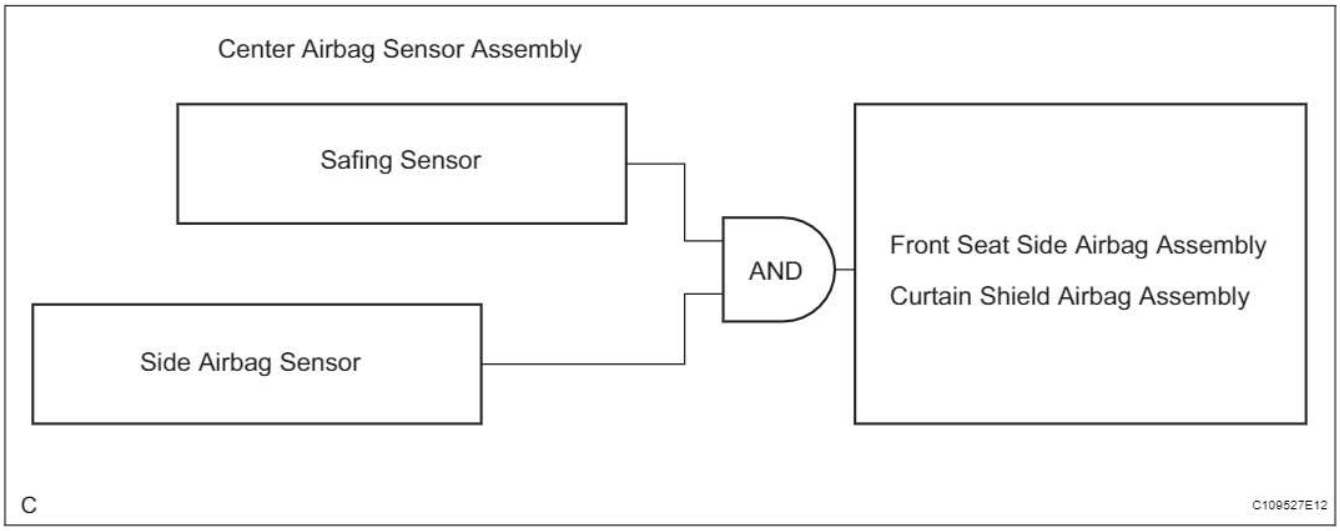


HINT:

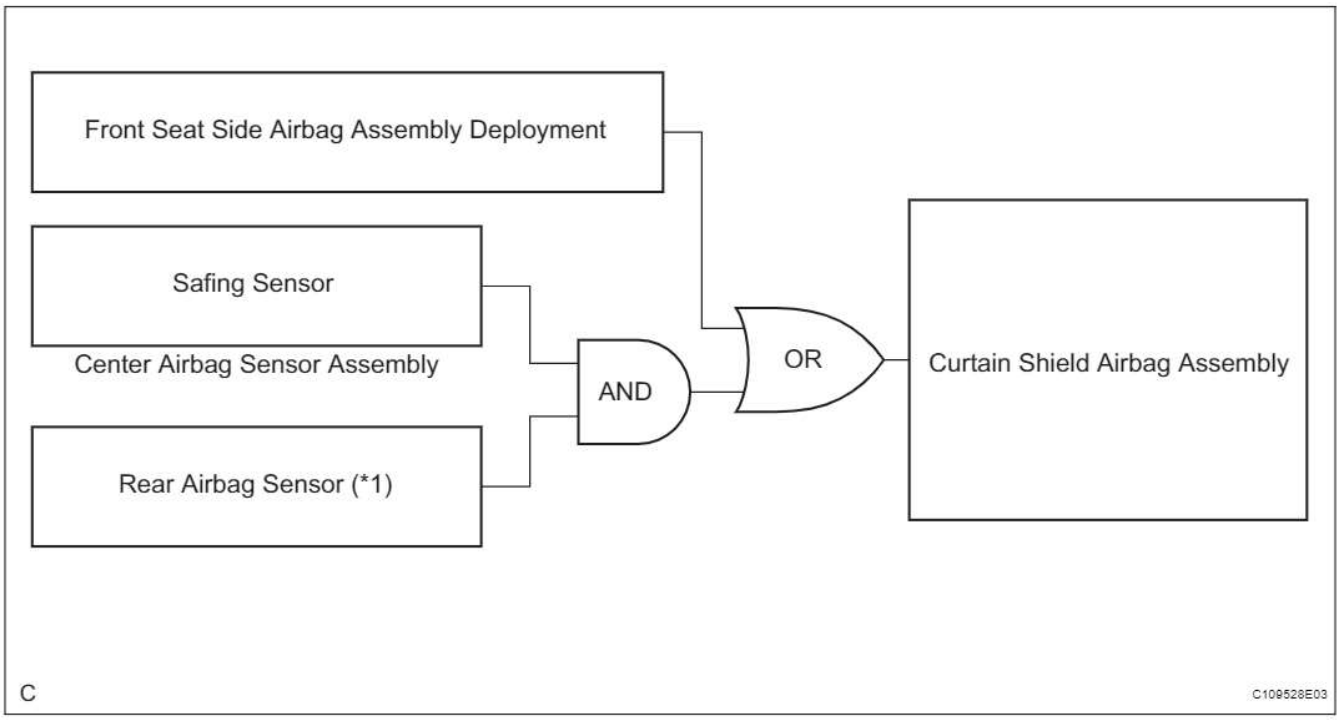
*1: In case of front collision, the ignition signal could be output with the deceleration sensor ON signal even without a signal from the front airbag sensor.

RS

(b) The center airbag sensor assembly determines whether ignition is necessary based on signals from the side airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below.



(c) The center airbag sensor assembly determines whether ignition is necessary based on signals from the rear airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below (*1).



HINT:
*1: If the front seat side airbag assembly deploys, the curtain shield airbag assembly will also deploy, regardless of whether the signal is output from the rear airbag sensor.

RS

HOW TO PROCEED WITH TROUBLESHOOTING

The intelligent tester can be used in steps 3, 5, 7, 9, and 10.

1 VEHICLE BROUGHT TO WORKSHOP

NEXT

2 CUSTOMER PROBLEM ANALYSIS

(a) Confirm problem symptoms (See page IN-72).

NEXT

3 CHECK CAN COMMUNICATION SYSTEM

(a) Check for DTC outputs (See page CA-22).
HINT:
The center airbag sensor assembly is connected to the CAN communication system. Therefore, before starting troubleshooting, make sure to check that there is no trouble in the CAN communication system.

Result

Result	Proceed To
CAN communication DTC is not output.	A
CAN communication DTC is output.	B

B → INSPECT CAN COMMUNICATION CIRCUIT

A

4 WARNING LIGHT CHECK

NEXT

5 CHECK DTC (Present and Past DTCs)

(a) Check for DTC outputs.

Result

Result	Proceed To
DTC is output.	A
DTC is not output.	B

B → PROBLEM SYMPTOMS TABLE

A

RS

6	DTC CHART

NEXT

7	CIRCUIT INSPECTION

NEXT

8	REPAIR

NEXT

9	CLEAR DTC (Present and Past DTCs)

NEXT

10	CHECK DTC (Present and Past DTCs)

(a) Check for DTC outputs.

Result

Result	Proceed To
DTC is not output.	A
DTC is output.	B

B → Go to step 6

A

11	CONFIRMATION TEST

NEXT

END

RS

PROBLEM SYMPTOMS TABLE

HINT:
Proceed to the troubleshooting for each circuit in the table below.

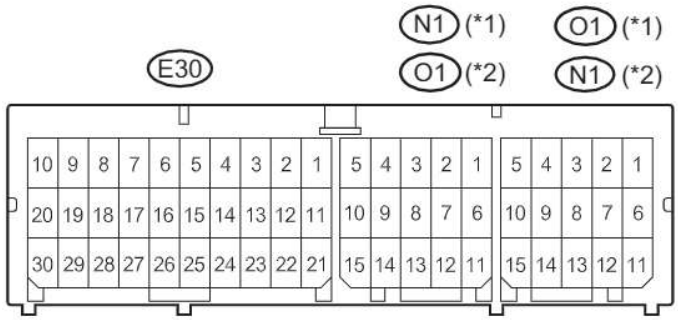
AIRBAG SYSTEM:

Symptom	Suspected Area	See page
The SRS warning light goes off after the primary check, but comes on.	SRS Warning Light Remains ON	RS-222
With the power switch on (IG), the SRS warning light sometimes comes on after approximately 6 seconds.	SRS Warning Light Remains ON	RS-222
The SRS warning light always comes on even when DTC is not output.	SRS Warning Light Remains ON	RS-222
With the power switch on (IG), the SRS warning light does not come on.	SRS Warning Light does not Come On	RS-227
Although an SRS warning light operates normally, DTC or a normal system code is not displayed.	Diagnosis Circuit	RS-230
Although terminals TC and CG of DLC3 are not connected, DTC or a normal system code is displayed.	Diagnosis Circuit	RS-230

RS

TERMINALS OF ECU

1. CENTER AIRBAG SENSOR ASSEMBLY



*1: LHD

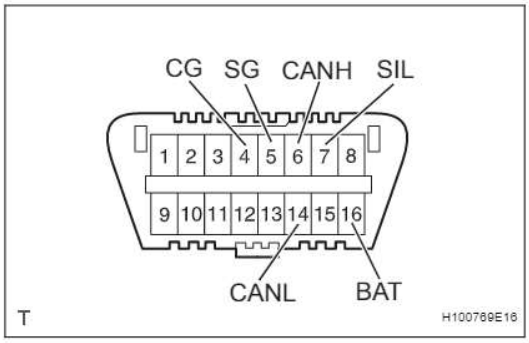
*2: RHD

C123353E04

Terminal No.	Terminal Symbol	Destination
E30-1	P2+	Front passenger airbag assembly (Front passenger side squib 2nd step)
E30-2	P2-	Front passenger airbag assembly (Front passenger side squib 2nd step)
E30-3	P-	Front passenger airbag assembly (Front passenger side squib)
E30-4	P+	Front passenger airbag assembly (Front passenger side squib)
E30-5	D+	Steering pad (Driver side squib)
E30-6	D-	Steering pad (Driver side squib)
E30-7	D2-	Steering pad (Driver side squib 2nd step)
E30-8	D2+	Steering pad (Driver side squib 2nd step)
E30-9	DK+	Driver side knee airbag assembly (Driver side knee airbag squib)
E30-10	DK-	Driver side knee airbag assembly (Driver side knee airbag squib)
E30-13	CANH	CAN Communication line
E30-14	GSW2	Hybrid vehicle control ECU
E30-16	SIL	DLC3
E30-17	P-AB	Clock assembly (Passenger airbag ON/OFF indicator)
E30-21	IG2	IGN fuse
E30-22	CANL	CAN Communication line
E30-23	PAON	Clock assembly (Passenger airbag ON/OFF indicator)
E30-25	E1	Ground
E30-26	E2	Ground
E30-27	-SR	Front airbag sensor RH
E30-28	-SL	Front airbag sensor LH
E30-29	+SR	Front airbag sensor RH
E30-30	+SL	Front airbag sensor LH
N1-1	PD-	Front seat outer belt assembly LH (Front driver side pretensioner squib)
N1-2	PD+	Front seat outer belt assembly LH (Front driver side pretensioner squib)

RS

Terminal No.	Terminal Symbol	Destination
N1-6	ICD-	Curtain shield airbag assembly LH (Driver side curtain shield squib)
N1-7	ICD+	Curtain shield airbag assembly LH (Driver side curtain shield squib)
N1-8	BBD+	Side airbag sensor LH
N1-9	SFD+	Front seat side airbag assembly LH (Front driver side - side squib)
N1-10	SFD-	Front seat side airbag assembly LH (Front driver side - side squib)
N1-11	DBE+	Front seat inner belt assembly LH (Driver side seat belt buckle switch)
N1-12	DBE-	Front seat inner belt assembly LH (Driver side seat belt buckle switch)
N1-13	DSP-	Seat position airbag sensor
N1-14	DSP+	Seat position airbag sensor
N1-15	BBD-	Side airbag sensor LH
O1-4	PP+	Front seat outer belt assembly RH (Front passenger side pretensioner squib)
O1-5	PP-	Front seat outer belt assembly RH (Front passenger side pretensioner squib)
O1-6	SFP-	Front seat side airbag assembly RH (Front passenger side - side squib)
O1-7	SFP+	Front seat side airbag assembly RH (Front passenger side - side squib)
O1-8	BBP+	Side airbag sensor RH
O1-9	ICP+	Curtain shield airbag assembly RH (Front passenger side curtain shield squib)
O1-10	ICP-	Curtain shield airbag assembly RH (Front passenger side curtain shield squib)
O1-11	BBP-	Side airbag sensor RH
O1-12	FSP+	Occupant classification ECU
O1-13	FSP-	Occupant classification ECU



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

Symbols (Terminal No.)	Terminal Description	Condition	Specified condition
SIL (7) - SG (5)	Bus "+" line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	10 to 14 V
CANH (6) - CANL (14)	CAN bus line	Power switch off (*)	54 to 69 Ω
CANH (6) - BAT (16)	HIGH-level CAN bus line	Power switch off (*)	6 kΩ or higher
CANH (6) - CG (4)	HIGH-level CAN bus line	Power switch off (*)	200 Ω or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Power switch off (*)	6 kΩ or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Power switch off (*)	200 Ω or higher

RS

NOTICE:

***: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the power switch, any other switches, or the doors.**

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.

HINT:

If the display shows a communication error message when connecting the cable of the intelligent tester to the DLC3, turning the power switch on (IG) and operating the intelligent tester, there is a problem on the vehicle side or tester side.

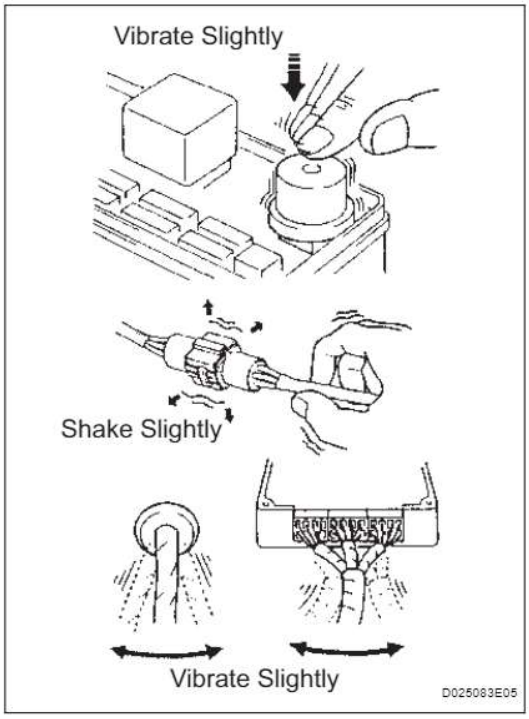
- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tester is connected to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.

2. SYMPTOM SIMULATION

HINT:

The most difficult case in troubleshooting is when no symptoms occur. In such cases, a thorough customer problem analysis must be carried out. Then the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be reproduced. No matter how experienced or skilled a technician may be, if he proceeds to troubleshoot without confirming the problem symptoms, he will likely overlook something important and make a wrong guess at some points in the repair operation.

This leads to a standstill in troubleshooting.



(a) Vibration method: When vibration seems to be the major cause.
HINT:
Perform the simulation method only during the primary check period (for approximately 6 seconds after the power switch is turned on (IG)).
(1) Slightly vibrate the part of the sensor considered to be the problem cause with your fingers and check whether the malfunction occurs.
HINT:
Shaking the relays too strongly may result in open relays.
(2) Slightly shake the connector vertically and horizontally.
(3) Slightly shake the wire harness vertically and horizontally.
The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

3. FUNCTION OF SRS WARNING LIGHT

(a) Primary check.
(1) Turn the power switch off. Wait for at least 2 seconds, then turn the power switch on (IG). The SRS warning light comes on for approximately 6 seconds and the diagnosis of the airbag system (including the seat belt pretensioners) is performed.
HINT:
If trouble is detected during the primary check, the SRS warning light remains on even after the primary check period (for approximately 6 seconds) has elapsed.

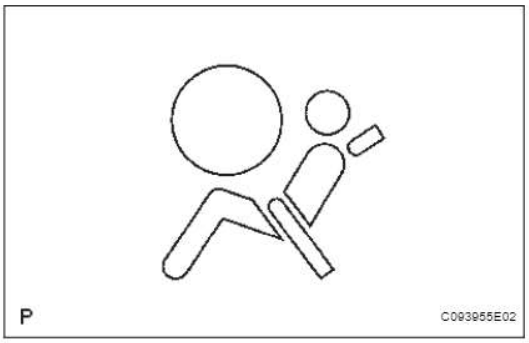
(b) Constant check.
(1) After the primary check, the center airbag sensor assembly constantly monitors the airbag system for trouble.
HINT:
If trouble is detected during the constant check, the center airbag sensor assembly functions as follows:
- The SRS warning light comes on.
- The SRS warning light goes off, and then comes on. This blinking pattern indicates a source voltage drop. The SRS warning light goes off 10 seconds after the source voltage returns to normal.

(c) Review.
(1) When the airbag system is normal:
The SRS warning light comes on only during the primary check period (for approximately 6 seconds after the power switch is turned on (IG)).
(2) When the airbag system has trouble:
- The SRS warning light remains on even after the primary check period has elapsed.

RS

- The SRS warning light goes off after the primary check, but comes on again during the constant check.
- The SRS warning light does not come on when turning the power switch from off to on (IG).

HINT:
The center airbag sensor assembly keeps the SRS warning light on if the airbag has been deployed.



4. SRS WARNING LIGHT CHECK

(a) Turn the power switch on (IG), and check that the SRS warning light comes on for approximately 6 seconds (primary check).

(b) Check that the SRS warning light goes off approximately 6 seconds after the power switch is turned on (IG) (constant check).

HINT:
When any of the following symptoms occur, refer to "Problem Symptoms Table" (See page RS-30).

- The SRS warning light comes on occasionally, after the primary check period has elapsed.
- The SRS warning light comes on, but a DTC is not output.
- The power switch is turned from off to on (IG), but the SRS warning light does not come on.

5. FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

(a) Initial check

(1) Turn the power switch on (IG).

(2) The passenger airbag ON/OFF indicator comes on for approximately 4 seconds, then goes off for approximately 2 seconds.

(3) Approximately 6 seconds after the power switch is turned on (IG), the passenger airbag ON/OFF indicator will be ON/OFF depending on the conditions listed below.

Condition	"ON" indicator	"OFF" indicator
Vacant	OFF	OFF
Adult is seated. (Above 36 kg (79.37 lb))	ON	OFF
Child is seated. (Less than 36 kg (79.37 lb))	OFF	ON
Child restraint system is set. (*)	OFF	ON
Front passenger occupant classification failure	OFF	ON

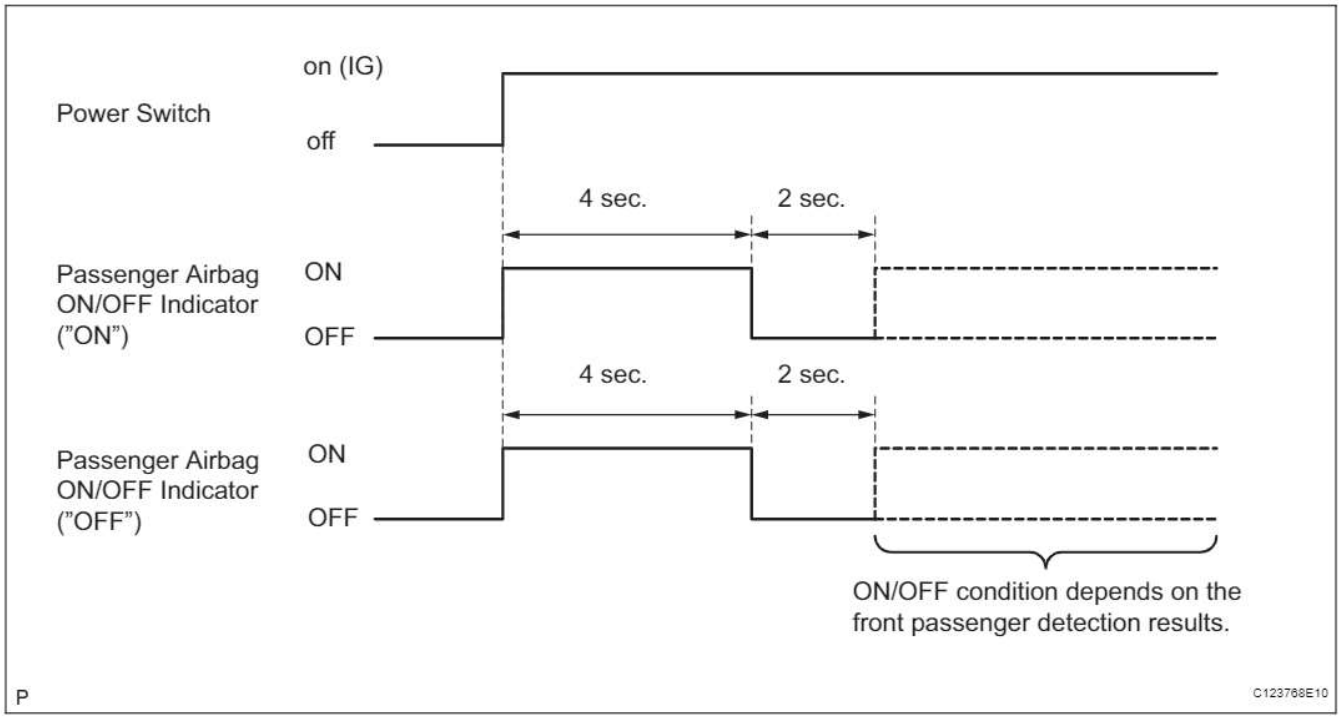
*: Child restraint system (less than 7 kg (15.43 lb)) and passenger side buckle switch is ON, then 7 to 36 kg (15.43 to 79.37 lb) is set.

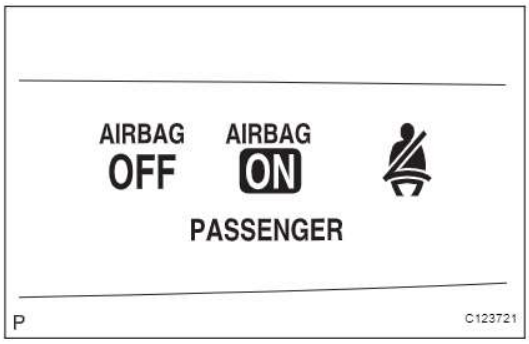
HINT:

- The passenger airbag ON/OFF indicator is based on the timing chart below in order to check the indicator light circuit.

RS

- When the front passenger occupant classification system has trouble, both the SRS warning light and the passenger airbag ON/OFF indicator ("OFF") come on. In this case, check the DTCs in "AIRBAG SYSTEM" first. Then troubleshoot the occupant classification system if DTC B1650/32 is detected, and troubleshoot the passenger airbag ON/OFF indicator if DTC B1660/43 is detected.





6. PASSENGER AIRBAG ON/OFF INDICATOR CHECK

(a) Turn the power switch on (IG).

(b) Check that the passenger airbag ON/OFF indicator ("ON" and "OFF") comes on for approximately 4 seconds, then goes off for approximately 2 seconds.
HINT:
Refer to the table in the previous step regarding the passenger airbag ON/OFF indicator when the power switch is turned on (IG) and approximately 6 seconds pass.

7. ACTIVATION PREVENTION MECHANISM

(a) FUNCTION OF ACTIVATION PREVENTION MECHANISM

(1) An activation prevention mechanism is built into the connector (on the center airbag sensor assembly side) of the airbag system squib circuit to prevent accidental airbag activation.

(2) This mechanism closes the circuit when the connector is disconnected by bringing the short spring into contact with the terminals and shutting off external electricity to prevent accidental airbag activation.

RS

(b) RELEASE METHOD OF ACTIVATION PREVENTION MECHANISM

(1) To release the activation prevention mechanism, insert a piece of paper with the same thickness as the male terminal (approximately 0.5 mm (0.020 in.)) between the terminals and the short spring to break the connection.

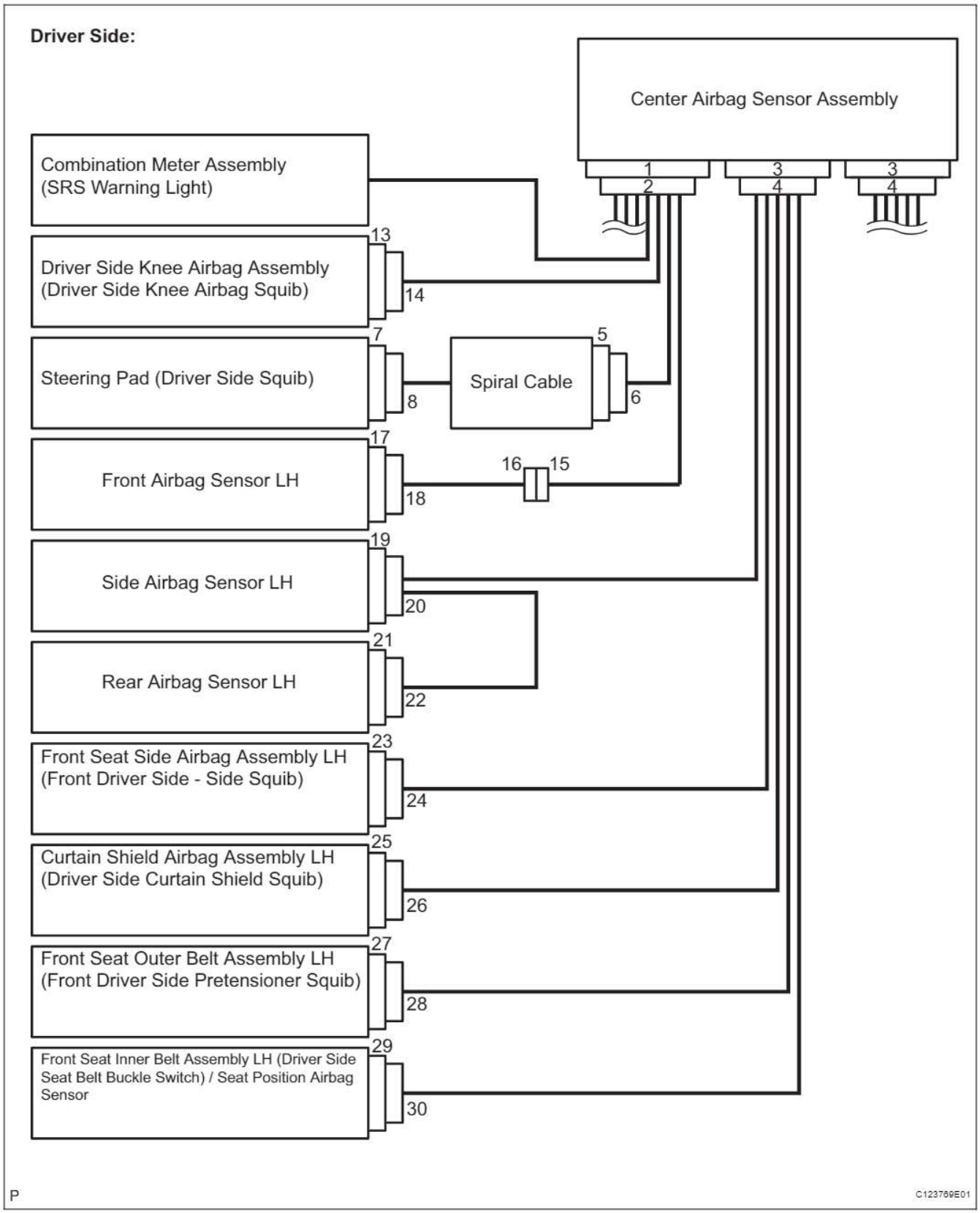
(2) Refer to the following illustrations concerning connectors utilizing the activation prevention mechanism and its release method.

CAUTION:

Never release the activation prevention mechanism on the squib connector even when inspecting with the squib disconnected.

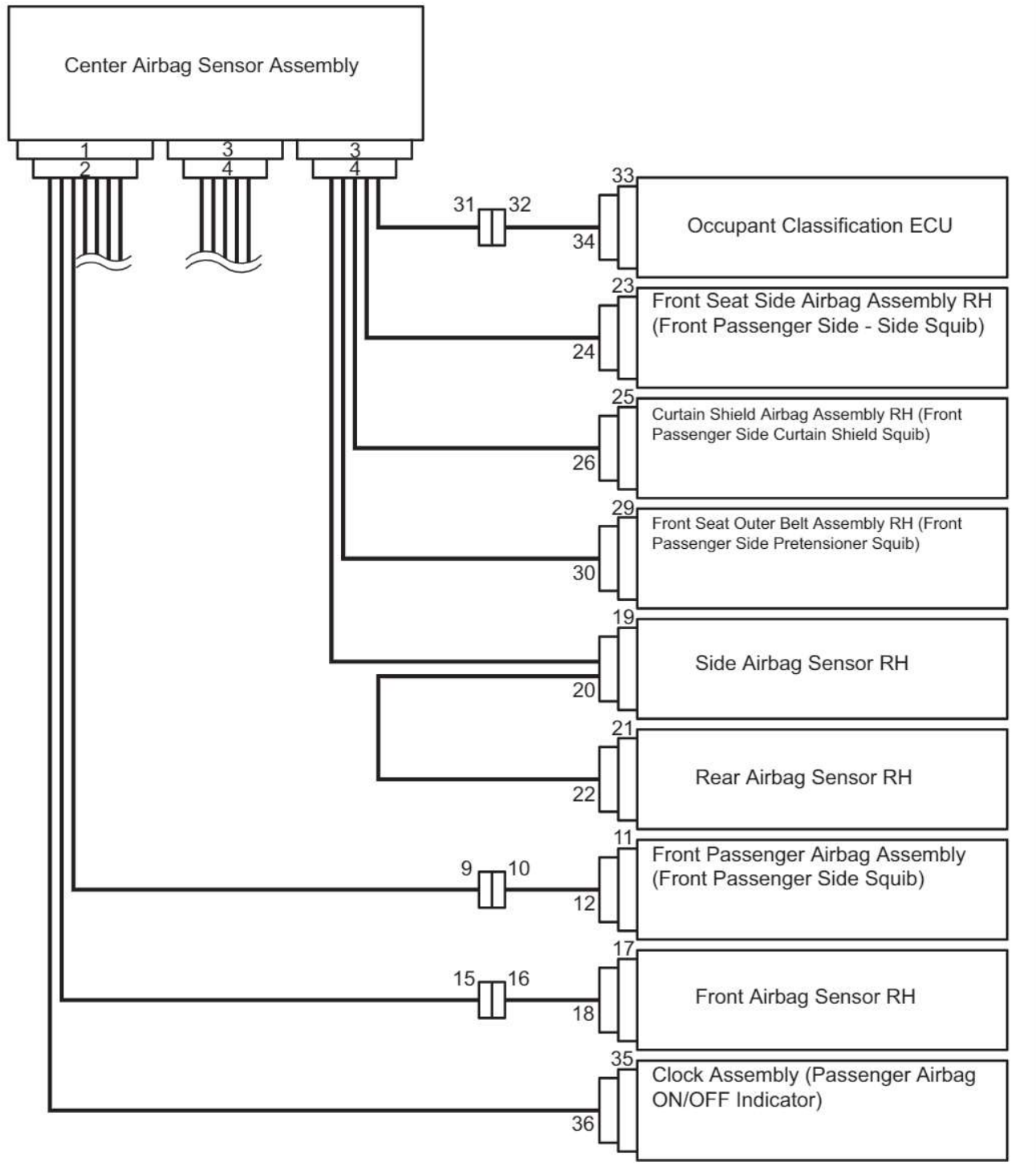
NOTICE:

- **Do not release the activation prevention mechanism unless specially directed by the troubleshooting procedure.**
- **To prevent the terminal and the short spring from being damaged, always use a piece of paper with the same thickness as the male terminal.**

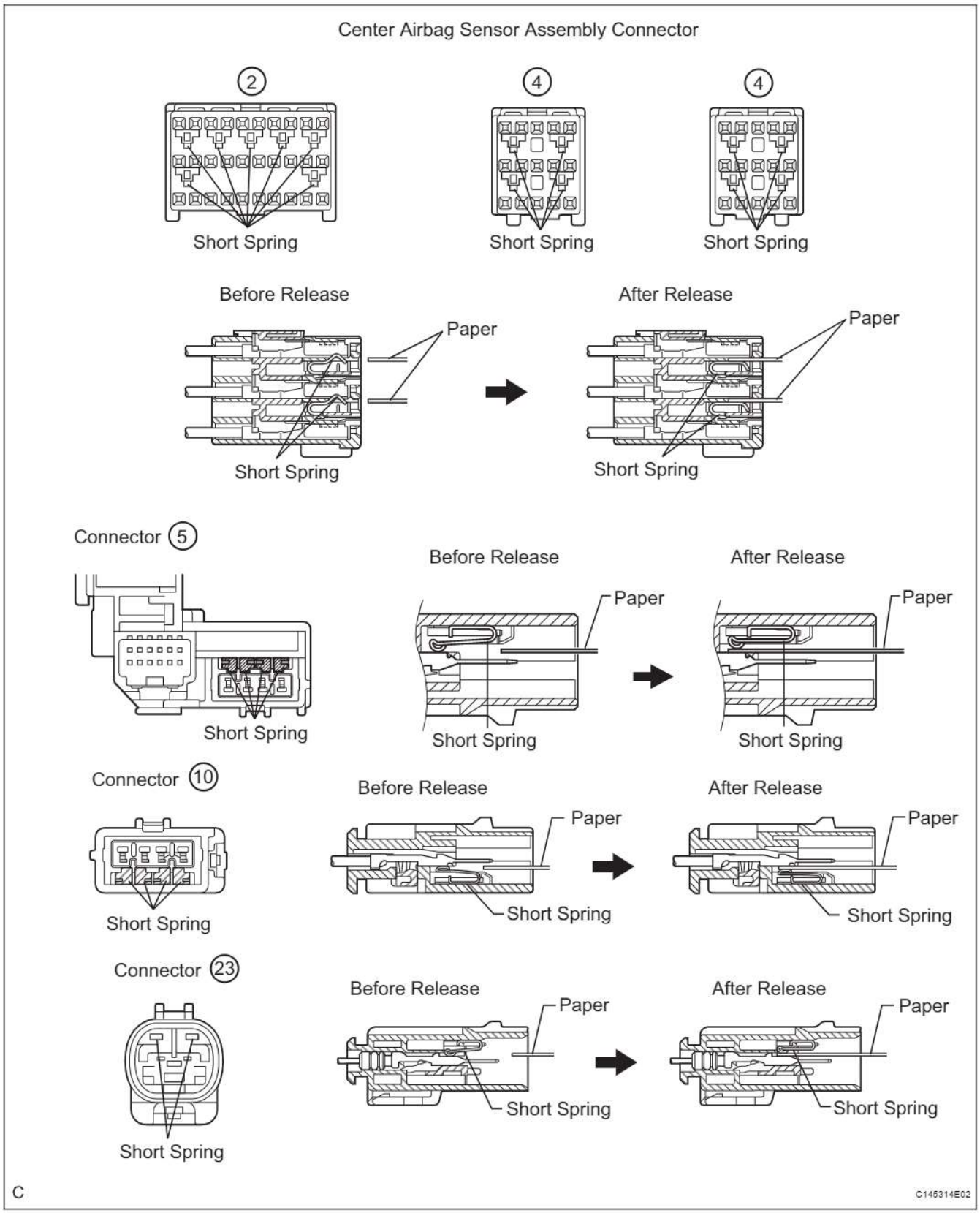

Driver Side:
Center Airbag Sensor Assembly
1
2
3
4
3
4
Combination Meter Assembly (SRS Warning Light)
Driver Side Knee Airbag Assembly (Driver Side Knee Airbag Squib)
13
14
Steering Pad (Driver Side Squib)
7
8
Spiral Cable
5
6
Front Airbag Sensor LH
17
18
16
15
Side Airbag Sensor LH
19
20
Rear Airbag Sensor LH
21
22
Front Seat Side Airbag Assembly LH (Front Driver Side - Side Squib)
23
24
Curtain Shield Airbag Assembly LH (Driver Side Curtain Shield Squib)
25
26
Front Seat Outer Belt Assembly LH (Front Driver Side Pretensioner Squib)
27
28
Front Seat Inner Belt Assembly LH (Driver Side Seat Belt Buckle Switch) / Seat Position Airbag Sensor
29
30
P
C123769E01

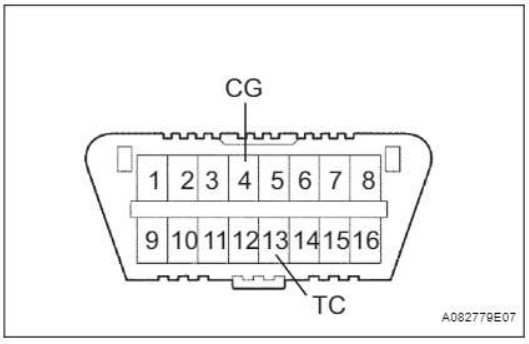
RS

Passenger Side:



RS


Center Airbag Sensor Assembly Connector
2
Short Spring
4
Short Spring
4
Short Spring
Before Release
Paper
Short Spring
After Release
Paper
Short Spring
Connector 5
Short Spring
Before Release
Paper
Short Spring
After Release
Paper
Short Spring
Connector 10
Short Spring
Before Release
Paper
Short Spring
After Release
Paper
Short Spring
Connector 23
Short Spring
Before Release
Paper
Short Spring
After Release
Paper
Short Spring
C
C145314E02



DTC CHECK / CLEAR

1. DTC CHECK (USING SST CHECK WIRE)

(a) Check the DTCs (Present trouble code).

(1) Turn the power switch on (IG), and wait for approximately 60 seconds.

(2) Using SST, connect terminals TC and CG of the DLC3.

SST 09843-18040

NOTICE:

Connect the terminals to the correct positions to avoid a malfunction.

(b) Check the DTCs (Past trouble code).

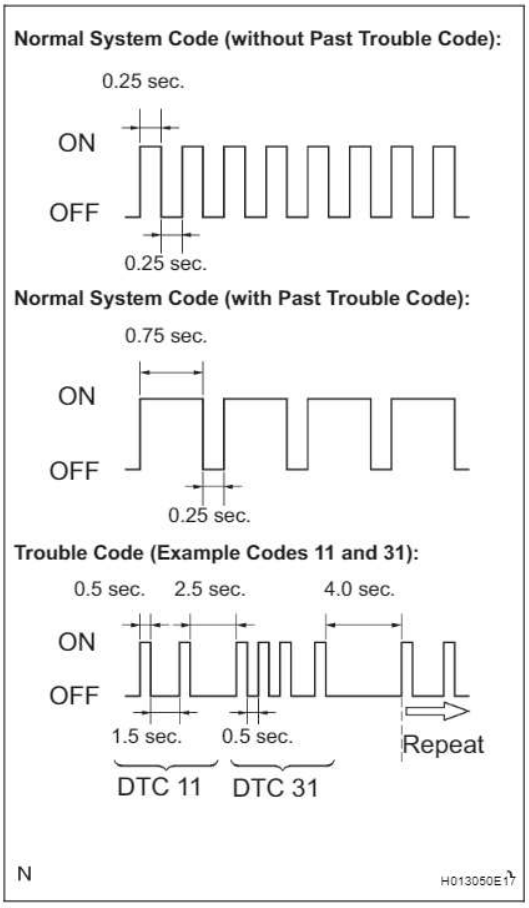
(1) Using SST, connect terminals TC and CG of the DLC3.

SST 09843-18040

NOTICE:

Connect the terminals to the correct positions to avoid a malfunction.

(2) Turn the power switch on (IG), and wait for approximately 60 seconds.



(c) Read the DTCs.

(1) Read the blinking patterns of the DTCs. As examples, the blinking patterns for the normal system code and trouble codes 11 and 31 are shown in the illustration.

- Normal system code indication (without past trouble code)
  The light blinks twice per second.
- Normal system code indication (with past trouble code)
  When the past trouble code is stored in the center airbag sensor assembly, the light blinks only once per second.
- Trouble code indication
  The first blinks indicates the first DTC. The second blinks occurs after a 1.5-second pause.

If there are more than 1 code, there will be a 2.5-second pause between each code. After all codes are shown, there will be a 4.0-second pause, and then they will all be repeated.

HINT:

- If 2 or more malfunctions are found, the indication begins with the smaller numbered code.
- If DTCs are indicated without connecting the terminals, proceed to "Diagnosis Circuit" (See page RS-230).

RS

2. DTC CLEAR (USING SST CHECK WIRE)

(a) Clear the DTCs.

(1) When the power switch is turned off, the DTCs are cleared.
HINT:
Depending on the DTC, the code may not be cleared by turning off the power switch. In this case, proceed to the next procedure.

(2) Using SST, connect terminals TC and CG of the DLC3, and then turn the power switch on (IG).
SST 09843-18040

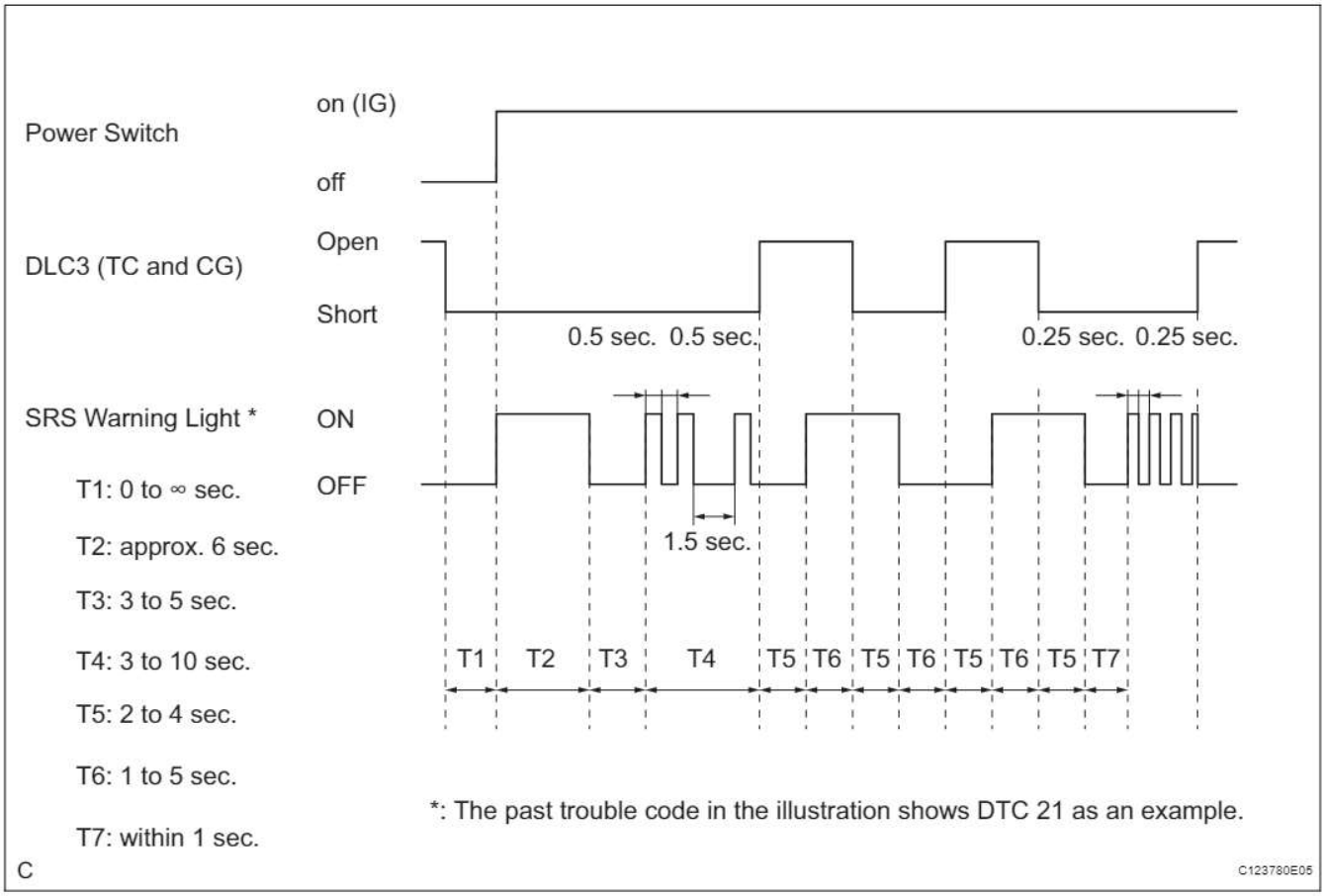
(3) Disconnect terminal TC of the DLC3 within 3 to 10 seconds after the DTCs are output, and check if the SRS warning light comes on after 3 seconds.

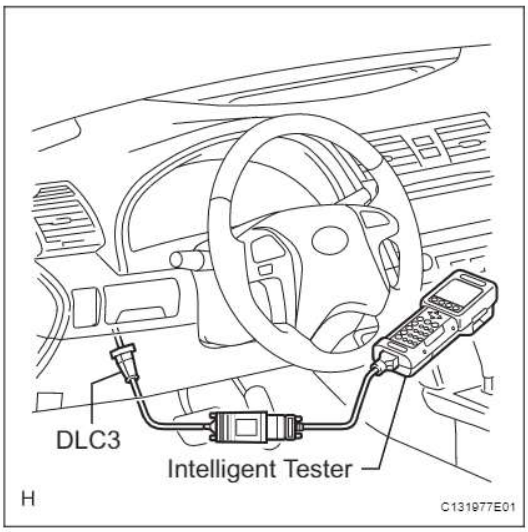
(4) Within 2 to 4 seconds after the SRS warning light comes on, connect terminals TC and CG of the DLC3.

(5) The SRS warning light should go off within 2 to 4 seconds after connecting terminals TC and CG of the DLC3. Then, disconnect terminal TC within 2 to 4 seconds after the SRS warning light goes off.

(6) The SRS warning light comes on again within 2 to 4 seconds after disconnecting terminal TC. Then, reconnect terminals TC and CG within 2 to 4 seconds after the SRS warning light comes on.

(7) Check if the SRS warning light goes off within 2 to 4 seconds after connecting terminals TC and CG of the DLC3. Also check if the normal system code is output within 1 second after the SRS warning light goes off.
If DTCs are not cleared, repeat this procedure until the codes are cleared.



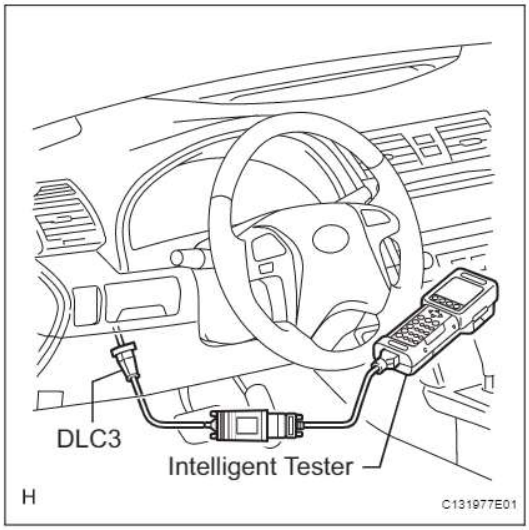


3. DTC CHECK

(a) Check the DTCs.
(1) Connect the intelligent tester to the DLC3.
(2) Turn the power switch on (IG).
(3) Check the DTCs by following the prompts on the tester screen.
HINT:
Refer to the intelligent tester operator's manual for further details.

(b) Clear the DTCs.
(1) Connect the intelligent tester to the DLC3.
(2) Turn the power switch on (IG).
(3) Clear the DTCs by following the prompts on the tester screen.
HINT:
Refer to the intelligent tester operator's manual for further details.

RS



CHECK MODE PROCEDURE

1. CHECK MODE (SIGNAL CHECK): DTC CHECK

(a) Connect the intelligent tester to the DLC3.

(b) Turn the power switch on (IG).

(c) Select "SIGNAL CHECK", and proceed with checking using the intelligent tester.

NOTICE:

Select "SIGNAL CHECK" from the "DTC CHECK" screen displayed on the intelligent tester to clear the output DTCs (both present and past).

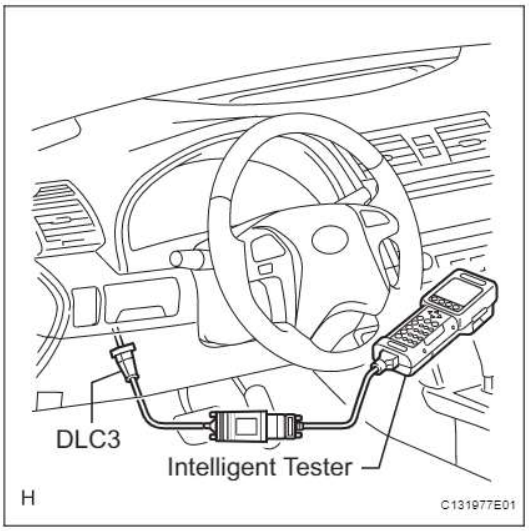
HINT:

- DTCs can be detected more sensitively in check mode than in normal diagnosis mode.
- Perform check mode inspection when a malfunction in each squib circuit is suspected even after the normal system code is output through normal diagnosis mode inspection.

RS

DATA LIST / ACTIVE TEST

HINT:
By accessing the DATA LIST displayed on the intelligent tester, you can perform such functions as reading the values of switches and sensors without removing any parts. Reading the DATA LIST as the first step in troubleshooting is one method to save labor time.



1. DATA LIST FOR CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Turn the tester ON.
(d) Enter the following menus: DIAGNOSIS / OBD/ MOBD / SRS AIRBAG / DATA LIST.
(e) Check the values by referring to the table below.

DATA LIST:

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D SEAT POSITION	Driver Seat Position/ FORWARD: Seat position is forward BKWARD: Seat position is backward FAIL: Failure detected	FORWARD/BKWARD	-
PASSENGER CLASS	Passenger Classification/ NG: Data is not determined OFF: Vacant CHILD: Child (less than 36 kg (79.37 lb)) is seated AF05: Adult (36 to 54 kg (79.37 to 119.05 lb) is seated AM50: Adult (more than 54 kg (119.05 lb)) is seated FAIL: A failure is detected	OFF/CHILD/AF05/AM50	-
D BUCKLE SW	Driver Buckle SW/ UNSET: The seat belt is not fastened SET: The seat belt is fastened NG: Data is not determined	UNSET/SET	-
P BUCKLE SW	Passenger Buckle SW/ UNSET: The seat belt is not fastened SET: The seat belt is fastened NG: Data is not determined	UNSET/SET	-
PAST CODES	Number of Past DTC/ Min.: 0, Max.: 255	0	-

RS

TYPE INFO:

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
DISPLAY TYPE	Display Type Information/ LR: The display is indicated by LH/RH DP: The display is indicated by Driver/Passenger	DP	-

DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for the code in the table below (refer to the appropriate page).

HINT:

- When the SRS warning light remains on and the DTC output is the normal system code, a voltage source drop is likely to occur. This malfunction is not stored in the memory by the center airbag sensor assembly. If the power source voltage returns to normal, the SRS warning light will automatically go off.
- When 2 or more codes are indicated, the code with the lower number appears first.
- If a code is not listed on the display chart, the center airbag sensor assembly may have failed.
- In the case of any malfunction concerning an open circuit, short to ground, or short to B+ due to a squib, other trouble codes may not be detected. In this case, repair the malfunction currently indicated and then perform malfunction diagnosis again.
- Mark in the check mode column:
  *1: DTC is not corresponding to the check mode.
  *2: DTC is corresponding to the check mode.

AIRBAG SYSTEM:

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1000/31	Center Airbag Sensor Assembly Malfunction	Center airbag sensor assembly	*1	RS-51
B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor RH 4. Center airbag sensor assembly	*1	RS-52
B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor LH 4. Center airbag sensor assembly	*1	RS-62
B1610/13	Front Airbag Sensor RH Malfunction	1. Front airbag sensor RH 2. Center airbag sensor assembly	*1	RS-72
B1612/83	Lost Communication with Front Airbag Sensor RH	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor RH 4. Center airbag sensor assembly	*1	RS-52
B1613/83	Front Airbag Sensor RH Initialization Incomplete	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor RH 4. Center airbag sensor assembly	*1	RS-52
B1615/14	Front Airbag Sensor LH Malfunction	1. Front airbag sensor LH 2. Center airbag sensor assembly	*1	RS-74
B1617/84	Lost Communication with Front Airbag Sensor LH	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor LH 4. Center airbag sensor assembly	*1	RS-62

RS

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1618/84	Front Airbag Sensor LH Initialization Incomplete	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor LH 4. Center airbag sensor assembly	*1	RS-62
B1620/21	Driver Side - Side Airbag Sensor Malfunction	1. Side airbag sensor LH 2. Center airbag sensor assembly	*1	RS-76
B1622/81	Lost Communication with Driver Side - Side Airbag Sensor Assembly	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80
B1623/81	Driver Side - Side Airbag Sensor Assembly Initialization Incomplete	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80
B1625/22	Front Passenger Side - Side Airbag Sensor Malfunction	1. Side airbag sensor RH 2. Center airbag sensor assembly	*1	RS-96
B1627/82	Lost Communication with Front Passenger Side - Side Airbag Sensor Assembly	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1628/82	Front Passenger Side - Side Airbag Sensor Assembly Initialization Incomplete	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1630/23	Driver Side Rear Airbag Sensor Malfunction	1. Rear airbag sensor LH 2. Center airbag sensor assembly	*1	RS-116
B1632/81	Lost Communication with Driver Side Rear Airbag Sensor	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80
B1633/81	Driver Side Rear Airbag Sensor Initialization Incomplete	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80
B1635/24	Front Passenger Side Rear Airbag Sensor Malfunction	1. Rear airbag sensor RH 2. Center airbag sensor assembly	*1	RS-120
B1637/82	Lost Communication with Passenger Side Rear Airbag Sensor	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1638/82	Passenger Side Rear Airbag Sensor Initialization Incomplete	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1642/81	Lost Communication with Driver Side Satellite Sensor Bus	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1643/81	Driver Side Satellite Sensor Bus Initialization Incomplete	1. Floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	*1	RS-80
B1647/82	Lost Communication with Front Passenger Side Satellite Sensor Bus	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1648/82	Front Passenger Side Satellite Sensor Bus Initialization Incomplete	1. Floor wire No. 2 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	*1	RS-100
B1650/32	Occupant Classification System Malfunction	1. Floor wire No. 2 2. Occupant classification system 3. Front seat wire RH 4. Center airbag sensor assembly	*1	RS-124
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	1. Floor wire 2. Seat position airbag sensor 3. Center airbag sensor assembly	*1	RS-136
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	1. Floor wire 2. Front seat inner belt assembly LH (Driver side seat belt buckle switch) 3. Center airbag sensor assembly	*1	RS-142
B1660/43	Passenger Airbag ON / OFF Indicator Circuit Malfunction	1. Instrument panel wire 2. Instrument panel wire No. 2 3. Clock assembly (Passenger airbag ON/ OFF indicator) 4. Center airbag sensor assembly	*1	RS-148
B1800/51	Short in Driver Side Squib Circuit	1. Instrument panel wire 2. Spiral cable 3. Steering pad (Driver side squib) 4. Center airbag sensor assembly	*2	RS-159
B1801/51	Open in Driver Side Squib Circuit	Same as DTC B1800/51	*2	RS-159
B1802/51	Short to GND in Driver Side Squib Circuit	Same as DTC B1800/51	*2	RS-159
B1803/51	Short to B+ in Driver Side Squib Circuit	Same as DTC B1800/51	*2	RS-159
B1805/52	Short in Front Passenger Side Squib Circuit	1. Instrument panel wire 2. Instrument panel wire assembly 3. Front passenger airbag assembly (Front passenger side squib) 4. Center airbag sensor assembly	*2	RS-166
B1806/52	Open in Front Passenger Side Squib Circuit	Same as DTC B1805/52	*2	RS-166

RS

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1807/52	Short to GND in Front Passenger Side Squib Circuit	Same as DTC B1805/52	*2	RS-166
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	Same as DTC B1805/52	*2	RS-166
B1810/53	Short in Driver Side Squib 2nd Step Circuit	1. Instrument panel wire 2. Spiral cable 3. Steering pad (Driver side squib 2nd step) 4. Center airbag sensor assembly	*2	RS-173
B1811/53	Open in Driver Side Squib 2nd Step Circuit	Same as DTC B1810/53	*2	RS-173
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	Same as DTC B1810/53	*2	RS-173
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	Same as DTC B1810/53	*2	RS-173
B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit	1. Instrument panel wire 2. Instrument panel wire assembly 3. Front passenger airbag assembly (Front passenger side squib 2nd step) 4. Center airbag sensor assembly	*2	RS-180
B1816/54	Open in Front Passenger Side Squib 2nd Step Circuit	Same as DTC B1815/54	*2	RS-180
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	Same as DTC B1815/54	*2	RS-180
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	Same as DTC B1815/54	*2	RS-180
B1820/55	Short in Front Driver Side - Side Squib Circuit	1. Floor wire 2. Front seat side airbag assembly LH (Front driver side - side squib) 3. Center airbag sensor assembly	*2	RS-187
B1821/55	Open in Front Driver Side - Side Squib Circuit	Same as DTC B1820/55	*2	RS-187
B1822/55	Short to GND in Front Driver Side - Side Squib Circuit	Same as DTC B1820/55	*2	RS-187
B1823/55	Short to B+ in Front Driver Side - Side Squib Circuit	Same as DTC B1820/55	*2	RS-187
B1825/56	Short in Front Passenger Side - Side Squib Circuit	1. Floor wire No. 2 2. Front seat side airbag assembly RH (Front passenger side - side squib) 3. Center airbag sensor assembly	*2	RS-192
B1826/56	Open in Front Passenger Side - Side Squib Circuit	Same as DTC B1825/56	*2	RS-192
B1827/56	Short to GND in Front Passenger Side - Side Squib Circuit	Same as DTC B1825/56	*2	RS-192

RS

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1828/56	Short to B+ in Front Passenger Side - Side Squib Circuit	Same as DTC B1825/56	*2	RS-192
B1830/57	Short in Driver Side Curtain Shield Squib Circuit	1. Floor wire 2. Curtain shield airbag assembly LH (Driver side curtain shield squib) 3. Center airbag sensor assembly	*2	RS-197
B1831/57	Open in Driver Side Curtain Shield Squib Circuit	Same as DTC B1830/57	*2	RS-197
B1832/57	Short to GND in Driver Side Curtain Shield Squib Circuit	Same as DTC B1830/57	*2	RS-197
B1833/57	Short to B+ in Driver Side Curtain Shield Squib Circuit	Same as DTC B1830/57	*2	RS-197
B1835/58	Short in Front Passenger Side Curtain Shield Squib Circuit	1. Floor wire No. 2 2. Curtain shield airbag assembly RH (Front passenger side curtain shield squib) 3. Center airbag sensor assembly	*2	RS-202
B1836/58	Open in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC B1835/58	*2	RS-202
B1837/58	Short to GND in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC B1835/58	*2	RS-202
B1838/58	Short to B+ in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC B1835/58	*2	RS-202
B1860/64	Short in Driver Side Knee Airbag Squib Circuit	1. Instrument panel wire 2. Driver side knee airbag assembly (Driver side knee airbag squib) 3. Center airbag sensor assembly	*2	RS-207
B1861/64	Open in Driver Side Knee Airbag Squib Circuit	Same as DTC B1860/64	*2	RS-207
B1862/64	Short to GND in Driver Side Knee Airbag Squib Circuit	Same as DTC B1860/64	*2	RS-207
B1863/64	Short to B+ in Driver Side Knee Airbag Squib Circuit	Same as DTC B1860/64	*2	RS-207
B1900/73	Short in Front Driver Side Pretensioner Squib Circuit	1. Floor wire 2. Front seat outer belt assembly LH (Front driver side pretensioner squib) 3. Center airbag sensor assembly	*2	RS-212
B1901/73	Open in Front Driver Side Pretensioner Squib Circuit	Same as DTC B1900/73	*2	RS-212
B1902/73	Short to GND in Front Driver Side Pretensioner Squib Circuit	Same as DTC B1900/73	*2	RS-212
B1903/73	Short to B+ in Front Driver Side Pretensioner Squib Circuit	Same as DTC B1900/73	*2	RS-212

RS

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1905/74	Short in Front Passenger Side Pretensioner Squib Circuit	1. Floor wire No. 2 2. Front seat outer belt assembly RH (Front passenger side pretensioner squib) 3. Center airbag sensor assembly	*2	RS-217
B1906/74	Open in Front Passenger Side Pretensioner Squib Circuit	Same as DTC B1905/74	*2	RS-217
B1907/74	Short to GND in Front Passenger Side Pretensioner Squib Circuit	Same as DTC B1905/74	*2	RS-217
B1908/74	Short to B+ in Front Passenger Side Pretensioner Squib Circuit	Same as DTC B1905/74	*2	RS-217

DTC	B1000/31	Center Airbag Sensor Assembly Malfunction

DESCRIPTION

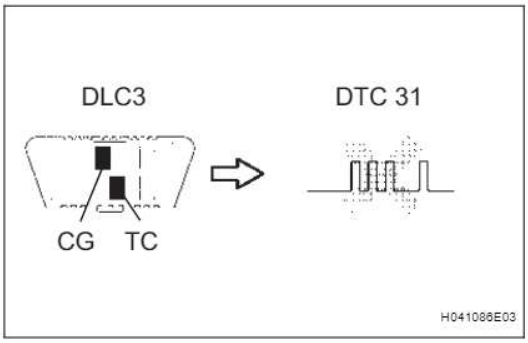
The center airbag sensor assembly consists of the deceleration sensor, the safing sensor, the drive circuit, the diagnosis circuit, the ignition control, etc.
If the center airbag sensor assembly receives signals from the deceleration sensor, it determines whether the SRS should be activated.
DTC B1000/31 is recorded when a malfunction is detected in the center airbag sensor assembly.

DTC No.	DTC Detecting Condition	Trouble Area
B1000/31	Center airbag sensor assembly malfunction	Center airbag sensor assembly

HINT:
When a trouble code is displayed simultaneously with B1000/31, repair the malfunction indicated by this code (except B1000/31) first.

INSPECTION PROCEDURE

1 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-41).
OK:
DTC B1000/31 is not output.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

DTC	B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete

DTC	B1612/83	Lost Communication with Front Airbag Sensor RH

DTC	B1613/83	Front Airbag Sensor RH Initialization Incomplete

DESCRIPTION

The front airbag sensor RH circuit consists of the center airbag sensor assembly and front airbag sensor RH.

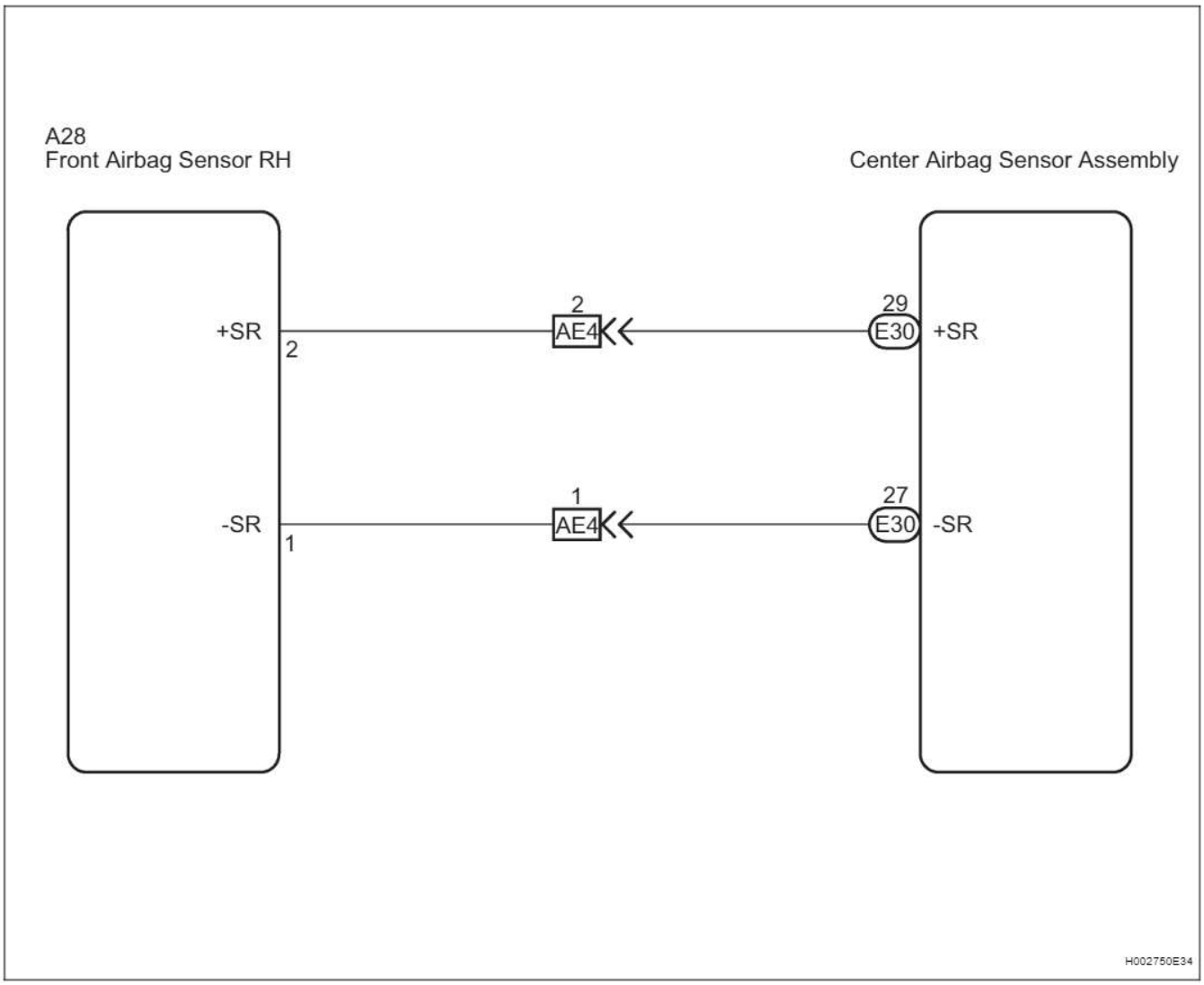
The front airbag sensor RH detect impacts to the vehicle and send signals to the center airbag sensor assembly to determine if the airbag should be deployed.

DTC B1603/83, B1612/83, or B1613/83 is recorded when a malfunction is detected in the front airbag sensor RH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1603/83 B1612/83 B1613/83	• The airbag sensor assembly center 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 front airbag sensor RH circuit for 2 seconds. • Front airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly

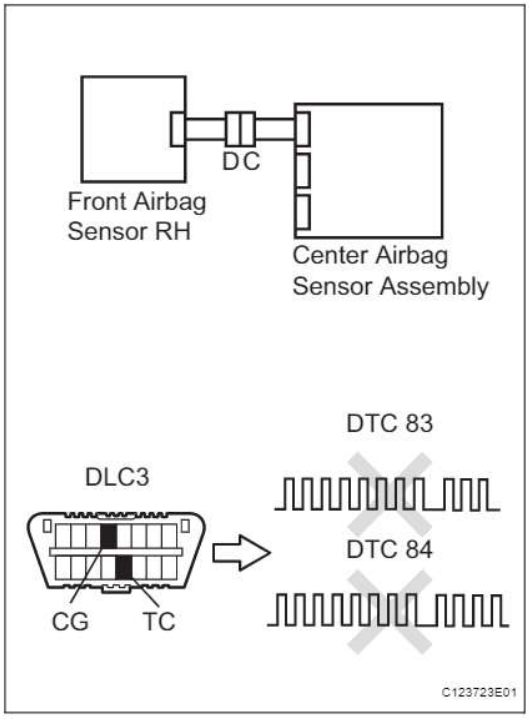
RS

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Turn the power switch off.
HINT:
If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. To identify the malfunctioning area, turn the power switch off and then on (IG) again.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1603, B1613, or 83 is output.	A
DTC B1618/84 is output.	B
DTC B1603, B1613, or 83 and B1618/84 are not output.	C

HINT:
- DTCs indicating communication errors will be changed to DTCs indicating errors in initialization by turning the power switch off and then on (IG) again.
- Codes other than DTC B1603, B1613, or 83 and B1618/84 may be output at this time, but they are not related to this check.

B → **GO TO DTC B1618/84 (See page RS-62)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

2 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 front airbag sensor RH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY**

OK

RS

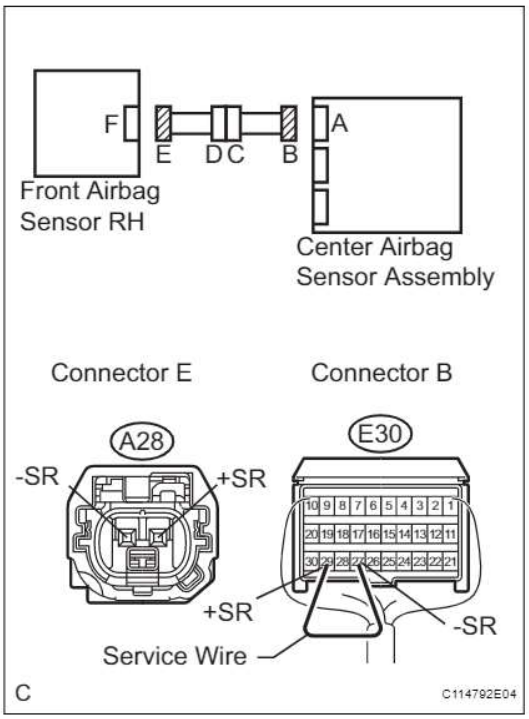
3	CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and front airbag sensor RH.
(b) Check that the connectors (on the center airbag sensor assembly side and front airbag sensor RH side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4	CHECK FRONT AIRBAG SENSOR RH CIRCUIT (OPEN)



(a) Using a service wire, connect terminals 29 (+SR) and 27 (-SR) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

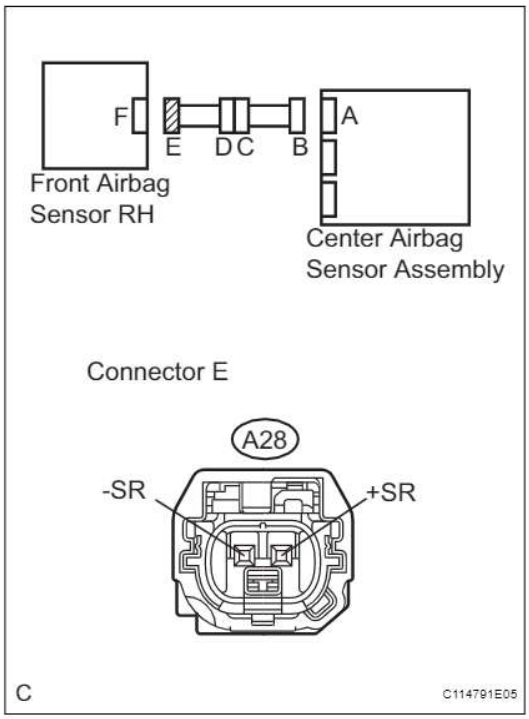
Tester Connection	Condition	Specified Condition
A28-2 (+SR) - A28-1 (-SR)	Always	Below 1 Ω

NG → **Go to step 9**

OK

RS

5 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.

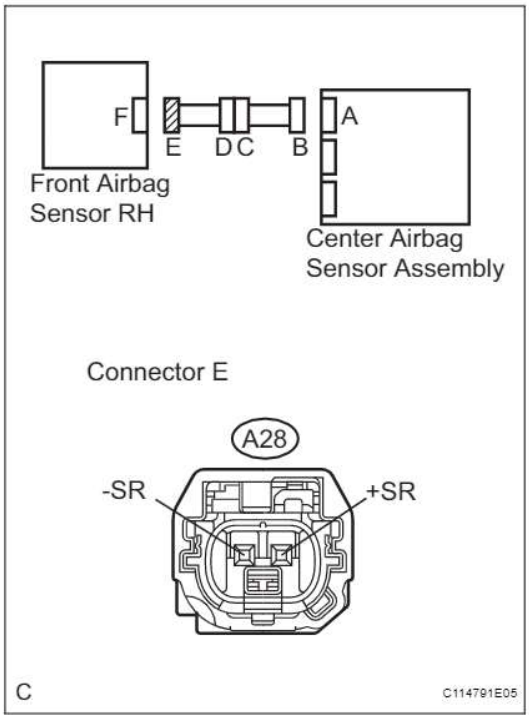
Standard resistance

Tester Connection	Condition	Specified Condition
A28-2 (+SR) - A28-1 (-SR)	Always	1 MΩ or higher

NG → Go to step 10

OK

6 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

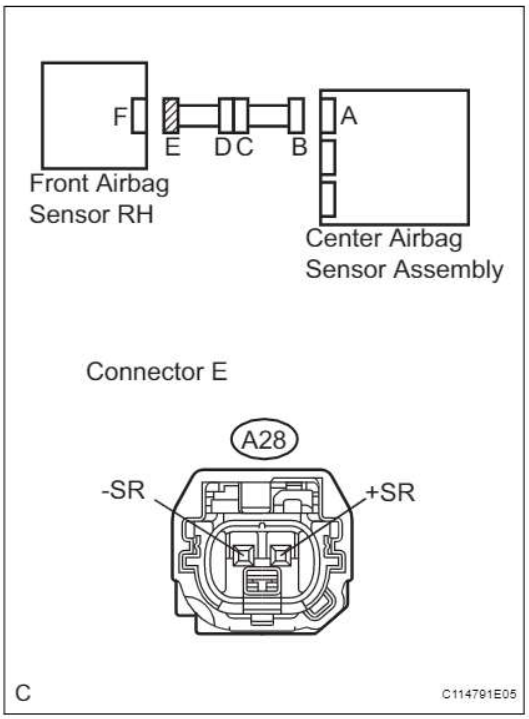
Tester Connection	Condition	Specified Condition
A28-2 (+SR) - Body ground	Power switch on (IG)	Below 1 V
A28-1 (-SR) - Body ground	Power switch on (IG)	Below 1 V

NG → Go to step 11

OK

RS

7 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

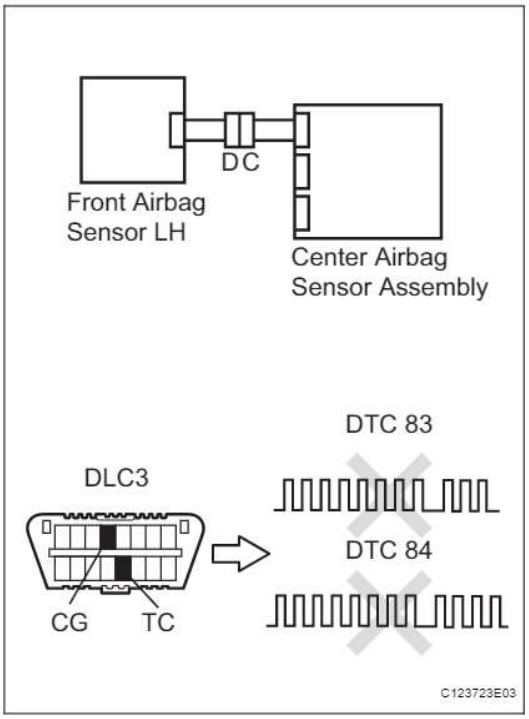
Standard resistance

Tester Connection	Condition	Specified Condition
A28-2 (+SR) - Body ground	Always	1 MΩ or higher
A28-1 (-SR) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

8 CHECK FRONT AIRBAG SENSOR RH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the front airbag sensor LH with RH and connect the connectors to them.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1603, B1612, B1613, or 83 is output.	A
DTC B1608, B1617, B1618, or 84 is output.	B
DTC B1603, B1612, B1613, or 83 and B1608, B1617, B1618, or 84 are not output.	C

HINT:
Codes other than DTC B1603, B1612, B1613, or 83 and B1608, B1617, B1618, or 84 may be output at this time, but they are not related to this check.

RS

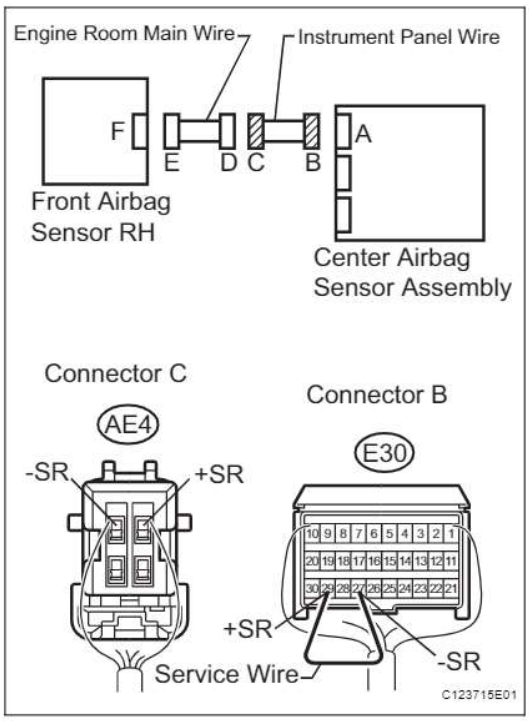
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

B → REPLACE FRONT AIRBAG SENSOR RH (See page RS-428)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

9 CHECK INSTRUMENT PANEL WIRE (OPEN)



(a) Disconnect the instrument panel wire connector from the engine room main wire.
HINT:
The service wire has already been inserted into connector B.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-2 (+SR) - AE4-1 (-SR)	Always	Below 1 Ω

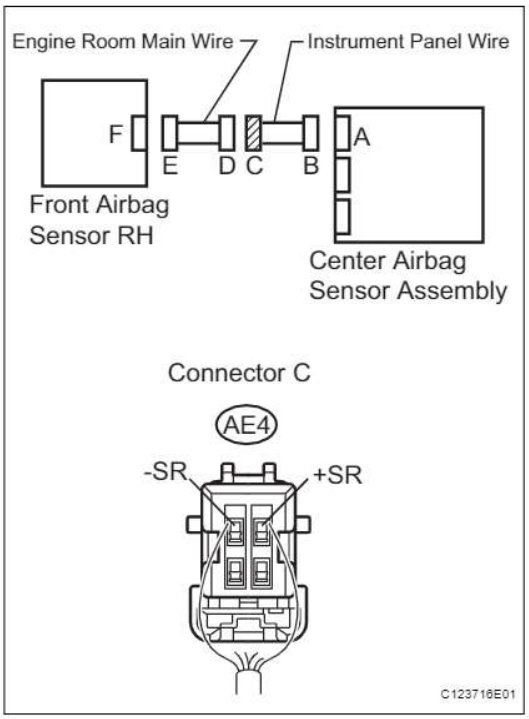
NG → REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

10 **CHECK INSTRUMENT PANEL WIRE (SHORT)**



(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-2 (+SR) - AE4-1 (-SR)	Always	1 MΩ or higher

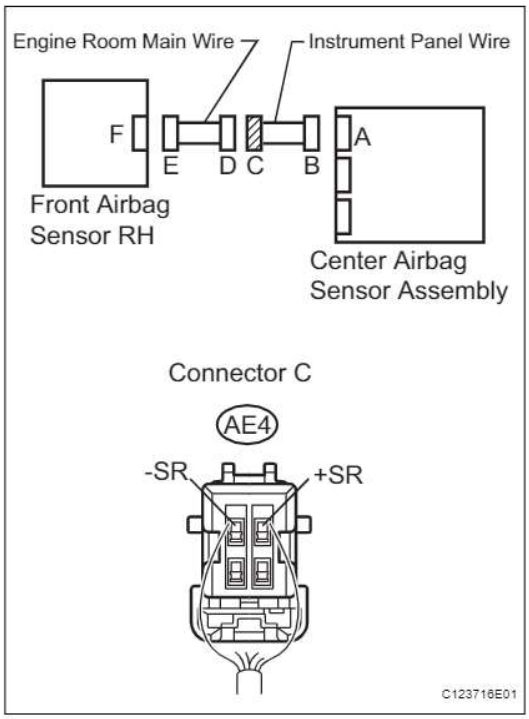
NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

11 CHECK INSTRUMENT PANEL WIRE (SHORT TO B+)



(a) Turn the power switch off.
(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 engine room main wire.
(d) Connect the negative (-) terminal cable to battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
AE4-2 (+SR) - Body ground	Power switch on (IG)	Below 1 V
AE4-1 (-SR) - Body ground	Power switch on (IG)	Below 1 V

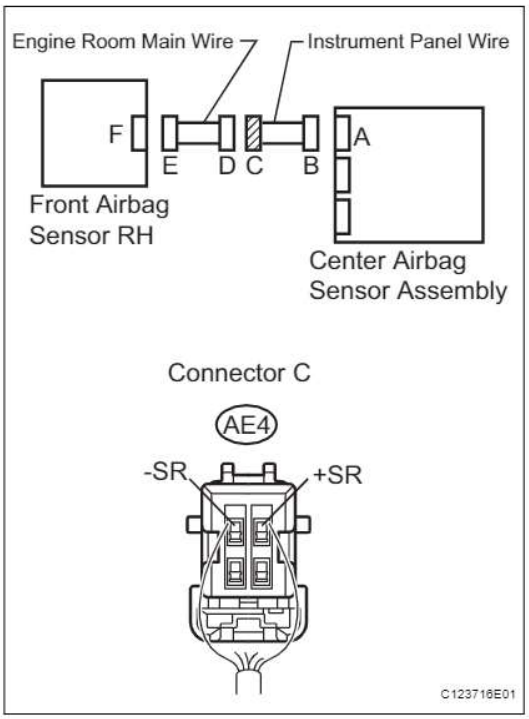
NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

12	CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)



(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-2 (+SR) - Body ground	Always	1 MΩ or higher
AE4-1 (-SR) - Body ground	Always	1 MΩ or higher

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

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

DTC	B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete

DTC	B1617/84	Lost Communication with Front Airbag Sensor LH

DTC	B1618/84	Front Airbag Sensor LH Initialization Incomplete

DESCRIPTION

The front airbag sensor LH circuit consists of the center airbag sensor assembly and front airbag sensor LH.

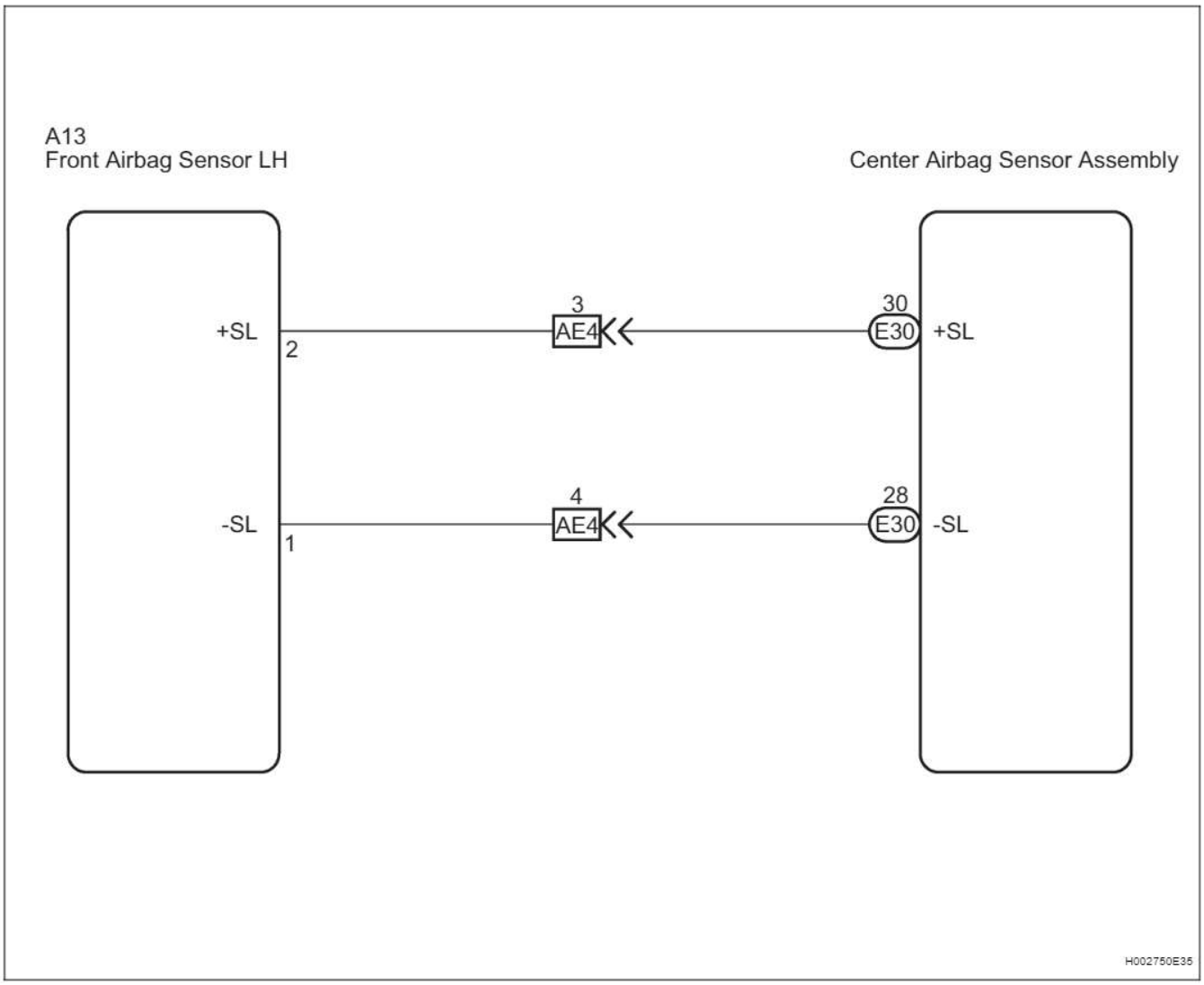
The front airbag sensor LH detects impacts to the vehicle and sends signals to the center airbag sensor assembly to determine if the airbag should be deployed.

DTC B1608/84, B1617/84, or B1618/84 is recorded when a malfunction is detected in the front airbag sensor LH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1608/84 B1617/84 B1618/84	• 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 front airbag sensor LH circuit for 2 seconds. • Front airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly

RS

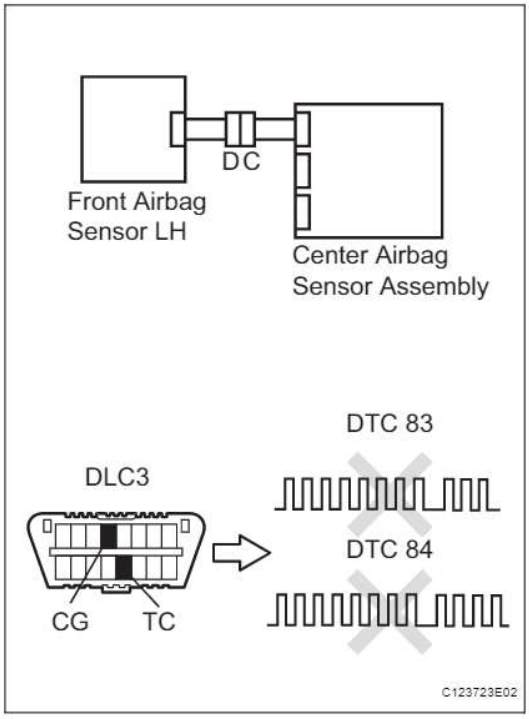
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1 CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Turn the power switch off.
HINT:
If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. To identify the malfunctioning area, turn the power switch off and then on (IG) again.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1608, B1618, or 84 is output.	A
DTC B1613/83 is output.	B
DTC B1608, B1618, or 84 and B1613/83 are not output.	C

HINT:
- DTCs indicating communication errors will be changed to DTCs indicating errors in initialization by turning the power switch off and then on (IG) again.
- Codes other than DTC B1608, B1618, or 84 and B1613/83 may be output at this time, but they are not related to this check.

B → **GO TO DTC B1613/83 (See page RS-52)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

2 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 front airbag sensor LH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY**

OK

RS

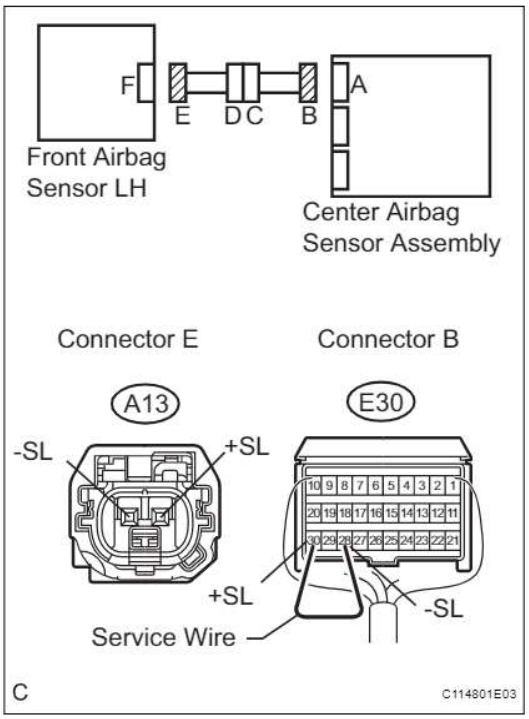
3	CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and front airbag sensor LH.
(b) Check that the connectors (on the center airbag sensor assembly side and front airbag sensor LH side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4	CHECK FRONT AIRBAG SENSOR LH (OPEN)



(a) Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

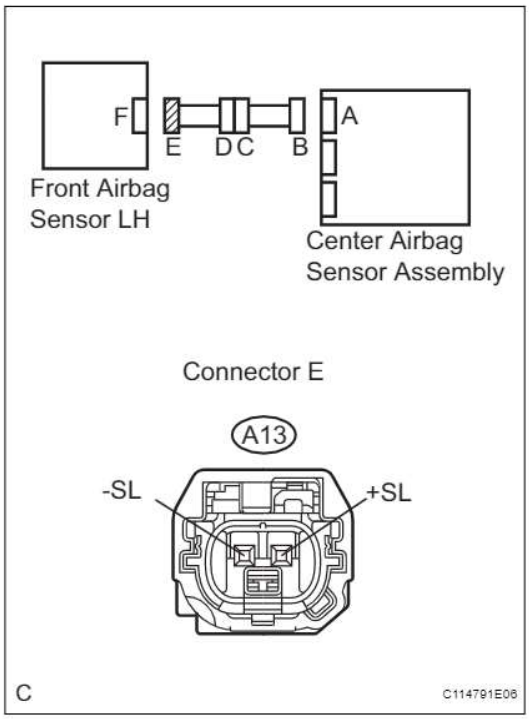
Tester Connection	Condition	Specified Condition
A13-2 (+SL) - A13-1 (-SL)	Always	Below 1 Ω

NG → **Go to step 9**

OK

RS

5 CHECK FRONT AIRBAG SENSOR LH (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.

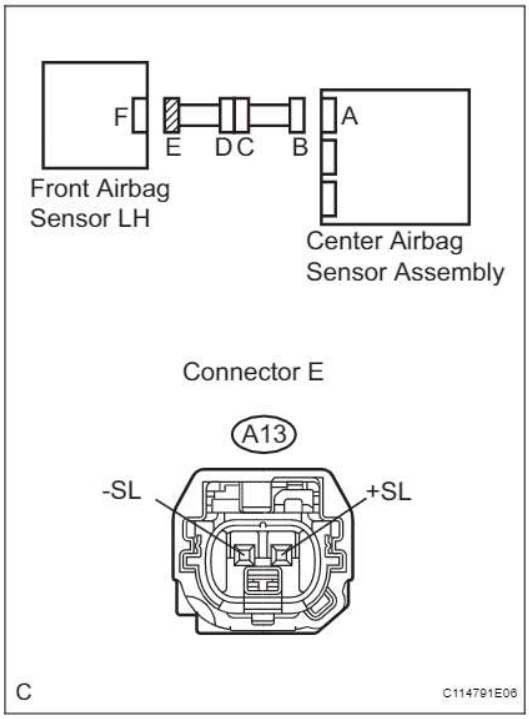
Standard resistance

Tester Connection	Condition	Specified Condition
A13-2 (+SL) - A13-1 (-SL)	Always	1 MΩ or higher

NG → Go to step 10

OK

6 CHECK FRONT AIRBAG SENSOR LH (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

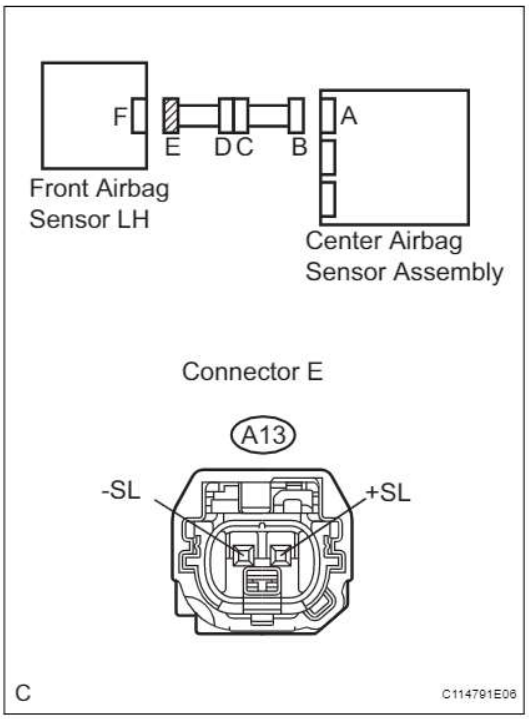
Tester Connection	Condition	Specified Condition
A13-2 (+SL) - Body ground	Power switch on (IG)	Below 1 V
A13-1 (-SL) - Body ground	Power switch on (IG)	Below 1 V

NG → Go to step 11

OK

RS

7 CHECK FRONT AIRBAG SENSOR LH (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

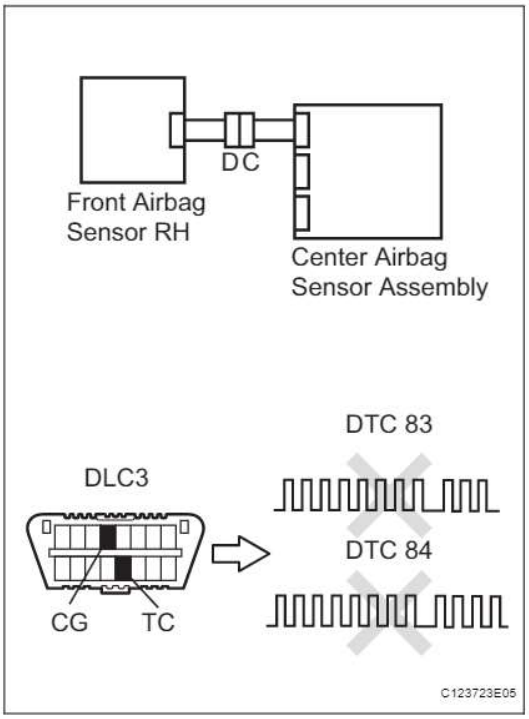
Standard resistance

Tester Connection	Condition	Specified Condition
A13-2 (+SL) - Body ground	Always	1 MΩ or higher
A13-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

8 CHECK FRONT AIRBAG SENSOR LH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the front airbag sensor RH with LH and connect the connectors to them.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1608, B1617, B1618, or 84 is output.	A
DTC B1603, B1612, B1613, or 83 is output.	B
DTC B1603, B1612, B1613, or 83 and B1608, B1617, B1618, or 84 are not output.	C

HINT:
Codes other than DTC B1608, B1617, B1618, or 84 and B1603, B1612, B1613, or 83 may be output at this time, but they are not related to this check.

RS

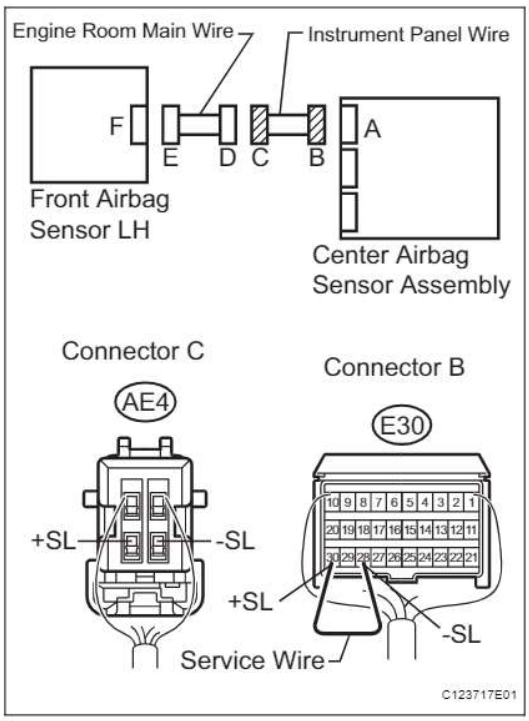
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

B → REPLACE FRONT AIRBAG SENSOR LH (See page RS-428)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

9 CHECK INSTRUMENT PANEL WIRE (OPEN)



(a) Disconnect the instrument panel wire connector from the engine room main wire.
HINT:
The service wire has already been inserted into connector B.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-3 (+SL) - AE4-4 (-SL)	Always	Below 1 Ω

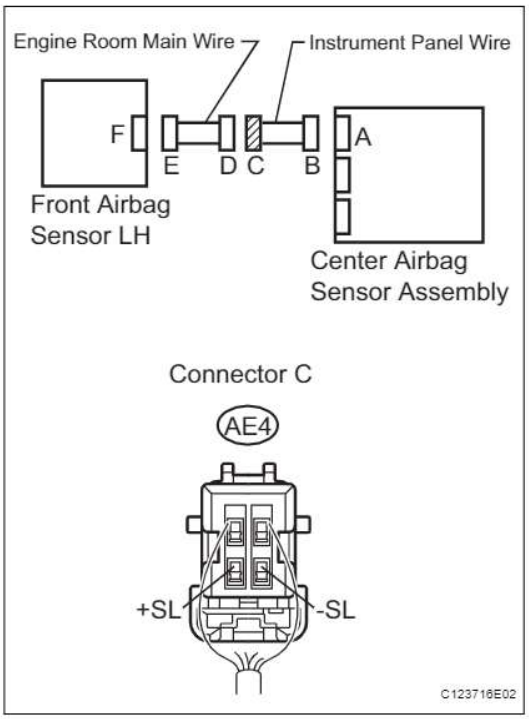
NG → REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

10	CHECK INSTRUMENT PANEL WIRE (SHORT)



(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-3 (+SL) - AE4-4 (-SL)	Always	1 MΩ or higher

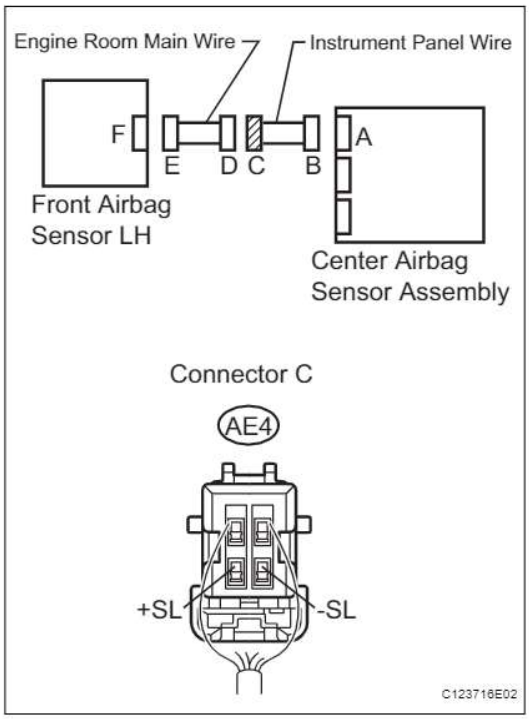
NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

11	CHECK INSTRUMENT PANEL WIRE (SHORT TO B+)



(a) Turn the power switch off.
(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 engine room main wire.
(d) Connect the negative (-) terminal cable to battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
AE4-3 (+SL) - Body ground	Power switch on (IG)	Below 1 V
AE4-4 (-SL) - Body ground	Power switch on (IG)	Below 1 V

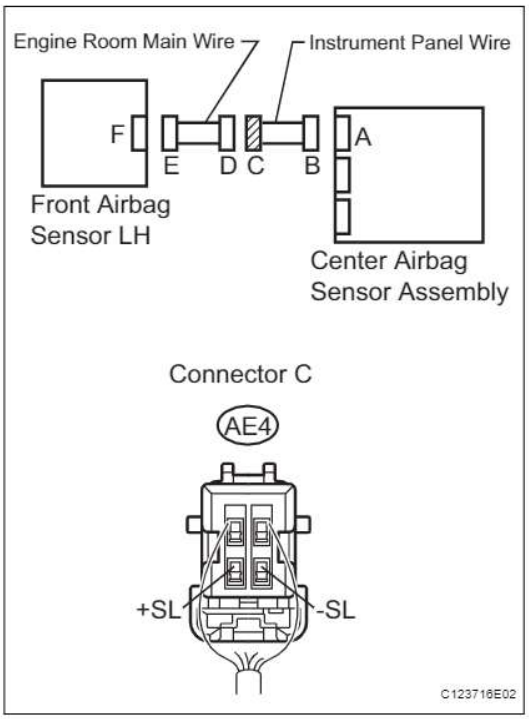
NG → REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

12	CHECK INSTRUMENT PANEL WIRE (SHORT TO GROUND)



(a) Disconnect the instrument panel wire connector from the engine room main wire.

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

Standard resistance

Tester Connection	Condition	Specified Condition
AE4-3 (+SL) - Body ground	Always	1 MΩ or higher
AE4-4 (-SL) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

REMOVAL

HINT:

- Use the same procedure for the RH side and the LH side.
- The procedure listed below are for the LH side.

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE FRONT DOOR SCUFF PLATE (See page IR-13)**
4. **REMOVE REAR DOOR SCUFF PLATE (See page IR-13)**
5. **REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP**
6. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP**
7. **REMOVE LOWER CENTER PILLAR GARNISH (See page IR-14)**
8. **REMOVE SIDE AIRBAG SENSOR**
   (a) Remove the bolt and side airbag sensor from the body.
   (b) Disconnect the connector from the side airbag sensor.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.



RS

INSTALLATION



1. **INSTALL SIDE AIRBAG SENSOR**
   (a) Check that the power switch is turned off.
   (b) Check that the battery negative (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (c) Install the side airbag sensor with the bolt.
   Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
   NOTICE:
   - **If the side airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
   - **When installing the side airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
   (d) Check that there is no looseness in the installation parts of the side airbag sensor.
   (e) Connect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
2. **INSTALL LOWER CENTER PILLAR GARNISH (See page IR-40)**
3. **INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP**
4. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP**
5. **INSTALL REAR DOOR SCUFF PLATE (See page IR-43)**
6. **INSTALL FRONT DOOR SCUFF PLATE (See page IR-41)**
7. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
8. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.
9. **INSPECT SRS WARNING LIGHT**
   (a) Inspect the SRS warning light (See page RS-33).

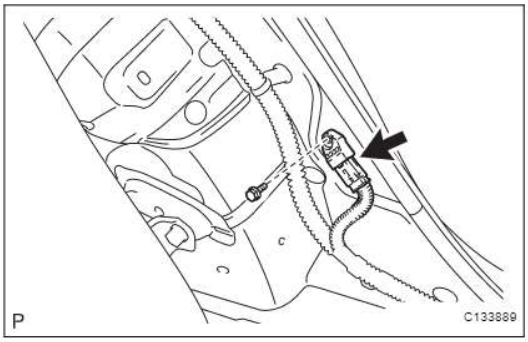
RS

REMOVAL

HINT:

- Use the same procedure for the RH side and the LH side.
- The procedure listed below are for the LH side.

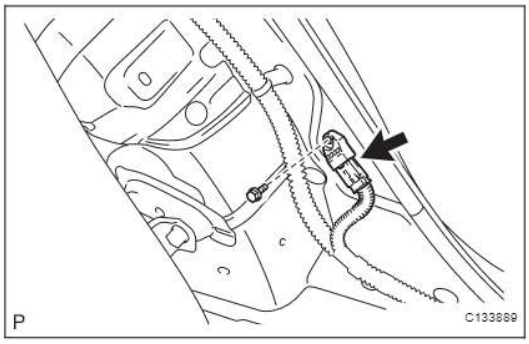
1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE REAR SEAT CUSHION ASSEMBLY (See page SE-44)**
4. **REMOVE REAR DOOR SCUFF PLATE (See page IR-13)**
5. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP**
6. **REMOVE ROOF SIDE INNER GARNISH (See page IR-15)**
7. **REMOVE REAR SIDE SEATBACK ASSEMBLY (See page SE-45)**
8. **REMOVE REAR AIRBAG SENSOR**
   (a) Disconnect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (b) Remove the bolt and rear airbag sensor.



RS

INSTALLATION

1. **INSTALL REAR AIRBAG SENSOR**
   (a) Check that the power switch is turned off.
   (b) Check that the battery negative (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.



   (c) Install the rear airbag sensor with the bolt.
   Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
   NOTICE:
   - **If the rear airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
   - **When installing the rear airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

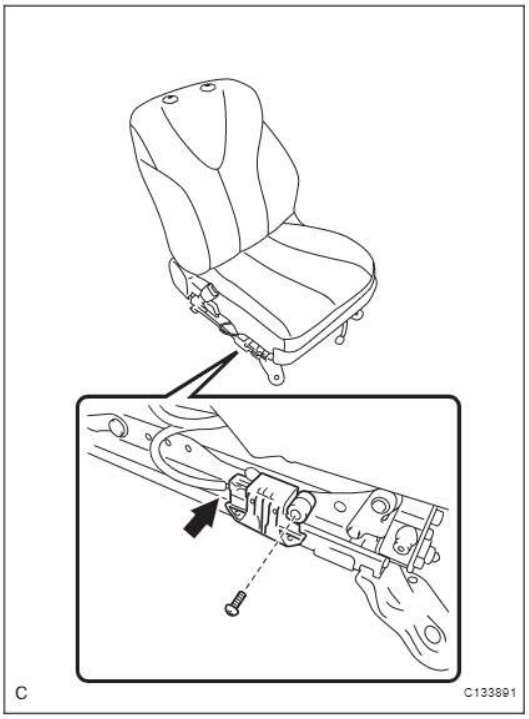
   (d) Check that there is no looseness in the installation parts of the rear airbag sensor.
   (e) Connect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.

2. **INSTALL REAR SIDE SEATBACK ASSEMBLY (See page SE-54)**
3. **INSTALL ROOF SIDE INNER GARNISH (See page IR-39)**
4. **INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP**
5. **INSTALL REAR DOOR SCUFF PLATE (See page IR-43)**
6. **INSTALL REAR SEAT CUSHION ASSEMBLY (See page SE-55)**
7. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
8. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.
9. **INSPECT SRS WARNING LIGHT**
   (a) Inspect the SRS warning light (See page RS-33).

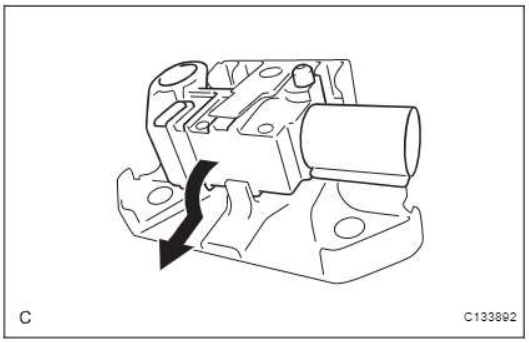
RS

REMOVAL

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **REMOVE FRONT SEAT HEADREST ASSEMBLY**
3. **REMOVE SEAT TRACK COVER LH (See page SE-29)**
4. **REMOVE INNER SEAT TRACK BRACKET COVER LH (See page SE-29)**
5. **REMOVE FRONT SEAT ASSEMBLY LH (See page SE-29)**
6. **REMOVE SEAT POSITION SENSOR**
   (a) Disconnect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (b) Using a "TORX" socket (T30), remove the "TORX" screw and seat position sensor with the seat slide position sensor protector.



(c) Remove the seat position sensor from the seat slide position sensor protector as shown in the illustration.



RS

INSTALLATION

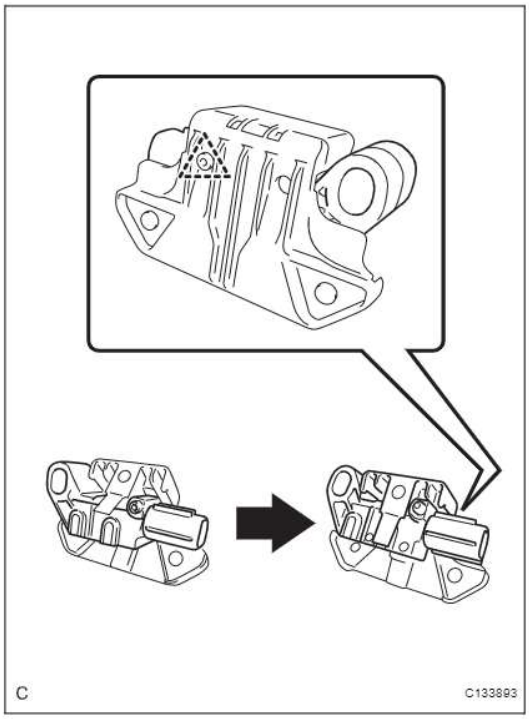
1. INSTALL SEAT POSITION SENSOR

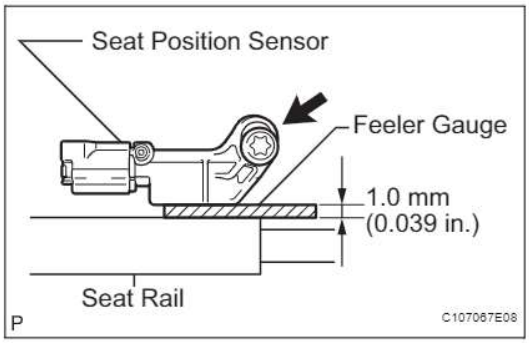
(a) Check that the power switch is turned off.

(b) Check that the negative battery (-) cable is disconnected.

CAUTION:
Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.

(c) Engage the pin and install the seat position sensor to the seat slide position sensor protector as shown in the illustration.





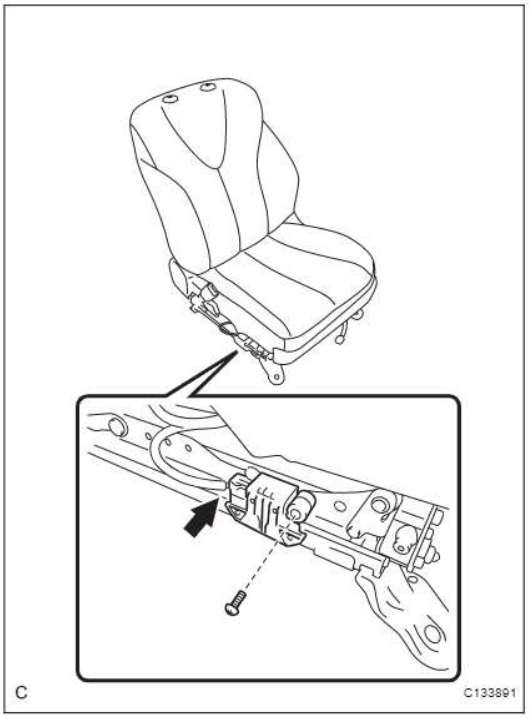
(d) Using a feeler gauge 1.0 mm (0.039 in.), temporarily install the seat position sensor.

NOTICE:

- **If the seat position sensor has been dropped, or there are any cracks, dents or other defects in the case or connector, replace the seat position sensor with a new one.**
- **When installing the seat position sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

HINT:
Be sure that a clearance between the seat position sensor and the seat rail is within 0.6 mm (0.024 in.) to 2.0 mm (0.079 in.).

RS



(e) Using a "TORX" socket (T30), tighten the "TORX" screw to install the seat position sensor.
Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)

(f) Make sure that a clearance between the seat position sensor and the seat rail is within 0.6 mm (0.024 in.) to 2.0 mm (0.079 in.).

(g) Check that there is no looseness in the installation parts of the seat position sensor.

(h) Connect the connector.
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

2. **INSTALL FRONT SEAT ASSEMBLY LH (See page SE-38)**

3. **INSTALL INNER SEAT TRACK BRACKET COVER LH (See page SE-39)**

4. **INSTALL SEAT TRACK COVER LH (See page SE-39)**

5. **INSTALL FRONT SEAT HEADREST ASSEMBLY**

6. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.

7. **INSPECT FRONT SEAT ASSEMBLY (See page SE-39)**

8. **INSPECT SRS WARNING LIGHT**
   (a) Inspect the SRS warning light (See page RS-33).

RS

ON-VEHICLE INSPECTION

1. **INSPECT OCCUPANT CLASSIFICATION ECU (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-245).

2. **INSPECT OCCUPANT CLASSIFICATION ECU (VEHICLE INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-245).
   (b) Even if the airbag was not deployed, check if there is any damage to the occupant classification ECU. If there are any defects as mentioned below, replace the occupant classification ECU with a new one:
   - Cracks, dents or chips on the case.
   - Cracks or other damage to the connector.

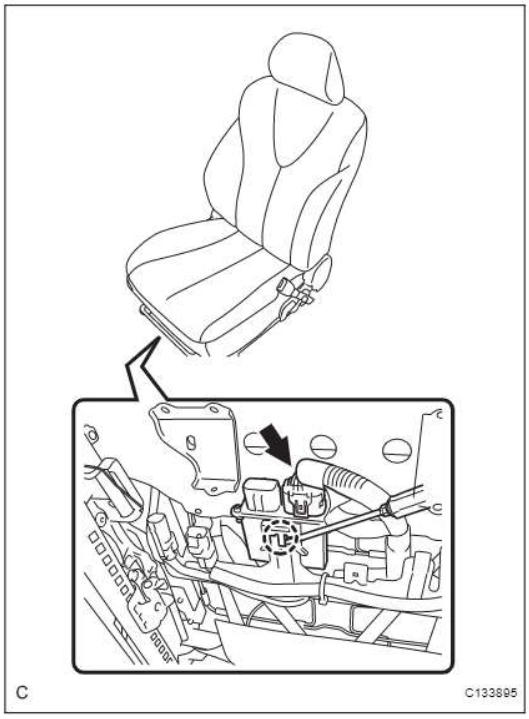
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

RS

REMOVAL

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL (for Manual Seat)**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE FRONT SEAT HEADREST ASSEMBLY (for Manual Seat)**
4. **REMOVE SEAT TRACK COVER RH (for Manual Seat) (See page SE-16)**
5. **REMOVE INNER SEAT TRACK BRACKET COVER RH (for Manual Seat) (See page SE-16)**
6. **REMOVE FRONT SEAT ASSEMBLY RH (for Manual Seat) (See page SE-16)**
7. **REMOVE FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
8. **REMOVE SEAT TRACK COVER RH (for Power Seat)**
   HINT:
   Use the same procedure for the RH side and the LH side (See page IR-12).
9. **REMOVE INNER SEAT TRACK BRACKET COVER RH (for Power Seat)**
   HINT:
   Use the same procedure for the RH side and the LH side (See page IR-12).
10. **REMOVE FRONT SEAT ASSEMBLY RH (for Power Seat)**
    HINT:
    Use the same procedure for the RH side and the LH side (See page IR-12).

RS



11. REMOVE OCCUPANT CLASSIFICATION ECU

(a) Disconnect the connector from the occupant classification ECU.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

(b) Using a screwdriver, disengage the claw and remove the occupant classification ECU.

RS

INSTALLATION



1. **INSTALL OCCUPANT CLASSIFICATION ECU**
   (a) Check that the power switch is off.
   (b) Check that the negative battery (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (c) Engage the claw.
   (d) Connect the connector and install the occupant classification ECU.
   NOTICE:
   - **When handling the airbag connector, take care not to damage the airbag wire harness.**
   - **If the occupant classification ECU has been dropped, or there are any cracks, dents or other defects in the case or connector, replace the occupant classification ECU with a new one.**
   - **When installing the occupant classification ECU, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
2. **INSTALL FRONT SEAT ASSEMBLY RH (for Power Seat)**
   HINT:
   Use the same procedure for the RH side and the LH side (See page IR-43).
3. **INSTALL INNER SEAT TRACK BRACKET COVER RH (for Power Seat)**
   HINT:
   Use the same procedure for the RH side and the LH side (See page IR-43).
4. **INSTALL SEAT TRACK COVER RH (for Power Seat)**
   HINT:
   Use the same procedure for the RH side and the LH side (See page IR-43).
5. **INSTALL FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
6. **INSTALL FRONT SEAT ASSEMBLY RH (for Manual Seat) (See page SE-23)**
7. **INSTALL INNER SEAT TRACK BRACKET COVER RH (for Manual Seat) (See page SE-24)**
8. **INSTALL SEAT TRACK COVER RH (for Manual Seat) (See page SE-39)**
9. **INSTALL FRONT SEAT HEADREST ASSEMBLY (for Manual Seat)**
10. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL (for Manual Seat)**

RS

11. PERFORM INITIALIZATION

(a) Perform initialization (See page IN-43).

NOTICE:
Some systems need initialization after reconnecting the cable to the negative battery terminal.

12. INSPECT SLIDE ADJUSTER LOCK (for Manual Seat)

13. INSPECT FRONT SEAT ASSEMBLY (for Power Seat) (See page SE-39)

14. PERFORM ZERO POINT CALIBRATION AND SENSITIVITY CHECK

(a) Perform zero point calibration and sensitivity check (See page RS-239).

15. INSPECT SRS WARNING LIGHT

(a) Inspect the SRS warning light (See page RS-33).

RS

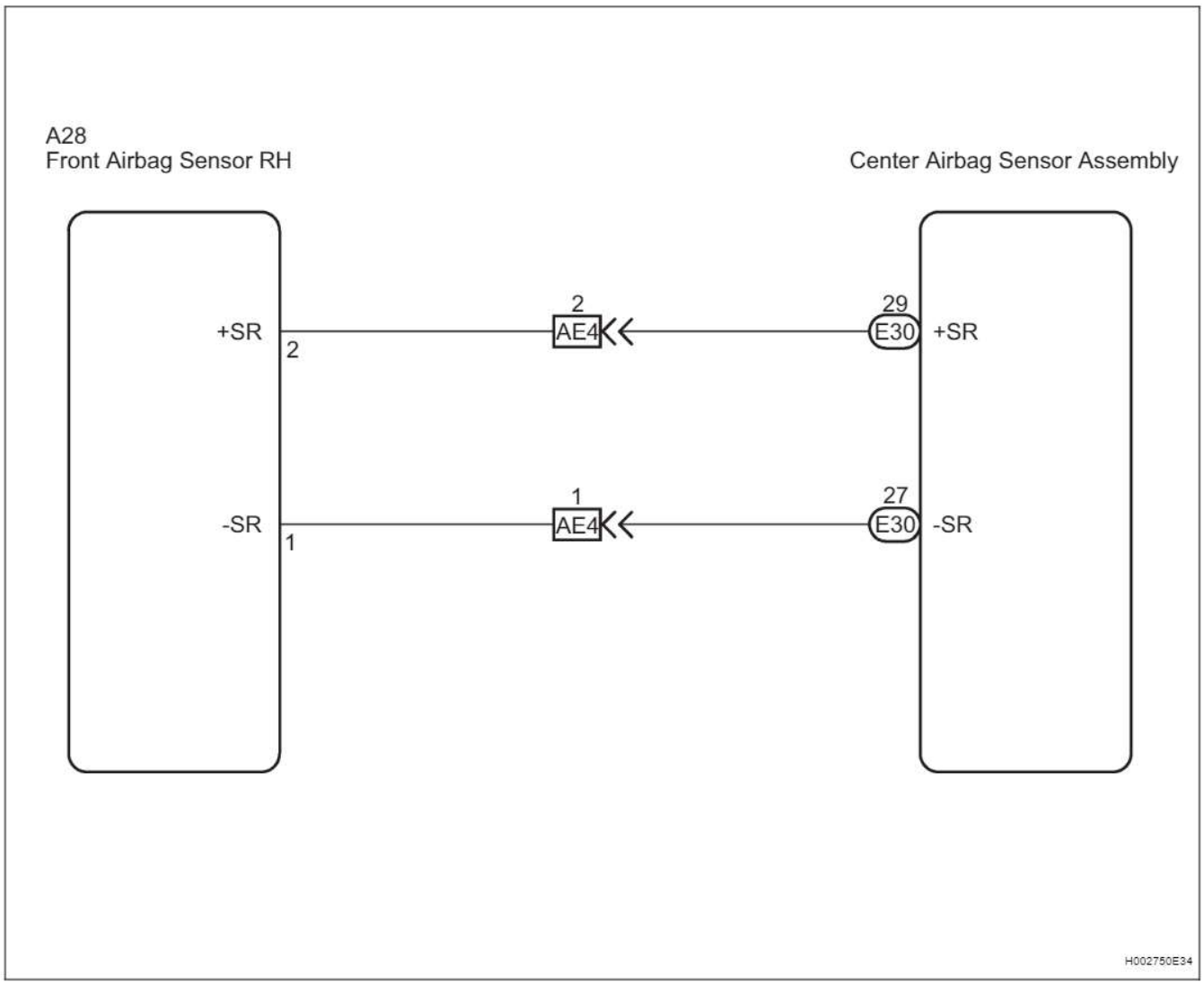
DTC	B1610/13	Front Airbag Sensor RH Malfunction

DESCRIPTION

The front airbag sensor RH consists of the diagnostic circuit, the frontal deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the frontal deceleration sensor, it determines whether the SRS should be activated.
DTC B1610/13 is recorded when a malfunction is detected in the front airbag sensor RH.

DTC No.	DTC Detection Condition	Trouble Area
B1610/13	• Front airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Front airbag sensor RH • Center airbag sensor assembly

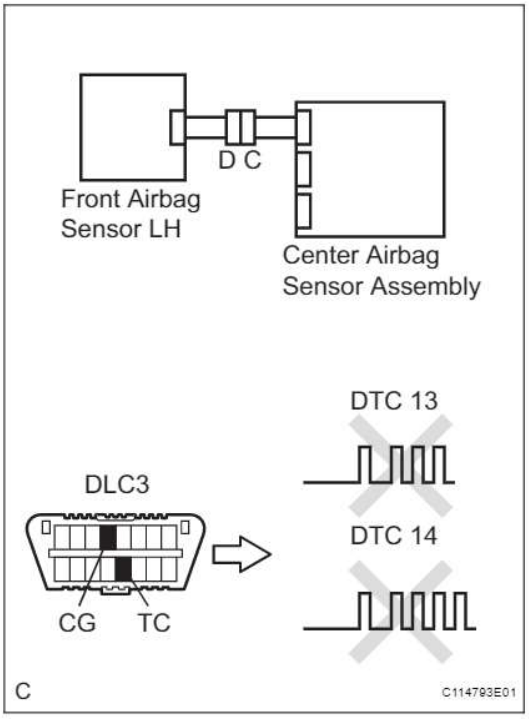
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK FRONT AIRBAG SENSOR RH



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Interchange the front airbag sensor LH with RH and connect the connectors to them.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Clear the DTCs stored in the memory (See page RS-41).
(g) Turn the power switch off.
(h) Turn the power switch on (IG), and wait for at least 60 seconds.
(i) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1610/13 is output.	A
DTC B1615/14 is output.	B
DTC B1610/13 and B1615/14 are not output.	C

HINT:
Codes other than DTC B1610/13 and B1615/14 may be output at this time, but they are not related to this check.

A → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

B → **REPLACE FRONT AIRBAG SENSOR RH (See page RS-428)**

C →

USE SIMULATION METHOD TO CHECK (See page RS-33)

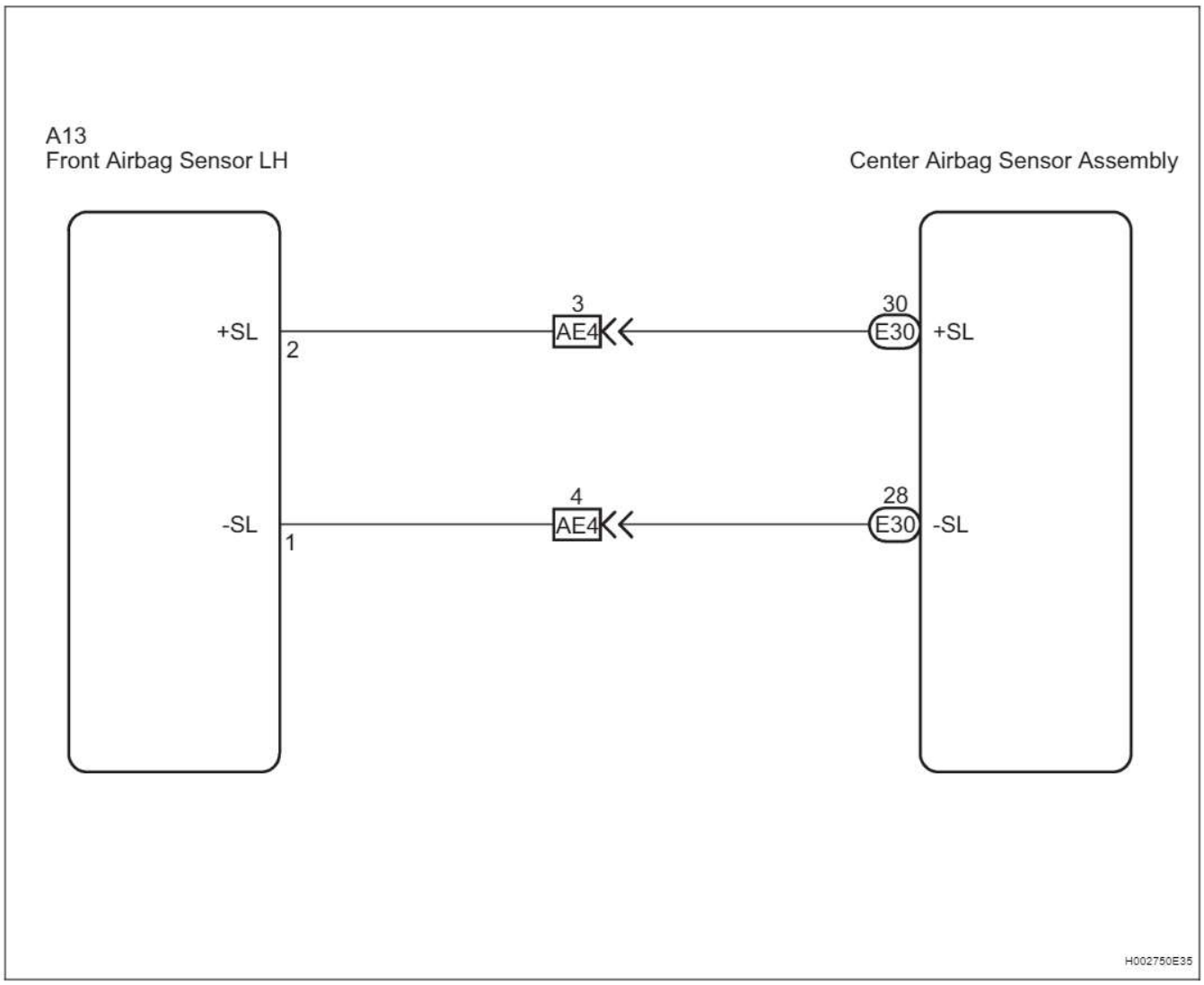
DTC	B1615/14	Front Airbag Sensor LH Malfunction

DESCRIPTION

The front airbag sensor LH consists of the diagnostic circuit and the frontal deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the frontal deceleration sensor, it determines whether the SRS should be activated.
DTC B1615/14 is recorded when a malfunction is detected in the front airbag sensor LH.

DTC No.	DTC Detection Condition	Trouble Area
B1615/14	• Front airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Front airbag sensor LH • Center airbag sensor assembly

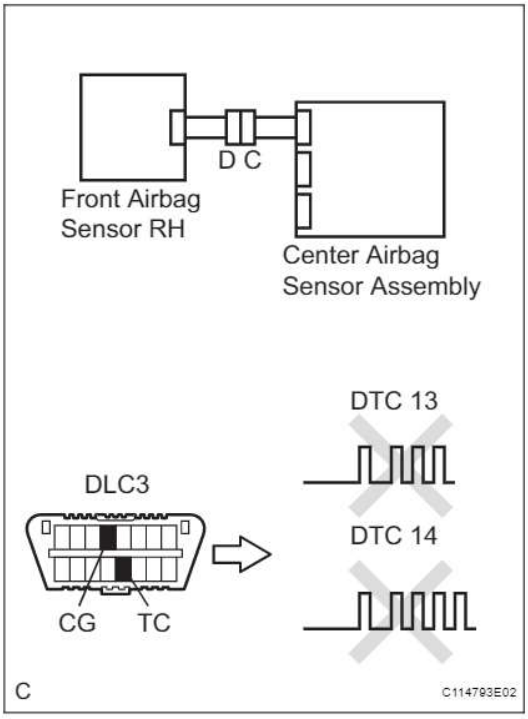
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK FRONT AIRBAG SENSOR LH



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Interchange the front airbag sensor RH with LH and connect the connectors to them.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Clear the DTCs stored in the memory (See page RS-41).
(g) Turn the power switch off.
(h) Turn the power switch on (IG), and wait for at least 60 seconds.
(i) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1615/14 is output.	A
DTC B1610/13 is output.	B
DTC B1610/13 and B1615/14 are not output.	C

HINT:
Codes other than DTC B1610/13 and B1615/14 may be output at this time, but they are not related to this check.

A → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

B → **REPLACE FRONT AIRBAG SENSOR LH (See page RS-428)**

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

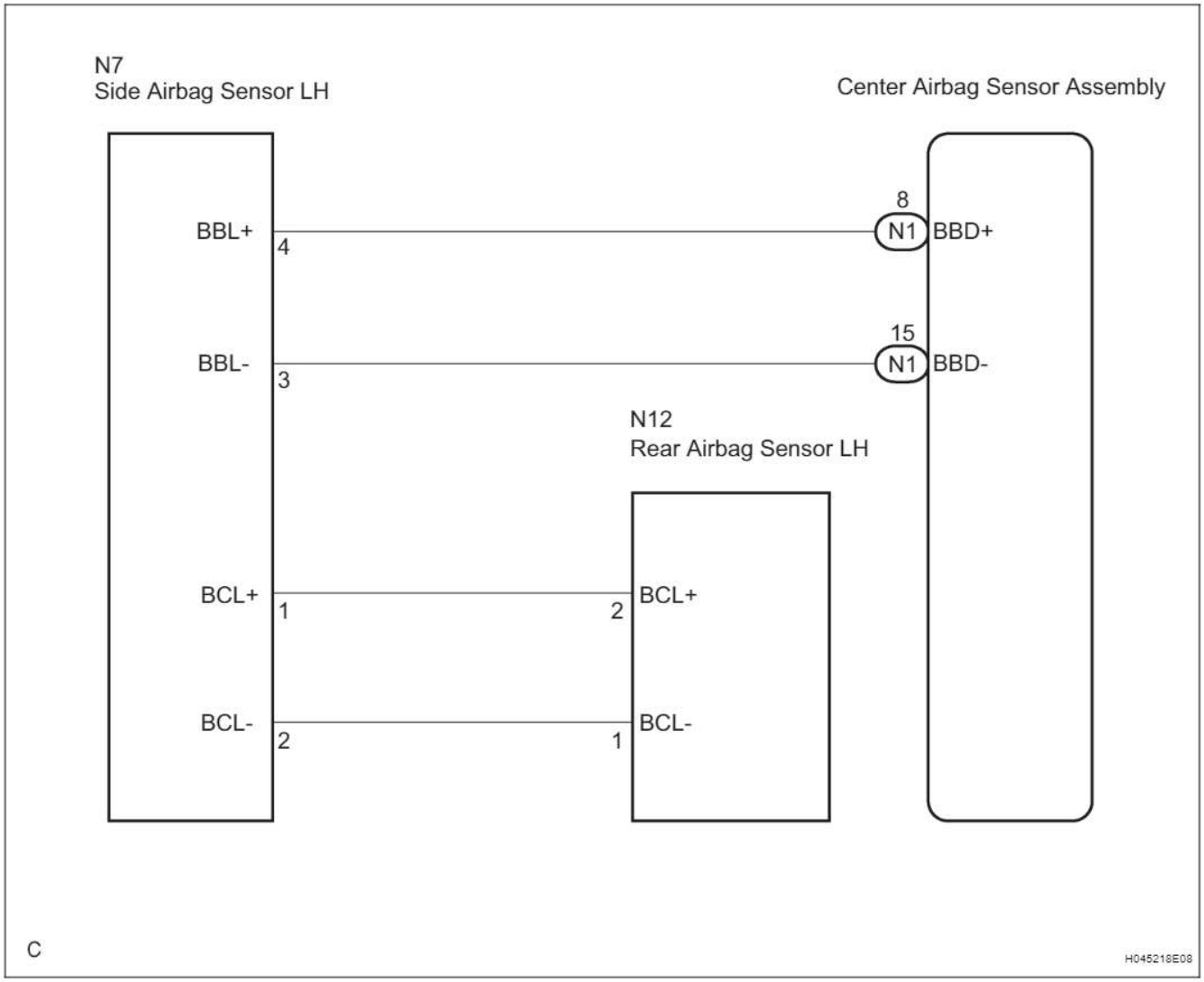
DTC	B1620/21	Driver Side - Side Airbag Sensor Malfunction

DESCRIPTION

The side airbag sensor LH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
DTC B1620/21 is recorded when a malfunction is detected in the side airbag sensor LH.

DTC No.	DTC Detection Condition	Trouble Area
B1620/21	• Side airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Side airbag sensor LH • Center airbag sensor assembly

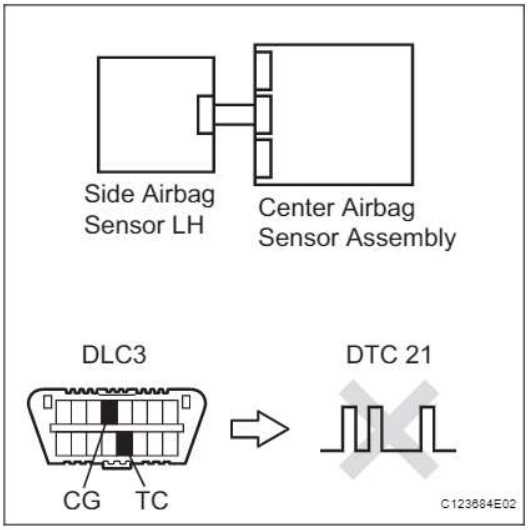
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).

OK:

DTC B1620/21 is not output.

HINT:

Codes other than DTC B1620/21 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the part number of the side airbag sensor LH is equal to the number of the other side.

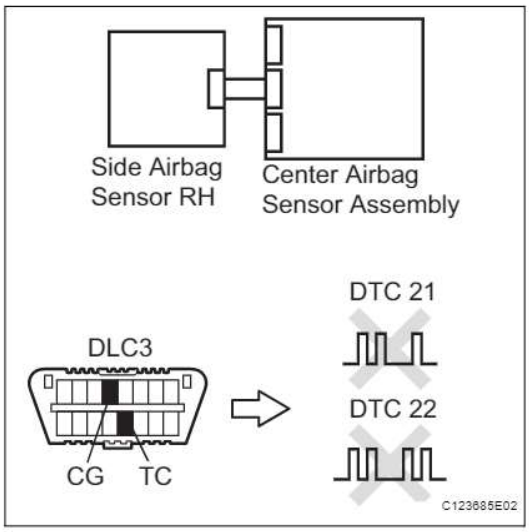
OK:

Those numbers are the same.

NG → **Go to step 4**

OK

3 CHECK SIDE AIRBAG SENSOR LH



(a) Interchange the side airbag sensor RH with LH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1620/21 is output.	A
DTC B1625/22 is output.	B
DTC B1620/21 and B1625/22 are not output.	C

HINT:
Codes other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A	Go to step 5
B	REPLACE SIDE AIRBAG SENSOR LH (See page RS-431)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

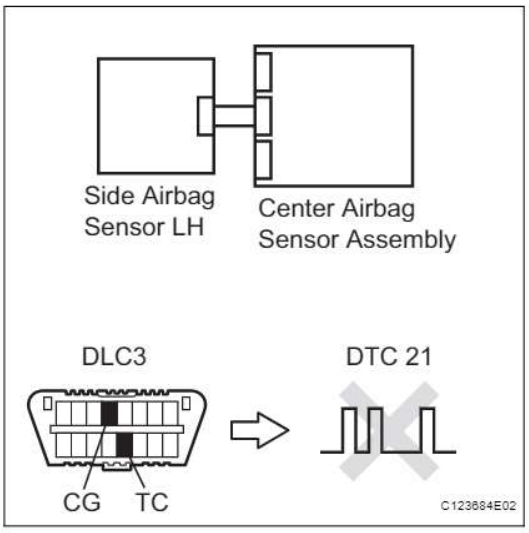
4 REPLACE SIDE AIRBAG SENSOR LH

(a) Replace the side airbag sensor LH (See page RS-431).
HINT:
Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1620/21 is not output.

HINT:

Codes other than DTC B1620/21 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

DTC	B1622/81	Lost Communication with Driver Side - Side Airbag Sensor Assembly
DTC	B1623/81	Driver Side - Side Airbag Sensor Assembly Initialization Incomplete
DTC	B1632/81	Lost Communication with Driver Side Rear Airbag Sensor
DTC	B1633/81	Driver Side Rear Airbag Sensor Initialization Incomplete
DTC	B1642/81	Lost Communication with Driver Side Satellite Sensor Bus
DTC	B1643/81	Driver Side Satellite Sensor Bus Initialization Incomplete

DESCRIPTION

The circuit for the side collision sensor LH (to determine deployment of the front seat side airbag assembly LH and curtain shield airbag assembly LH) is composed of the center airbag sensor assembly, side airbag sensor LH, and rear airbag sensor LH.

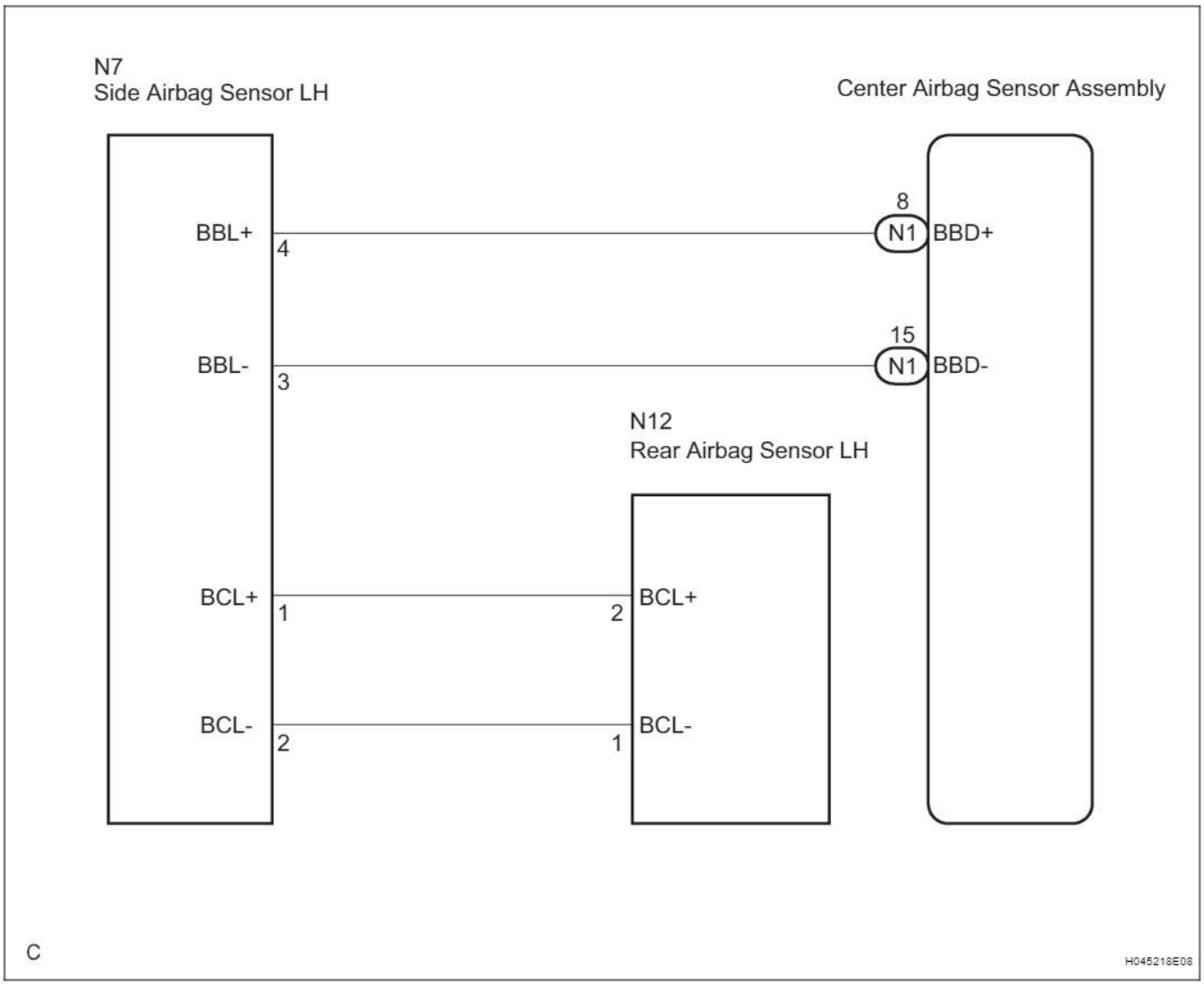
The side airbag sensor LH and rear airbag sensor LH detect impacts to the vehicle and send signals to the center airbag sensor assembly to determine if the airbag should be deployed.

DTC B1622/81, B1623/81, B1632/81, B1633/81, B1642/81, or B1643/81 is recorded when a malfunction is detected in the circuit for the side collision sensor LH (to determine deployment of the front seat side airbag assembly LH and curtain shield airbag assembly LH).

DTC No.	DTC Detecting Condition	Trouble Area
1622/81 1623/81 1632/81 1633/81 1642/81 1643/81	• 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 circuit for the side collision sensor LH (to determine deployment of the front seat side airbag assembly LH and curtain shield airbag assembly LH) for 2 seconds. • Side airbag sensor LH malfunction • Rear airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Floor wire • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

RS

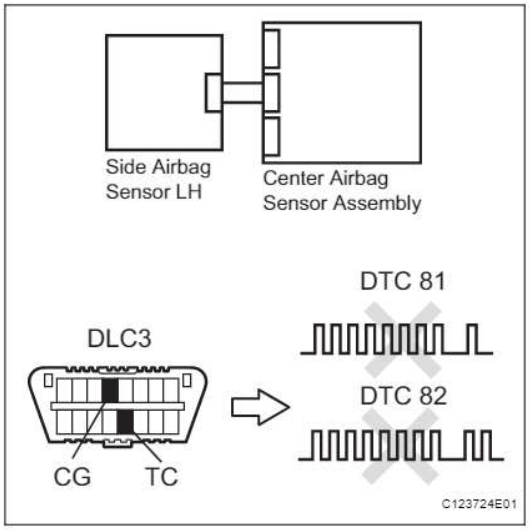
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1 CHECK PRESENT DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Turn the power switch off.
HINT:
If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. To identify the malfunctioning area, turn the power switch off and then on (IG) again.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Check the present DTCs (See page RS-41).
Result

Result	Proceed to
Present DTC B1623, B1633, B1643, or 81 is output.	A
Present DTC B1628, B1638, B1648, or 82 is output.	B
Present DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
- DTCs indicating communication errors will be changed to DTCs indicating errors in initialization by turning the power switch off and then on (IG) again.
- Codes other than present DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

B → **REPAIR CIRCUITS INDICATED BY OUTPUT DTCS**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

2 CHECK PAST DTC

(a) Check the past DTCs (See page RS-41).
Result

Result	Proceed to
• Past DTC B1632, B1642, or 81 is output. • Past DTC B1622, B1632, B1642, or 81 is not output.	A
Past DTC B1622 is output.	B

HINT:
Codes other than past DTC B1622, B1632, B1642, or 81 may be output at this time, but they are not related to this check.

RS

B → Go to step 20

A

3 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 side airbag sensor LH.
OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4 CHECK CONNECTORS

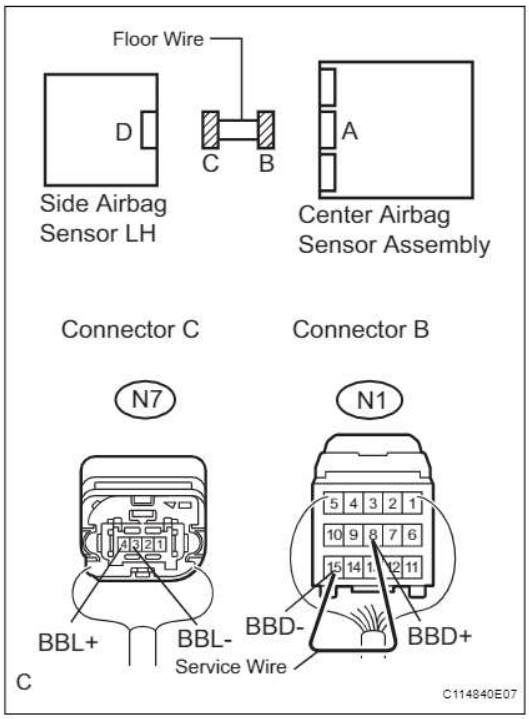
(a) Disconnect the connectors from the center airbag sensor assembly and side airbag sensor LH.
(b) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor LH side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

5 CHECK FLOOR WIRE (OPEN)



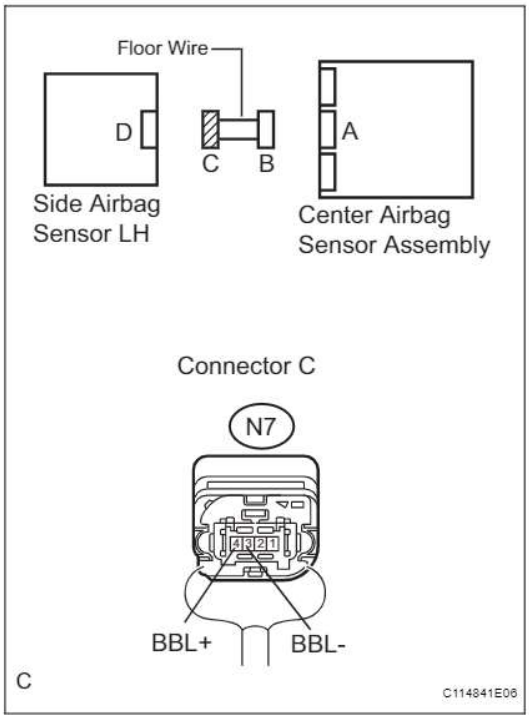
(a) Using a service wire, connect terminals 8 (BBD+) and 15 (BBD-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
N7-4 (BBL+) - N7-3 (BBL-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE

OK

6 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

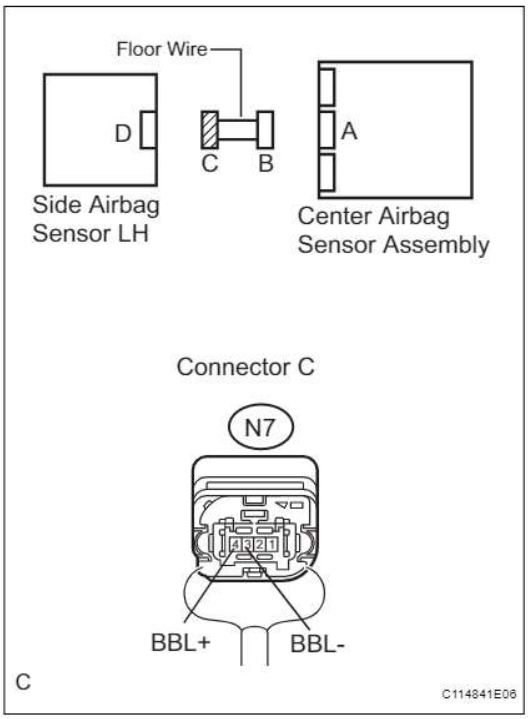
Tester connection	Condition	Specified condition
N7-4 (BBL+) - N7-3 (BBL-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

7 CHECK FLOOR WIRE (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

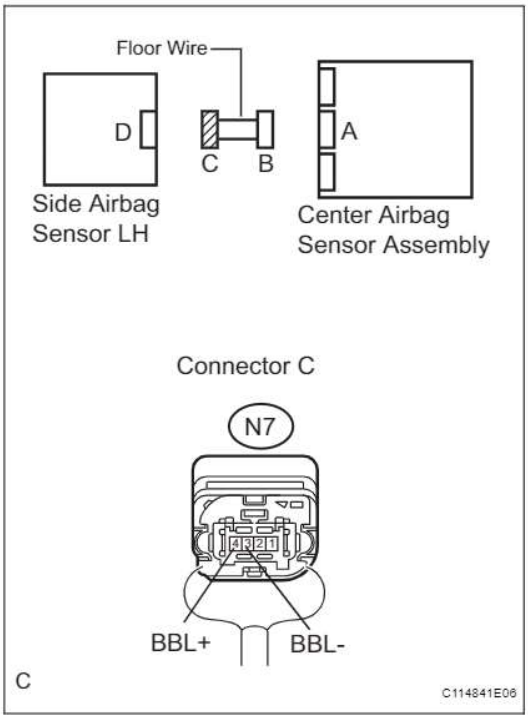
Standard voltage

Tester connection	Condition	Specified condition
N7-4 (BBL+) - Body ground	Power switch on (IG)	Below 1 V
N7-3 (BBL-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

8 CHECK FLOOR WIRE (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
N7-4 (BBL+) - Body ground	Always	1 MΩ or higher
N7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

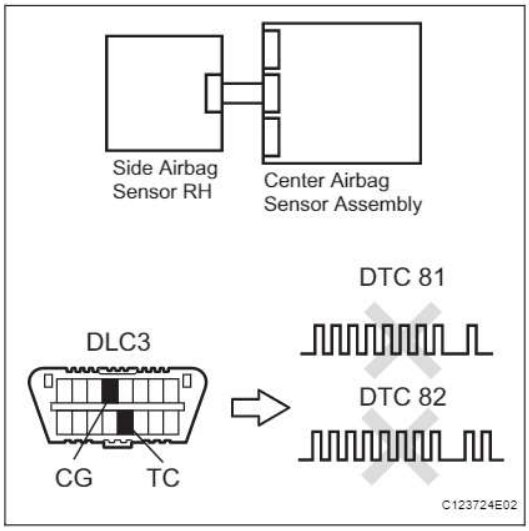
9	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Check that the part number of the side airbag sensor LH is equal to the number of the other side.
OK:
Those numbers are the same.
(b) Connect the connectors to the center airbag sensor assembly and the side airbag sensor LH.

NG → **Go to step 11**

OK

10	CHECK SIDE AIRBAG SENSOR LH



(a) Interchange the side airbag sensor RH with LH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1623, B1633, B1643, or 81 is output.	A
DTC B1628, B1638, B1648, or 82 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.
(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

B → **REPLACE SIDE AIRBAG SENSOR LH (See page RS-431)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

RS

11	CHECK CONNECTION OF CONNECTOR

(a) Check that the connector is properly connected to the rear airbag sensor LH.
OK:
The connector is properly connected.

NG → **CONNECT CONNECTOR PROPERLY**

OK

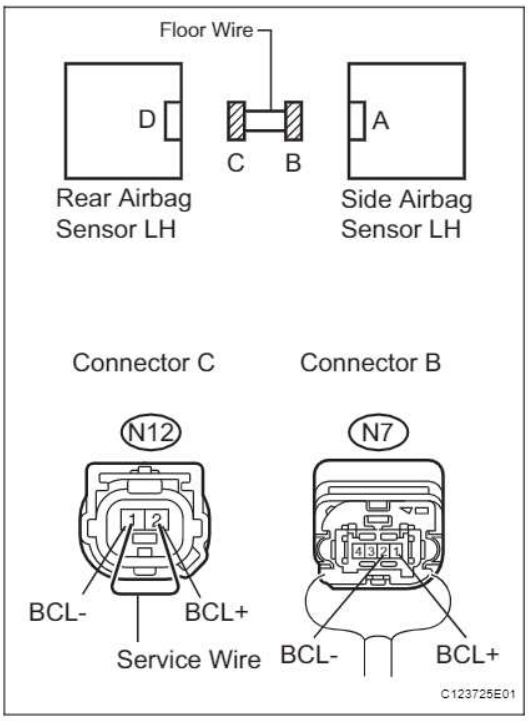
12	CHECK CONNECTOR

(a) Disconnect the connector from the rear airbag sensor LH.
(b) Check that the connector (on the rear airbag sensor LH side) is not damaged.
OK:
The connector is not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

13	CHECK FLOOR WIRE (OPEN)



(a) Disconnect the connector from the side airbag sensor LH.
(b) Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(c) Measure the resistance according to the value(s) in the table below.
Standard resistance

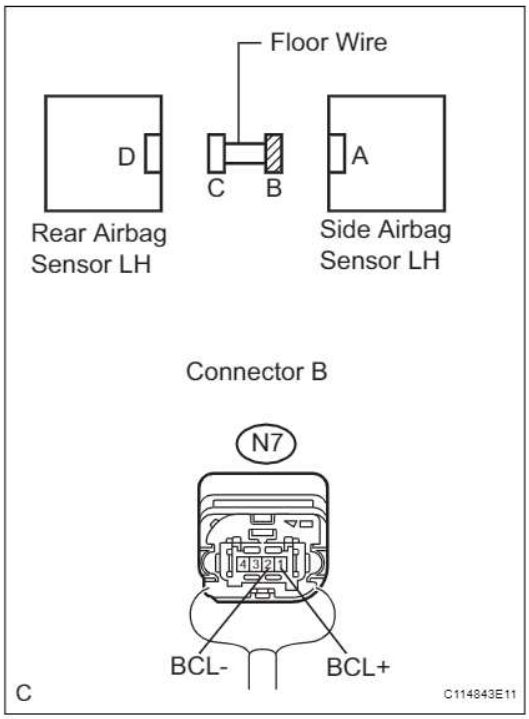
Tester connection	Condition	Specified condition
N7-1 (BCL+) - N7-2 (BCL-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

14 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

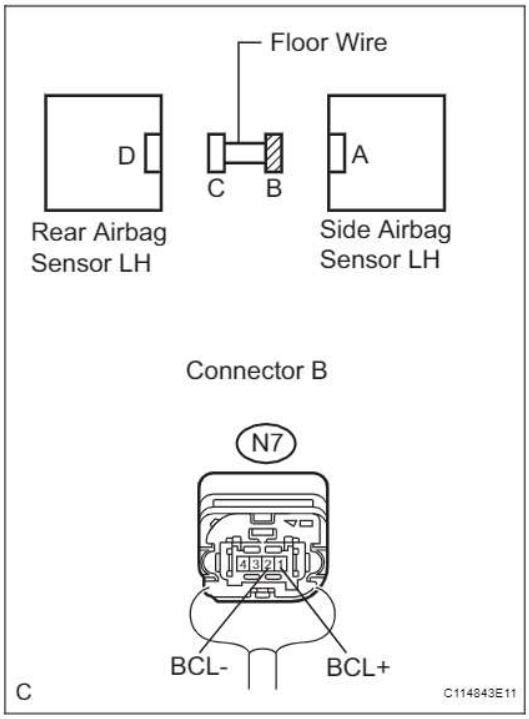
Standard resistance

Tester connection	Condition	Specified condition
N7-1 (BCL+) - N7-2 (BCL-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

15 CHECK FLOOR WIRE (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

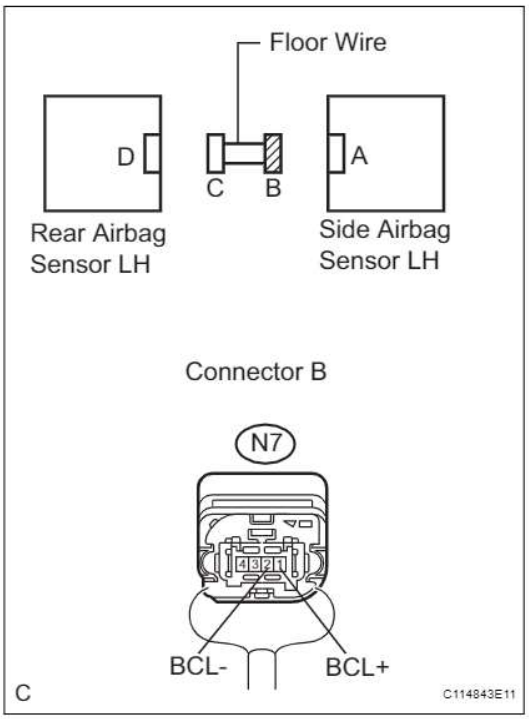
Tester connection	Condition	Specified condition
N7-1 (BCL+) - Body ground	Power switch on (IG)	Below 1 V
N7-2 (BCL-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

16 CHECK FLOOR WIRE (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
N7-1 (BCL+) - Body ground	Always	1 MΩ or higher
N7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

17 CONFIRM PART NUMBER OF REAR AIRBAG SENSOR

(a) Check that the part number of the rear airbag sensor LH is equal to the number of the other side.

OK:

Those numbers are the same.

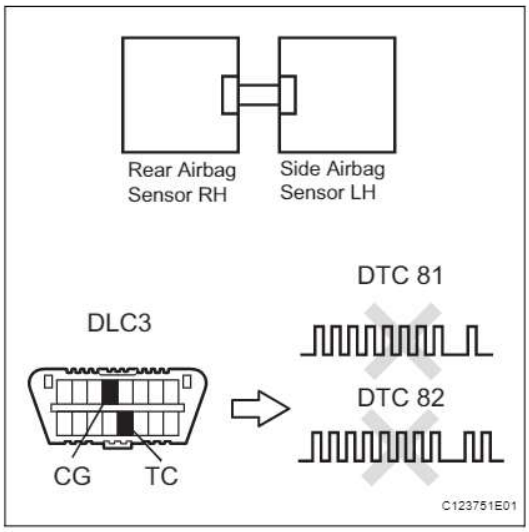
(b) Connect the connectors to the side airbag sensor LH and the rear airbag sensor LH.

NG → **Go to step 19**

OK

RS

18 CHECK REAR AIRBAG SENSOR LH



(a) Interchange the rear airbag sensor RH with LH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1623, B1633, B1643, or 81 is output.	A
DTC B1628, B1638, B1648, or 82 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the rear airbag sensor RH and LH to their original positions and connect the connectors to them.

B → **REPLACE REAR AIRBAG SENSOR LH (See page RS-435)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

19 CHECK CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:
DTC B1623, B1633, B1643, or 81 is not output.

RS

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

20	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 side airbag sensor LH.
OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

21	CHECK CONNECTORS

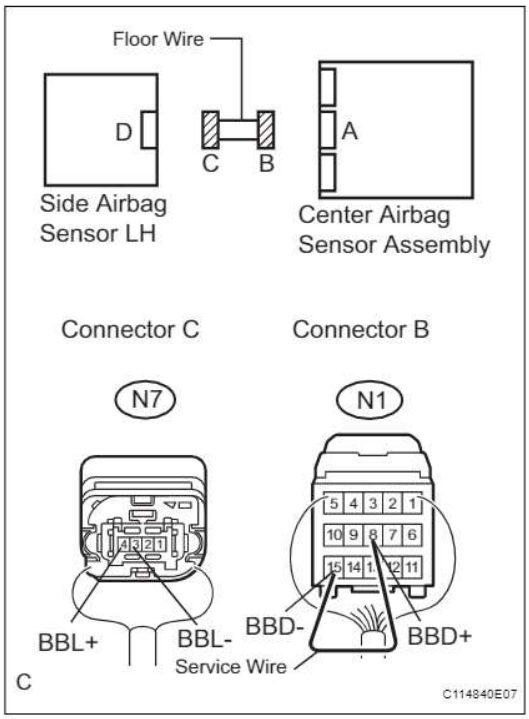
(a) Disconnect the connectors from the center airbag sensor assembly and side airbag sensor LH.
(b) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor LH side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

22 CHECK FLOOR WIRE (OPEN)



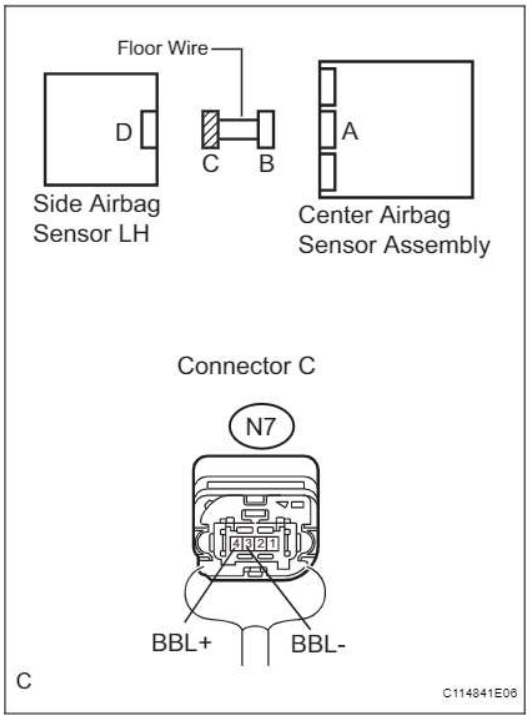
(a) Using a service wire, connect terminals 8 (BBD+) and 15 (BBD-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
N7-4 (BBL+) - N7-3 (BBL-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE

OK

23 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

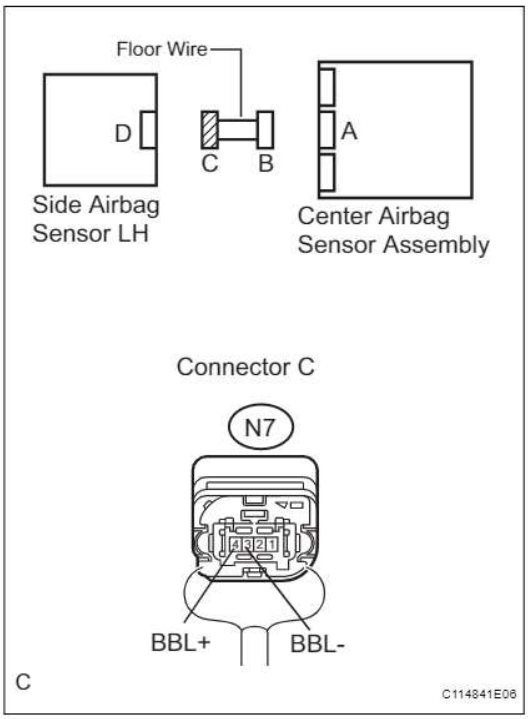
Tester connection	Condition	Specified condition
N7-4 (BBL+) - N7-3 (BBL-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

24 CHECK FLOOR WIRE (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

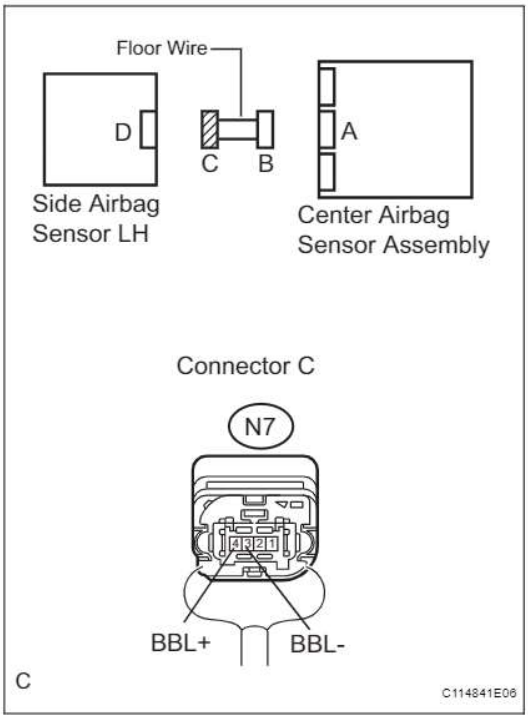
Standard voltage

Tester connection	Condition	Specified condition
N7-4 (BBL+) - Body ground	Power switch on (IG)	Below 1 V
N7-3 (BBL-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

25 CHECK FLOOR WIRE (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
N7-4 (BBL+) - Body ground	Always	1 MΩ or higher
N7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

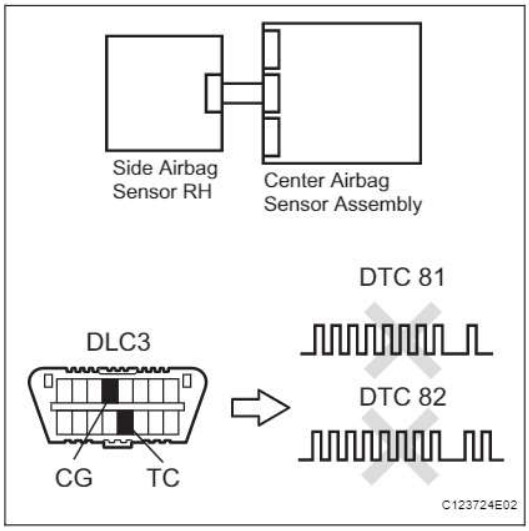
26	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Check that the part number of the side airbag sensor LH is equal to the number of the other side.
OK:
Those numbers are the same.
(b) Connect the connectors to the center airbag sensor assembly and the side airbag sensor LH.

NG → **Go to step 28**

OK

27	CHECK SIDE AIRBAG SENSOR LH



(a) Interchange the side airbag sensor RH with LH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1623, B1633, B1643, or 81 is output.	A
DTC B1628, B1638, B1648, or 82 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.
(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

B → **REPLACE SIDE AIRBAG SENSOR LH (See page RS-431)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

RS

28	CHECK CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).
OK:
DTC B1623, B1633, B1643, or 81 is not output.
HINT:
Codes other than DTC B1623, B1633, B1643, or 81 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

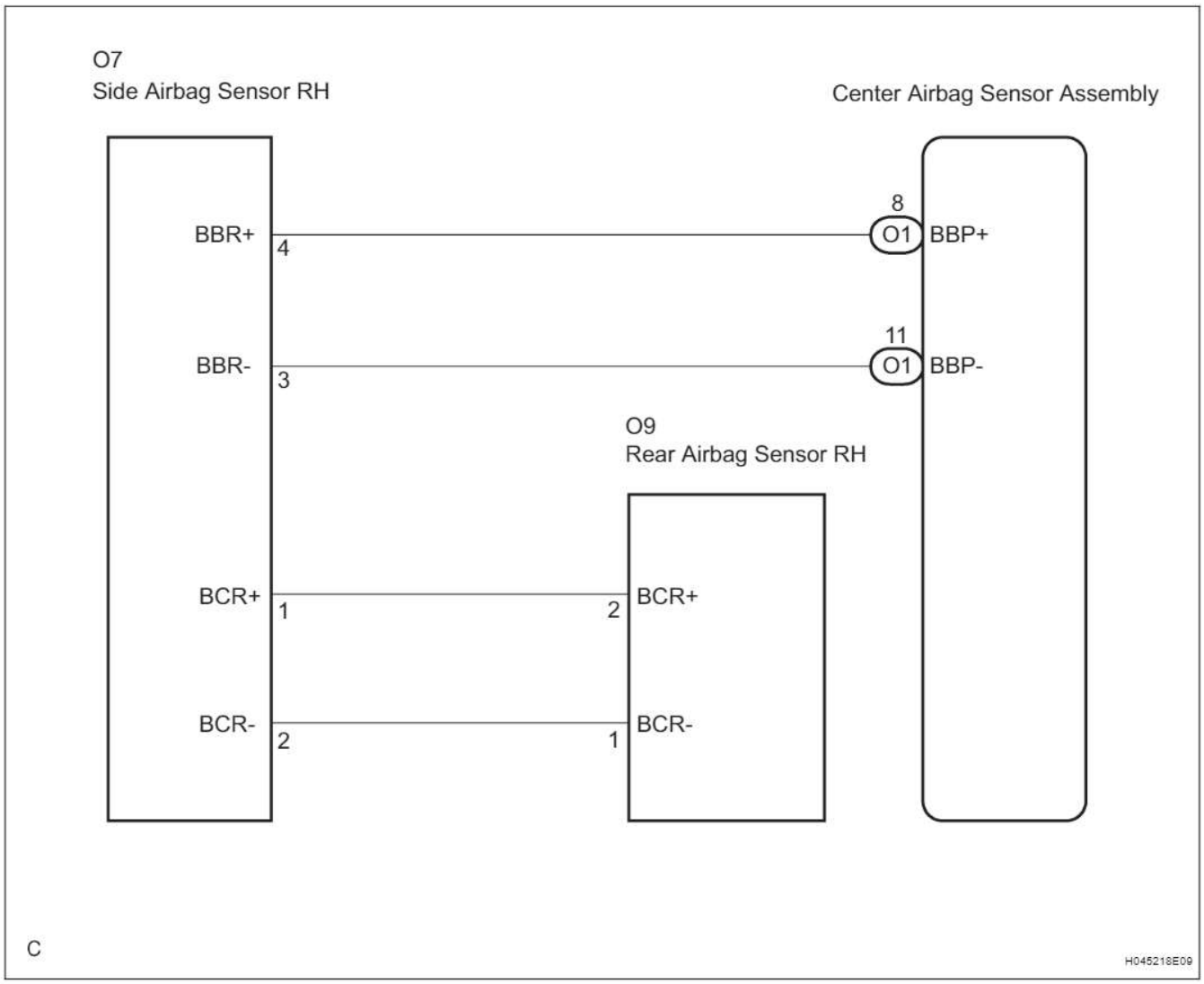
DTC	B1625/22	Front Passenger Side - Side Airbag Sensor Malfunction

DESCRIPTION

The side airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
DTC B1625/22 is recorded when a malfunction is detected in the side airbag sensor RH.

DTC No.	DTC Detection Condition	Trouble Area
B1625/22	• Side airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Side airbag sensor RH • Center airbag sensor assembly

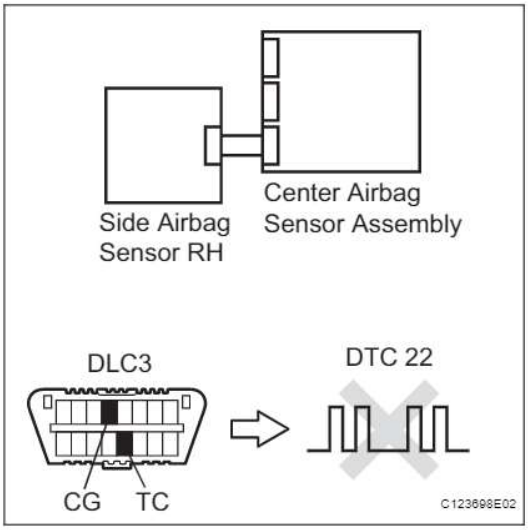
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).

OK:

DTC B1625/22 is not output.

HINT:

Codes other than DTC B1625/22 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the part number of the side airbag sensor RH is equal to the number of the other side.

OK:

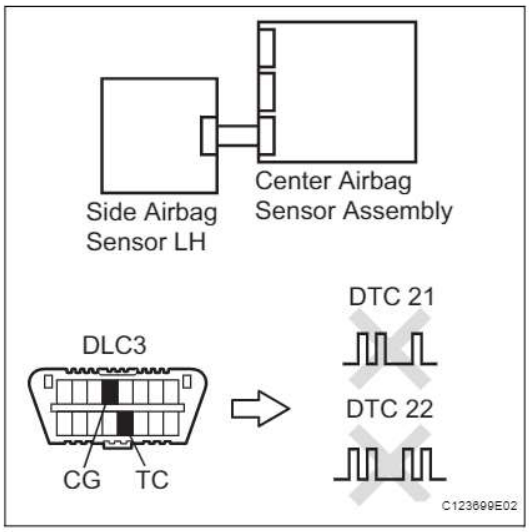
Those numbers are the same.

NG → **Go to step 4**

OK

RS

3	CHECK SIDE AIRBAG SENSOR RH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the side airbag sensor LH with RH and connect the connectors to them.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1625/22 is output.	A
DTC B1620/21 is output.	B
DTC B1620/21 and B1625/22 are not output.	C

HINT:
Codes other than DTC B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

(i) Turn the power switch off.
(j) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(k) Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A	Go to step 5
B	REPLACE SIDE AIRBAG SENSOR RH (See page RS-431)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

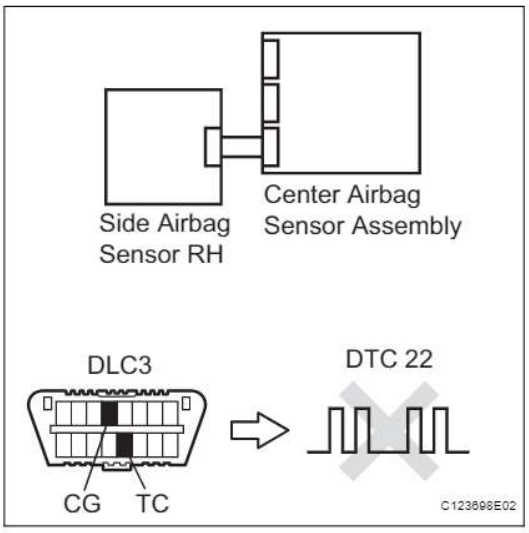
4	REPLACE SIDE AIRBAG SENSOR RH

(a) Replace the side airbag sensor RH (See page RS-431).
HINT:
Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1625/22 is not output.

HINT:

Codes other than DTC B1625/22 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK →

USE SIMULATION METHOD TO CHECK (See page RS-33)

DTC	B1627/82	Lost Communication with Front Passenger Side - Side Airbag Sensor Assembly
DTC	B1628/82	Front Passenger Side - Side Airbag Sensor Assembly Initialization Incomplete
DTC	B1637/82	Lost Communication with Passenger Side Rear Airbag Sensor
DTC	B1638/82	Passenger Side Rear Airbag Sensor Initialization Incomplete
DTC	B1647/82	Lost Communication with Front Passenger Side Satellite Sensor Bus
DTC	B1648/82	Front Passenger Side Satellite Sensor Bus Initialization Incomplete

DESCRIPTION

The circuit for the side collision sensor RH (to determine deployment of the front seat side airbag assembly RH and curtain shield airbag assembly RH) is composed of the center airbag sensor assembly, side airbag sensor RH, and rear airbag sensor RH.

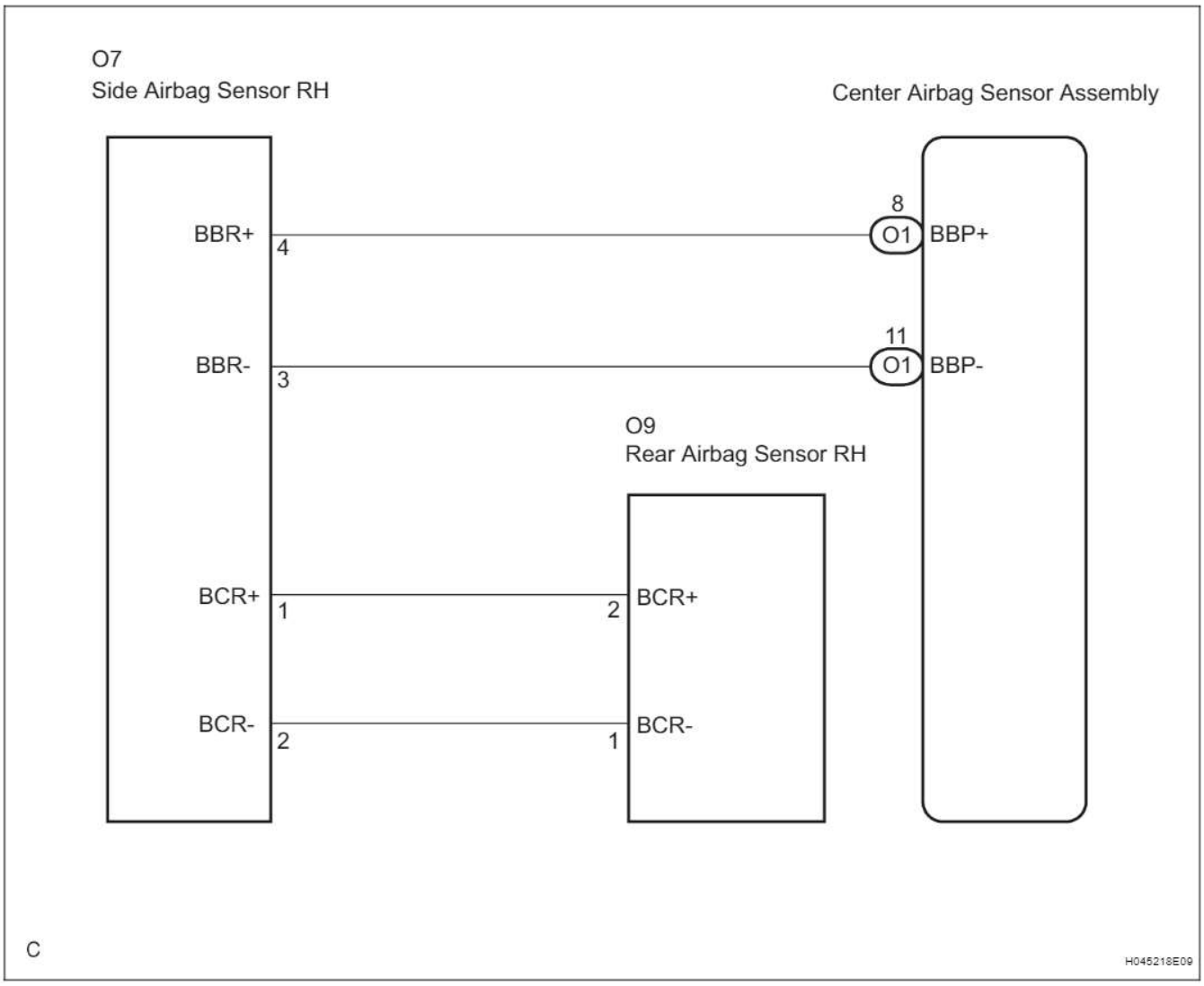
The side airbag sensor RH and rear airbag sensor RH detect impacts to the vehicle and send signals to the center airbag sensor assembly to determine if the airbag should be deployed.

DTC B1627/82, B1628/82, B1637/82, B1638/82, B1647/82, or B1648/82 is recorded when a malfunction is detected in the circuit for the side collision sensor RH (to determine deployment of the front seat side airbag assembly RH and curtain shield airbag assembly RH).

DTC No.	DTC Detecting Condition	Trouble Area
B1627/82 B1628/82 B1637/82 B1638/82 B1647/82 B1648/82	• 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 circuit for the side collision sensor RH (to determine deployment of the front seat side airbag assembly RH and curtain shield airbag assembly RH) for 2 seconds. • Side airbag sensor RH malfunction • Rear airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly

RS

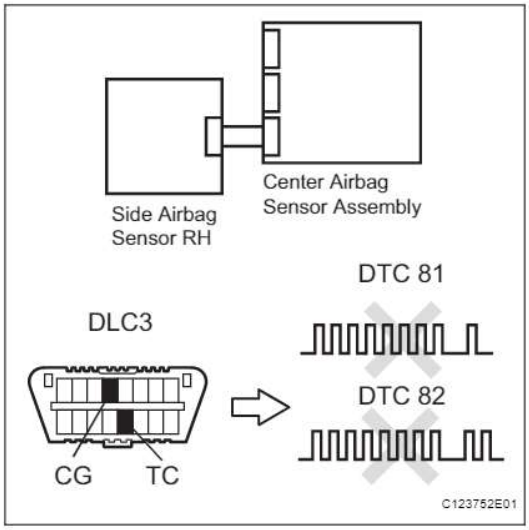
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1 CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Turn the power switch off.
HINT:
If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. To identify the malfunctioning area, turn the power switch off and then on (IG) again.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Check the present DTCs (See page RS-41).
Result

Result	Proceed to
Present DTC B1628, B1638, B1648, or 82 is output.	A
Present DTC B1623, B1633 B1643, or 81 is output.	B
Present DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
- DTCs indicating communication errors will be changed to DTCs indicating errors in initialization by turning the power switch off and then on (IG) again.
- Codes other than present DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

B → **REPAIR CIRCUITS INDICATED BY OUTPUT DTCS**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

2 CHECK PAST DTC

(a) Check the past DTCs (See page RS-41).
Result

Result	Proceed to
• Past DTC B1637, B1647, or 82 is output. • Past DTC B1627, B1637, B1647, or 82 is not output.	A
Past DTC B1627 is output.	B

HINT:
Codes other than past DTC B1627, B1637, B1647, or 82 may be output at this time, but they are not related to this check.

RS

B → Go to step 20

A

3 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 side airbag sensor RH.
OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4 CHECK CONNECTORS

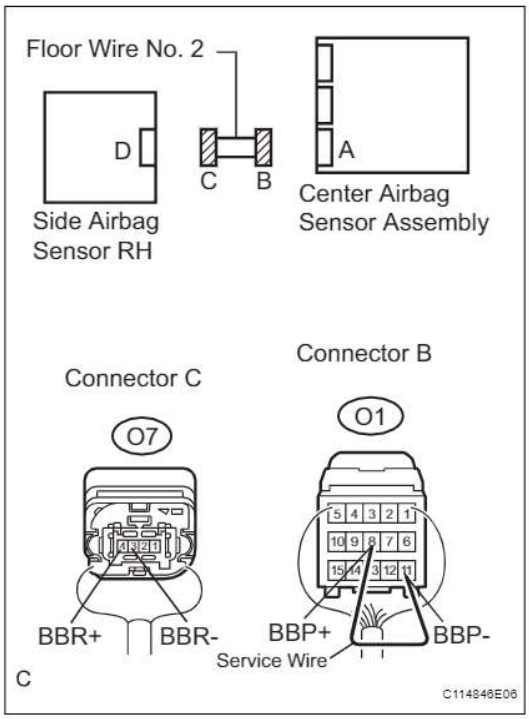
(a) Disconnect the connectors from the center airbag sensor assembly and side airbag sensor RH.
(b) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor RH side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

5 CHECK FLOOR WIRE NO. 2 (OPEN)



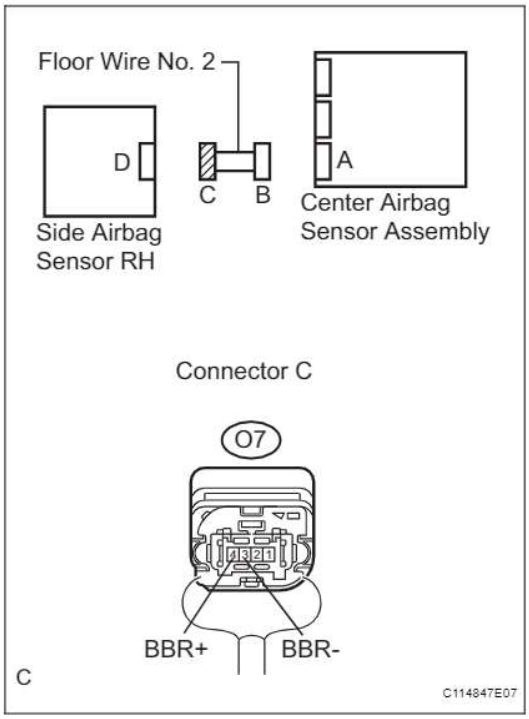
(a) Using a service wire, connect terminals 8 (BBP+) and 11 (BBP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
O7-4 (BBR+) - O7-3 (BBR-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

6 CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

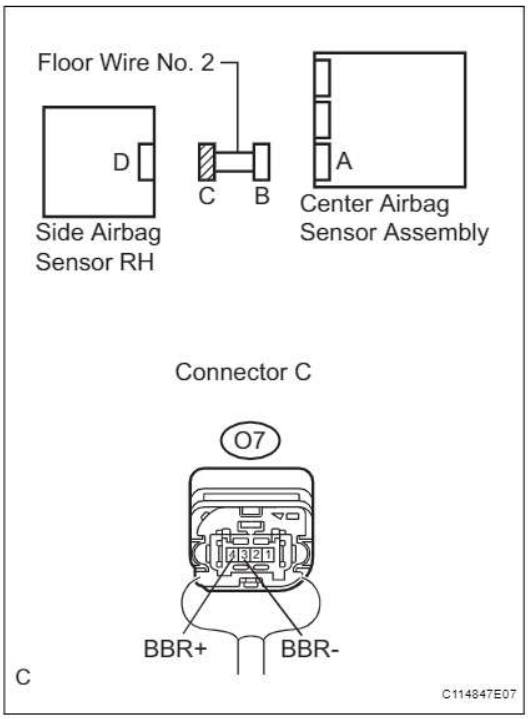
Tester connection	Condition	Specified condition
O7-4 (BBR+) - O7-3 (BBR-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

7 CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

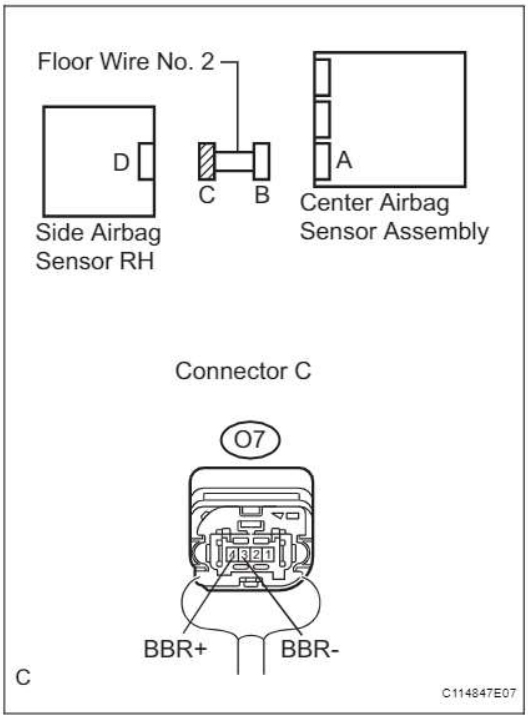
Standard voltage

Tester connection	Condition	Specified condition
O7-4 (BBR+) - Body ground	Power switch on (IG)	Below 1 V
O7-3 (BBR-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

8 CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
O7-4 (BBR+) - Body ground	Always	1 MΩ or higher
O7-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

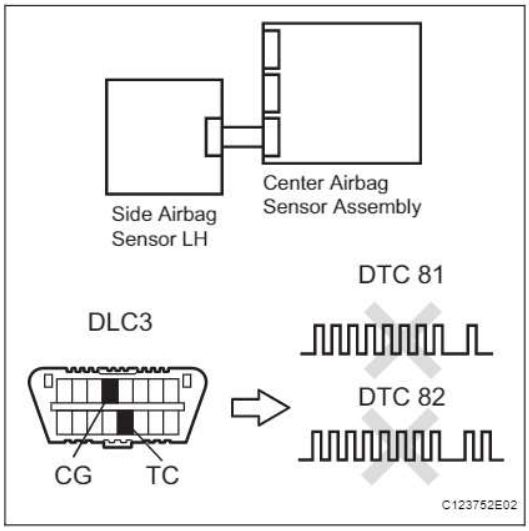
9	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Check that the part number of the side airbag sensor RH is equal to the number of the other side.
OK:
Those numbers are the same.
(b) Connect the connectors to the center airbag sensor assembly and the side airbag sensor RH.

NG → **Go to step 11**

OK

10	CHECK SIDE AIRBAG SENSOR RH



(a) Interchange the side airbag sensor LH with RH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1628, B1638, B1648, or 82 is output.	A
DTC B1623, B1633, B1643, or 81 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.
(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

B → **REPLACE SIDE AIRBAG SENSOR RH (See page RS-431)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

RS

11	CHECK CONNECTION OF CONNECTOR

(a) Check that the connector is properly connected to the rear airbag sensor RH.
OK:
The connector is properly connected.

NG → **CONNECT CONNECTOR PROPERLY**

OK

12	CHECK CONNECTOR

(a) Disconnect the connectors from the rear airbag sensor RH.
(b) Check that the connector (on the rear airbag sensor RH side) is not damaged.
OK:
The connector is not deformed or damaged.

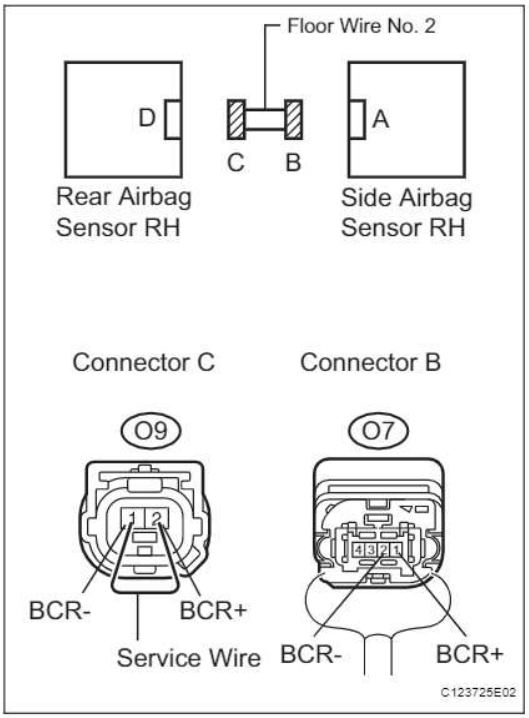
NG → **REPAIR OR REPLACE FLOOR WIRE NO. 2**

OK

13	CHECK FLOOR WIRE NO. 2 (OPEN)

(a) Disconnect the connectors from the side airbag sensor RH.
(b) Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(c) Measure the resistance according to the value(s) in the table below.
Standard resistance

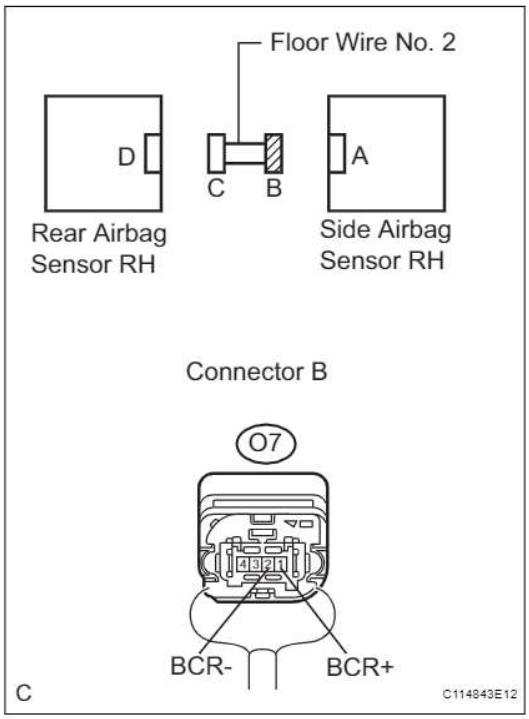
Tester connection	Condition	Specified condition
O7-2 (BCR-) - O7-1 (BCR+)	Always	Below 1 Ω



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

OK

14 CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

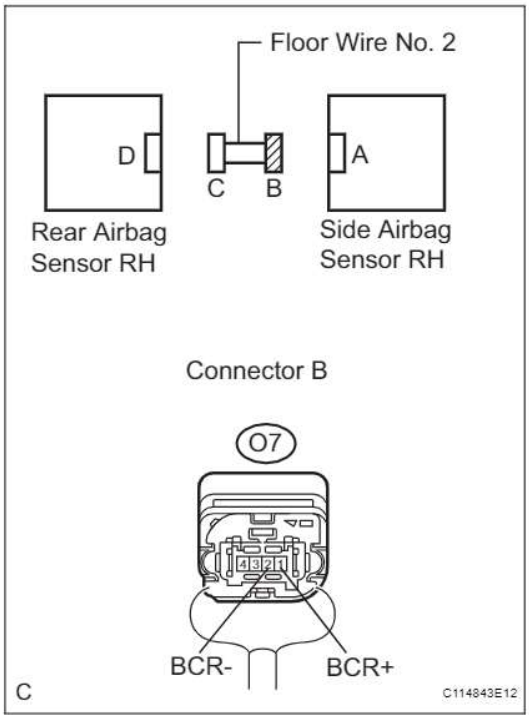
Standard resistance

Tester connection	Condition	Specified condition
O7-1 (BCR+) - O7-2 (BCR-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

15 CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

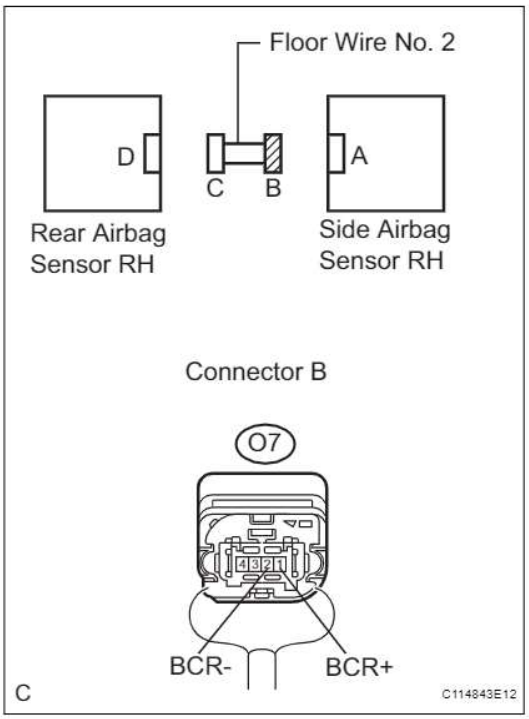
Tester connection	Condition	Specified condition
O7-1 (BCR+) - Body ground	Power switch on (IG)	Below 1 V
O7-2 (BCR-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

16 CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
O7-1 (BCR+) - Body ground	Always	1 MΩ or higher
O7-2 (BCR-) - Body ground	Always	1 MΩ or higher

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

OK

17 CONFIRM PART NUMBER OF REAR AIRBAG SENSOR

(a) Check that the part number of the rear airbag sensor RH is equal to the number of the other side.

OK:

Those numbers are the same.

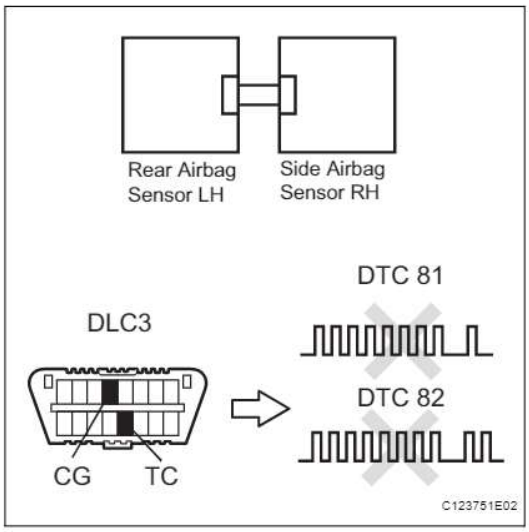
(b) Connect the connectors to the side airbag sensor RH and the rear airbag sensor RH.

NG → **Go to step 19**

OK

RS

18 CHECK REAR AIRBAG SENSOR RH



(a) Interchange the rear airbag sensor LH with RH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1628, B1638, B1648, or 82 is output.	A
DTC B1623, B1633, B1643, or 81 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the rear airbag sensor LH and RH to their original positions and connect the connectors to them.

B → **REPLACE REAR AIRBAG SENSOR RH (See page RS-435)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

19 CHECK CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:
DTC B1628, B1638, B1648, or 82 is not output.

RS

HINT:
Codes other than DTC B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

20	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 side airbag sensor RH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY**

OK

21	CHECK CONNECTORS

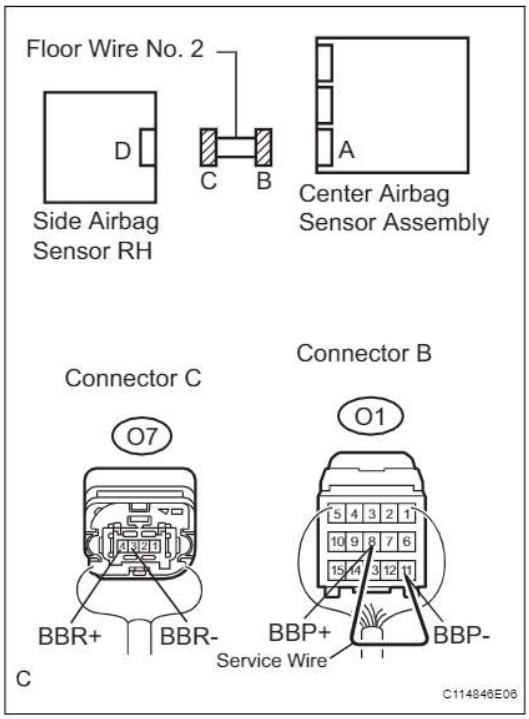
(a) Disconnect the connectors from the center airbag sensor assembly and side airbag sensor RH.
(b) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor RH side) are not damaged.
OK:
The connectors are not deformed or damaged.

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

OK

RS

22 CHECK FLOOR WIRE NO. 2 (OPEN)



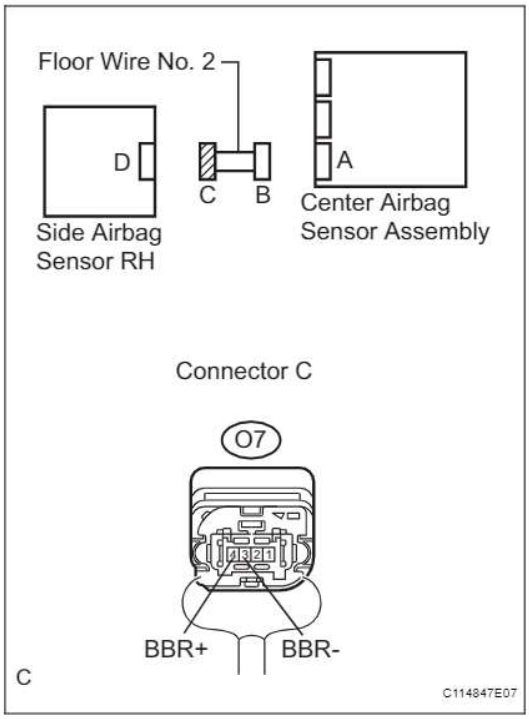
(a) Using a service wire, connect terminals 8 (BBP+) and 11 (BBP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
O7-4 (BBR+) - O7-3 (BBR-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

23 CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

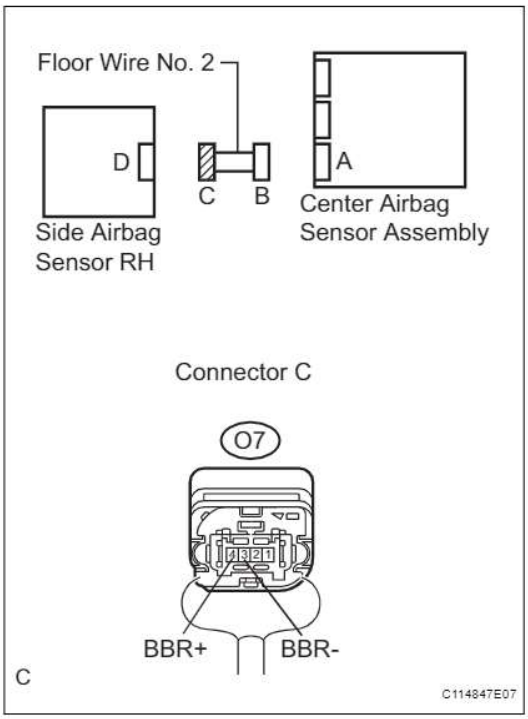
Tester connection	Condition	Specified condition
O7-4 (BBR+) - O7-3 (BBR-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

24 CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

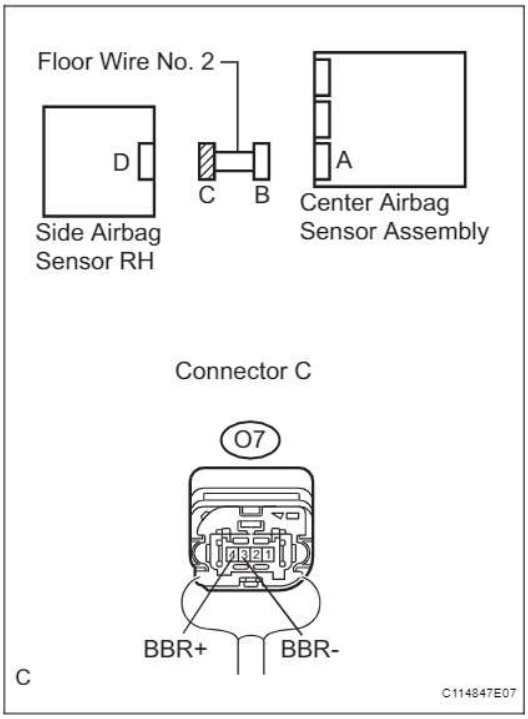
Standard voltage

Tester connection	Condition	Specified condition
O7-4 (BBR+) - Body ground	Power switch on (IG)	Below 1 V
O7-3 (BBR-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

25 CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester connection	Condition	Specified condition
O7-4 (BBR+) - Body ground	Always	1 MΩ or higher
O7-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

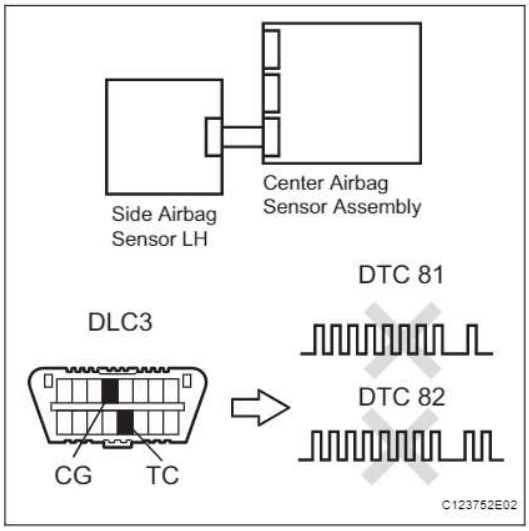
26	CONFIRM PART NUMBER OF SIDE AIRBAG SENSOR

(a) Check that the part number of the side airbag sensor RH is equal to the number of the other side.
OK:
Those numbers are the same.
(b) Connect the connectors to the center airbag sensor assembly and the side airbag sensor RH.

NG → **Go to step 28**

OK

27	CHECK SIDE AIRBAG SENSOR RH



(a) Interchange the side airbag sensor LH with RH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).
Result

Result	Proceed to
DTC B1628, B1638, B1648, or 82 is output.	A
DTC B1623, B1633, B1643, or 81 is output.	B
DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 are not output.	C

HINT:
Codes other than DTC B1623, B1633, B1643, or 81 and B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.
(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

B → **REPLACE SIDE AIRBAG SENSOR RH (See page RS-431)**

C → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

A

RS

28	CHECK CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).
OK:
DTC B1628, B1638, B1648, or 82 is not output.
HINT:
Codes other than DTC B1628, B1638, B1648, or 82 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

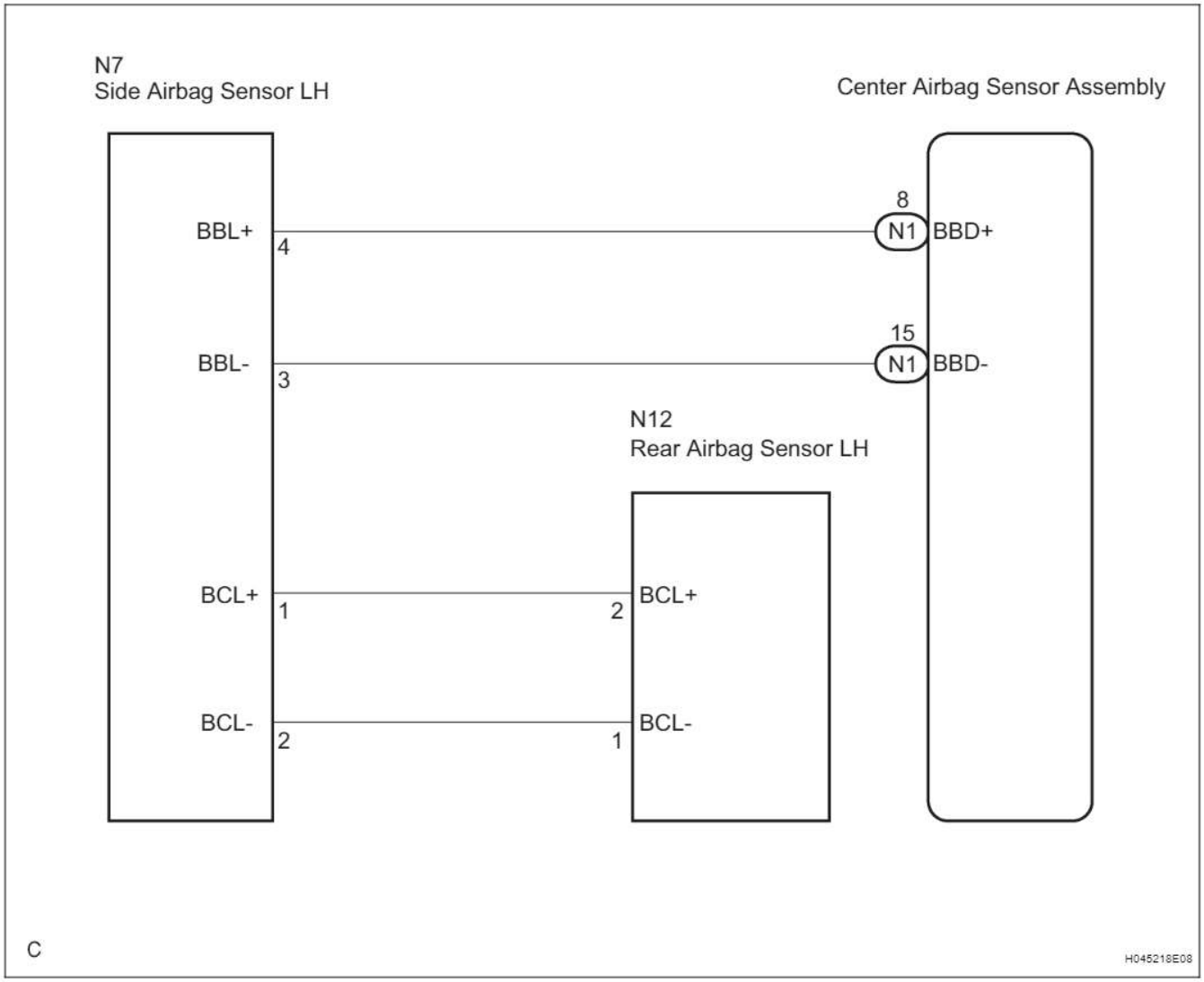
DTC	B1630/23	Driver Side Rear Airbag Sensor Malfunction

DESCRIPTION

The rear airbag sensor LH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
DTC B1630/23 is recorded when a malfunction is detected in the rear airbag sensor LH.

DTC No.	DTC Detection Condition	Trouble Area
B1630/23	• Rear airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Rear airbag sensor LH • Center airbag sensor assembly

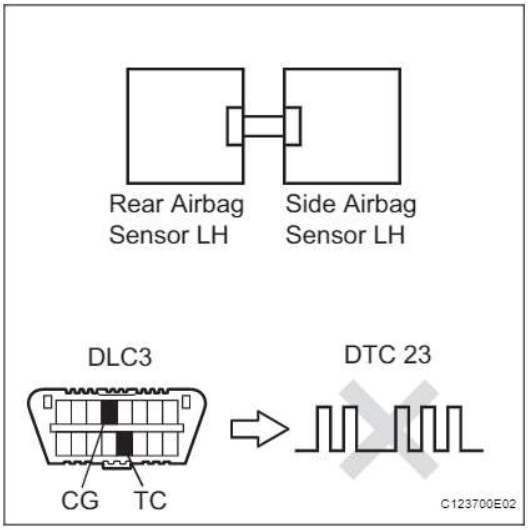
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).

OK:

DTC B1630/23 is not output.

HINT:

Codes other than DTC B1630/23 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2	CONFIRM PART NUMBER OF REAR AIRBAG SENSOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the part number of the rear airbag sensor LH is equal to the number of the other side.

OK:

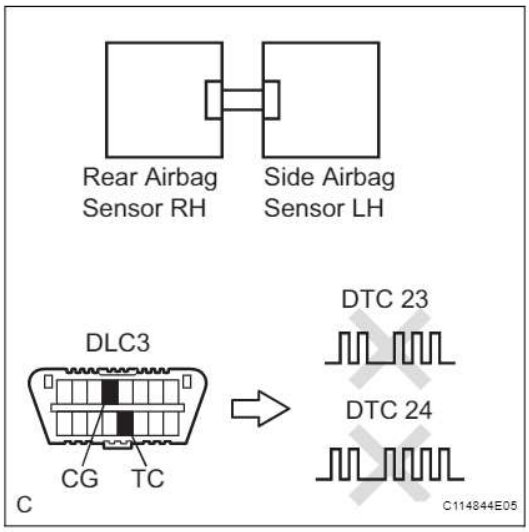
Those numbers are the same.

NG → **Go to step 4**

OK

RS

3 CHECK REAR AIRBAG SENSOR LH



(a) Interchange the rear airbag sensor RH with LH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1630/23 is output.	A
DTC B1635/24 is output.	B
DTC B1630/23 and B1635/24 are not output.	C

HINT:
Codes other than DTC B1630/23 and B1635/24 may be output at this time, but they are not related to this check.

(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the rear airbag sensor RH and LH to their original positions and connect the connectors to them.

A	Go to step 5
B	REPLACE REAR AIRBAG SENSOR LH (See page RS-435)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

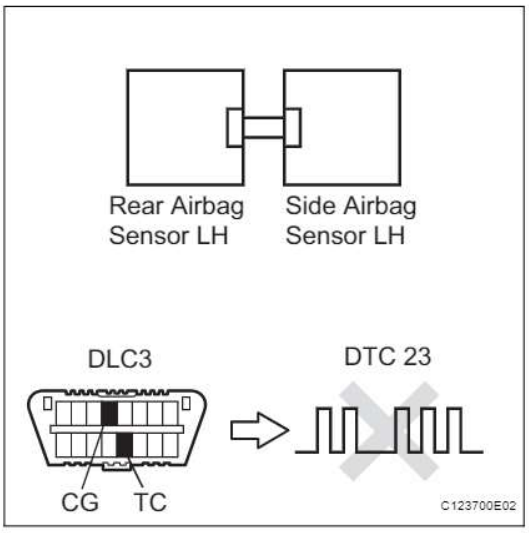
4 REPLACE REAR AIRBAG SENSOR LH

(a) Replace the rear airbag sensor LH (See page RS-435).
HINT:
Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1630/23 is not output.

HINT:

Codes other than DTC B1630/23 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

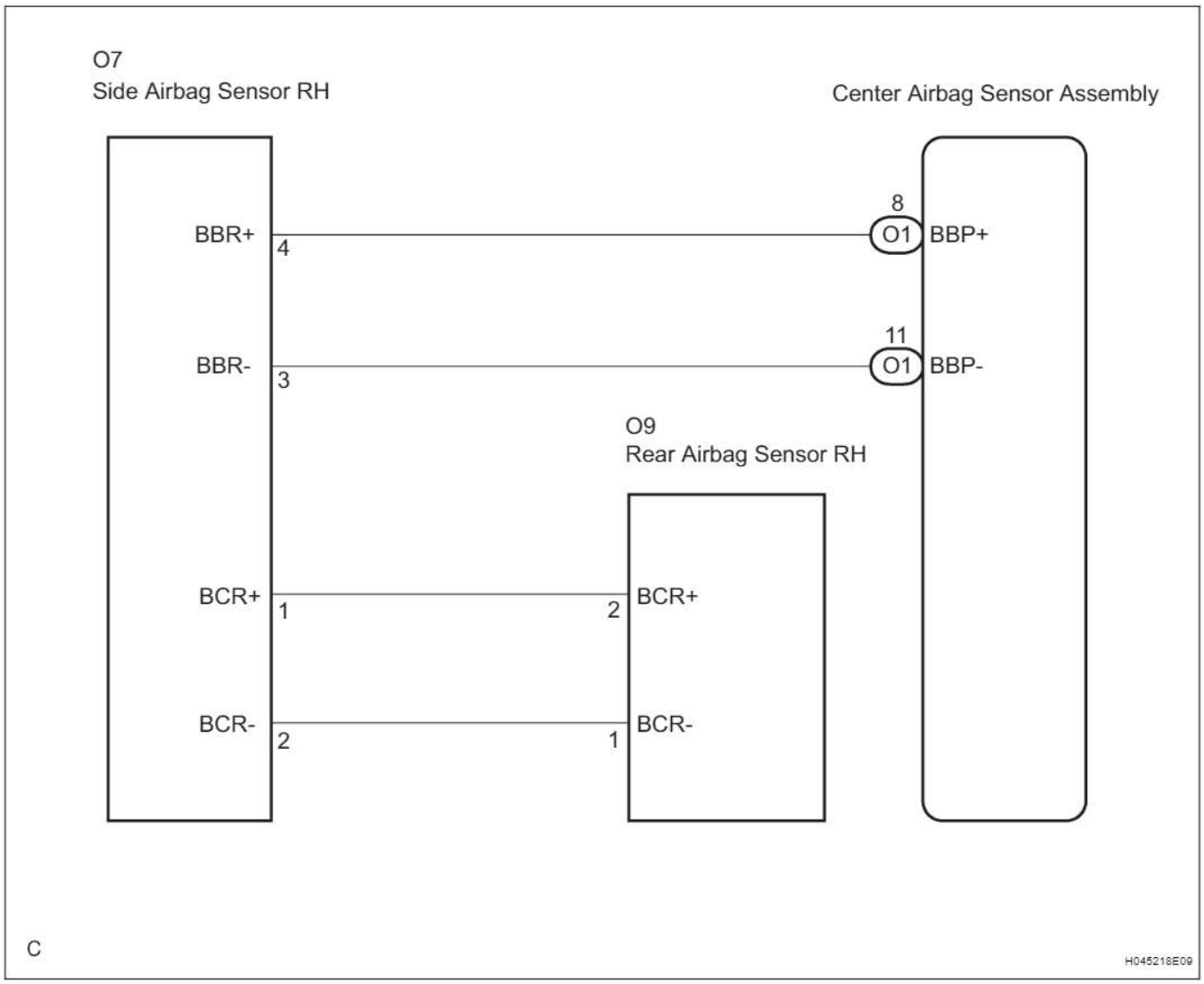
DTC	B1635/24	Front Passenger Side Rear Airbag Sensor Malfunction

DESCRIPTION

The rear airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
If the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
DTC B1635/24 is recorded when a malfunction is detected in the rear airbag sensor RH.

DTC No.	DTC Detection Condition	Trouble Area
B1635/24	• Rear airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Rear airbag sensor RH • Center airbag sensor assembly

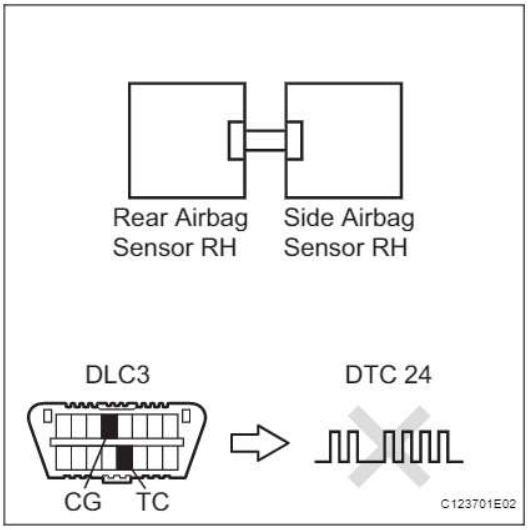
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1	CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).

OK:

DTC B1635/24 is not output.

HINT:

Codes other than DTC B1635/24 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2	CONFIRM PART NUMBER OF REAR AIRBAG SENSOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the part number of the rear airbag sensor RH is equal to the number of the other side.

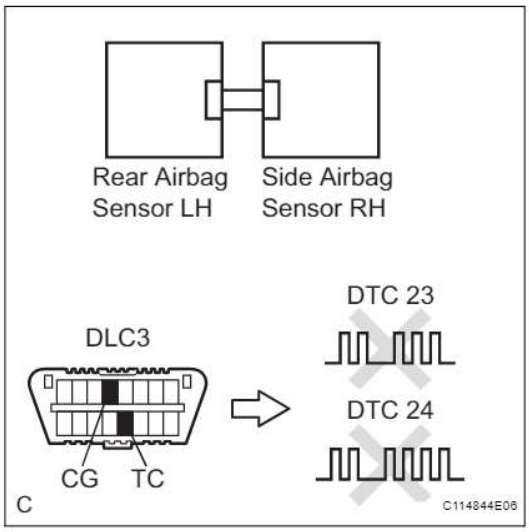
OK:

Those numbers are the same.

NG → **Go to step 4**

OK

3 CHECK REAR AIRBAG SENSOR RH



(a) Interchange the rear airbag sensor LH with RH and connect the connectors to them.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

Result

Result	Proceed to
DTC B1635/24 is output.	A
DTC B1630/23 is output.	B
DTC B1630/23 and B1635/24 are not output.	C

HINT:
Codes other than DTC B1630/23 and B1635/24 may be output at this time, but they are not related to this check.

(h) Turn the power switch off.
(i) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(j) Return the rear airbag sensor LH and RH to their original positions and connect the connectors to them.

A	Go to step 5
B	REPLACE REAR AIRBAG SENSOR RH (See page RS-435)

C

USE SIMULATION METHOD TO CHECK (See page RS-33)

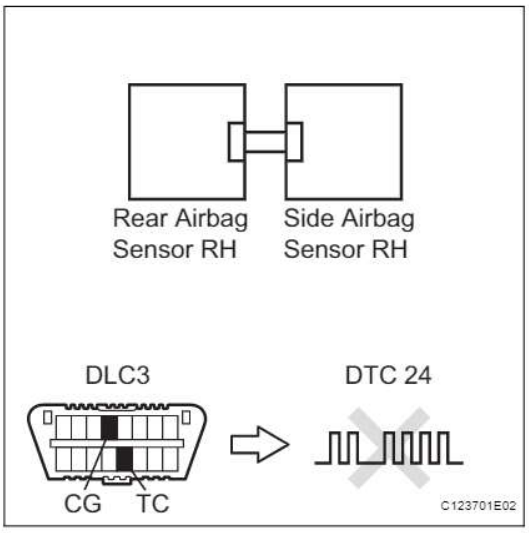
4 REPLACE REAR AIRBAG SENSOR RH

(a) Replace the rear airbag sensor RH (See page RS-435).
HINT:
Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1635/24 is not output.

HINT:

Codes other than DTC B1635/24 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1650/32	Occupant Classification System Malfunction

DESCRIPTION

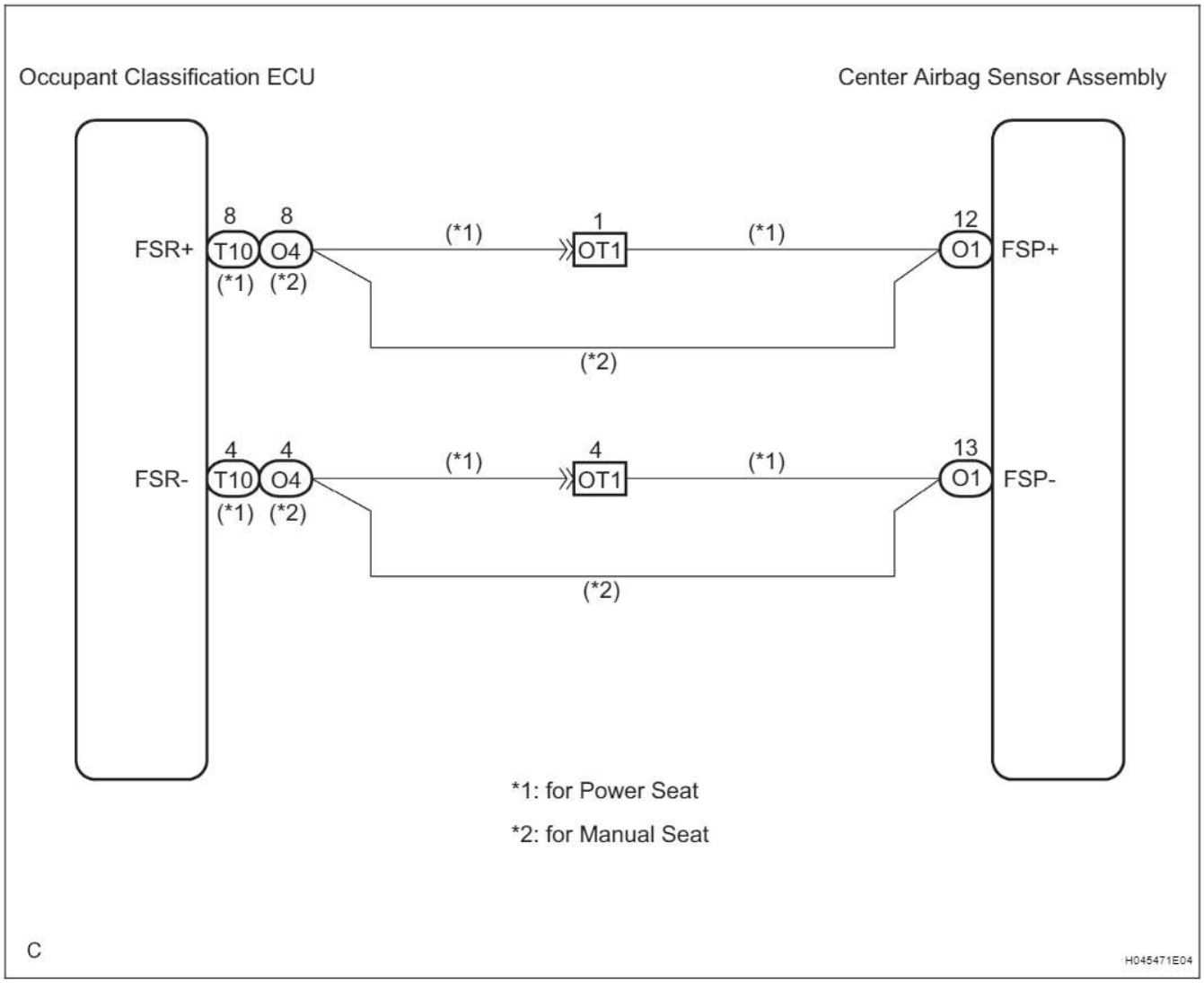
The occupant classification system circuit consists of the center airbag sensor assembly and the occupant classification system.

If the center airbag sensor assembly receives signals from the occupant classification ECU, it determines whether the front passenger airbag assembly, the front seat side airbag assembly RH and front seat outer belt assembly should be operated.

DTC B1650/32 is recorded when a malfunction is detected in the occupant classification system circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1650/32	• Occupant classification system malfunction • 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 occupant classification system circuit for 2 seconds. • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Occupant classification system • Front seat wire RH (for Power Seat) • Center airbag sensor assembly

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

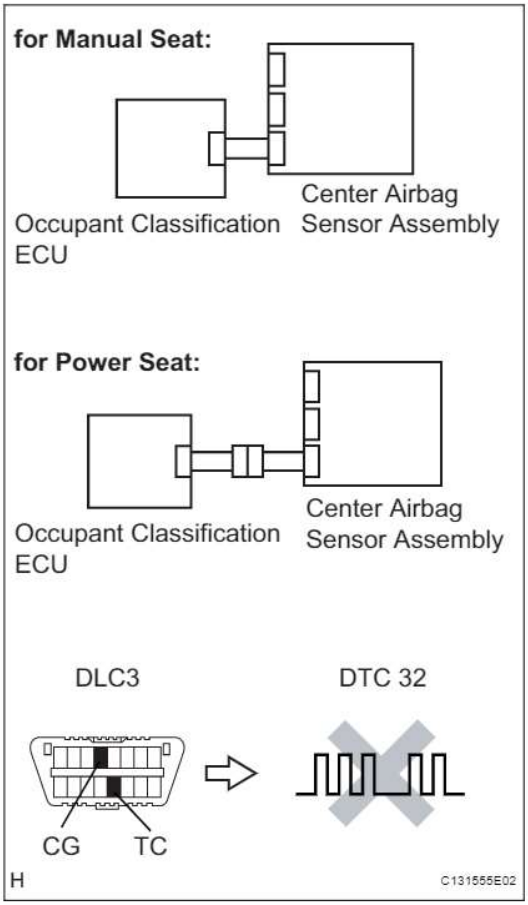
1	CHECK DTC (OCCUPANT CLASSIFICATION ECU)

(a) Turn the power switch on (IG), and wait for at least 10 seconds.
(b) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-248).
OK:
DTC is not output.

NG → **GO TO OCCUPANT CLASSIFICATION SYSTEM (See page RS-250)**

OK

2	CHECK DTC (CENTER AIRBAG SENSOR ASSEMBLY)



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).
OK:
DTC B1650/32 is not output.
HINT:
Codes other than DTC B1650/32 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

3	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

RS

(c) Check that the connectors are properly connected to the center airbag sensor assembly and the occupant classification ECU.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY**

OK ↓

4	CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the occupant classification ECU.
(b) Check that the connectors (on the center airbag sensor assembly side and occupant classification ECU side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK ↓

5	CHECK VEHICLE TYPE

(a) Check the front passenger side seat type.
Result

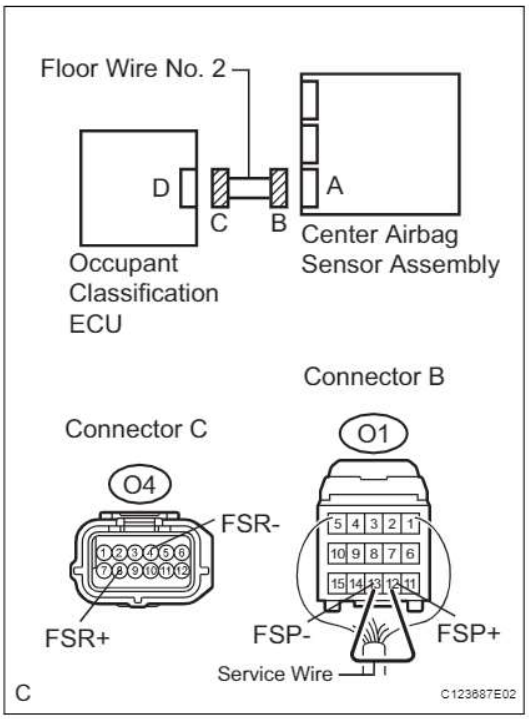
Result	Proceed to
for Manual seat	A
for Power seat	B

B → **Go to step 10**

A ↓

RS

6 CHECK FLOOR WIRE NO. 2 (OPEN)



(a) Using a service wire, connect terminals 12 (FSP+) and 13 (FSP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.

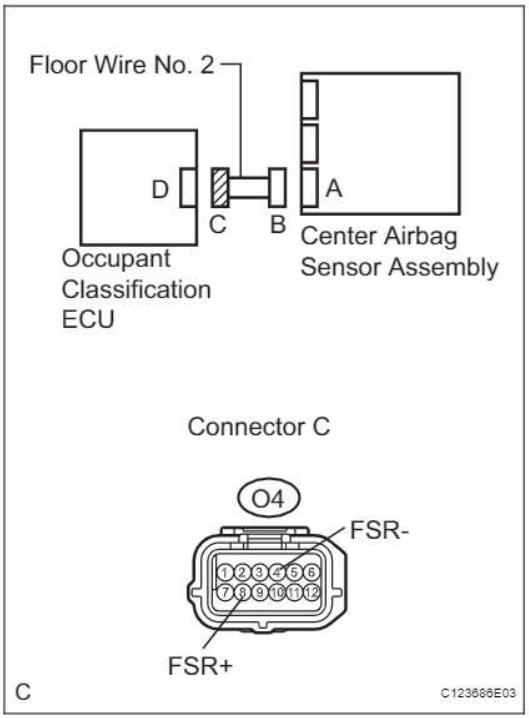
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Terminal Connection	Condition	Specified Condition
O4-8 (FSR+) - O4-4 (FSR-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

7 CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the service wire from connector B.

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

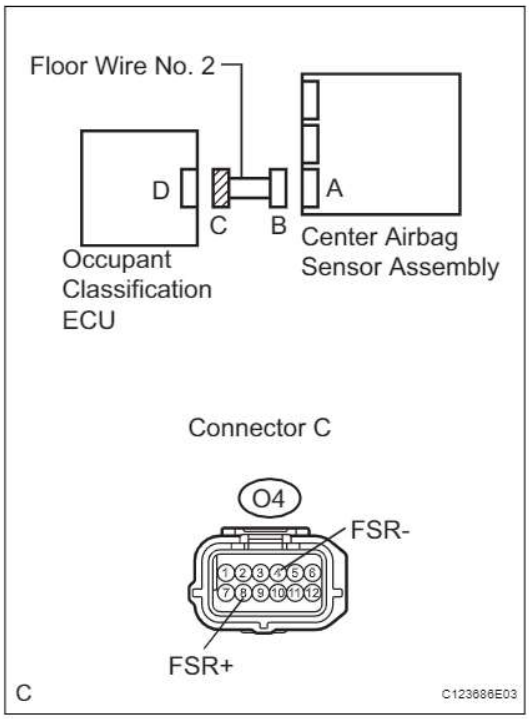
Terminal Connection	Condition	Specified Condition
O4-8 (FSR+) - O4-4 (FSR-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

8 CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

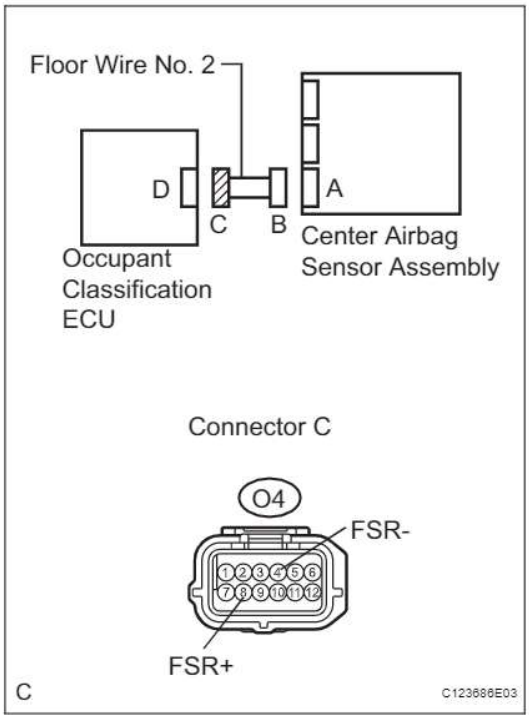
Standard voltage

Tester Connection	Condition	Specified Condition
O4-8 (FSR+) - Body ground	Power switch ON	Below 1 V
O4-4 (FSR-) - Body ground	Power switch ON	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

9 CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
O4-8 (FSR+) - Body ground	Always	1 MΩ or higher
O4-4 (FSR-) - Body ground	Always	1 MΩ or higher

HINT:
After replacing the center airbag sensor assembly, check for DTCs of the center airbag sensor assembly. If the DTC B1650/32 is detected, replace the occupant classification ECU (See page RS-445) and perform "zero point calibration" and "sensitivity check" of the occupant classification system (See page RS-239).

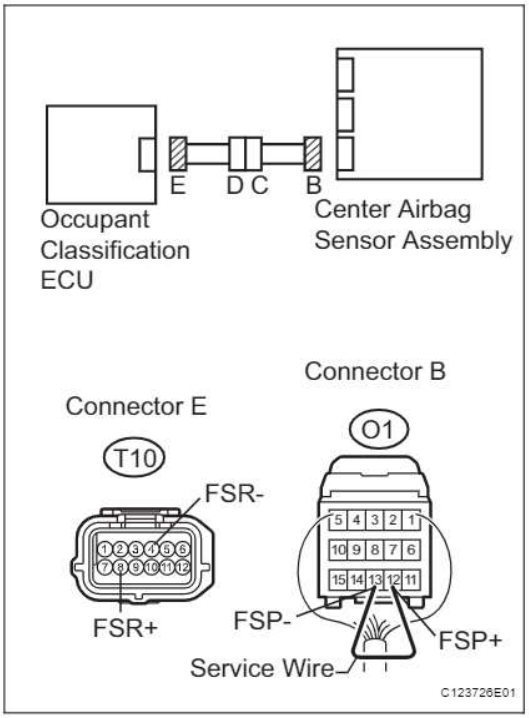
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

RS

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

10	CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (OPEN)



(a) Using a service wire, connect terminals 12 (FSP+) and 13 (FSP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminal of the connector when connecting.

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

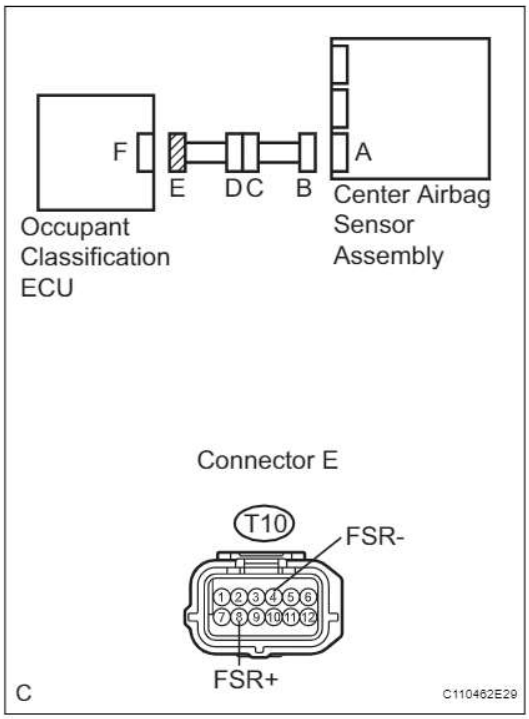
Tester Connection	Condition	Specified Condition
T10-8 (FSR+) - T10-4 (FSR-)	Always	Below 1 Ω

NG → Go to step 14

OK

RS

11 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.

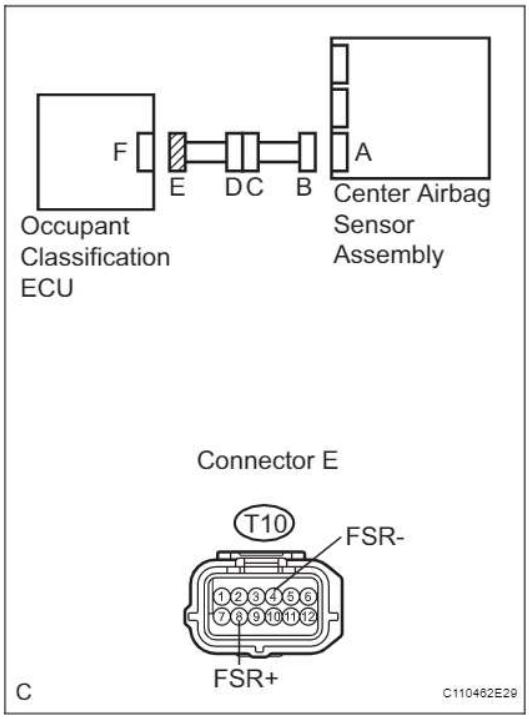
Standard resistance

Tester Connection	Condition	Specified Condition
T10-8 (FSR+) - T10-4 (FSR-)	Always	1 MΩ or higher

NG → Go to step 15

OK

12 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

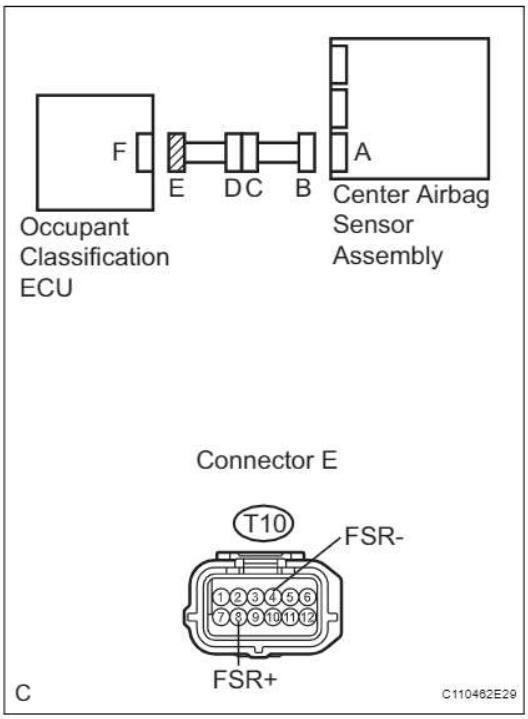
Tester Connection	Condition	Specified Condition
T10-8 (FSR+) - Body ground	Power switch on (IG)	Below 1 V
T10-4 (FSR-) - Body ground	Power switch on (IG)	Below 1 V

NG → Go to step 16

OK

RS

13 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
T10-8 (FSR+) - Body ground	Always	1 MΩ or higher
T10-4 (FSR-) - Body ground	Always	1 MΩ or higher

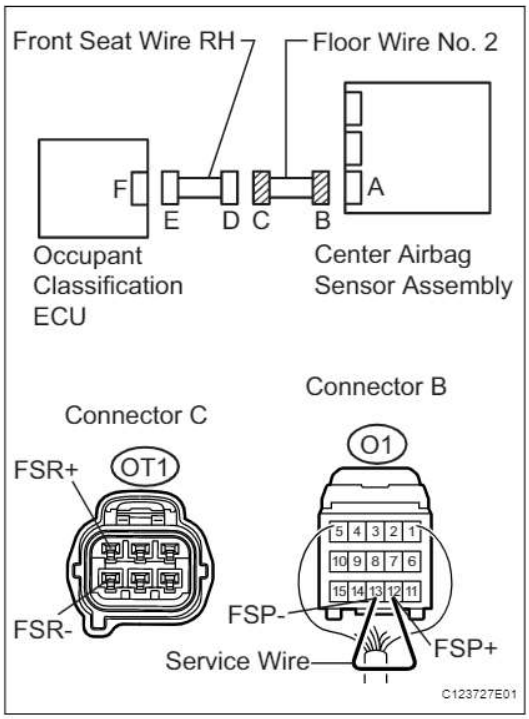
HINT:
After replacing the center airbag sensor assembly, check for DTCs of the center airbag sensor assembly. If the DTC B1650/32 is detected, replace the occupant classification ECU (See page RS-445) and perform "zero point calibration" and "sensitivity check" of the occupant classification system (See page RS-239).

NG → **Go to step 17**

OK →

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

14	CHECK FLOOR WIRE NO. 2 (OPEN)



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.
HINT:
The service wire has already been inserted into connector B.

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

Standard resistance

Tester Connection	Condition	Specified Condition
OT1-1 (FSR+) - OT1-4 (FSR-)	Always	Below 1 Ω

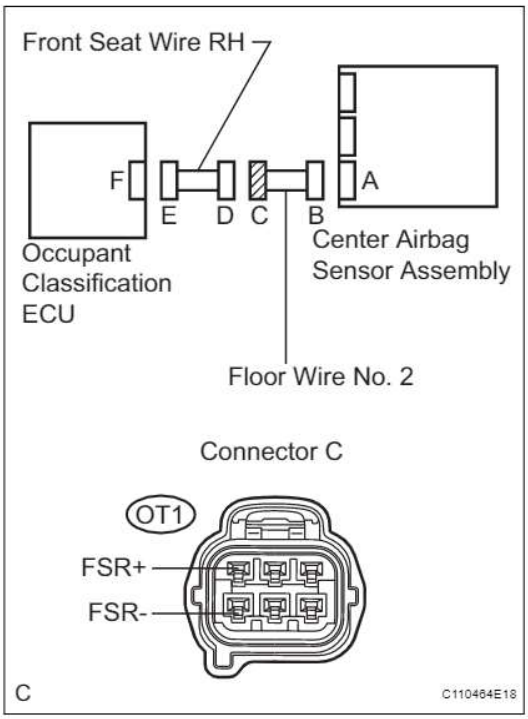
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

15	CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.

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

Standard resistance

Tester Connection	Condition	Specified Condition
OT1-1 (FSR+) - OT1-4 (FSR-)	Always	1 MΩ or higher

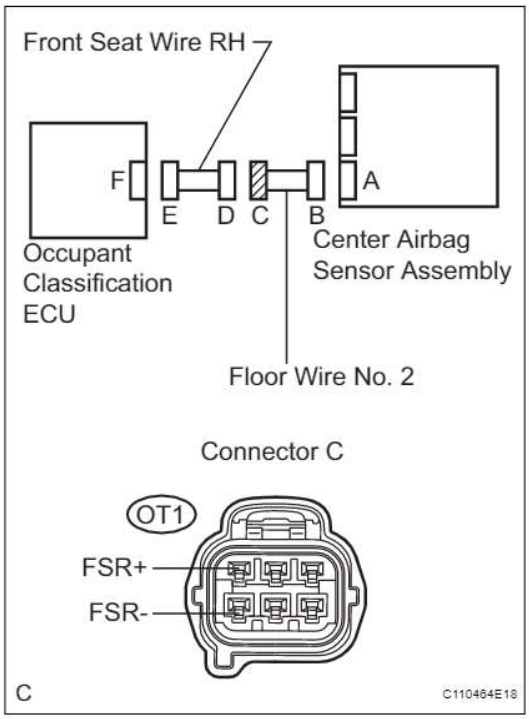
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

16	CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the front seat wire RH connector from the floor wire No. 2.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
OT1-1 (FSR+) - Body ground	Power switch on (IG)	Below 1 V
OT1-4 (FSR-) - Body ground	Power switch on (IG)	Below 1 V

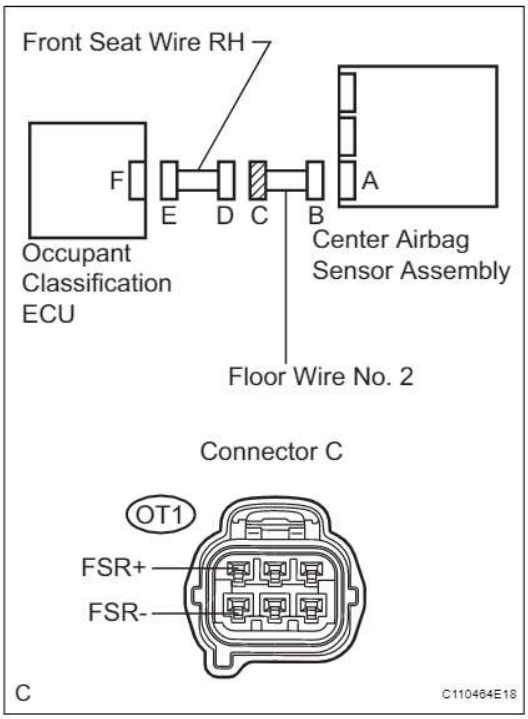
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

17 CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.

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

Standard resistance

Tester Connection	Condition	Specified Condition
OT1-1 (FSR+) - Body ground	Always	1 MΩ or higher
OT1-4 (FSR-) - Body ground	Always	1 MΩ or higher

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

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

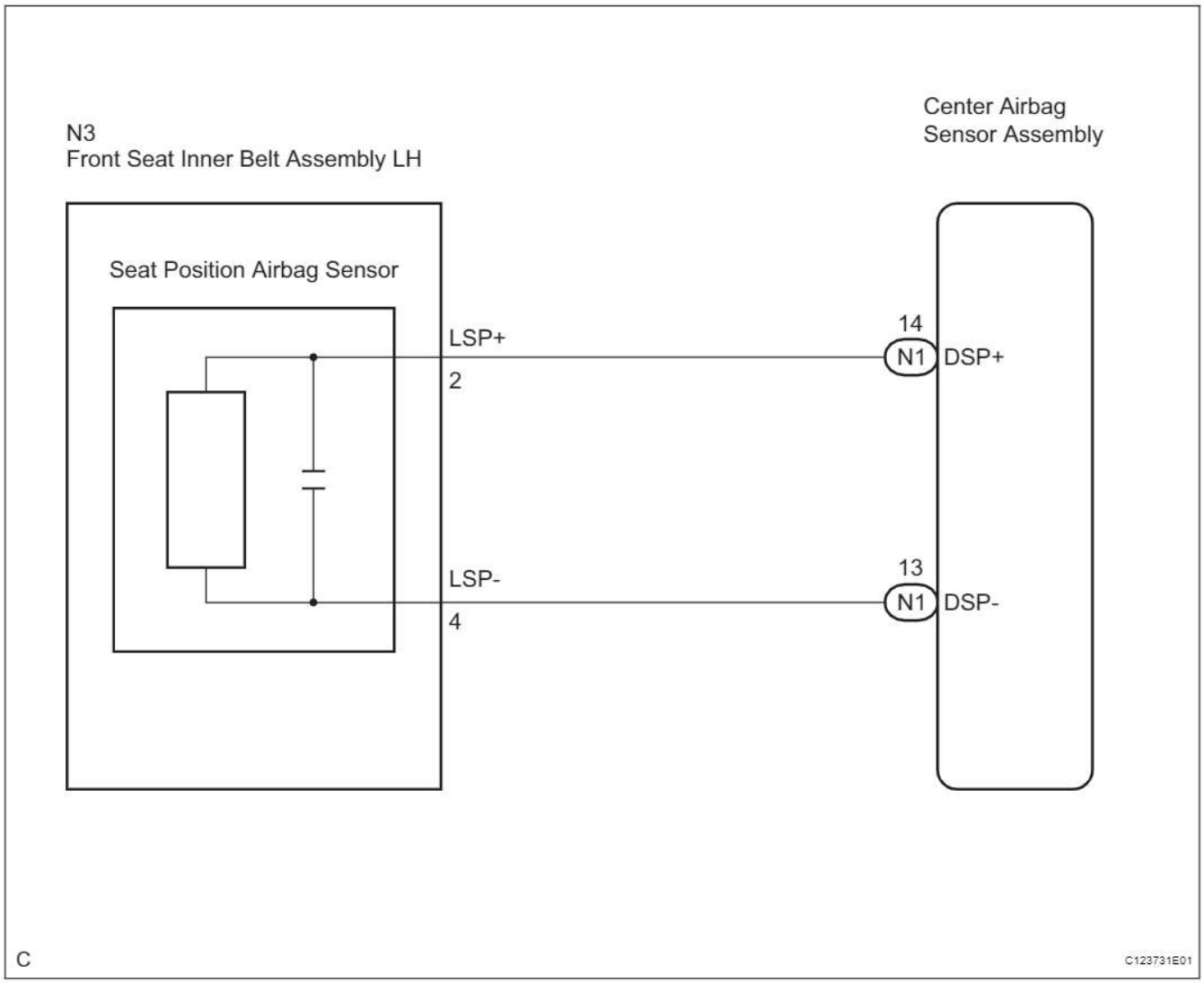
DTC	B1653/35	Seat Position Airbag Sensor Circuit Malfunction

DESCRIPTION

The seat position airbag sensor circuit consists of the center airbag sensor assembly and the seat position airbag sensor.
DTC B1653/35 is recorded when a malfunction is detected in the seat position airbag sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1653/35	• 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 seat position airbag sensor circuit for 2 seconds. • Seat position airbag sensor malfunction • Center airbag sensor assembly malfunction	• Floor wire • Seat position airbag sensor • Center airbag sensor assembly

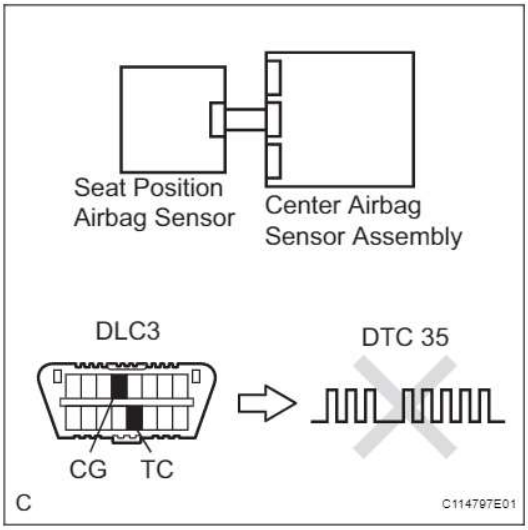
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1 CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-41).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 seat position airbag sensor.

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

3 CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the seat position airbag sensor.
(b) Check that the connectors (on the center airbag sensor assembly side and seat position airbag sensor side) are not damaged.

OK:

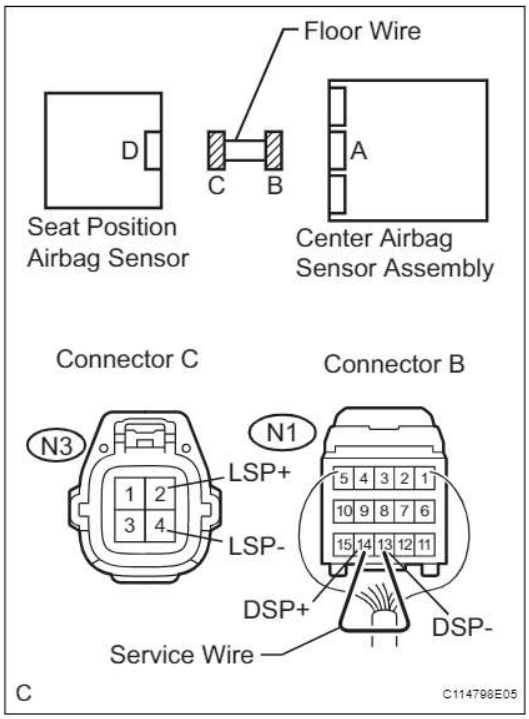
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE**

RS

OK

4 CHECK FLOOR WIRE (OPEN)



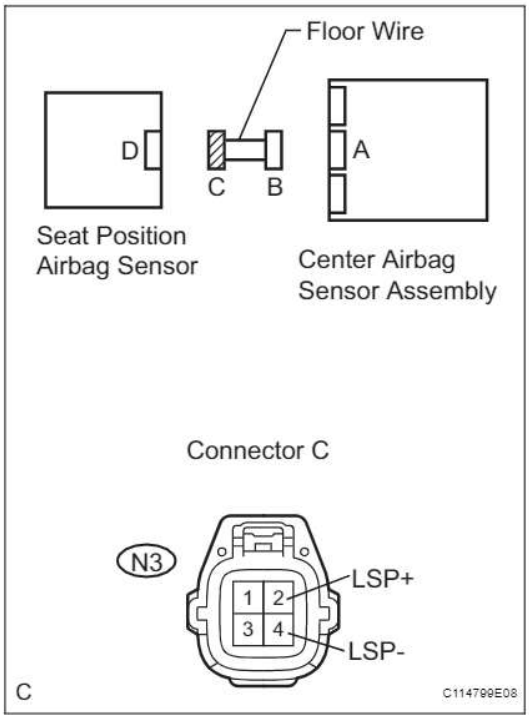
(a) Using a service wire, connect terminals 14 (DSP+) and 13 (DSP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
N3-2 (LSP+) - N3-4 (LSP-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE

OK

5 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

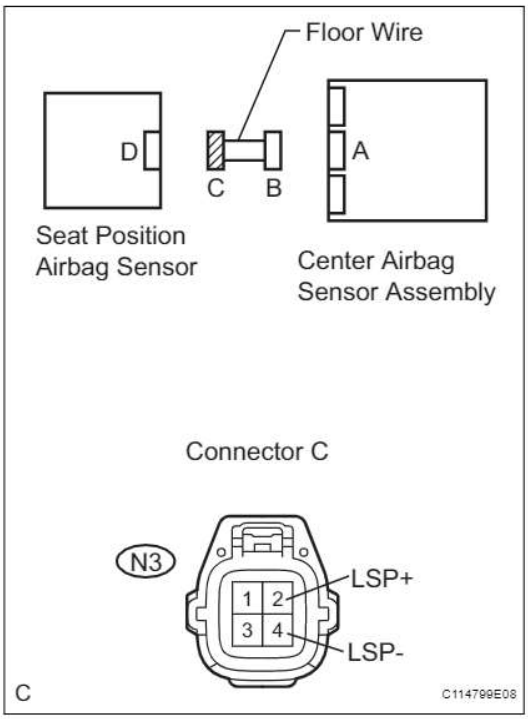
Tester Connection	Condition	Specified Condition
N3-2 (LSP+) - N3-4 (LSP-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

6 CHECK FLOOR WIRE (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

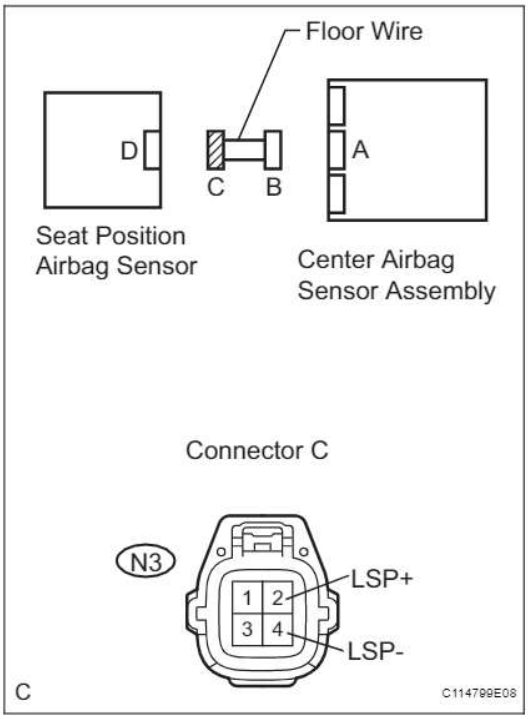
Standard voltage

Tester Connection	Condition	Specified Condition
N3-2 (LSP+) - Body ground	Power switch on (IG)	Below 1 V
N3-4 (LSP-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

7 CHECK FLOOR WIRE (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

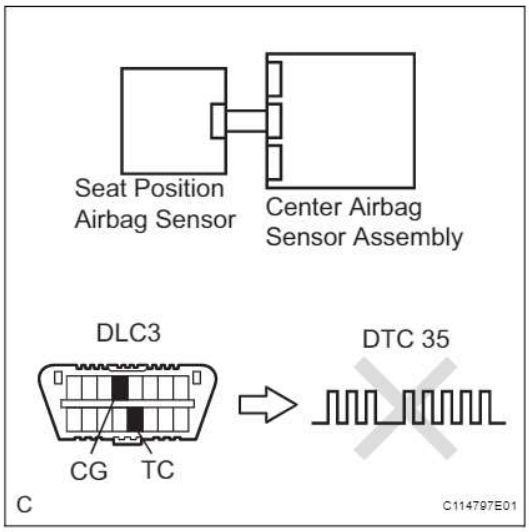
Tester Connection	Condition	Specified Condition
N3-2 (LSP+) - Body ground	Always	1 MΩ or higher
N3-4 (LSP-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

8	CHECK SEAT POSITION AIRBAG SENSOR



(a) Connect the connectors to the center airbag sensor assembly and the seat position airbag sensor.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

9	REPLACE SEAT POSITION AIRBAG SENSOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the seat position airbag sensor (See page RS-439).

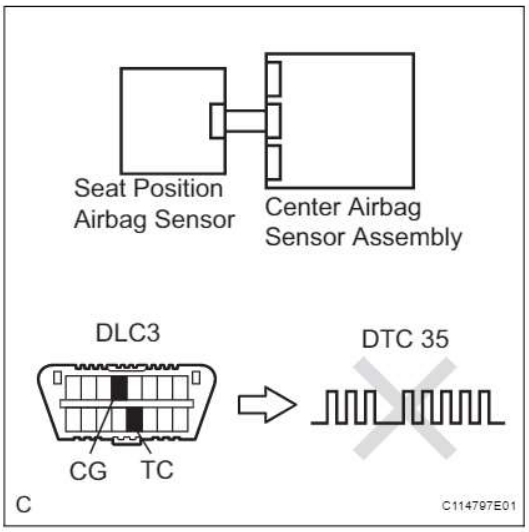
HINT:

Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

10	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

END

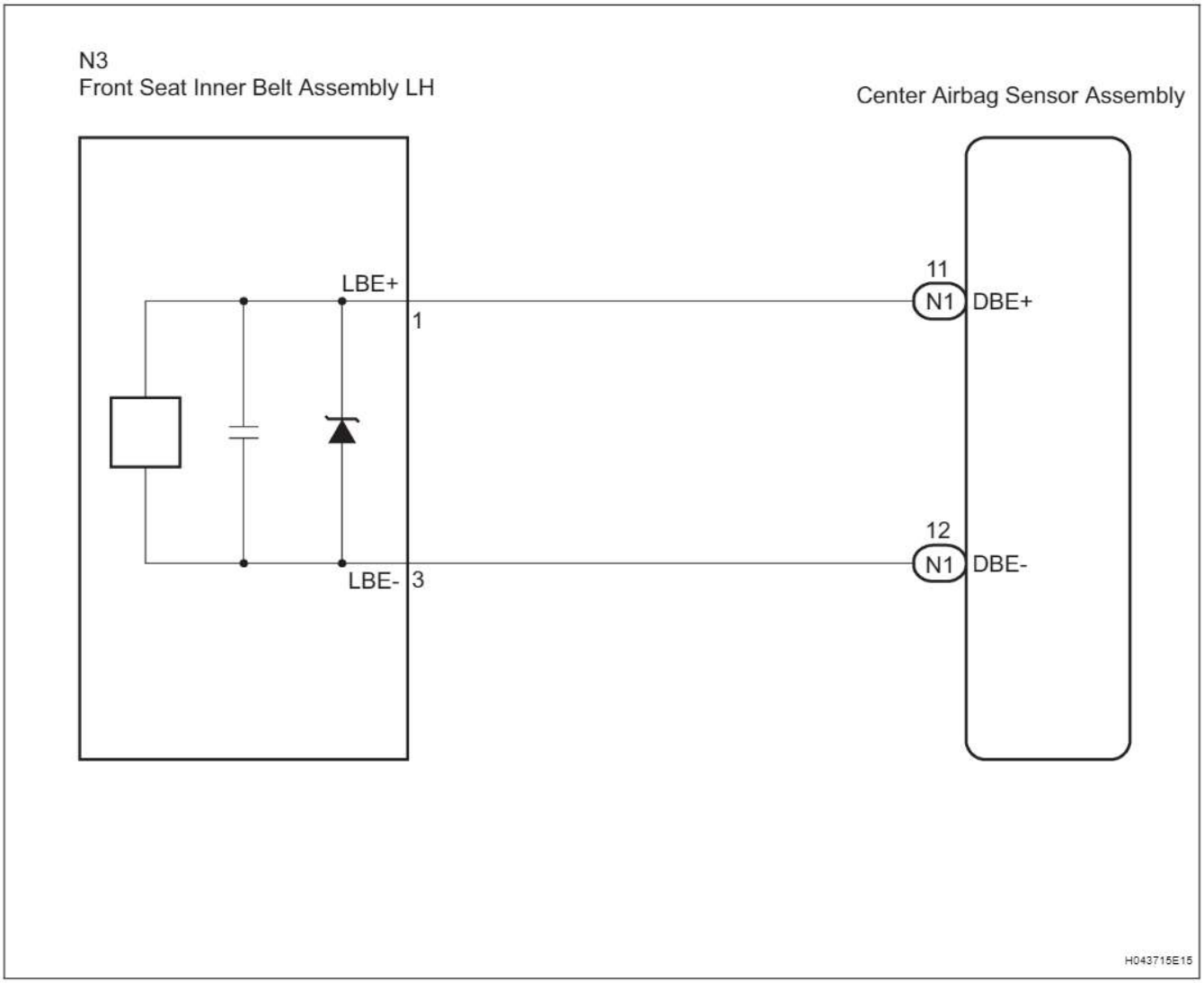
DTC	B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction

DESCRIPTION

The driver side seat belt buckle switch circuit consists of the center airbag sensor assembly and the front seat inner belt assembly LH.
DTC B1655/37 is recorded when a malfunction is detected in the driver side seat belt buckle switch circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1655/37	• 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 driver side seat belt buckle switch circuit for 2 seconds. • Front seat inner belt assembly LH malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat inner belt assembly LH (Driver side seat belt buckle switch) • Center airbag sensor assembly

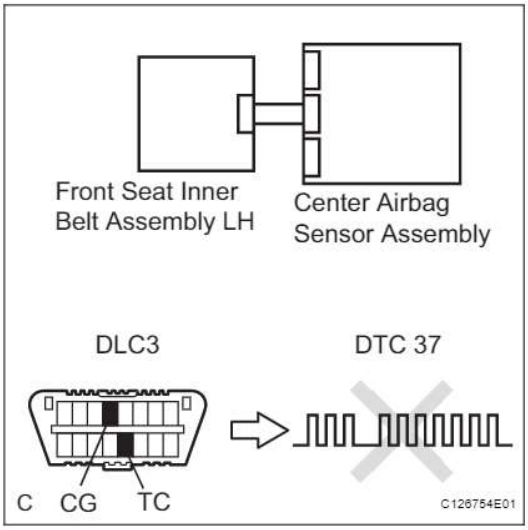
WIRING DIAGRAM



RS

INSPECTION PROCEDURE

1 CHECK DTC



(a) Turn the power switch on (IG), and wait for at least 60 seconds.
(b) Clear the DTCs stored in the memory (See page RS-41).
(c) Turn the power switch off.
(d) Turn the power switch on (IG), and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-44).

OK:

DTC B1655/37 is not output.

HINT:

Codes other than DTC B1655/37 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2 CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 front seat inner belt assembly LH.

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

3 CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the front seat inner belt assembly LH.
(b) Check that the connectors (on the center airbag sensor assembly side and front seat inner belt assembly LH side) are not damaged.

OK:

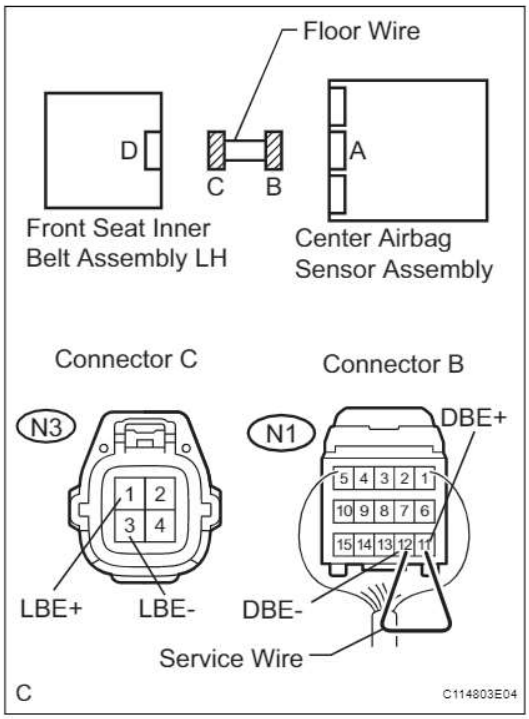
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE**

RS

OK

4 CHECK FLOOR WIRE (OPEN)



(a) Using a service wire, connect terminals 11 (DBE+) and 12 (DBE-) of connector B.

NOTICE:

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

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

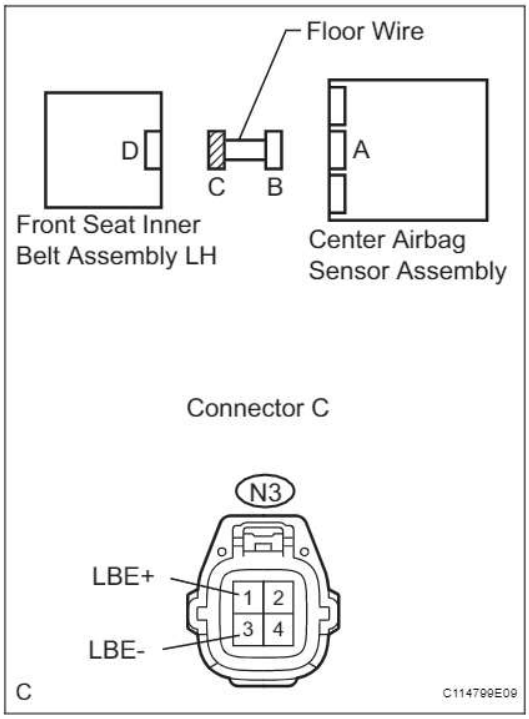
Standard resistance

Tester Connection	Condition	Specified Condition
N3-1 (LBE+) - N3-3 (LBE-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE

OK

5 CHECK FLOOR WIRE (SHORT)



(a) Disconnect the service wire from connector B.

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

Standard resistance

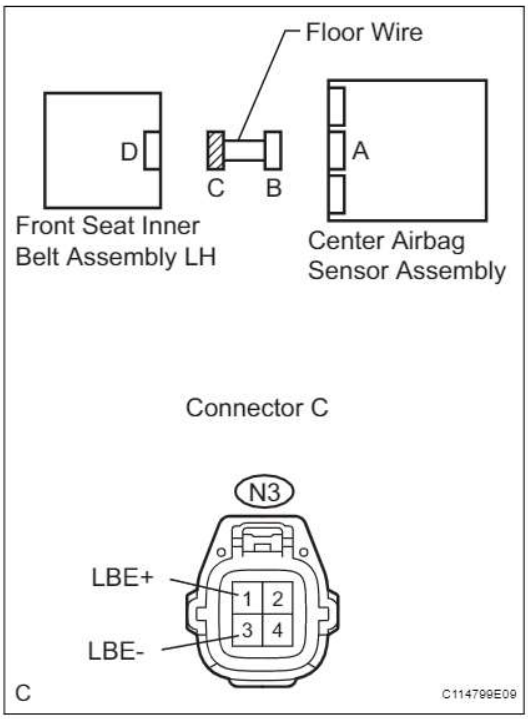
Tester Connection	Condition	Specified Condition
N3-1 (LBE+) - N3-3 (LBE-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

6 CHECK FLOOR WIRE (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

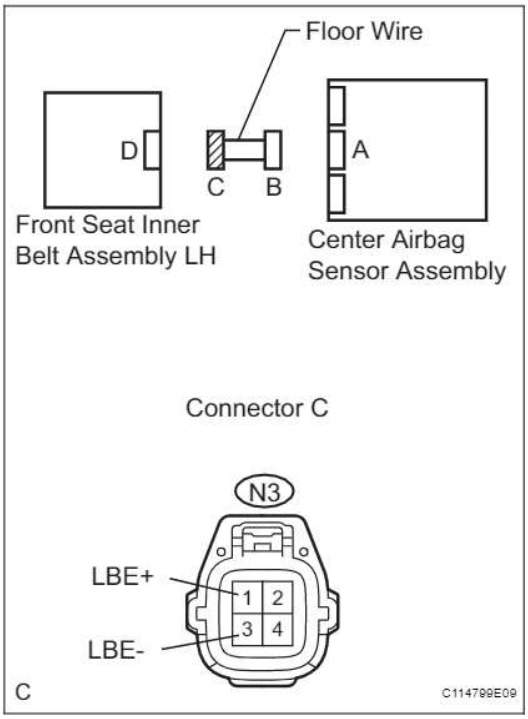
Standard voltage

Tester Connection	Condition	Specified Condition
N3-1 (LBE+) - Body ground	Power switch on (IG)	Below 1 V
N3-3 (LBE-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

7 CHECK FLOOR WIRE (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance

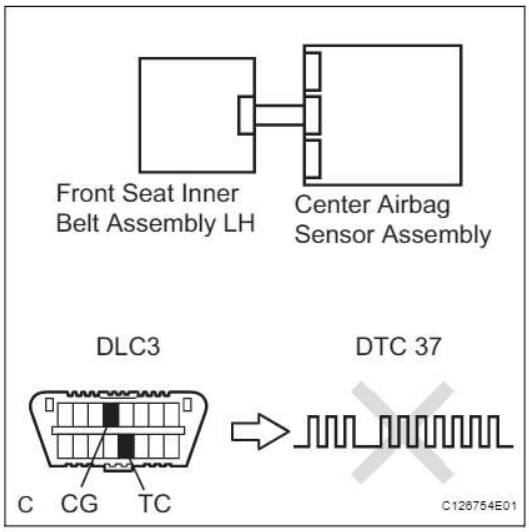
Tester Connection	Condition	Specified Condition
N3-1 (LBE+) - Body ground	Always	1 MΩ or higher
N3-3 (LBE-) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

8	CHECK FRONT SEAT INNER BELT ASSEMBLY LH



(a) Connect the connector to the center airbag sensor assembly and the front seat inner belt assembly LH.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1655/37 is not output.

HINT:

Codes other than DTC B1655/37 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

9	REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat inner belt assembly LH (See page SB-16).

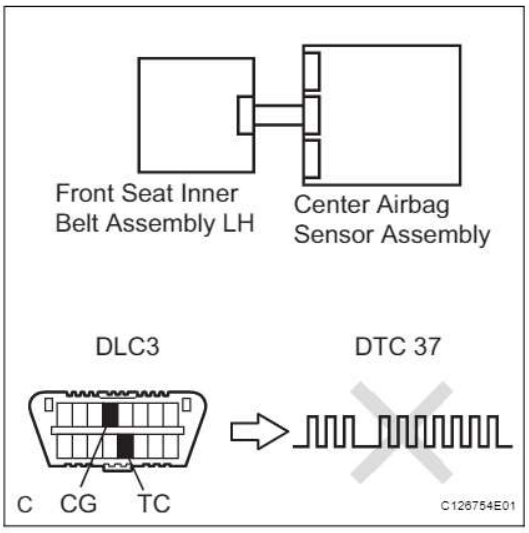
HINT:

Perform inspection using parts from a normal vehicle if possible.

NEXT

RS

10	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG), and wait for at least 60 seconds.
(c) Clear the DTCs stored in the memory (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Check the DTCs (See page RS-41).

OK:

DTC B1655/37 is not output.

HINT:

Codes other than DTC B1655/37 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK →

END

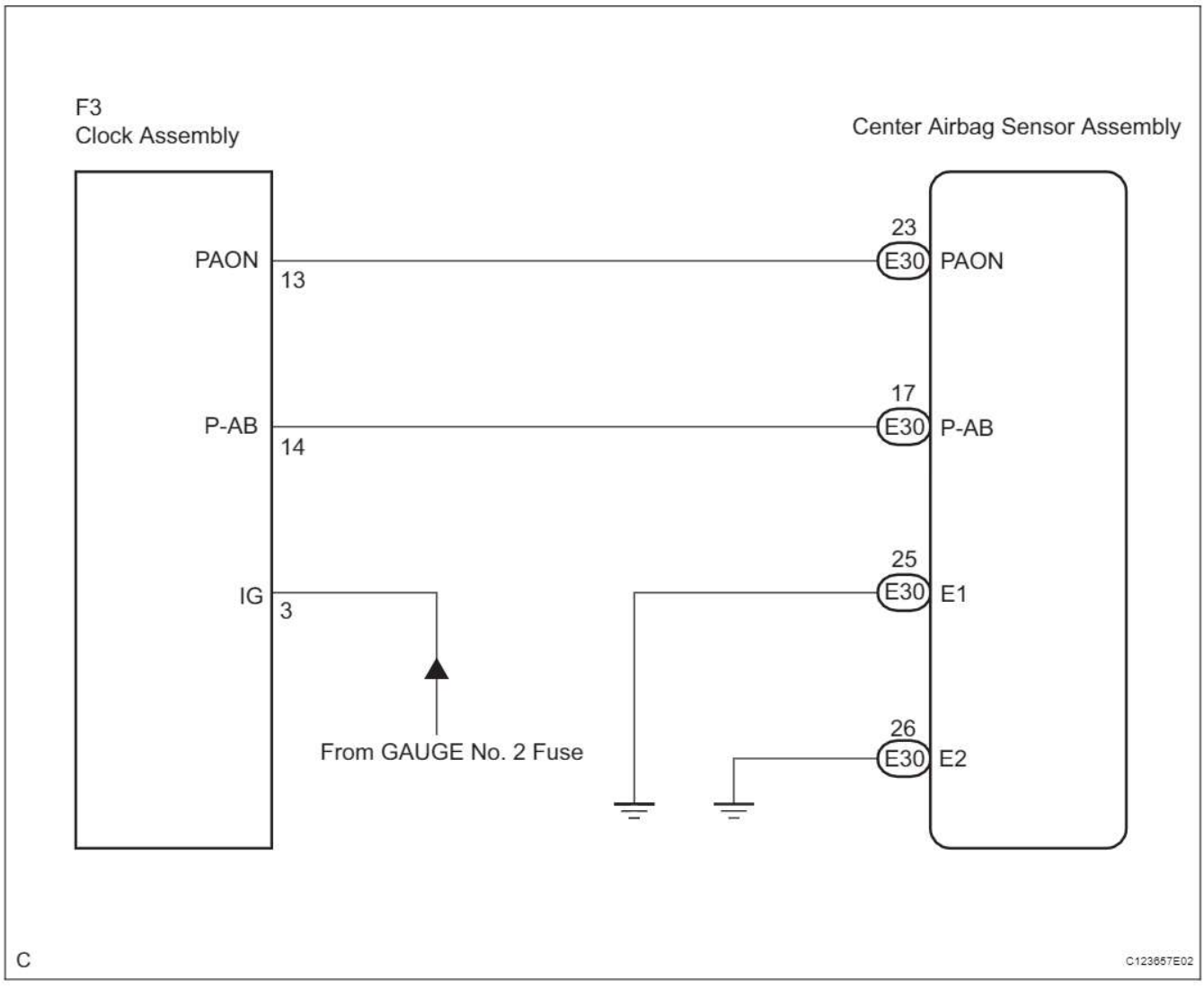
DTC	B1660/43	Passenger Airbag ON / OFF Indicator Circuit Malfunction

DESCRIPTION

The passenger airbag ON/OFF indicator circuit consists of the center airbag sensor assembly and the clock assembly.
The passenger airbag ON/OFF indicator indicates the operation condition of the front passenger airbag assembly and the front seat side airbag assembly RH.
DTC B1660/43 is recorded when a malfunction is detected in the passenger airbag ON/OFF indicator circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1660/43	• 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 passenger airbag ON/OFF indicator circuit for 2 seconds. • Clock assembly malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire No. 2 • Clock assembly (Passenger airbag ON/OFF indicator) • Center airbag sensor assembly

WIRING DIAGRAM

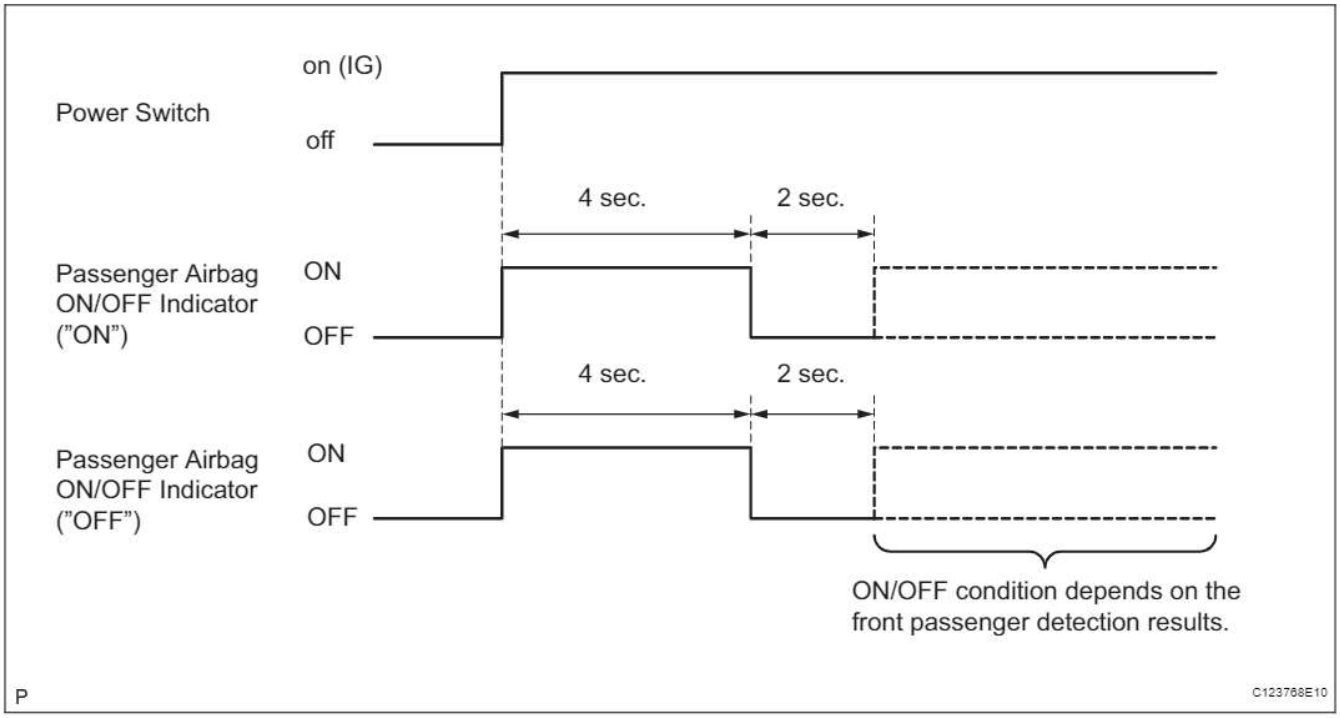


RS

INSPECTION PROCEDURE

1	CHECK PASSENGER AIRBAG ON/OFF INDICATOR CONDITION

(a) Turn the power switch on (IG).
(b) Check the passenger airbag ON/OFF indicator operation.
HINT:
Refer to the normal condition of the passenger airbag ON/OFF indicator (See page RS-33).



Result

ON/OFF Indicator Illumination	Proceed to
Always ON	A
OFF	B

B → Go to step 10

A

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 clock assembly.
OK:
The connectors are properly connected.

RS

NG → CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1

OK

3 CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the clock assembly.
(b) Check that the connectors (on the center airbag sensor assembly side and clock assembly side) are not damaged.
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE WIRE HARNESS

OK

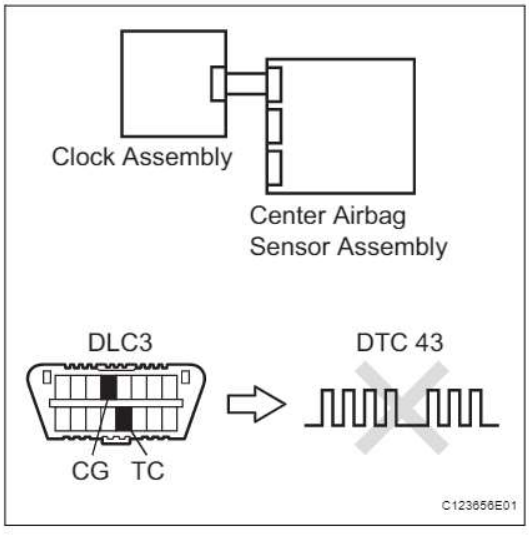
4 CHECK PASSENGER AIRBAG ON/OFF INDICATOR

(a) Connect the connector to the clock assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG).
(d) Check the passenger airbag ON/OFF indicator operation.
OK:
The passenger airbag ON/OFF indicator does not come on.

NG → Go to step 6

OK

5 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connector 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 power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-41).
OK:
DTC B1660/43 is not output.
HINT:
Codes other than DTC B1660/43 may be output at this time, but they are not related to this check.

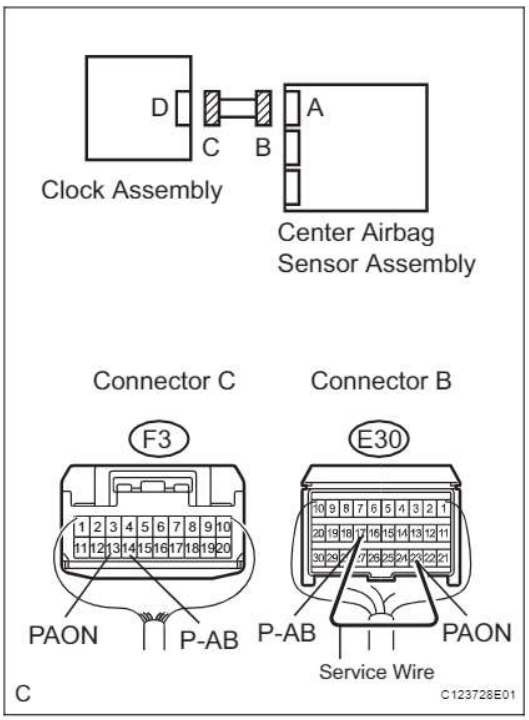
RS

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

6 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (OPEN)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the clock assembly.
(d) Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(e) Measure the resistance according to the value(s) in the table below.
Standard resistance

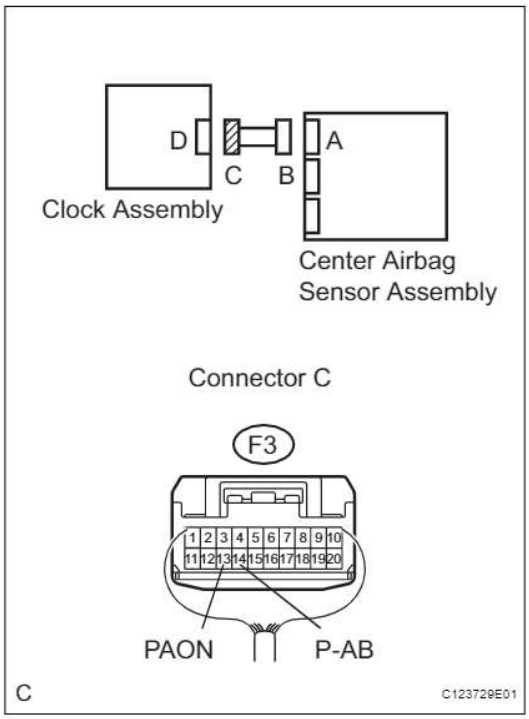
Tester Connection	Condition	Specified Condition
F3-13 (PAON) - F3-14 (P-AB)	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS

OK

RS

7 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.

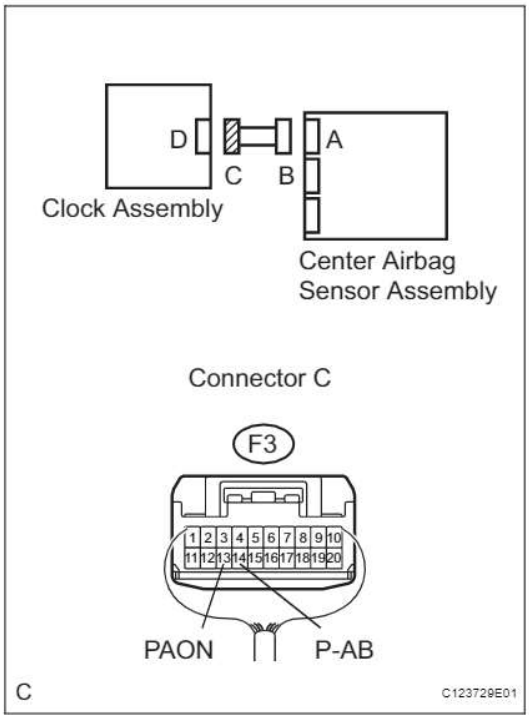
Standard resistance

Tester Connection	Condition	Specified Condition
F3-13 (PAON) - F3-14 (P-AB)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE WIRE HARNESS

OK

8 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT TO GROUND)



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

Standard resistance

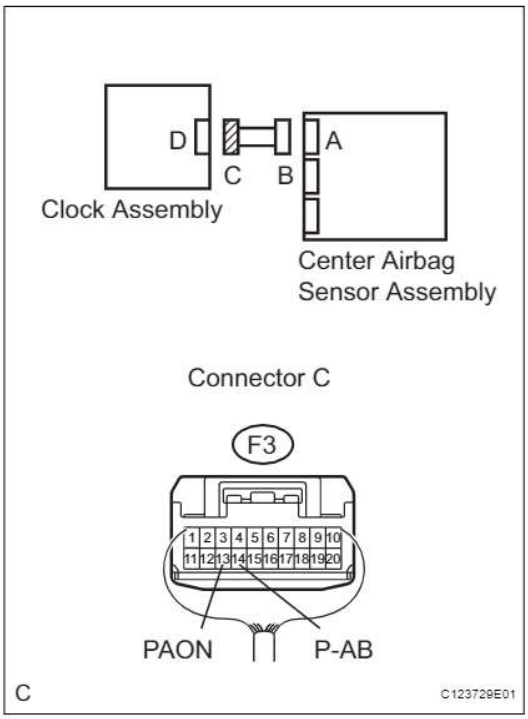
Tester Connection	Condition	Specified Condition
F3-13 (PAON) - Body ground	Always	1 MΩ or higher
F3-14 (P-AB) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE WIRE HARNESS

OK

RS

9	CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
F3-13 (PAON) - Body ground	Power switch on (IG)	Below 1 V
F3-14 (P-AB) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE WIRE HARNESS

OK

REPLACE CLOCK ASSEMBLY (See page OT-5)

10	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 clock assembly.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

11	CHECK CONNECTORS

(a) Disconnect the connectors from the center airbag sensor assembly and the clock assembly.
(b) Check that the connectors (on the center airbag sensor assembly side and clock assembly side) are not damaged.

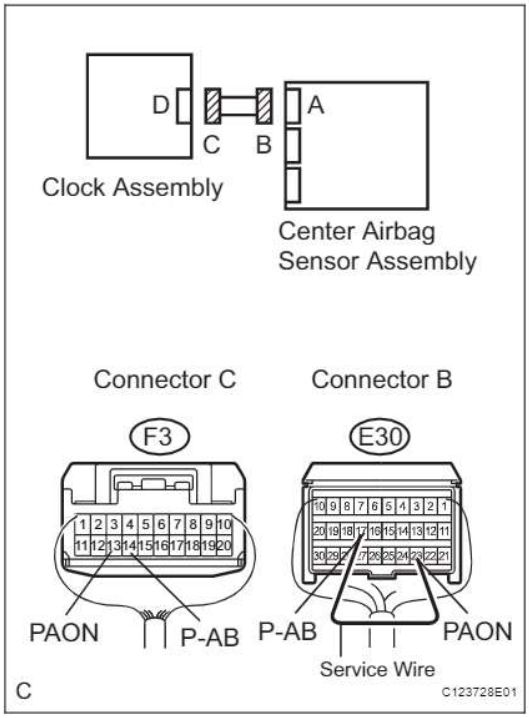
RS

OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

12 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (OPEN)



(a) Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.

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

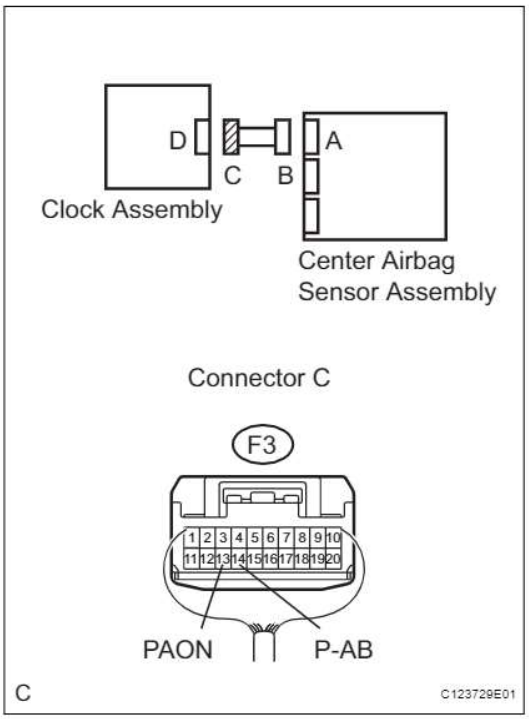
Tester Connection	Condition	Specified Condition
F3-13 (PAON) - F3-14 (P-AB)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

RS

13 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.

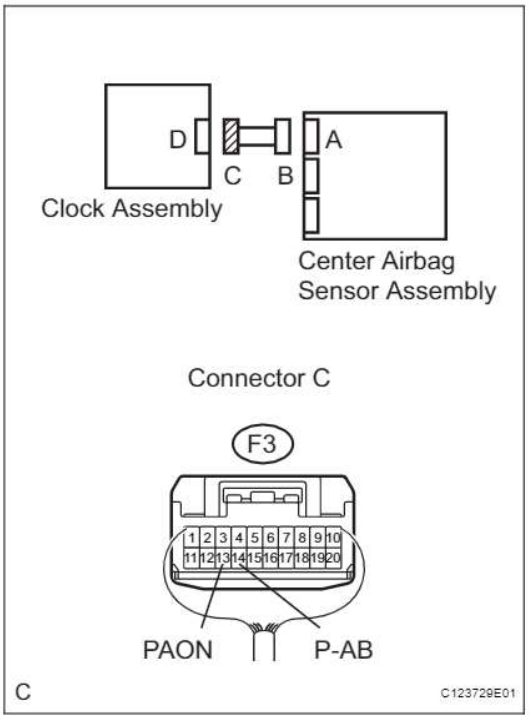
Standard resistance

Tester Connection	Condition	Specified Condition
F3-13 (PAON) - F3-14 (P-AB)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE WIRE HARNESS

OK

14 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT TO GROUND)



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

Standard resistance

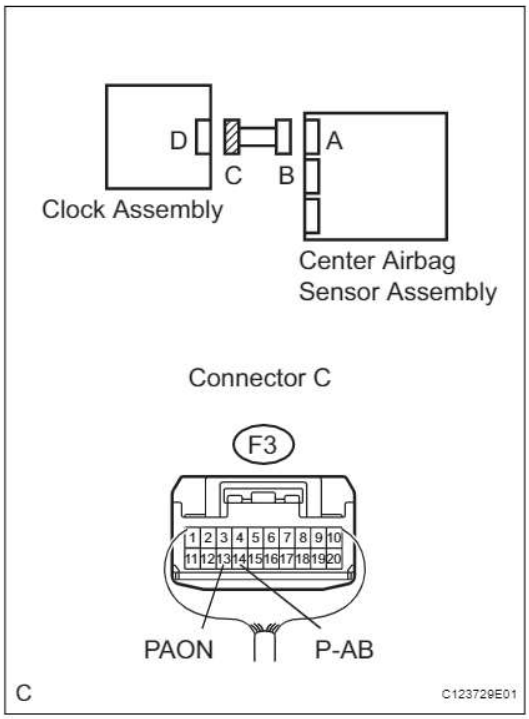
Tester Connection	Condition	Specified Condition
F3-13 (PAON) - Body ground	Always	1 MΩ or higher
F3-14 (P-AB) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE WIRE HARNESS

OK

RS

15 CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT (SHORT TO B+)



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the power switch on (IG).
(c) Measure the voltage according to the value(s) in the table below.

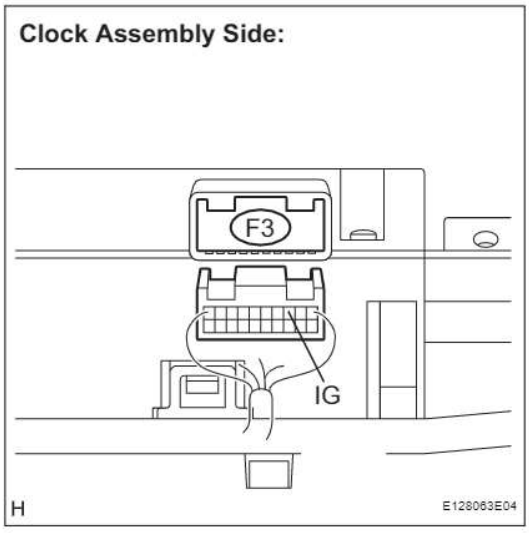
Standard voltage

Tester Connection	Condition	Specified Condition
F3-13 (PAON) - Body ground	Power switch on (IG)	Below 1 V
F3-14 (P-AB) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE WIRE HARNESS

OK

16 CHECK CLOCK ASSEMBLY (SOURCE VOLTAGE)



(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 power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage

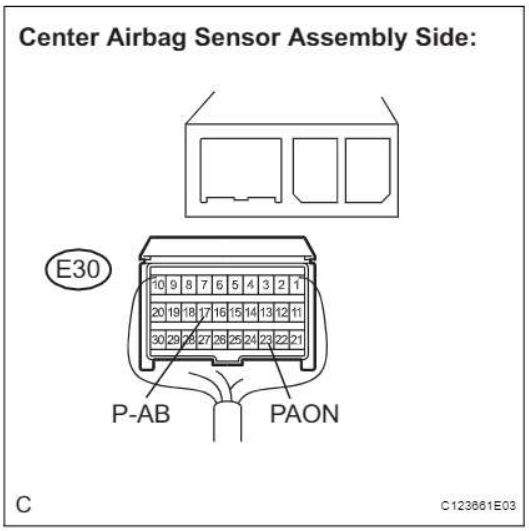
Tester Connection	Condition	Specified Condition
F3-3 (IG) -Body ground	Power switch on (IG)	10 to 14 V

NG → REPAIR OR REPLACE WIRE HARNESS (CLOCK ASSEMBLY - BATTERY) OR BATTERY

OK

RS

17 CHECK PASSENGER AIRBAG ON / OFF INDICATOR



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the clock assembly.
(d) Disconnect the connectors from the center airbag sensor assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG).
(g) Check the indicator according to the conditions in the table below.

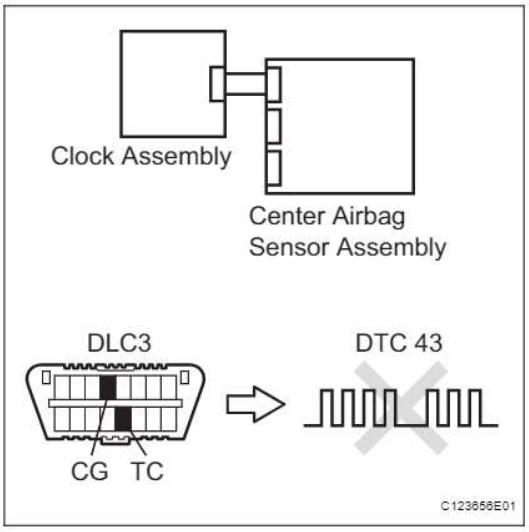
Result

Tester Connection	Condition	Passenger airbag ON/ OFF indicator
E30-23 (PAON) - Body ground	Power switch on (IG)	"ON" comes on
E30-17 (P-AB) - Body ground	Power switch on (IG)	"OFF" comes on

NG → **REPLACE CLOCK ASSEMBLY (See page OT-5)**

OK

18 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the power switch off.
(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) Connect the negative (-) terminal cable to the battery and wait for at least 2 seconds.
(e) Turn the power switch on (IG), and wait for at least 60 seconds.
(f) Clear the DTCs stored in the memory (See page RS-41).
(g) Turn the power switch off.
(h) Turn the power switch on (IG), and wait for at least 60 seconds.
(i) Check for DTCs (See page RS-41).

OK:

DTC B1660/43 is not output.

HINT:

Codes other than DTC B1660/43 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

RS

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

DTC	B1800/51	Short in Driver Side Squib Circuit
DTC	B1801/51	Open in Driver Side Squib Circuit
DTC	B1802/51	Short to GND in Driver Side Squib Circuit
DTC	B1803/51	Short to B+ in Driver Side Squib Circuit

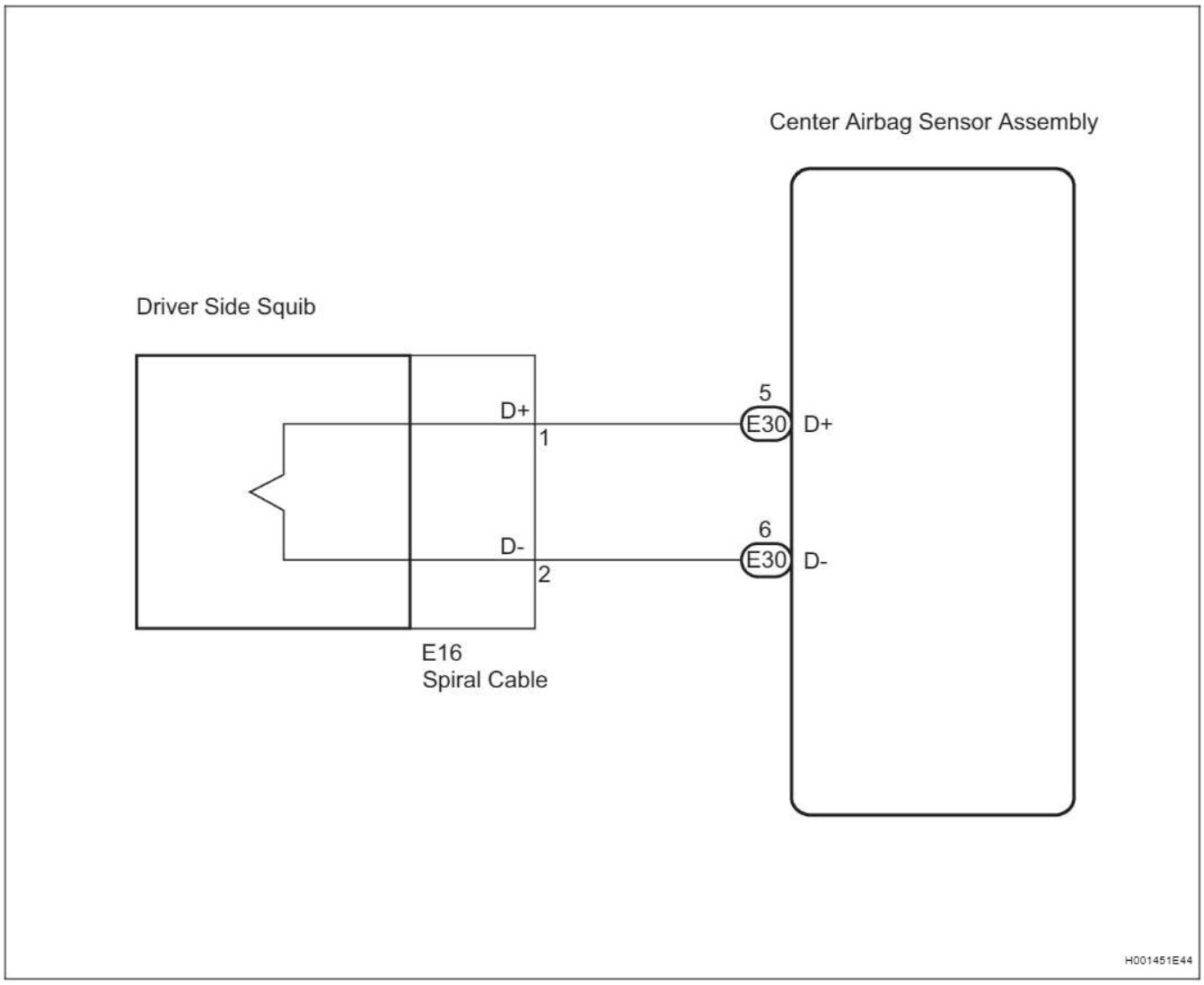
DESCRIPTION

The driver side squib circuit consists of the center airbag sensor assembly, the spiral cable and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the driver side squib circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1800/51	• The center airbag sensor assembly receives a line short circuit signal 5 times in the driver side squib circuit during primary check. • Driver side squib malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1801/51	• The center airbag sensor assembly receives an open circuit signal in the driver side squib circuit for 2 seconds. • Driver side squib malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1802/51	• The center airbag sensor assembly receives a short circuit to ground signal in the driver side squib circuit for 0.5 seconds. • Driver side squib malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1803/51	• The center airbag sensor assembly receives a short circuit to B+ signal in the driver side squib circuit for 0.5 seconds. • Driver side squib malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



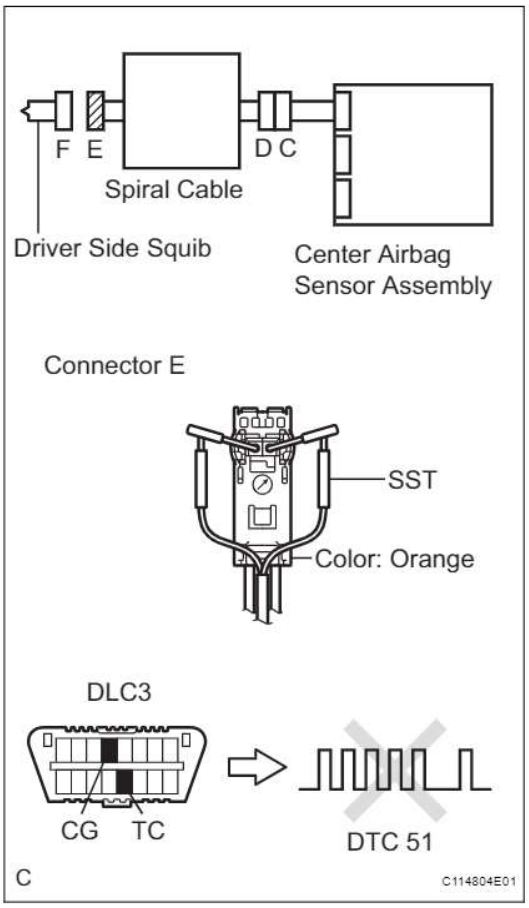
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting the "check mode" (signal check) with the intelligent tester (See page RS-44).
- 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-44).

RS

1	CHECK STEERING PAD (DRIVER SIDE SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the steering pad.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector E (orange connector).

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

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1800, B1801, B1802, B1803, or 51 is not output.

HINT:
Codes other than DTC B1800, B1801, B1802, B1803, and 51 may be output at this time, but they are not related to this check.

OK → **REPLACE STEERING PAD (See page RS-344)**

NG

2	CHECK CONNECTOR

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

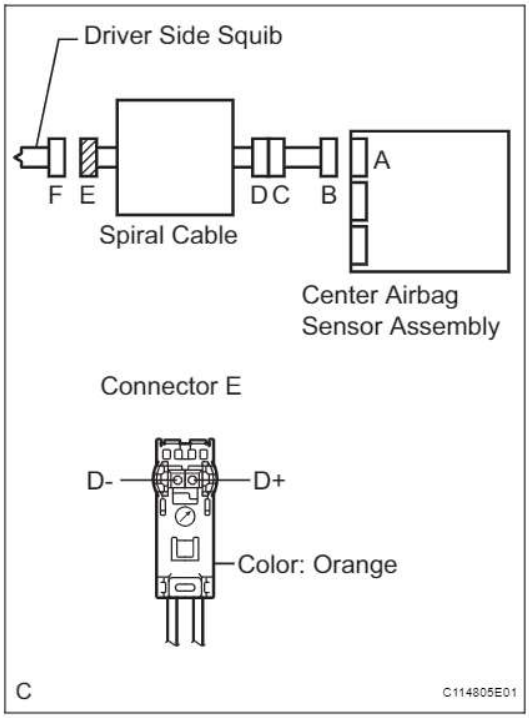
OK:
The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

RS

NG → REPLACE SPIRAL CABLE (See page RS-357)

OK

3 CHECK DRIVER SIDE SQUIB CIRCUIT



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.
 (1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
 (2) Turn the power switch on (IG).
 (3) Measure the voltage according to the value(s) in the table below.
 Standard voltage

Tester Connection	Condition	Specified Condition
D+ - Body ground	Power switch on (IG)	Below 1 V
D- - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
 (1) Turn the power switch off.
 (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
 (3) Measure the resistance according to the value(s) in the table below.
 Standard resistance

Tester Connection	Condition	Specified Condition
D+ - D-	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
 (1) Measure the resistance according to the value(s) in the table below.
 Standard resistance

Tester Connection	Condition	Specified Condition
D+ - Body ground	Always	1 MΩ or higher
D- - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
 (1) Release the activation prevention mechanism built into connector B (See page RS-33).
 (2) Measure the resistance according to the value(s) in the table below.
 Standard resistance

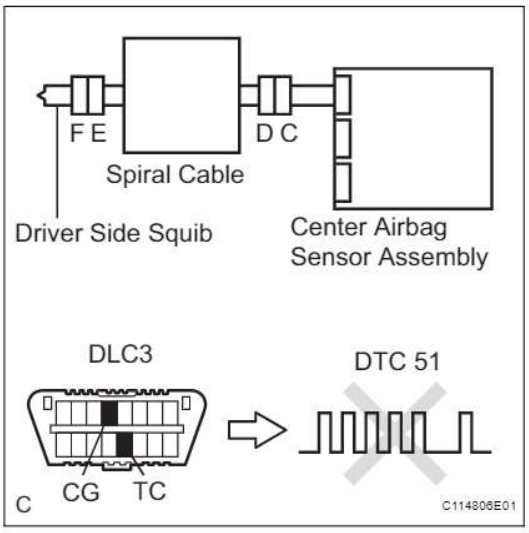
Tester Connection	Condition	Specified Condition
D+ - D-	Always	1 MΩ or higher

NG → Go to step 5

OK

RS

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the steering pad and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1800, B1801, B1802, B1803, or 51 is not output.

HINT:

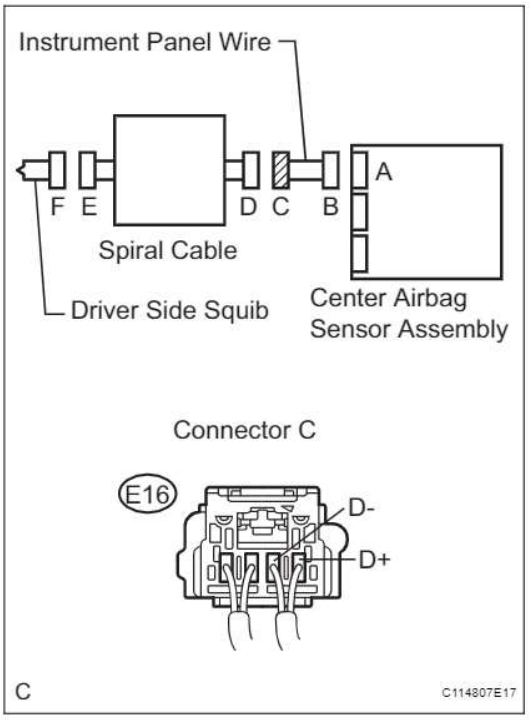
Codes other than DTC B1800, B1801, B1802, B1803, and 51 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

5 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 spiral cable.
(c) Check for a short to B+ in the circuit.
  (1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
  (2) Turn the power switch on (IG).
  (3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
E16-1 (D+) - Body ground	Power switch on (IG)	Below 1 V
E16-2 (D-) - Body ground	Power switch on (IG)	Below 1 V

(d) Check for an open in the circuit.
  (1) Turn the power switch off.
  (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

RS

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

Standard resistance

Tester Connection	Condition	Specified Condition
E16-1 (D+) - E16-2 (D-)	Always	Below 1 Ω

(e) Check for a short to ground in the circuit.

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

Standard resistance

Tester Connection	Condition	Specified Condition
E16-1 (D+) - Body ground	Always	1 MΩ or higher
E16-2 (D-) - Body ground	Always	1 MΩ or higher

(f) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector B (See page RS-33).

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

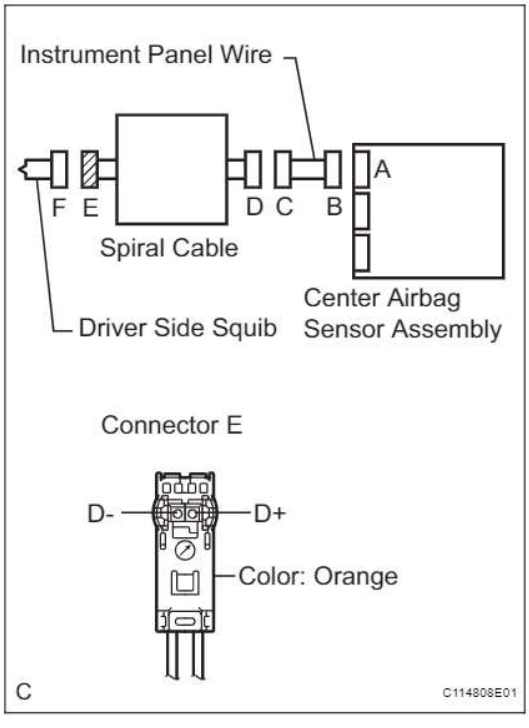
Standard resistance

Tester Connection	Condition	Specified Condition
E16-1 (D+) - E16-2 (D-)	Always	1 MΩ or higher

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

OK

6 CHECK SPIRAL CABLE



(a) Check for a short to B+ in the circuit.

(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
D+ - Body ground	Power switch on (IG)	Below 1 V
D- - Body ground	Power switch on (IG)	Below 1 V

(b) Check for an open in the circuit.

(1) Turn the power switch off.

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

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

Standard resistance

Tester Connection	Condition	Specified Condition
D+ - D-	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.

RS

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

Standard resistance

Tester Connection	Condition	Specified Condition
D+ - Body ground	Always	1 MΩ or higher
D- - Body ground	Always	1 MΩ or higher

(d) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector D (See page RS-33).

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

Standard resistance

Tester Connection	Condition	Specified Condition
D+ - D-	Always	1 MΩ or higher

NG → **REPLACE SPIRAL CABLE (See page RS-357)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

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

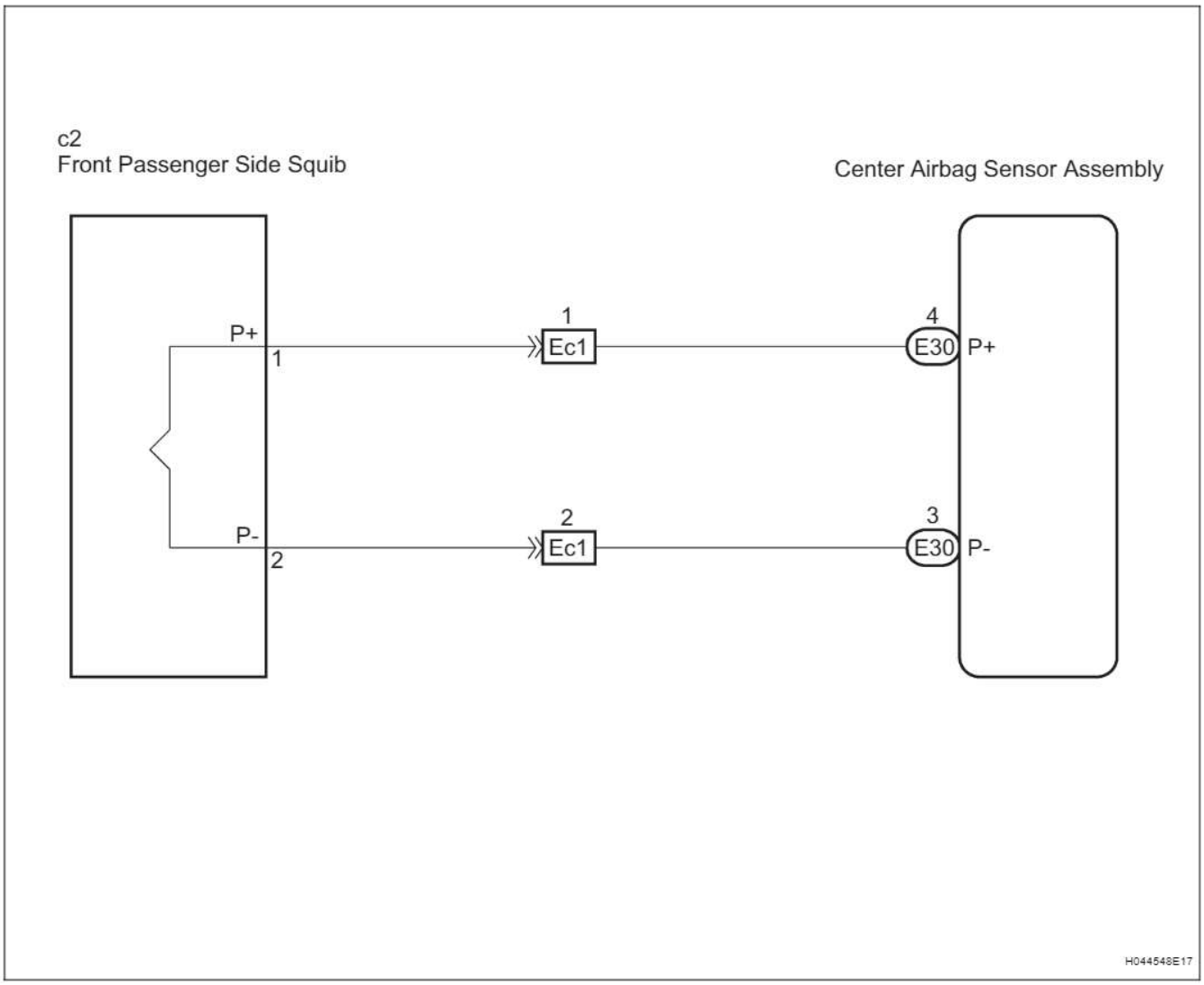
DESCRIPTION

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 signal 5 times in the front passenger side squib circuit during primary check. • 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

RS

WIRING DIAGRAM



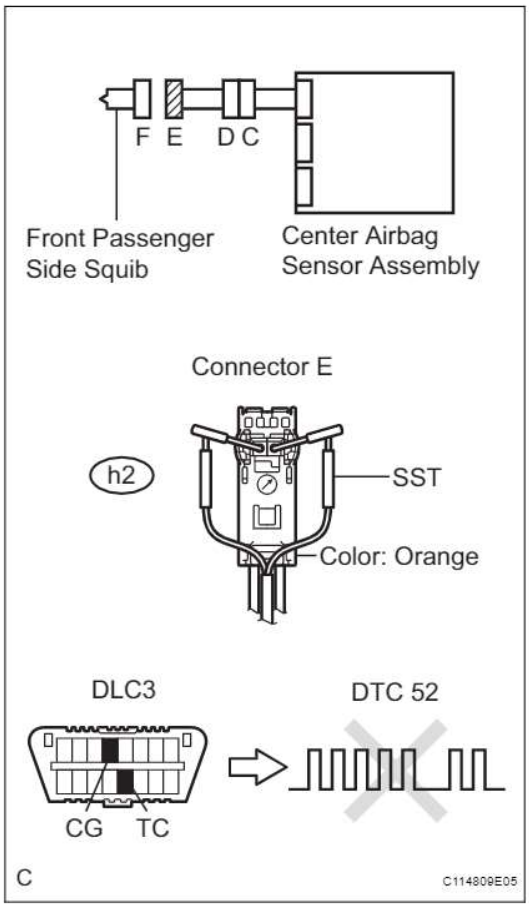
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

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



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the front passenger airbag assembly.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector E (orange connector).

CAUTION:
Never connect the tester to the front passenger airbag assembly (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1805, B1806, B1807, B1808, or 52 is not output.

HINT:
Codes other than DTC B1805, B1806, B1807, B1808, and 52 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (See page RS-379)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector E.
(d) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

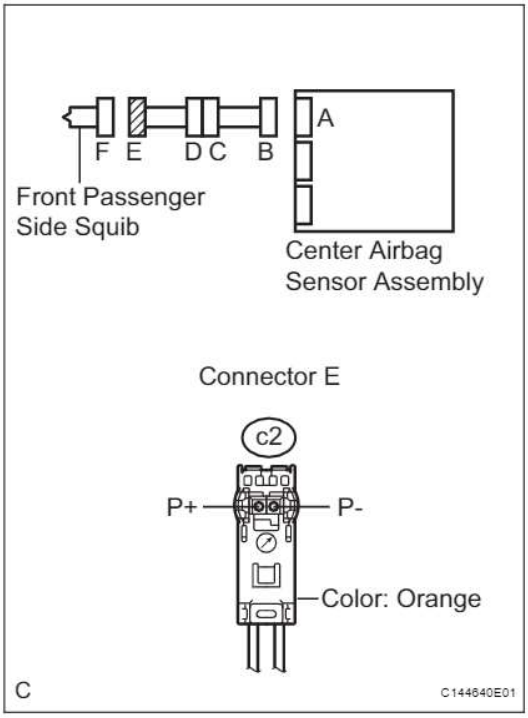
RS

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 ASSEMBLY**

OK

3 CHECK FRONT PASSENGER SIDE SQUIB CIRCUIT



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
c2-1 (P+) - Body ground	Power switch on (IG)	Below 1 V
c2-2 (P-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
c2-1 (P+) - c2-2 (P-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
c2-1 (P+) - Body ground	Always	1 MΩ or higher
c2-2 (P-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

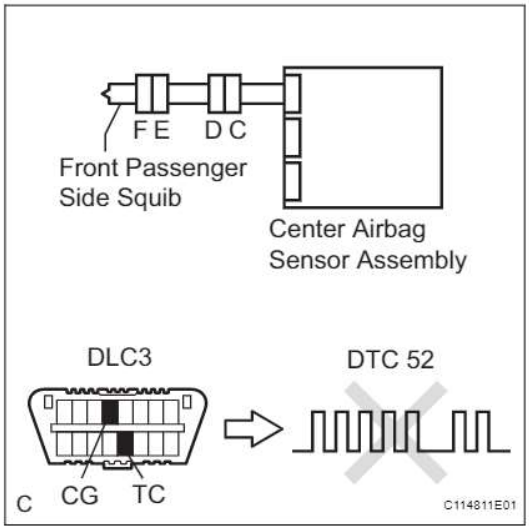
Tester Connection	Condition	Specified Condition
c2-1 (P+) - c2-2 (P-)	Always	1 MΩ or higher

NG → **Go to step 5**

RS

OK

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front passenger airbag assembly and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1805, B1806, B1807, B1808, or 52 is not output.

HINT:

Codes other than DTC B1805, B1806, B1807, B1808, and 52 may be output at this time, but they are not related to this check.

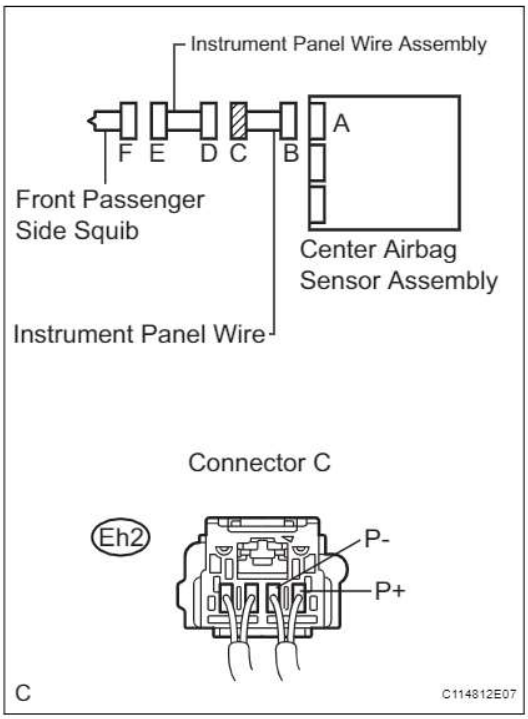
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

5 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 assembly.

(c) Check for a short to B+ in the circuit.

(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
Ec1-1 (P+) - Body ground	Power switch on (IG)	Below 1 V
Ec1-2 (P-) - Body ground	Power switch on (IG)	Below 1 V

(d) Check for an open in the circuit.

(1) Turn the power switch off.

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

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

Standard resistance

Tester Connection	Condition	Specified Condition
Ec1-1 (P+) - Ec1-2 (P-)	Always	Below 1 Ω

(e) Check for a short to ground in the circuit.

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

Standard resistance

Tester Connection	Condition	Specified Condition
Ec1-1 (P+) - Body ground	Always	1 MΩ or higher
Ec1-2 (P-) - Body ground	Always	1 MΩ or higher

(f) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector B (See page RS-33).

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

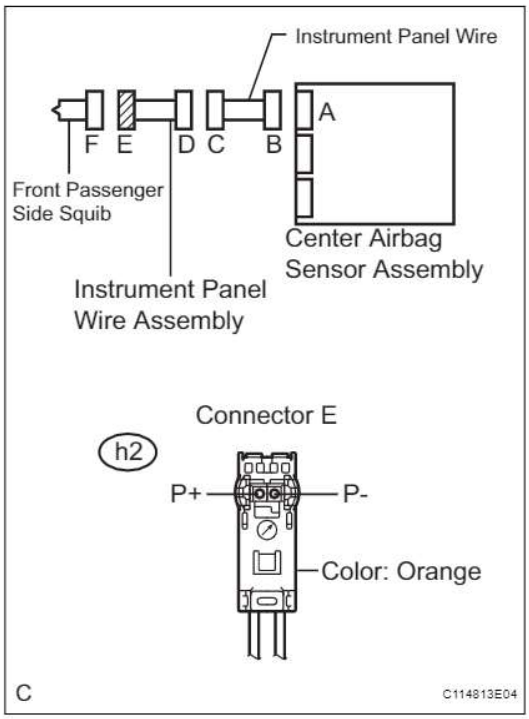
Standard resistance

Tester Connection	Condition	Specified Condition
Ec1-1 (P+) - Ec1-2 (P-)	Always	1 MΩ or higher

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

OK

6 CHECK INSTRUMENT PANEL WIRE ASSEMBLY



(a) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
c2-1 (P+) - Body ground	Power switch on (IG)	Below 1 V
c2-2 (P-) - Body ground	Power switch on (IG)	Below 1 V

(b) Check for a open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c2-1 (P+) - c2-2 (P-)	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c2-1 (P+) - Body ground	Always	1 MΩ or higher
c2-2 (P-) - Body ground	Always	1 MΩ or higher

(d) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector D (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c2-1 (P+) - c2-2 (P-)	Always	1 MΩ or higher

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

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

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

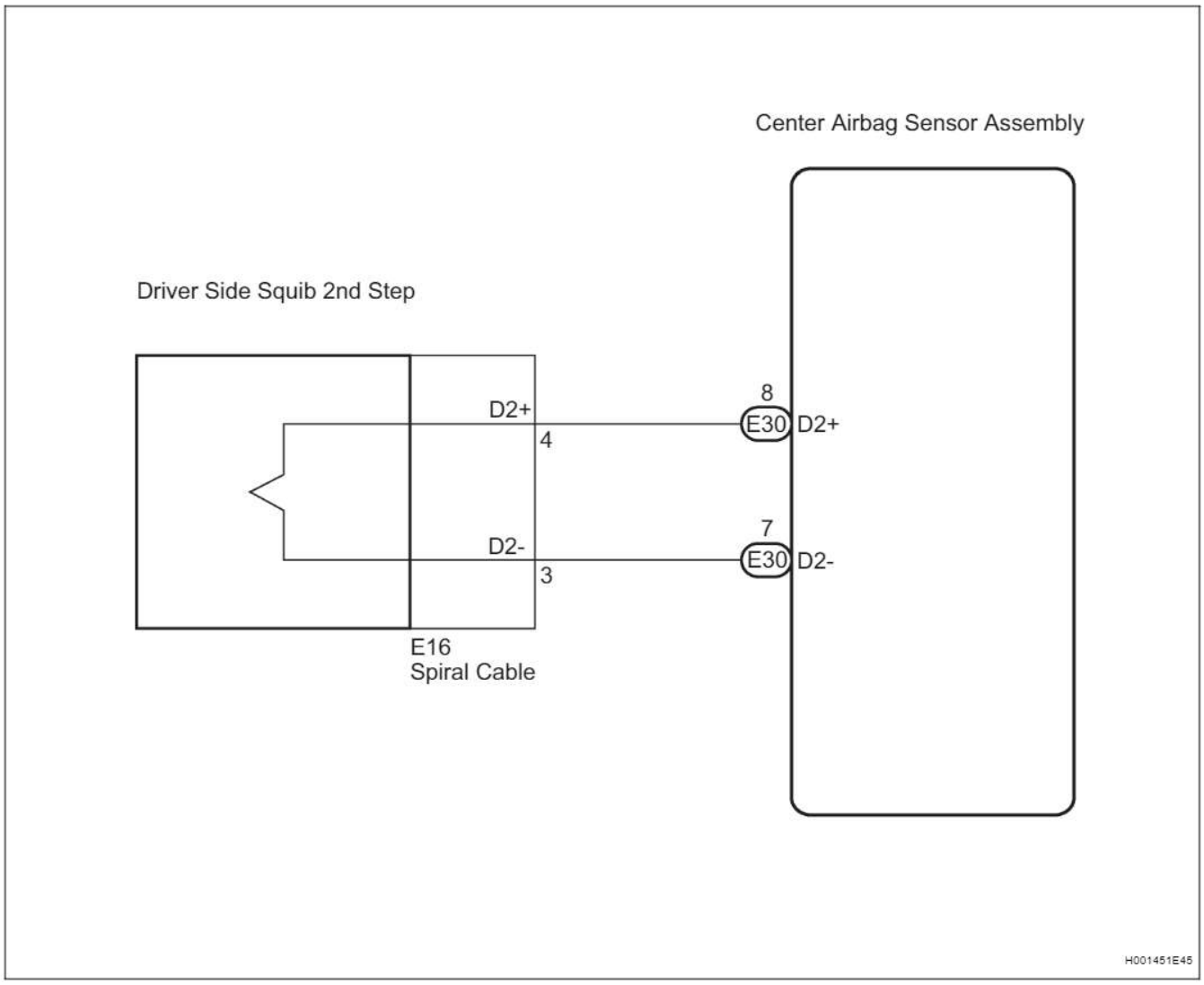
DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor assembly, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the driver side squib 2nd step circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1810/53	• The center airbag sensor assembly receives a line short circuit signal 5 times in the driver side squib 2nd step circuit during primary check. • Driver side squib 2nd step malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1811/53	• The center airbag sensor assembly receives an open circuit signal in the driver side squib 2nd step circuit for 2 seconds. • Driver side squib 2nd step malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1812/53	• The center airbag sensor assembly receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds. • Driver side squib 2nd step malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1813/53	• The center airbag sensor assembly receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds. • Driver side squib 2nd step malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly

RS

WIRING DIAGRAM



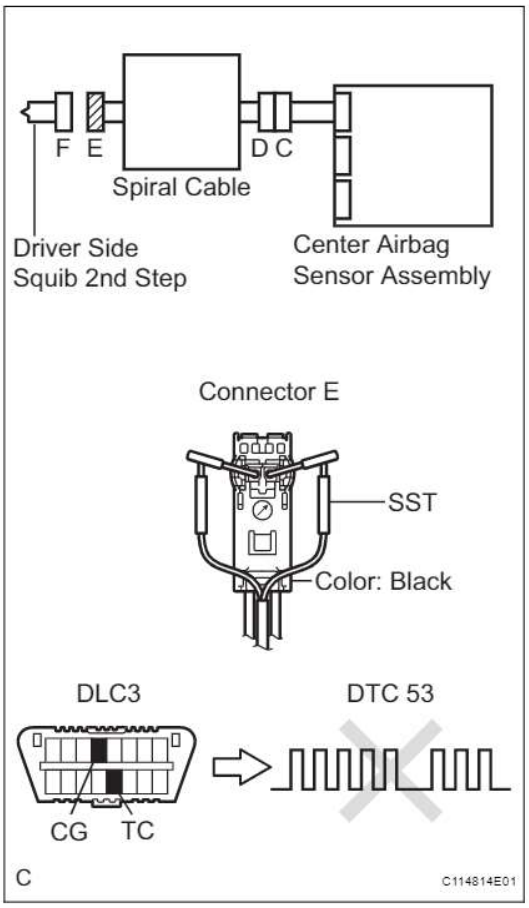
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

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



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the steering pad.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector E (black connector).

CAUTION:
Never connect the 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 the SST into the terminals of the connector when connecting.**
- **Insert straight the SST into the terminals of the connector.**

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

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

HINT:
Codes other than DTC B1810, B1811, B1812, B1813, and 53 may be output at this time, but they are not related to this check.

OK → **REPLACE STEERING PAD (See page RS-344)**

NG

2	CHECK CONNECTOR

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

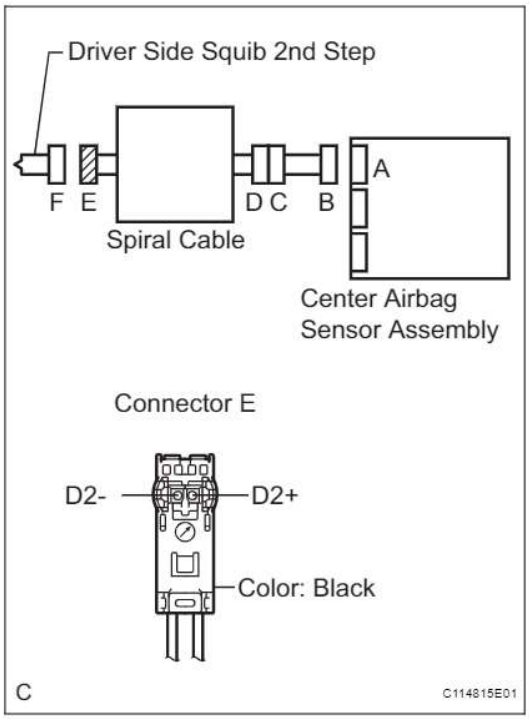
OK:
The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

RS

NG → REPLACE SPIRAL CABLE (See page RS-357)

OK

3 CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.

(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
D2+ - Body ground	Power switch on (IG)	Below 1 V
D2- - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.

(1) Turn the power switch off.

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

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

Standard resistance

Tester Connection	Condition	Specified Condition
D2+ - D2-	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.

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

Standard resistance

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

(e) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector B (See page RS-33).

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

Standard resistance

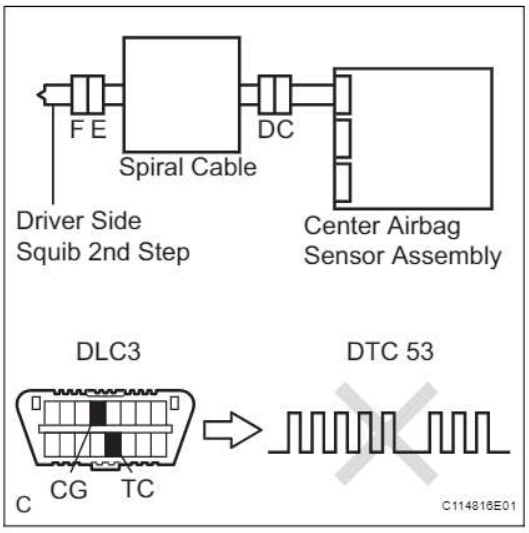
Tester Connection	Condition	Specified Condition
D2+ - D2-	Always	1 MΩ or higher

NG → Go to step 5

OK

RS

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the steering pad and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

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

HINT:

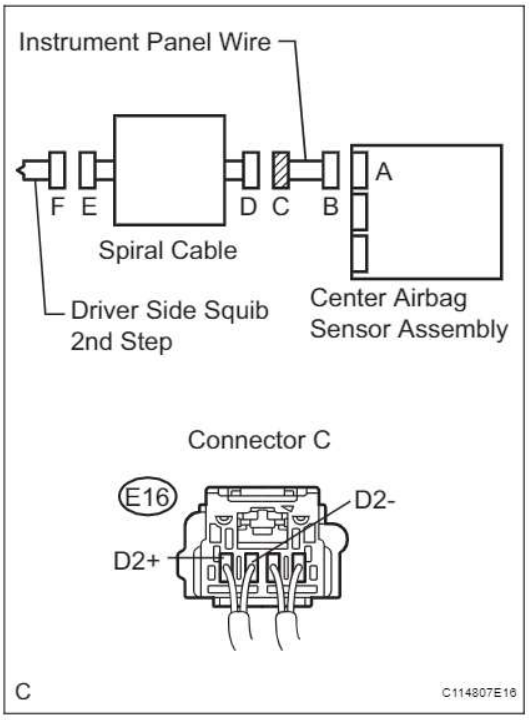
Codes other than DTC B1810, B1811, B1812, B1813, and 53 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

5 CHECK INSTRUMENT PANEL WIRE



(a) Check for a short to B+ in the circuit.
  (1) Restore the released activation prevention mechanism of connector B to the original condition.
  (2) Disconnect the instrument panel wire connector from the spiral cable.
  (3) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
  (4) Turn the power switch on (IG).
  (5) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
E16-4 (D2+) - Body ground	Power switch on (IG)	Below 1 V
E16-3 (D2-) - Body ground	Power switch on (IG)	Below 1 V

(b) Check for an open in the circuit.
  (1) Turn the power switch off.
  (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

RS

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

Standard resistance

Tester Connection	Condition	Specified Condition
E16-4 (D2+) - E16-3 (D2-)	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.

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

Standard resistance

Tester Connection	Condition	Specified Condition
E16-4 (D2+) - Body ground	Always	1 MΩ or higher
E16-3 (D2-) - Body ground	Always	1 MΩ or higher

(d) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector B (See page RS-33).

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

Standard resistance

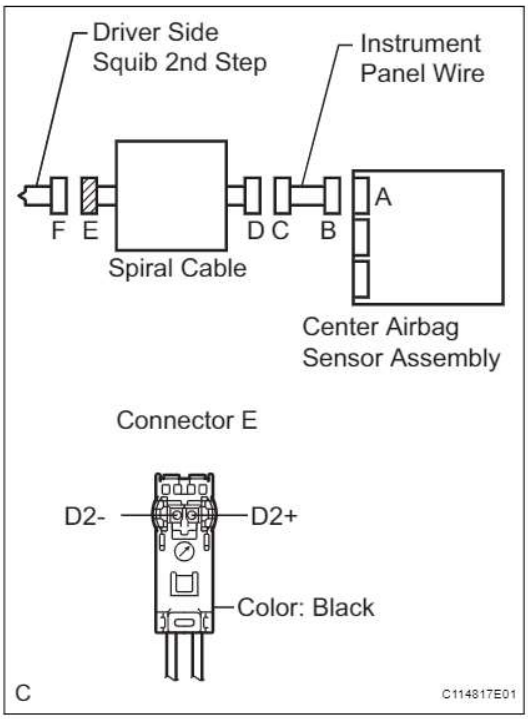
Tester Connection	Condition	Specified Condition
E16-4 (D2+) - E16-3 (D2-)	Always	1 MΩ or higher

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

OK

RS

6 CHECK SPIRAL CABLE



(a) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
D2+ - Body ground	Power switch on (IG)	Below 1 V
D2- - Body ground	Power switch on (IG)	Below 1 V

(b) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
D2+ - D2-	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.

Standard resistance

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

(d) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector D (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.

Standard resistance

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

NG → **REPLACE SPIRAL CABLE (See page RS-357)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit

DTC	B1816/54	Open in Front Passenger Side Squib 2nd Step Circuit

DTC	B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit

DTC	B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit

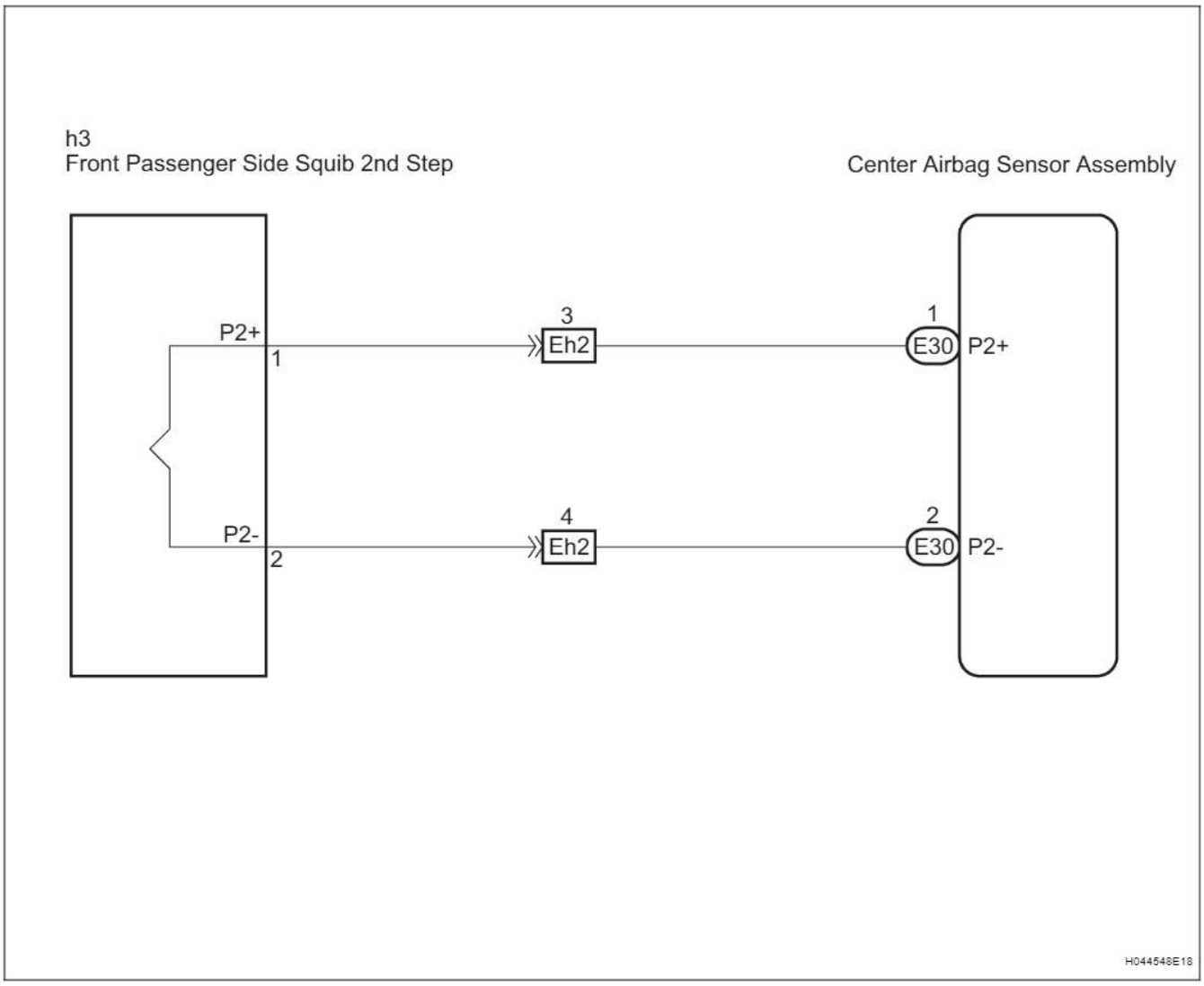
DESCRIPTION

The front passenger side squib 2nd step 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 2nd step circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1815/54	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during primary check. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	• The center airbag sensor assembly receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • Front passenger side squib 2nd step malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

RS

WIRING DIAGRAM



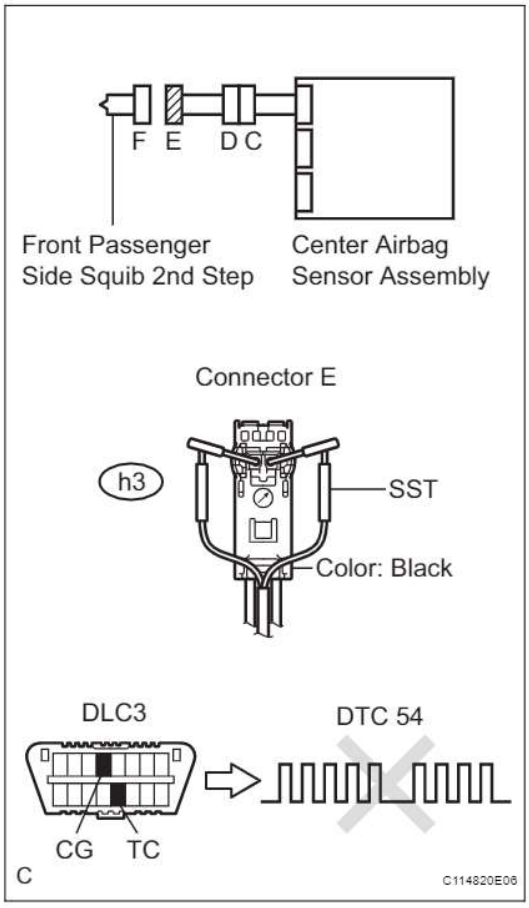
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB 2ND STEP)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the front passenger airbag assembly.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector E (black connector).

CAUTION:
Never connect the tester to the front passenger airbag assembly (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1815, B1816, B1817, B1818, or 54 is not output.

HINT:
Codes other than DTC B1815, B1816, B1817, B1818, and 54 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (See page RS-379)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector E.
(d) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

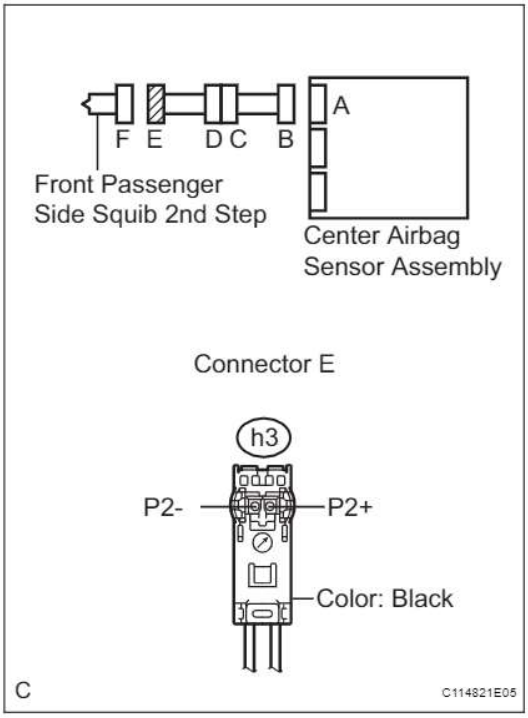
RS

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

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

OK

3 CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - Body ground	Power switch on (IG)	Below 1 V
c1-2 (P2-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - c1-2 (P2-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - Body ground	Always	1 MΩ or higher
c1-2 (P2-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

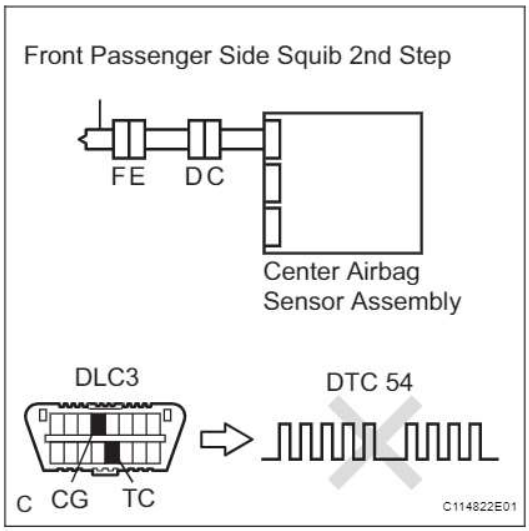
Tester Connection	Condition	Specified Condition
c1-1 (P2+) - c1-2 (P2-)	Always	1 MΩ or higher

RS

NG → Go to step 5

OK

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front passenger airbag assembly and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1815, B1816, B1817, B1818, or 54 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817, B1818, and 54 may be output at this time, but they are not related to this check.

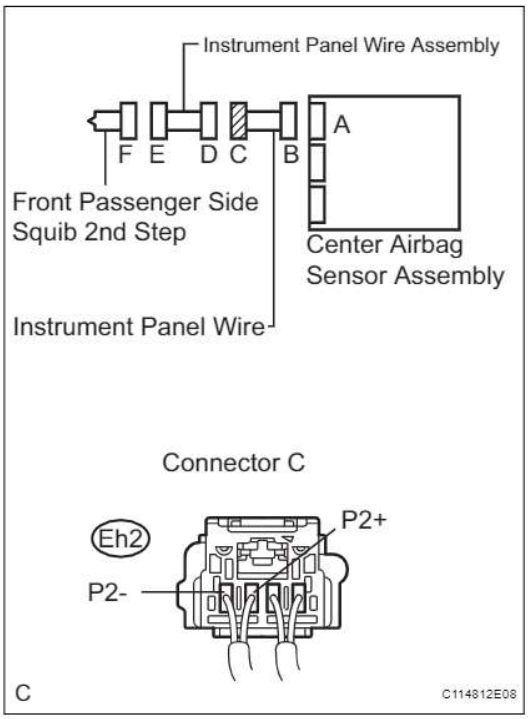
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

5 CHECK INSTRUMENT PANEL WIRE



(a) Check for a short to B+ in the circuit.
(1) Restore the released activation prevention mechanism of connector B to the original condition.
(2) Disconnect the instrument panel wire connector from the instrument panel wire assembly.
(3) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(4) Turn the power switch on (IG).
(5) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester connection	Condition	Specified condition
Ec1-3 (P2+) - Body ground	Power switch on (IG)	Below 1 V
Ec1-4 (P2-) - Body ground	Power switch on (IG)	Below 1 V

(b) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
Ec1-3 (P2+) - Ec1-4 (P2-)	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
Ec1-3 (P2+) - Body ground	Always	1 MΩ or higher
Ec1-4 (P2-) - Body ground	Always	1 MΩ or higher

(d) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.

Standard resistance

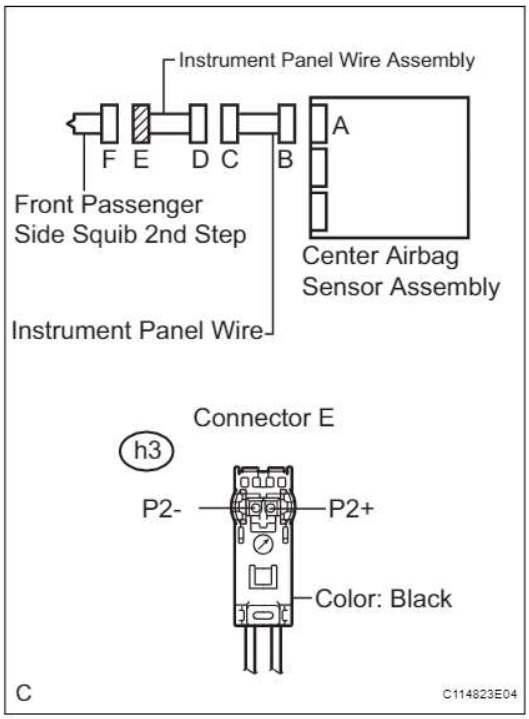
Tester Connection	Condition	Specified Condition
Ec1-3 (P2+) - Ec1-4 (P2-)	Always	1 MΩ or higher

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

RS

OK

6 CHECK INSTRUMENT PANEL WIRE ASSEMBLY



(a) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - Body ground	Power switch on (IG)	Below 1 V
c1-2 (P2-) - Body ground	Power switch on (IG)	Below 1 V

(b) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - c1-2 (P2-)	Always	Below 1 Ω

(c) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - Body ground	Always	1 MΩ or higher
c1-2 (P2-) - Body ground	Always	1 MΩ or higher

(d) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector D (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
c1-1 (P2+) - c1-2 (P2-)	Always	1 MΩ or higher

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

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1820/55	Short in Front Driver Side - Side Squib Circuit

DTC	B1821/55	Open in Front Driver Side - Side Squib Circuit

DTC	B1822/55	Short to GND in Front Driver Side - Side Squib Circuit

DTC	B1823/55	Short to B+ in Front Driver Side - Side Squib Circuit

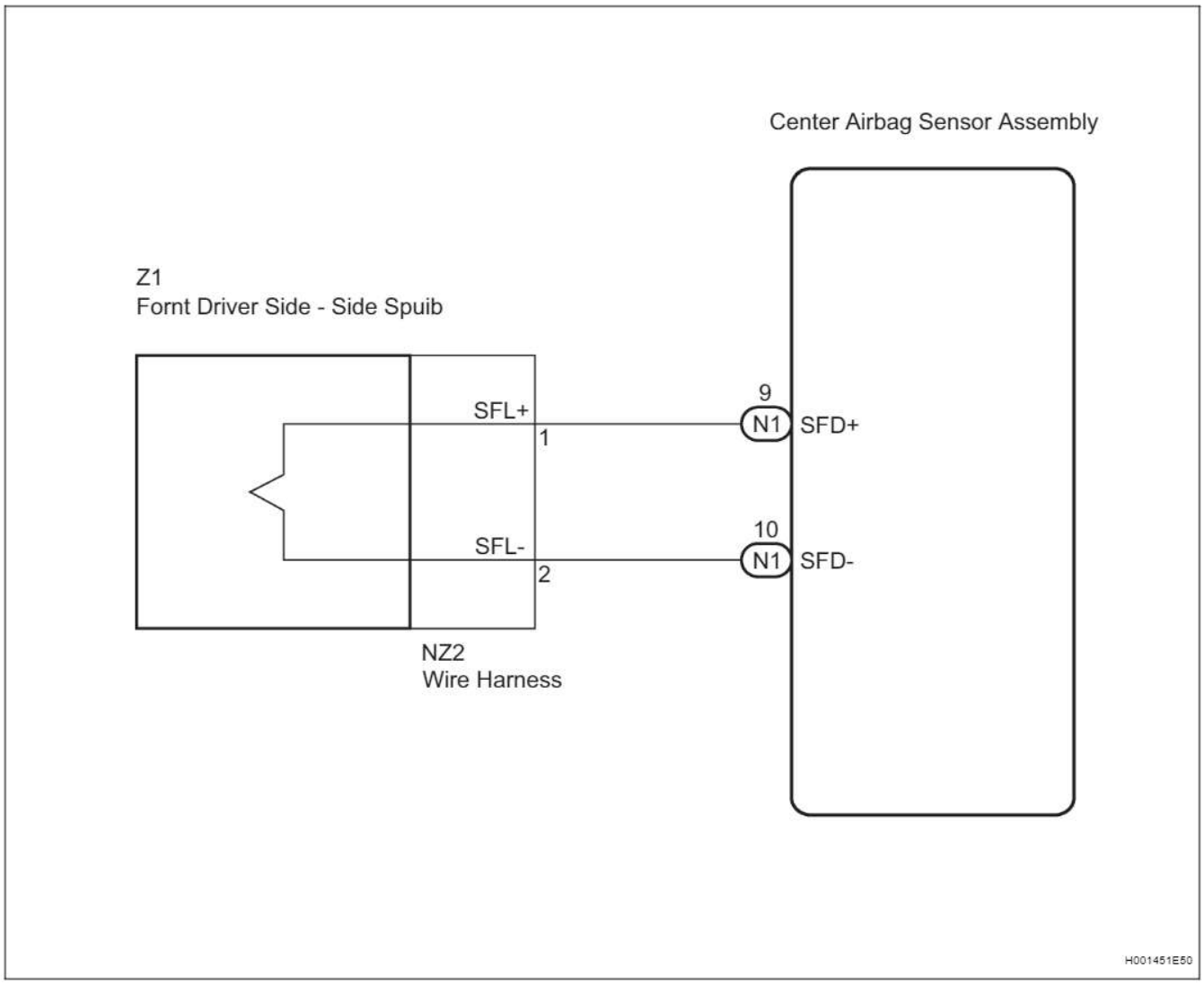
DESCRIPTION

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

DTC No.	DTC Detection Condition	Trouble Area
B1820/55	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front driver side - side squib circuit during primary check. • Front driver side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat side airbag assembly LH (Front driver side - side squib) • Center airbag sensor assembly
B1821/55	• The center airbag sensor assembly receives an open circuit signal in the front driver side - side squib circuit for 2 seconds. • Front driver side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat side airbag assembly LH (Front driver side - side squib) • Center airbag sensor assembly
B1822/55	• The center airbag sensor assembly receives a short circuit to ground signal in the front driver side - side squib circuit for 0.5 seconds. • Front driver side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat side airbag assembly LH (Front driver side - side squib) • Center airbag sensor assembly
B1823/55	• The center airbag sensor assembly receives a short circuit to B+ signal in the front driver side - side squib circuit for 0.5 seconds. • Front driver side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat side airbag assembly LH (Front driver side - side squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



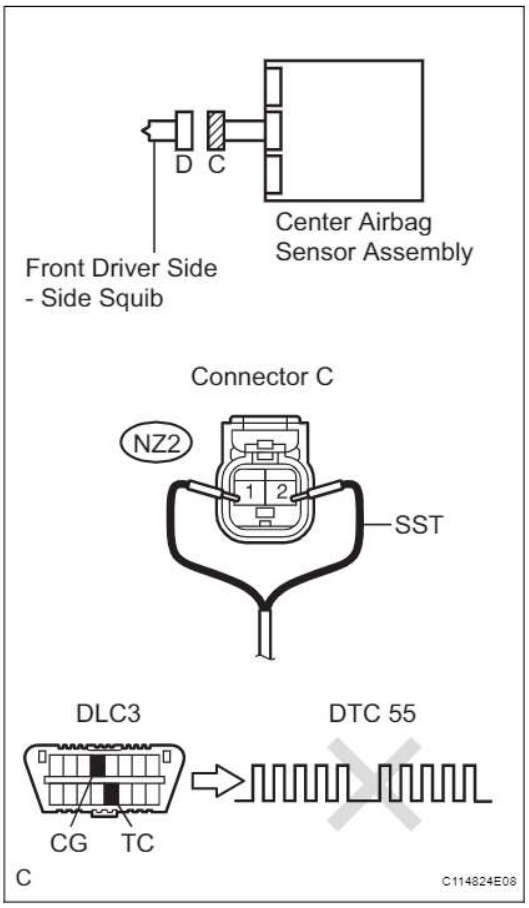
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY LH (FRONT DRIVER SIDE - SIDE SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the front seat side airbag assembly LH.
(d) Connect the black wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the front seat side airbag assembly LH (front driver side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

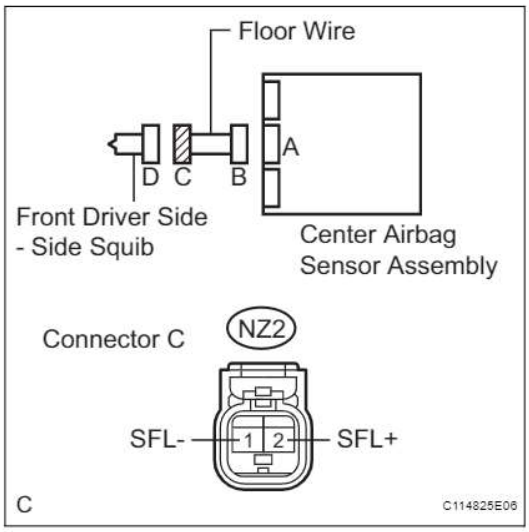
OK:
DTC B1820, B1821, B1822, B1823, or 55 is not output.

HINT:
Codes other than DTC B1820, B1821, B1822, B1823, and 55 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT SEAT ASSEMBLY LH**

NG

2 CHECK FLOOR WIRE (FRONT DRIVER SIDE - SIDE SQUIB CIRCUIT)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Disconnect the connectors from the center airbag sensor assembly.
(e) Check for a short to B+ in the circuit.
  (1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
  (2) Turn the power switch on (IG).
  (3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
NZ2-2 (SFL+) - Body ground	Power switch on (IG)	Below 1 V
NZ2-1 (SFL-) - Body ground	Power switch on (IG)	Below 1 V

(f) Check for an open in the circuit.
  (1) Turn the power switch off.
  (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
  (3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
NZ2-2 (SFL+) - NZ2-1 (SFL-)	Always	Below 1 Ω

(g) Check for a short to ground in the circuit.
  (1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
NZ2-2 (SFL+) - Body ground	Always	1 MΩ or higher
NZ2-1 (SFL-) - Body ground	Always	1 MΩ or higher

(h) Check for a short in the circuit.
  (1) Release the activation prevention mechanism built into connector B (See page RS-33).
  (2) Measure the resistance according to the value(s) in the table below.

Standard resistance

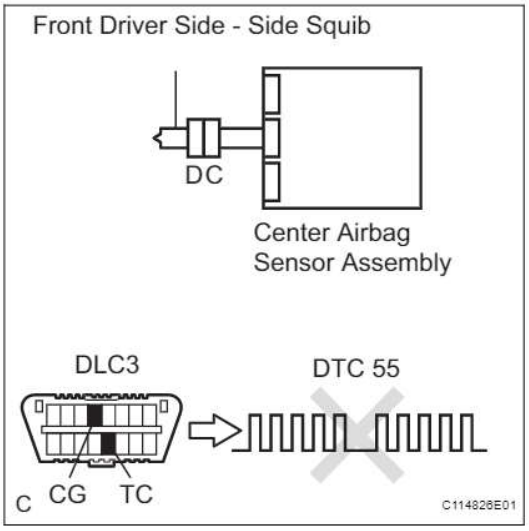
Tester Connection	Condition	Specified Condition
NZ2-2 (SFL+) - NZ2-1 (SFL-)	Always	1 MΩ or higher

RS

NG → REPAIR OR REPLACE FLOOR WIRE

OK

3	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front seat side airbag assembly LH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1820, B1821, B1822, B1823, or 55 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822, B1823, and 55 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1825/56	Short in Front Passenger Side - Side Squib Circuit
DTC	B1826/56	Open in Front Passenger Side - Side Squib Circuit
DTC	B1827/56	Short to GND in Front Passenger Side - Side Squib Circuit
DTC	B1828/56	Short to B+ in Front Passenger Side - Side Squib Circuit

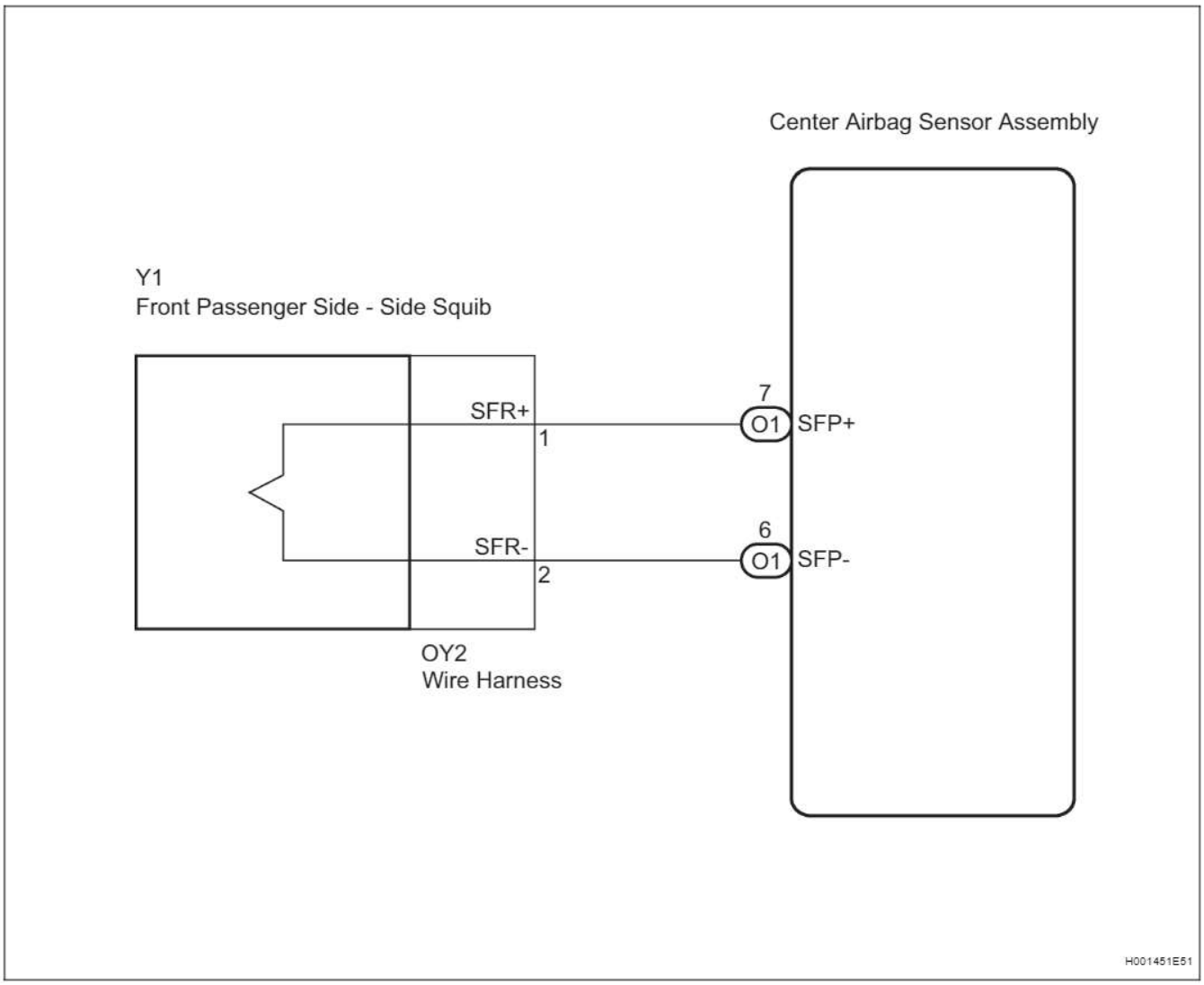
DESCRIPTION

The front passenger side - side squib circuit consists of the center airbag sensor assembly and the front seat side airbag assembly RH.
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 - side squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1825/56	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front passenger side - side squib circuit during primary check. • Front passenger side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat side airbag assembly RH (Front passenger side - side squib) • Center airbag sensor assembly
B1826/56	• The center airbag sensor assembly receives an open circuit signal in the front passenger side - side squib circuit for 2 seconds. • Front passenger side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat side airbag assembly RH (Front passenger side - side squib) • Center airbag sensor assembly
B1827/56	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side - side squib circuit for 0.5 seconds. • Front passenger side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat side airbag assembly RH (Front passenger side - side squib) • Center airbag sensor assembly
B1828/56	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side - side squib circuit for 0.5 seconds. • Front passenger side - side squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat side airbag assembly RH (Front passenger side - side squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



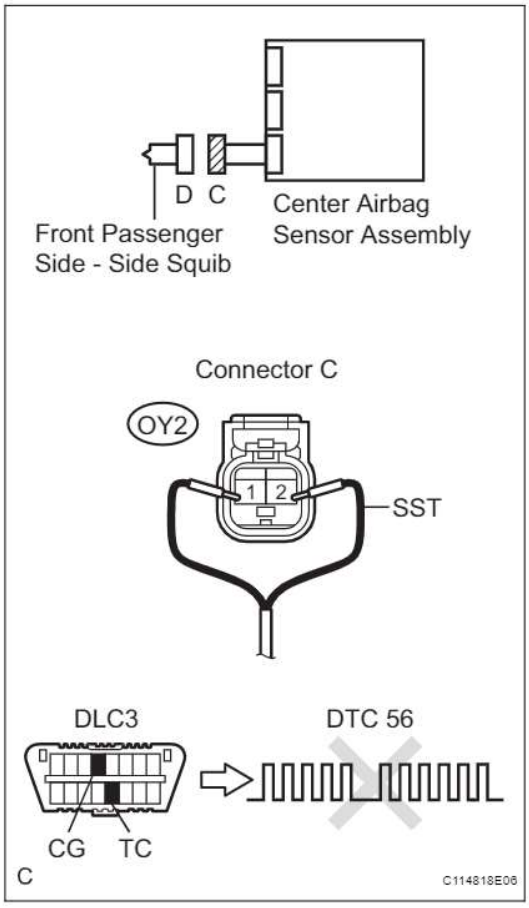
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY RH (FRONT PASSENGER SIDE - SIDE SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the front seat side airbag assembly RH.
(d) Connect the black wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the front seat side airbag assembly RH (front passenger side - side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1825, B1826, B1827, B1828, or 56 is not output.

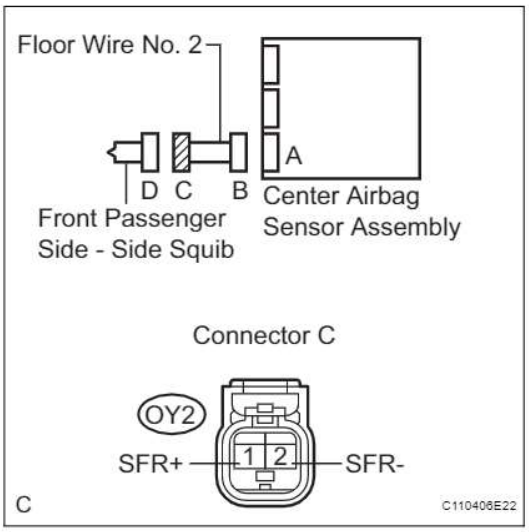
HINT:
Codes other than DTC B1825, B1826, B1827, B1828, and 56 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT SEAT ASSEMBLY RH**

NG

RS

2 CHECK FLOOR WIRE NO. 2 (FRONT PASSENGER SIDE - SIDE SQUIB CIRCUIT)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Disconnect the connectors from the center airbag sensor assembly.
(e) Check for a short to B+ in the circuit.
  (1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
  (2) Turn the power switch on (IG).
  (3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester connection	Condition	Specified condition
OY2-2 (SFR+) - Body ground	Power switch on (IG)	Below 1 V
OY2-1 (SFR-) - Body ground	Power switch on (IG)	Below 1 V

(f) Check for an open in the circuit.
  (1) Turn the power switch off.
  (2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
  (3) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
OY2-2 (SFR+) - OY2-1 (SFR-)	Always	Below 1 Ω

(g) Check for a short to ground in the circuit.
  (1) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
OY2-2 (SFR+) - Body ground	Always	1 MΩ or higher
OY2-1 (SFR-) - Body ground	Always	1 MΩ or higher

(h) Check for a short in the circuit.
  (1) Release the activation prevention mechanism built into connector B (See page RS-33).
  (2) Measure the resistance according to the value(s) in the table below.

Standard resistance

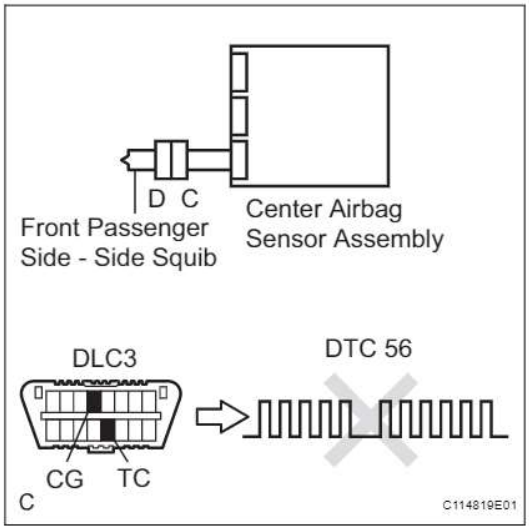
Tester Connection	Condition	Specified Condition
OY2-2 (SFR+) - OY2-1 (SFR-)	Always	1 MΩ or higher

RS

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

3	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front seat side airbag assembly RH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1825, B1826, B1827, B1828, or 56 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827, B1828, and 56 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

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

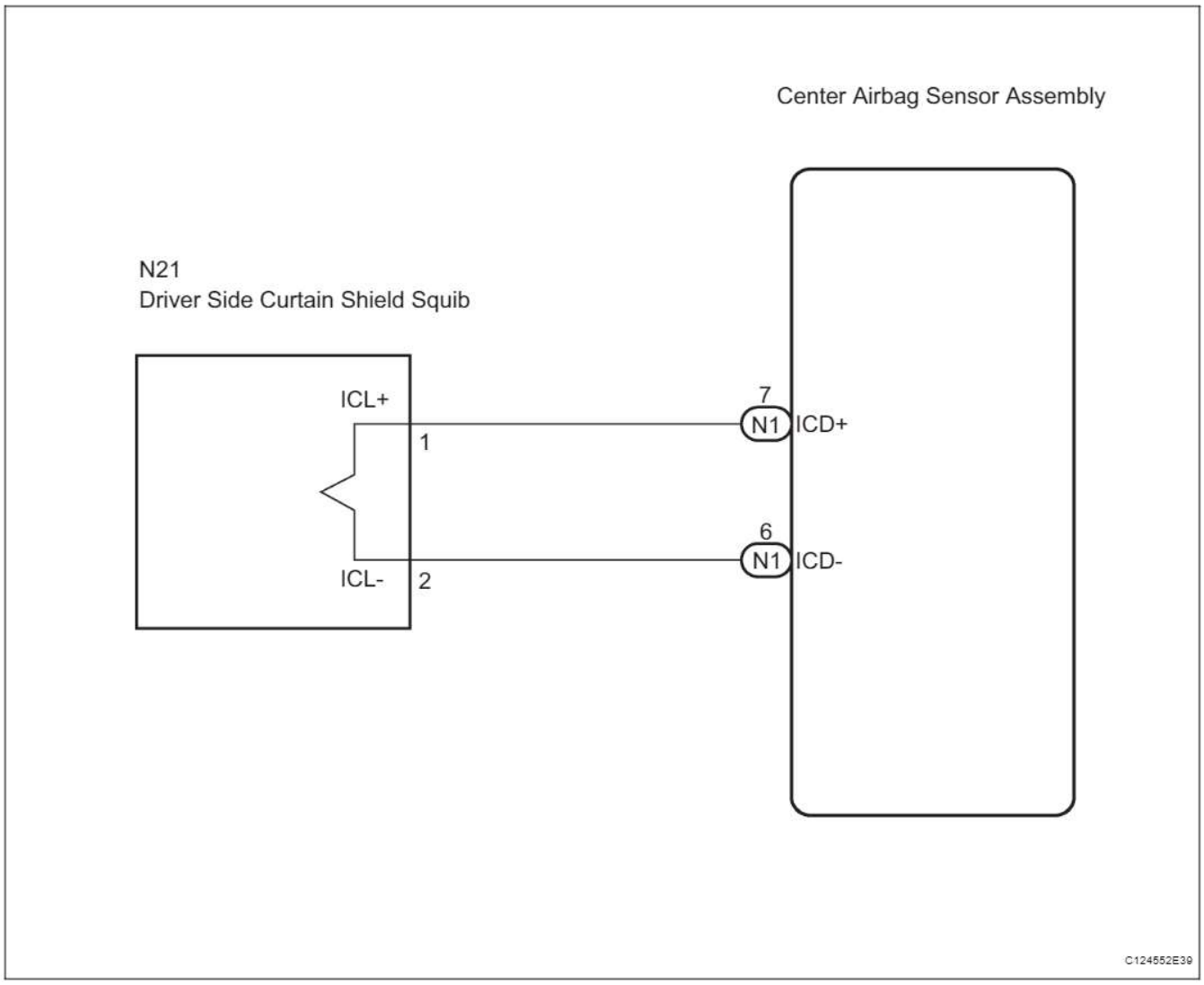
DESCRIPTION

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

DTC No.	DTC Detection Condition	Trouble Area
B1830/57	• The center airbag sensor assembly receives a line short circuit signal 5 times in the driver side curtain shield squib circuit during primary check. • Driver side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly LH (Driver side curtain shield squib) • Center airbag sensor assembly
B1831/57	• The center airbag sensor assembly receives an open circuit signal in the driver side curtain shield squib circuit for 2 seconds. • Driver side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly LH (Driver side curtain shield squib) • Center airbag sensor assembly
B1832/57	• The center airbag sensor assembly receives a short circuit to ground signal in the driver side curtain shield squib circuit for 0.5 seconds. • Driver side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly LH (Driver side curtain shield squib) • Center airbag sensor assembly
B1833/57	• The center airbag sensor assembly receives a short circuit to B+ signal in the driver side curtain shield squib circuit for 0.5 seconds. • Driver side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly LH (Driver side curtain shield squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



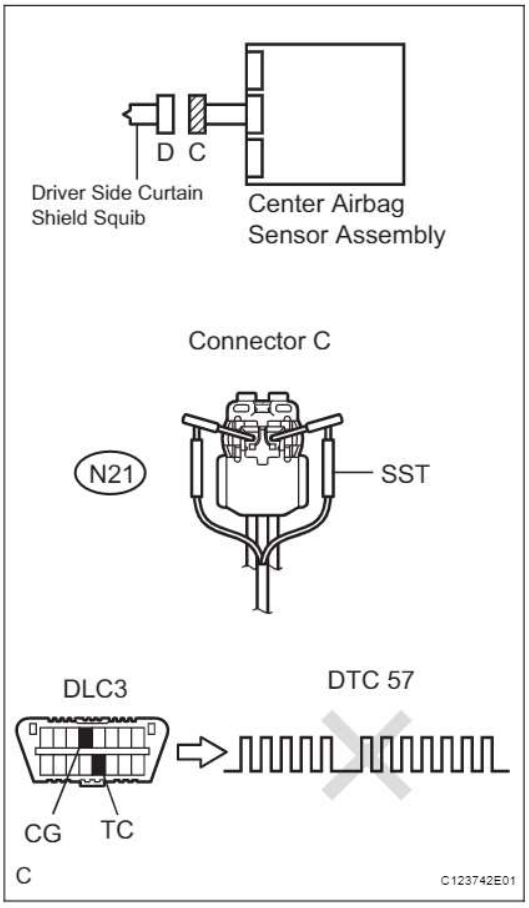
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK CURTAIN SHIELD AIRBAG ASSEMBLY LH (DRIVER SIDE CURTAIN SHIELD SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the curtain shield airbag assembly LH.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the curtain shield airbag assembly LH (driver side curtain shield squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1830, B1831, B1832, B1833, or 57 is not output.

HINT:
Codes other than DTC B1830, B1831, B1832, B1833, and 57 may be output at this time, but they are not related to this check.

OK → **REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (See page RS-401)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Check that the floor wire connector (on the curtain shield airbag assembly LH side) is not damaged.

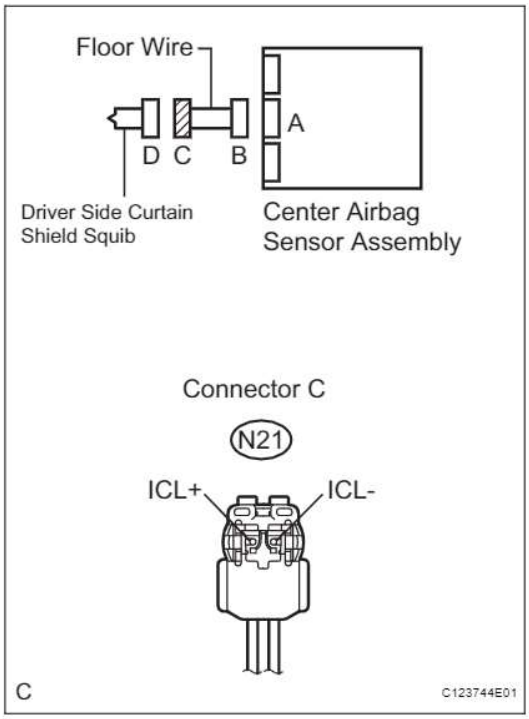
RS

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

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

3 CHECK FLOOR WIRE (DRIVER SIDE CURTAIN SHIELD SQUIB CIRCUIT)



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
N21-1 (ICL+) - Body ground	Power switch on (IG)	Below 1 V
N21-2 (ICL-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
N21-1 (ICL+) - N21-2 (ICL-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
N21-1 (ICL+) - Body ground	Always	1 MΩ or higher
N21-2 (ICL-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

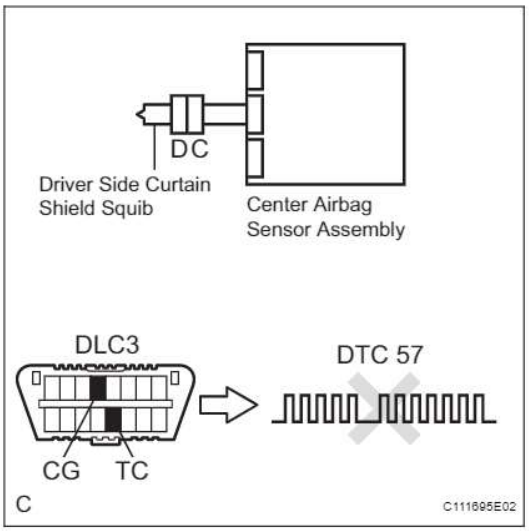
Tester Connection	Condition	Specified Condition
N21-1 (ICL+) - N21-2 (ICL-)	Always	1 MΩ or higher

RS

NG → REPAIR OR REPLACE FLOOR WIRE

OK

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the curtain shield airbag assembly LH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1830, B1831, B1832, B1833, or 57 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832, B1833, and 57 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1835/58	Short in Front Passenger Side Curtain Shield Squib Circuit

DTC	B1836/58	Open in Front Passenger Side Curtain Shield Squib Circuit

DTC	B1837/58	Short to GND in Front Passenger Side Curtain Shield Squib Circuit

DTC	B1838/58	Short to B+ in Front Passenger Side Curtain Shield Squib Circuit

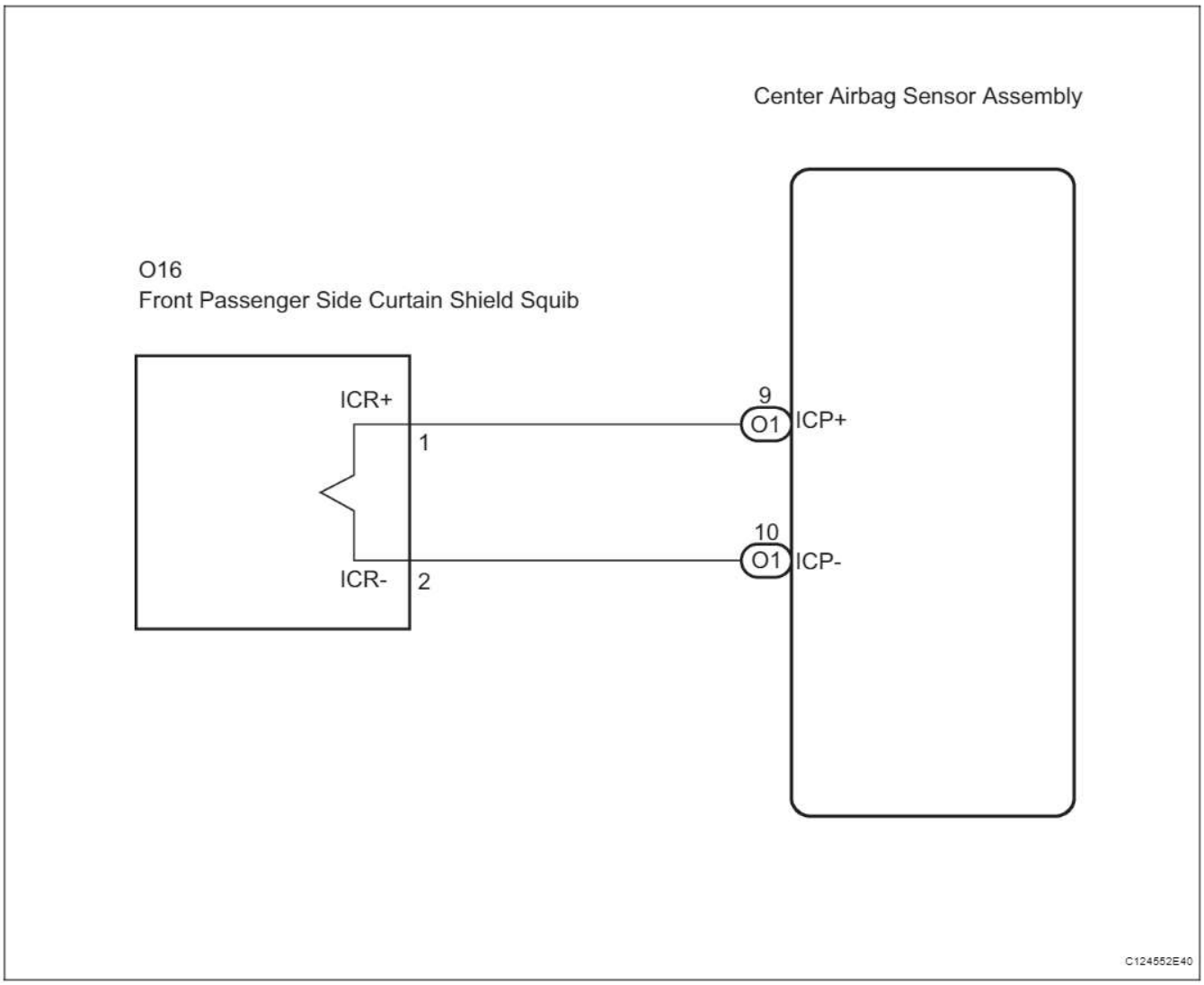
DESCRIPTION

The front passenger side curtain shield squib circuit consists of the center airbag sensor assembly and the curtain shield airbag assembly RH.
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 curtain shield squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1835/58	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front passenger side curtain shield squib circuit during primary check. • Front passenger side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Curtain shield airbag assembly RH (Front passenger side curtain shield squib) • Center airbag sensor assembly
B1836/58	• The center airbag sensor assembly receives an open circuit signal in the front passenger side curtain shield squib circuit for 2 seconds. • Front passenger side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Curtain shield airbag assembly RH (Front passenger side curtain shield squib) • Center airbag sensor assembly
B1837/58	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side curtain shield squib circuit for 0.5 seconds. • Front passenger side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Curtain shield airbag assembly RH (Front passenger side curtain shield squib) • Center airbag sensor assembly
B1838/58	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side curtain shield squib circuit for 0.5 seconds. • Front passenger side curtain shield squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Curtain shield airbag assembly RH (Front passenger side curtain shield squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



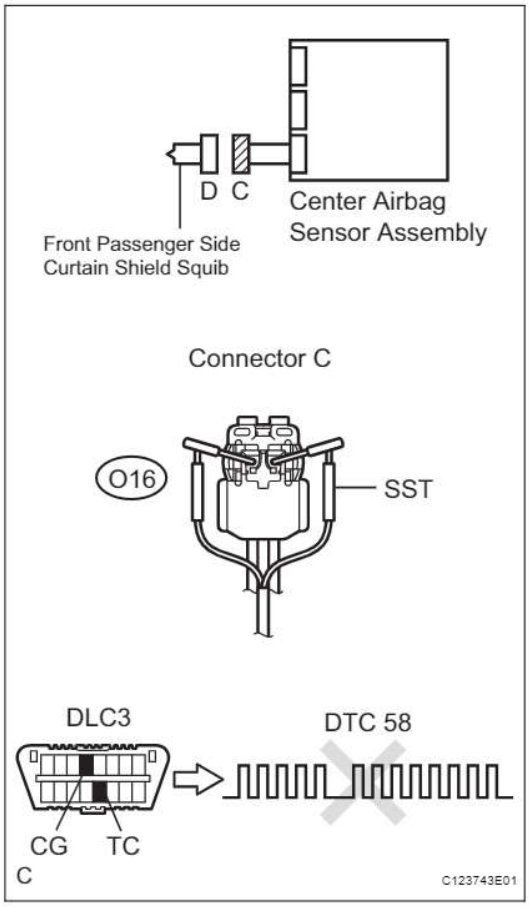
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK CURTAIN SHIELD AIRBAG ASSEMBLY RH (FRONT PASSENGER SIDE CURTAIN SHIELD SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the curtain shield airbag assembly RH.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the curtain shield airbag assembly RH (front passenger side curtain shield squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1835, B1836, B1837, B1838, or 58 is not output.

HINT:
Codes other than DTC B1835, B1836, B1837, B1838, and 58 may be output at this time, but they are not related to this check.

OK → **REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (See page RS-401)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Check that the floor wire No. 2 connectors (on the curtain shield airbag assembly RH side) are not damaged.

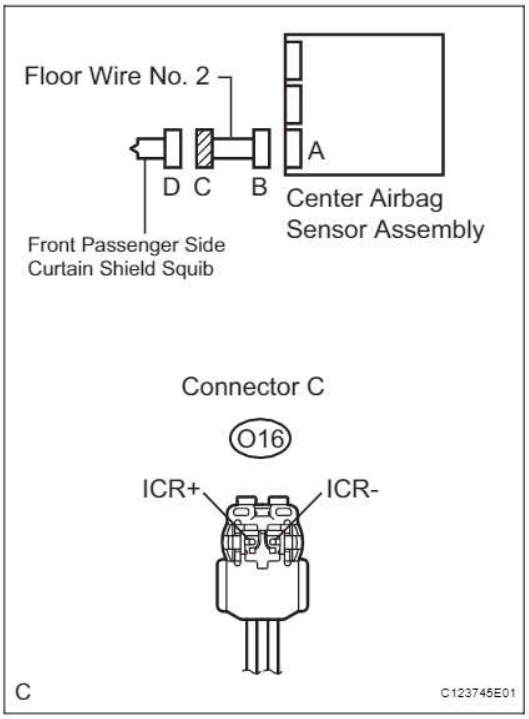
RS

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

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

OK

3	CHECK FLOOR WIRE NO. 2 (FRONT PASSENGER SIDE CURTAIN SHIELD SQUIB CIRCUIT)



(a) Disconnect the connectors from the center airbag sensor assembly.
(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
O16-1 (ICR+) - Body ground	Power switch on (IG)	Below 1 V
O16-2 (ICR-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
O16-1 (ICR+) - O16-2 (ICR-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
O16-1 (ICR+) - Body ground	Always	1 MΩ or higher
O16-2 (ICR-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

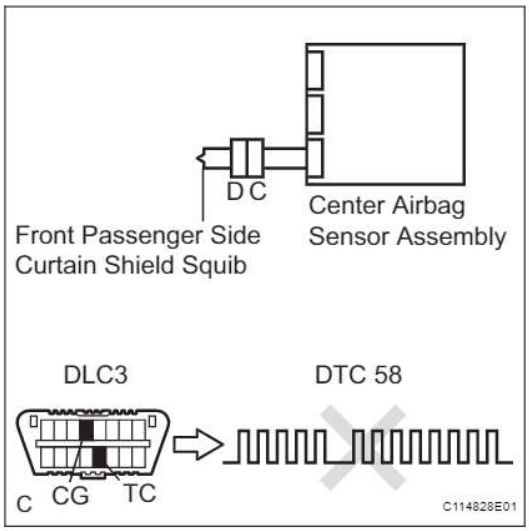
Tester Connection	Condition	Specified Condition
O16-1 (ICR+) - O16-2 (ICR-)	Always	1 MΩ or higher

RS

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the curtain shield airbag assembly RH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).
OK:
DTC B1835, B1836, B1837, B1838, or 58 is not output.
HINT:
Codes other than DTC B1835, B1836, B1837, B1838, and 58 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1860/64	Short in Driver Side Knee Airbag Squib Circuit
DTC	B1861/64	Open in Driver Side Knee Airbag Squib Circuit
DTC	B1862/64	Short to GND in Driver Side Knee Airbag Squib Circuit
DTC	B1863/64	Short to B+ in Driver Side Knee Airbag Squib Circuit

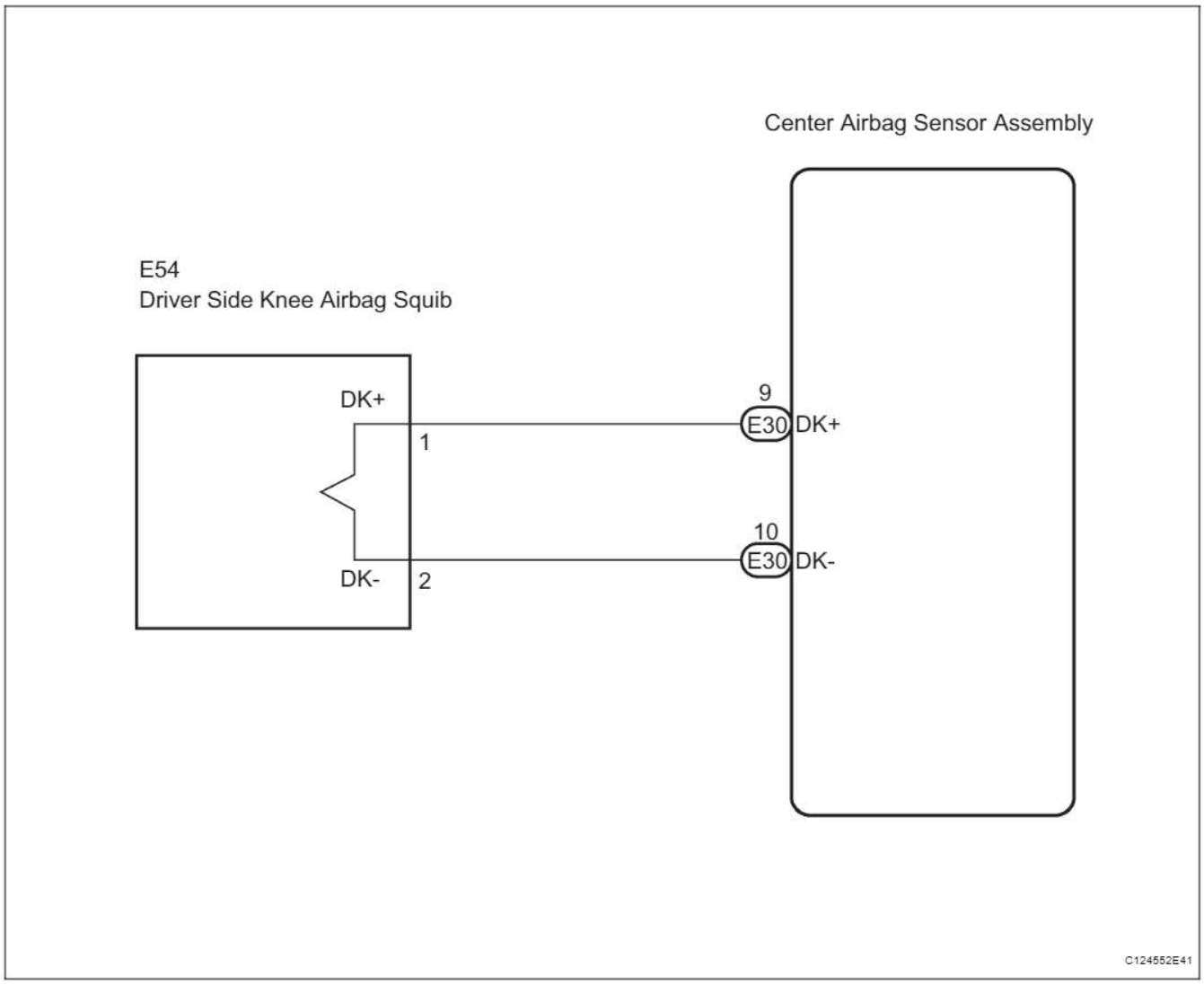
DESCRIPTION

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

DTC No.	DTC Detecting Condition	Trouble Area
B1860/64	• The center airbag sensor assembly receives a line short circuit signal 5 times in the driver side knee airbag squib circuit during primary check. • Driver side knee airbag squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee airbag squib) • Center airbag sensor assembly
B1861/64	• The center airbag sensor assembly receives an open circuit signal in the driver side knee airbag squib circuit for 2 seconds. • Driver side knee airbag squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee airbag squib) • Center airbag sensor assembly
B1862/64	• The center airbag sensor assembly receives a short circuit to ground signal in the driver side knee airbag squib circuit for 0.5 seconds. • Driver side knee airbag squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee airbag squib) • Center airbag sensor assembly
B1863/64	• The center airbag sensor assembly receives a short circuit to B+ signal in the driver side knee airbag squib circuit for 0.5 seconds. • Driver side knee airbag squib malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee airbag squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



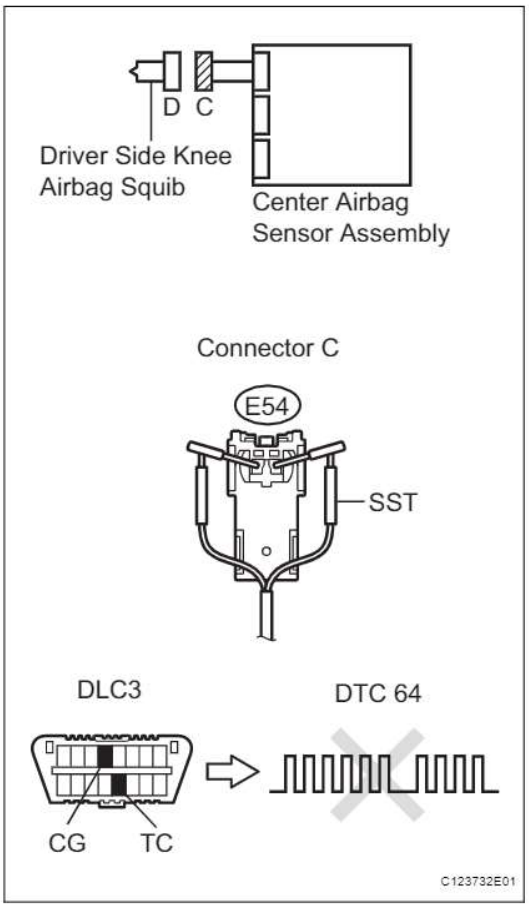
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK DRIVER SIDE KNEE AIRBAG ASSEMBLY (DRIVER SIDE KNEE AIRBAG SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the driver side knee airbag assembly.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the driver side knee airbag assembly (driver side knee airbag squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1860, B1861, B1862, B1863, or 64 is not output.

HINT:
Codes other than DTC B1860, B1861, B1862, B1863, and 64 may be output at this time, but they are not related to this check.

OK → **REPLACE DRIVER SIDE KNEE AIRBAG ASSEMBLY (See page RS-362)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Check that the instrument panel wire connector (on the driver side knee airbag assembly side) is not damaged.

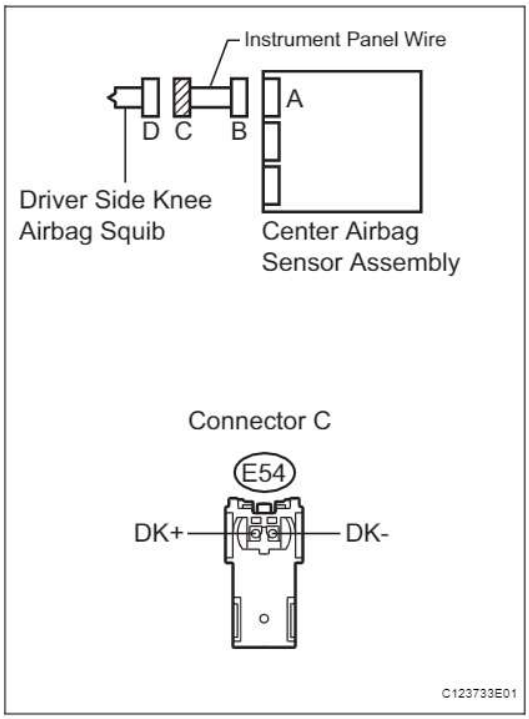
OK:
The lock button is not disengaged, or the claw of the lock is not deformed or damaged.

RS

NG → REPAIR OR REPLACE INSTRUMENT PANEL WIRE

OK

3 CHECK INSTRUMENT PANEL WIRE (DRIVER SIDE KNEE AIRBAG SQUIB CIRCUIT)



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.

(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.

(2) Turn the power switch on (IG).

(3) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
E54-1 (DK+) - Body ground	Power switch on (IG)	Below 1 V
E54-2 (DK-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.

(1) Turn the power switch off.

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

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

Standard resistance

Tester Connection	Condition	Specified Condition
E54-1 (DK+) - E54-2 (DK-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.

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

Standard resistance

Tester Connection	Condition	Specified Condition
E54-1 (DK+) - Body ground	Always	1 MΩ or higher
E54-2 (DK-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.

(1) Release the activation prevention mechanism built into connector B (See page RS-33).

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

Standard resistance

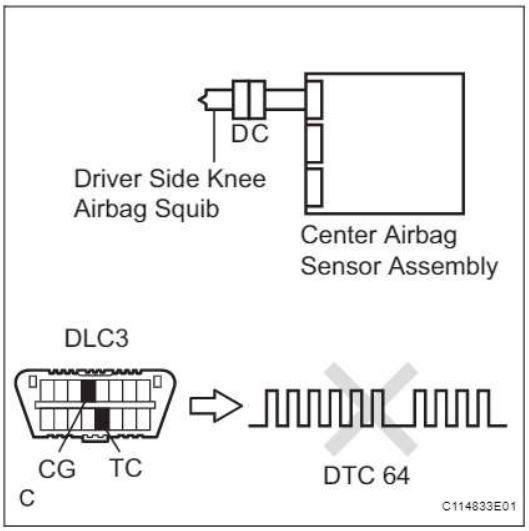
Tester Connection	Condition	Specified Condition
E54-1 (DK+) - E54-2 (DK-)	Always	1 MΩ or higher

RS

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

OK

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the driver side knee airbag assembly and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the stored DTCs in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1860, B1861, B1862, B1863, or 64 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862, B1863, and 64 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1900/73	Short in Front Driver Side Pretensioner Squib Circuit

DTC	B1901/73	Open in Front Driver Side Pretensioner Squib Circuit

DTC	B1902/73	Short to GND in Front Driver Side Pretensioner Squib Circuit

DTC	B1903/73	Short to B+ in Front Driver Side Pretensioner Squib Circuit

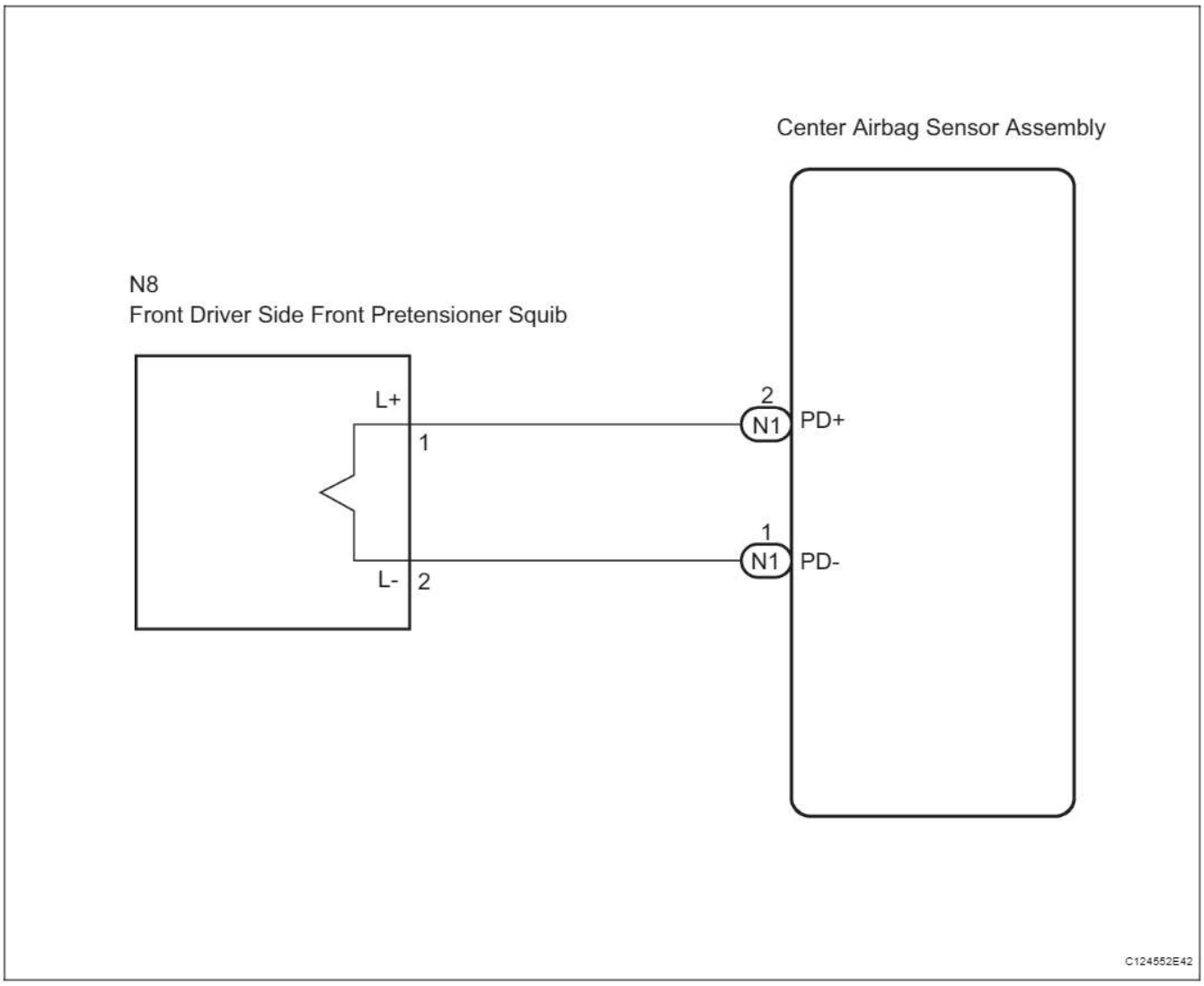
DESCRIPTION

The front driver side front pretensioner squib circuit consists of the center airbag sensor assembly and the front seat outer belt assembly LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are recorded when a malfunction is detected in the front driver side pretensioner squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1900/73	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front driver side pretensioner squib circuit during primary check. • Front driver side pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat outer belt assembly LH (Front driver side pretensioner squib) • Center airbag sensor assembly
B1901/73	• The center airbag sensor assembly receives an open circuit signal in the front driver side pretensioner squib circuit for 2 seconds. • Front driver side pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat outer belt assembly LH (Front driver side pretensioner squib) • Center airbag sensor assembly
B1902/73	• The center airbag sensor assembly receives a short circuit to ground signal in the front driver side pretensioner squib circuit for 0.5 seconds. • Front driver side pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat outer belt assembly LH (Front driver side pretensioner squib) • Center airbag sensor assembly
B1903/73	• The center airbag sensor assembly receives a short circuit to B+ signal in the front driver side pretensioner squib circuit for 0.5 seconds. • Front driver side pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat outer belt assembly LH (Front driver side pretensioner squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



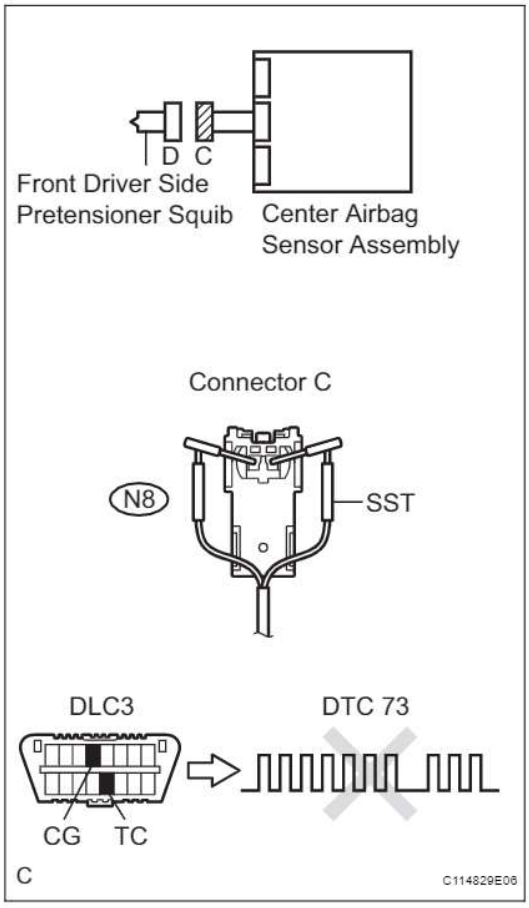
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK FRONT SEAT OUTER BELT ASSEMBLY LH (FRONT DRIVER SIDE PRETENSIONER SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the front seat outer belt assembly LH.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the front seat outer belt assembly LH (front driver side pretensioner squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1900, B1901, B1902, B1903, or 73 is not output.

HINT:
Codes other than DTC B1900, B1901, B1902, B1903, and 73 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (See page SB-21)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Check that the floor wire connector (on the front seat outer belt assembly LH side) is not damaged.

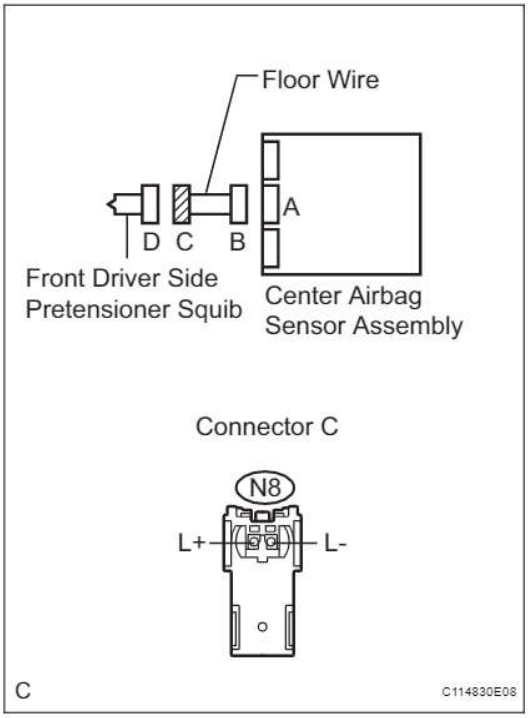
RS

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

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

3 CHECK FLOOR WIRE (FRONT DRIVER SIDE PRETENSIONER SQUIB CIRCUIT)



(a) Disconnect the connectors from the center airbag sensor assembly.

(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester connection	Condition	Specified condition
N8-1 (L+) - Body ground	Power switch on (IG)	Below 1 V
N8-2 (L-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
N8-1 (L+) - N8-2 (L-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
N8-1 (L+) - Body ground	Always	1 MΩ or higher
N8-2 (L-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

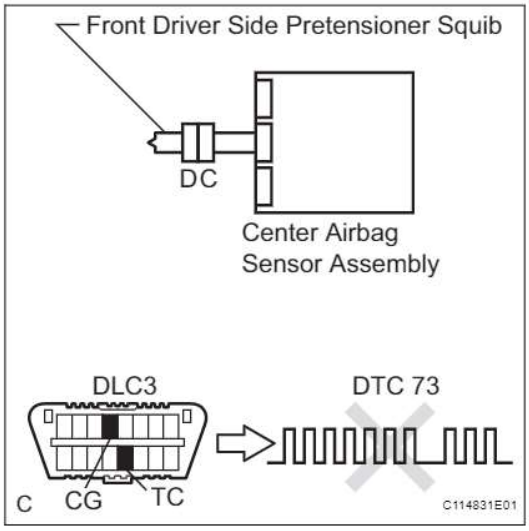
Tester Connection	Condition	Specified Condition
N8-1 (L+) - N8-2 (L-)	Always	1 MΩ or higher

RS

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front seat outer belt assembly LH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1900, B1901, B1902, B1903, or 73 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902, B1903, or 73 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

RS

DTC	B1905/74	Short in Front Passenger Side Pretensioner Squib Circuit

DTC	B1906/74	Open in Front Passenger Side Pretensioner Squib Circuit

DTC	B1907/74	Short to GND in Front Passenger Side Pretensioner Squib Circuit

DTC	B1908/74	Short to B+ in Front Passenger Side Pretensioner Squib Circuit

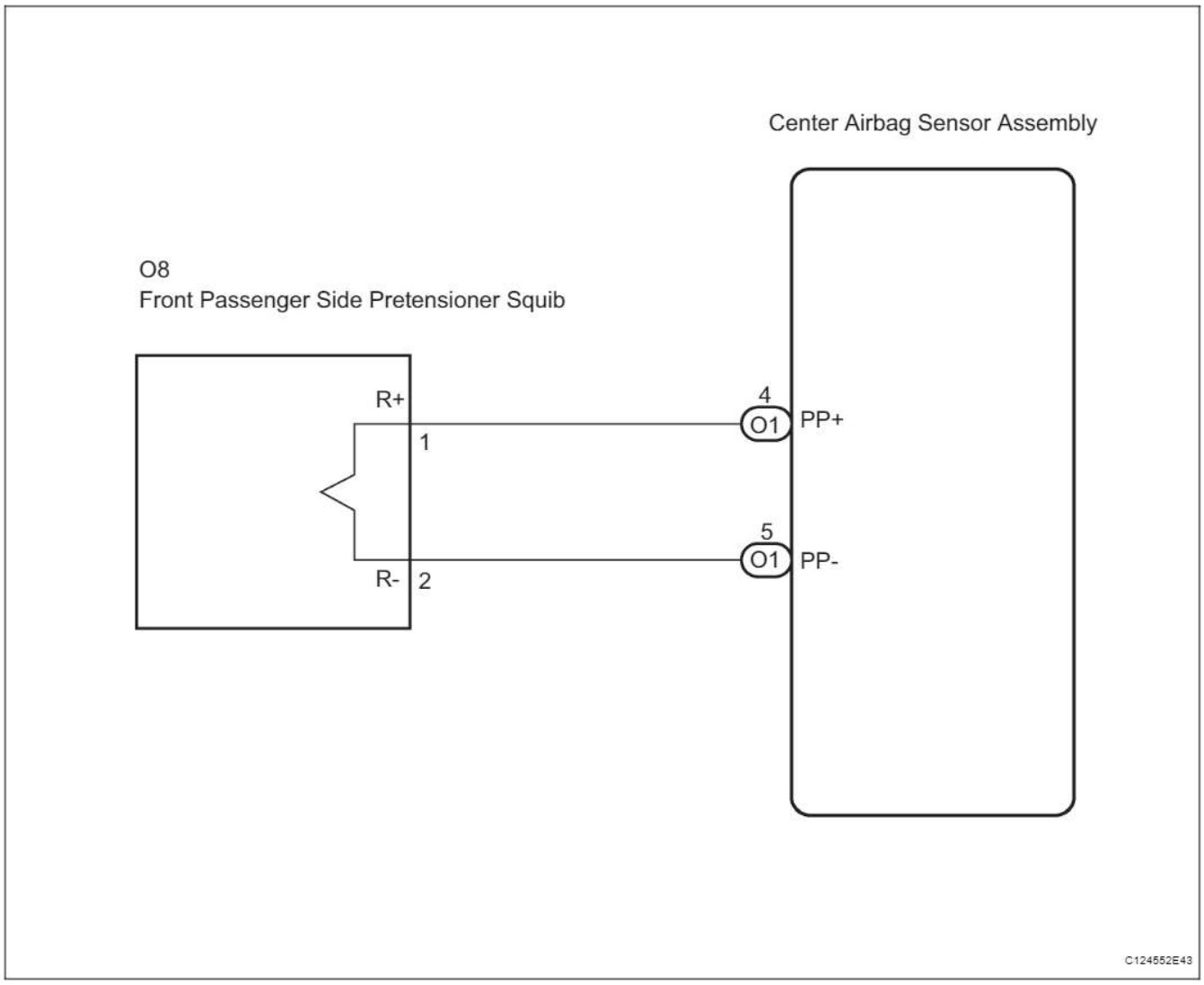
DESCRIPTION

The front passenger side front pretensioner squib circuit consists of the center airbag sensor assembly and the front seat outer belt assembly RH.
This 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 front pretensioner squib circuit.

DTC No.	DTC Detection Condition	Trouble Area
B1905/74	• The center airbag sensor assembly receives a line short circuit signal 5 times in the front passenger side front pretensioner squib circuit during primary check. • Front passenger side front pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat outer belt assembly RH (Front passenger side pretensioner squib) • Center airbag sensor assembly
B1906/74	• The center airbag sensor assembly receives an open circuit signal in the front passenger side front pretensioner squib circuit for 2 seconds. • Front passenger side front pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat outer belt assembly RH (Front passenger side pretensioner squib) • Center airbag sensor assembly
B1907/74	• The center airbag sensor assembly receives a short circuit to ground signal in the front passenger side front pretensioner squib circuit for 0.5 seconds. • Front passenger side front pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat outer belt assembly RH (Front passenger side pretensioner squib) • Center airbag sensor assembly
B1908/74	• The center airbag sensor assembly receives a short circuit to B+ signal in the front passenger side front pretensioner squib circuit for 0.5 seconds. • Front passenger side front pretensioner squib malfunction • Center airbag sensor assembly malfunction	• Floor wire No. 2 • Front seat outer belt assembly RH (Front passenger side pretensioner squib) • Center airbag sensor assembly

RS

WIRING DIAGRAM



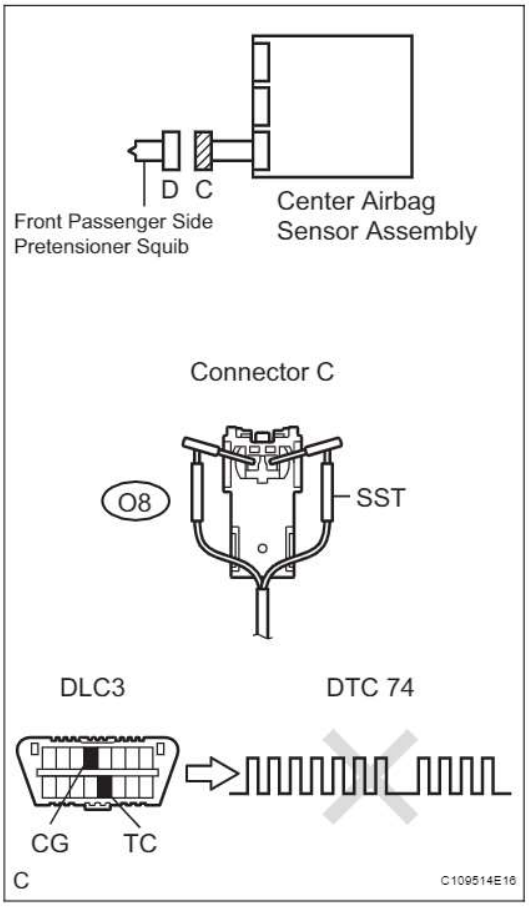
INSPECTION PROCEDURE

HINT:

- Perform the simulation method by selecting "check mode" (signal check) with the intelligent tester (See page RS-44).
- After selecting "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-44).

RS

1	CHECK FRONT SEAT OUTER BELT ASSEMBLY RH (FRONT PASSENGER SIDE PRETENSIONER SQUIB)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the front seat outer belt assembly RH.
(d) Connect the white wire side of SST (resistance 2.1 Ω) to connector C.

CAUTION:
Never connect the tester to the front seat outer belt assembly RH (front passenger side pretensioner squib) for measurement, as this may lead to a serious injury due to airbag deployment.

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

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(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG), and wait for at least 60 seconds.
(j) Check the DTCs (See page RS-41).

OK:
DTC B1905, B1906, B1907, B1908, or 74 is not output.

HINT:
Codes other than DTC B1905, B1906, B1907, B1908, and 74 may be output at this time, but they are not related to this check.

OK → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (See page SB-21)**

NG

2	CHECK CONNECTOR

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Check that the floor wire No. 2 connector (on the front seat outer belt assembly RH side) is not damaged.

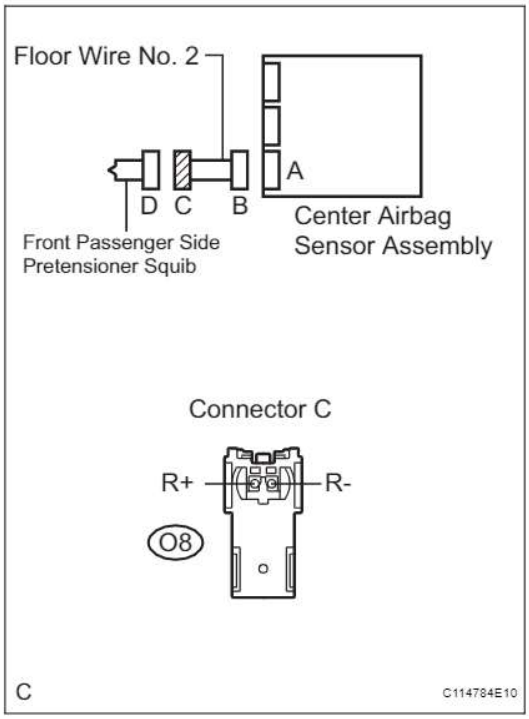
RS

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

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

OK

3	CHECK FLOOR WIRE NO. 2 (FRONT PASSENGER SIDE PRETENSIONER SQUIB CIRCUIT)



(a) Disconnect the connectors from the center airbag sensor assembly.
(b) Check for a short to B+ in the circuit.
(1) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(2) Turn the power switch on (IG).
(3) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
O8-1 (R+) - Body ground	Power switch on (IG)	Below 1 V
O8-2 (R-) - Body ground	Power switch on (IG)	Below 1 V

(c) Check for an open in the circuit.
(1) Turn the power switch off.
(2) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(3) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
O8-1 (R+) - O8-2 (R-)	Always	Below 1 Ω

(d) Check for a short to ground in the circuit.
(1) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester Connection	Condition	Specified Condition
O8-1 (R+) - Body ground	Always	1 MΩ or higher
O8-2 (R-) - Body ground	Always	1 MΩ or higher

(e) Check for a short in the circuit.
(1) Release the activation prevention mechanism built into connector B (See page RS-33).
(2) Measure the resistance according to the value(s) in the table below.
Standard resistance

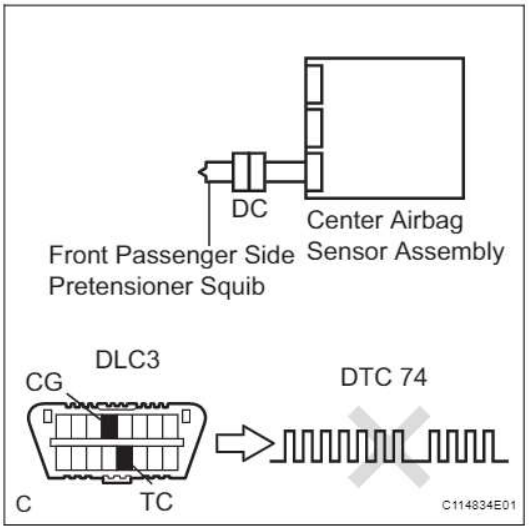
Tester Connection	Condition	Specified Condition
O8-1 (R+) - O8-2 (R-)	Always	1 MΩ or higher

RS

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

OK

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the connectors to the front seat outer belt assembly RH and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the memory (See page RS-41).
(e) Turn the power switch off.
(f) Turn the power switch on (IG), and wait for at least 60 seconds.
(g) Check the DTCs (See page RS-41).

OK:

DTC B1905, B1906, B1907, B1908, or 74 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907, B1908, and 74 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

USE SIMULATION METHOD TO CHECK (See page RS-33)

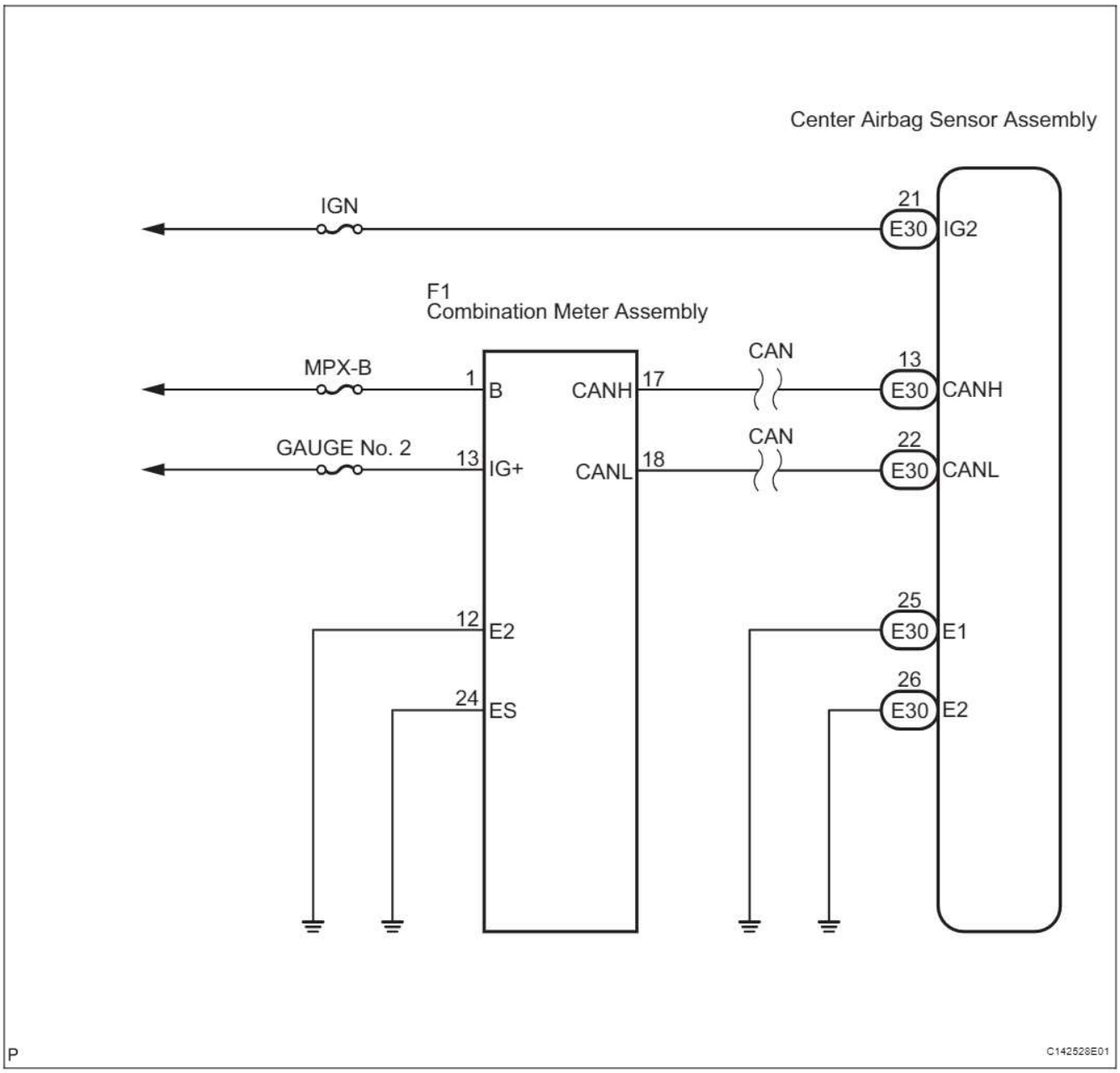
RS

SRS Warning Light Remains ON

DESCRIPTION

The SRS warning light is located on the combination meter assembly.
When the SRS is normal, the SRS warning light comes on for approximately 6 seconds after the power switch is turned from off to on (IG), and then goes off automatically.
If there is a malfunction in the SRS, the SRS warning light comes on to inform the driver of a problem.
When terminals TC and CG of the DLC3 are connected, the DTC is displayed by blinking of the SRS warning light.
The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the center airbag sensor assembly in case the source voltage drops.
When the battery voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to normal voltage.
A malfunction in this circuit is not recorded in the center airbag sensor assembly. The SRS warning light automatically goes off when the source voltage returns to normal.
The signal to illuminate the SRS warning light is transmitted from the center airbag sensor assembly to the combination meter assembly through the CAN communication system.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK CAN COMMUNICATION SYSTEM

(a) Check if a CAN communication DTC is output (See page CA-22).

Result

Condition	Proceed To
DTC is not output	A
DTC is output	B

RS

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS

A

2 CHECK BATTERY

(a) Measure the voltage of the battery.
Standard voltage:
11 to 14 V

NG → CHECK AND REPLACE BATTERY OR CHARGING SYSTEM

OK

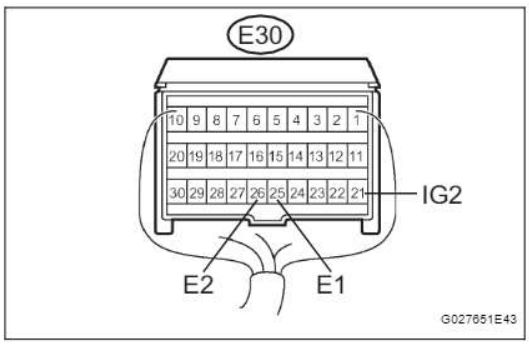
3 CHECK CONNECTORS

(a) Turn the power switch off.
(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 combination meter assembly.
OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4 CHECK WIRE HARNESS (CENTER AIRBAG SENSOR ASSEMBLY - BODY GROUND)



(a) Disconnect the connectors from the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the power switch on (IG).
(d) Operate all components of the electrical system (defogger, wipers, headlight, heater blower, etc.).
(e) Measure the voltage according to the value(s) in the table below.
Standard voltage

Tester Connection	Condition	Specified Condition
E30-21 (IG2) - Body ground	Power switch on (IG)	10 to 14 V

(f) Turn the power switch off.
(g) Measure the resistance according to the value(s) in the table below.

RS

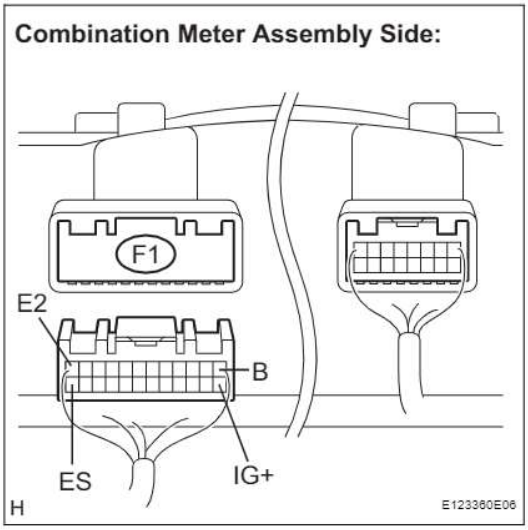
Standard resistance

Tester Connection	Condition	Specified Condition
E30-25 (E1) - Body ground	Always	Below 1 Ω
E30-26 (E2) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS

OK

5 CHECK WIRE HARNESS (COMBINATION METER ASSEMBLY - BODY GROUND)



(a) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(b) Disconnect the F1 connector from the combination meter assembly.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the power switch on (IG).
(e) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
F1-1 (B) - Body ground	Always	10 to 14 V
F1-13 (IG+) - Body ground	Power switch on (IG)	10 to 14 V

(f) Turn the power switch off.
(g) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
F1-12 (E2) - Body ground	Always	Below 1 Ω
F1-24 (ES) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS

OK

6 CHECK SRS WARNING LIGHT

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the combination meter assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Check the SRS warning light condition.

RS

OK:

After the primary check period, SRS warning light goes off for approximately 10 seconds, and remains on.

HINT:

The primary check period shows approximately 6 seconds after the power switch is turned on (IG).

NG → **GO TO METER / GAUGE SYSTEM (See page ME-14)**

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

SRS Warning Light does not Come ON

DESCRIPTION

See page RS-222.

WIRING DIAGRAM

See page RS-223.

INSPECTION PROCEDURE

1	CHECK BATTERY

(a) Measure the voltage of the battery.
Standard voltage:
11 to 14 V

NG → **CHECK AND REPLACE BATTERY OR CHARGING SYSTEM**

OK

2	CHECK CONNECTOR

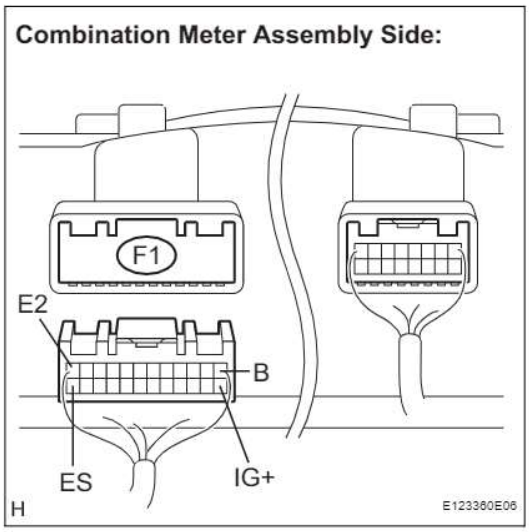
(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector is properly connected to the combination meter assembly.
OK:
The connector is properly connected.

NG → **CONNECT CONNECTOR PROPERLY**

OK

RS

3 CHECK WIRE HARNESS (COMBINATION METER ASSEMBLY - BODY GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the F1 connector from the combination meter assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester Connection	Condition	Specified Condition
F1-1 (B) - Body ground	Always	10 to 14 V
F1-13 (IG+) - Body ground	Power switch on (IG)	10 to 14 V

(g) Turn the power switch off.
(h) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
F1-12 (E2) - Body ground	Always	Below 1 Ω
F1-24 (ES) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS

OK

4 CHECK SRS WARNING LIGHT

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the combination meter assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Check the SRS warning light condition.

OK:

After the primary check period, SRS warning light goes off for approximately 10 seconds, and remains on.

HINT:

The primary check period is approximately 6 seconds after the power switch is turned on (IG).

RS

NG → GO TO METER / GAUGE SYSTEM (See page ME-14)

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

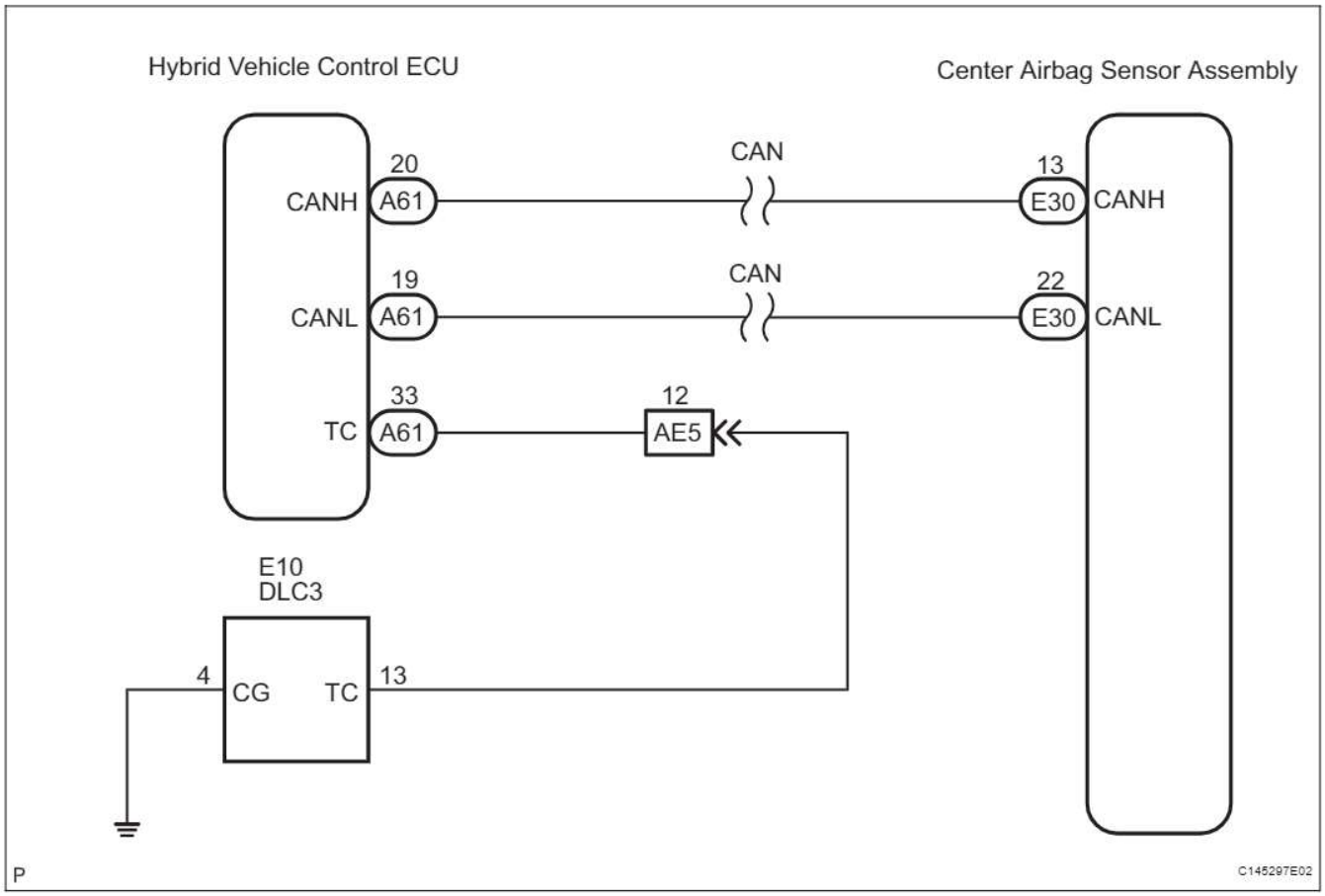
Diagnosis Circuit

DESCRIPTION

DTC output mode is set by connecting terminals TC and CG of the DLC3.
DTCs are displayed by blinking of the SRS warning light.
HINT:

- When each warning light stays blinking, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in each ECU is suspected.
- A DTC output mode signal is transmitted through CAN communication system to each ECU including the center airbag sensor assembly. Thus when all systems do not enter DTC output mode, there may be an hybrid vehicle control ECU malfunction.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK CAN COMMUNICATION SYSTEM

(a) Check if a CAN communication system DTC is output (See page CA-22).

Result

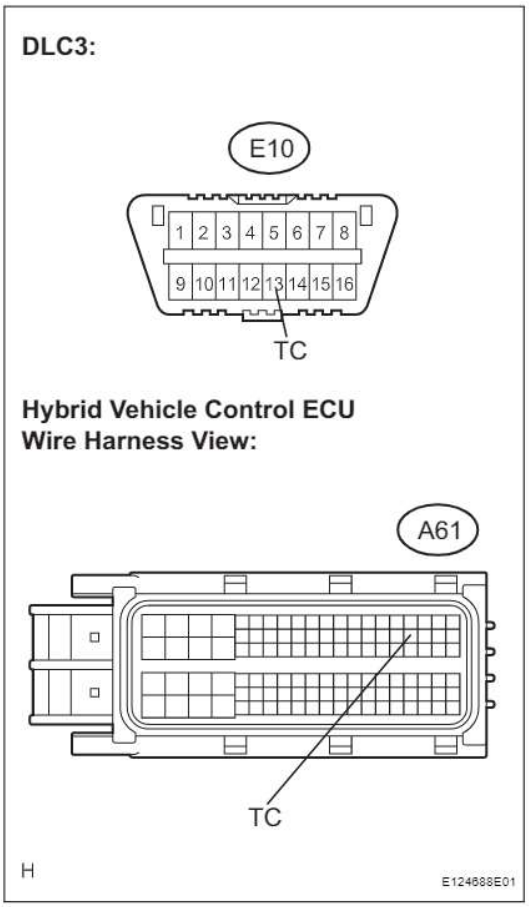
Condition	Proceed to
DTC is not output	A
DTC is output	B

RS

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS

A

2 CHECK WIRE HARNESS (DLC3 - HYBRID VEHICLE CONTROL ECU)



(a) Turn the power switch off.
(b) Disconnect the connector from the hybrid vehicle control ECU.
(c) Measure the resistance according to the value(s) in the table below.

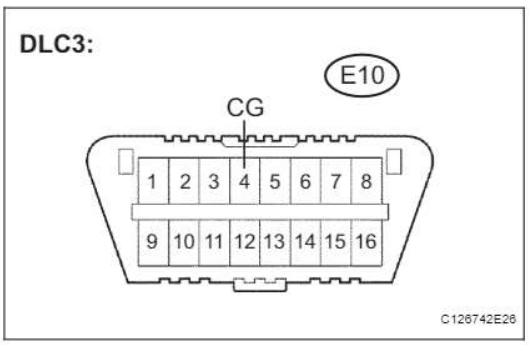
Standard resistance

Tester Connection	Condition	Specified Condition
E10-13 (TC) - A61-33 (TC)	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS (TC OF DLC3 - TC OF HYBRID VEHICLE CONTROL ECU)

OK

3 CHECK WIRE HARNESS (CG OF DLC3 - BODY GROUND)



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

Standard resistance

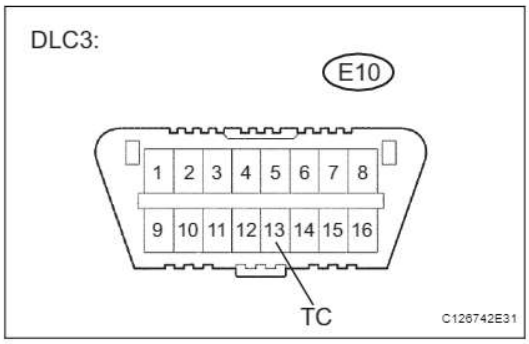
Tester Connection	Condition	Specified Condition
E10-4 (CG) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS (CG OF DLC3 - BODY GROUND)

RS

OK

4	CHECK WIRE HARNESS (TC OF DLC3 - BODY GROUND)



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

Standard resistance

Tester Connection	Condition	Specified Condition
E10-13 (TC) - Body ground	Always	1 MΩ or higher

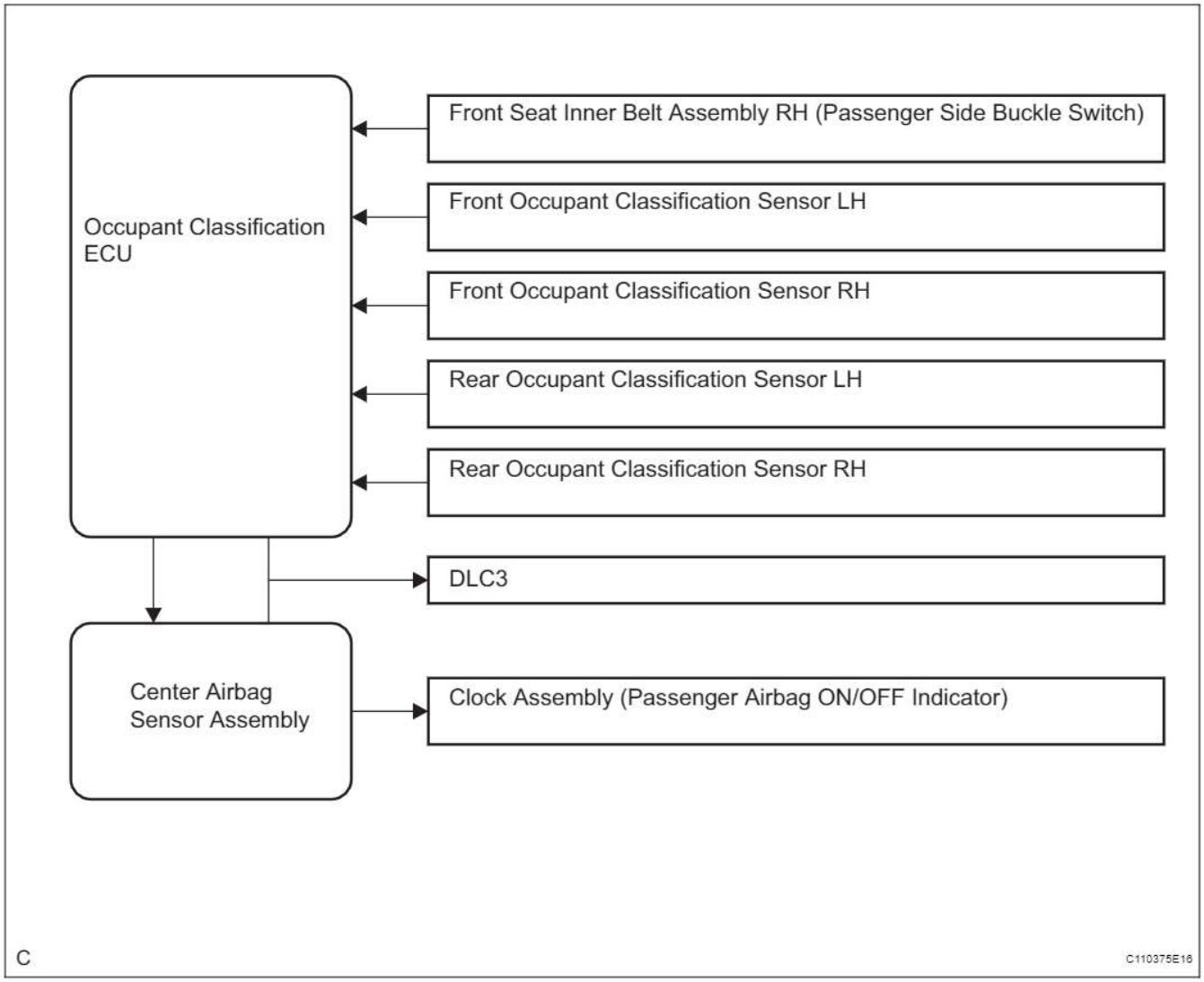
NG → REPAIR OR REPLACE WIRE HARNESS OR EACH ECU

OK →

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

RS

SYSTEM DIAGRAM



RS

SYSTEM DESCRIPTION

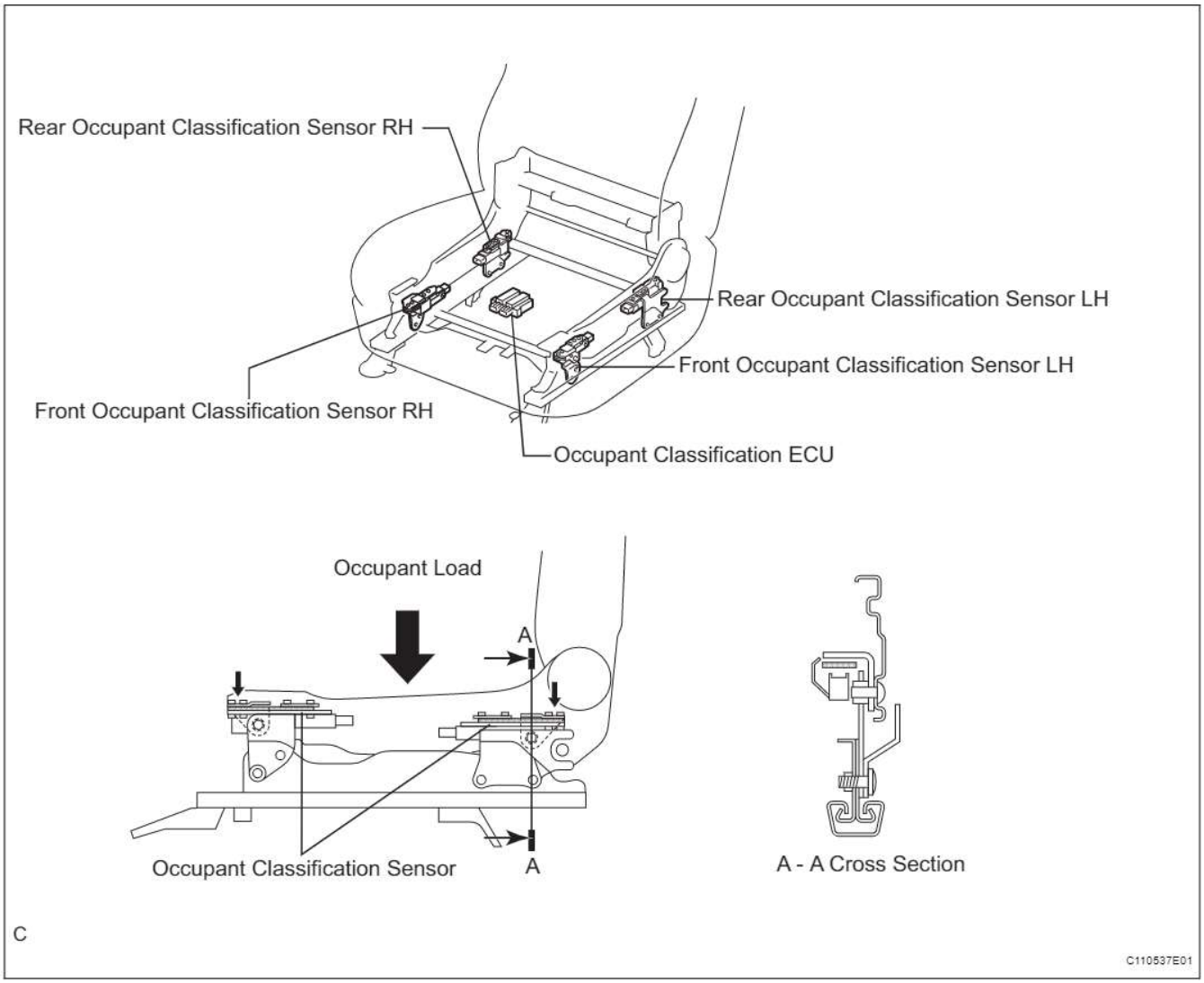
1. DESCRIPTION OF OCCUPANT CLASSIFICATION SYSTEM

(a) GENERAL DESCRIPTION.

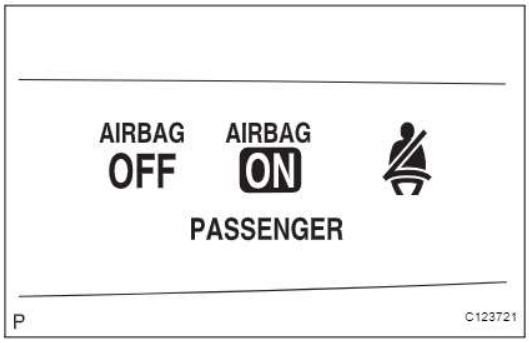
(1) In the occupant classification system, the occupant classification ECU calculates the weight of the occupant based on a signal from the occupant classification sensors. This system recognizes the occupant as a child if it detects a weight of less than 36 kg (79.37 lb), and disables the front passenger airbag and front passenger side-side airbag.

(2) This system is mainly comprised of 4 occupant classification sensors that detect the load on the front passenger seat. The occupant classification ECU controls the system, and the passenger airbag ON/OFF indicator indicates the ON/OFF condition of the front passenger airbag and front passenger side-side airbag.

(b) OCCUPANT CLASSIFICATION SENSOR.



(1) The occupant classification sensors are installed on 4 brackets connecting the seat rail and seat frame. Accordingly, when load is applied to the front passenger seat by an occupant sitting in it, the occupant classification sensors register a distortion.



(c) DESCRIPTION FOR PASSENGER AIRBAG ON/OFF INDICATOR.

(1) The passenger airbag ON/OFF indicator is installed on the clock assembly. This indicator informs the driver whether the occupant classification ECU puts the front passenger airbag assembly into an active state or inactive state.

(2) If a malfunction occurs in the occupant classification system, "OFF" indication of the passenger airbag ON/OFF indicator and the SRS warning light come on.

RS

HOW TO PROCEED WITH TROUBLESHOOTING

The intelligent tester can be used in steps 4, 6, 8, and 9.

1 VEHICLE BROUGHT TO WORKSHOP

NEXT

2 CUSTOMER PROBLEM ANALYSIS

(a) Confirm problem symptoms (See page IN-72).

NEXT

3 PASSENGER AIRBAG ON/OFF INDICATOR CHECK

NEXT

4 DTCS CHECK (Present and Past DTCs)

(a) Check for DTCs.
Result

Result	Proceed to
DTC is output.	A
DTC is not output.	B

B → GO TO PROBLEM SYMPTOMS TABLE

A

5 DTCS CHART

NEXT

6 CIRCUIT INSPECTION

NEXT

7 REPAIR

NEXT

RS

8	CLEAR DTCS (Present and Past DTCs)

(a) Clear DTCs.

NEXT

9	DTCS CHECK (Present and Past DTCs)

(a) Check for DTCs.
Result

Result	Proceed to
DTC is not output.	A
DTC is output.	B

B → Go to step 5

A

10	SYMPTOM SIMULATION

(a) Check the passenger airbag ON/OFF indicator condition.
Result

Result	Proceed to
Passenger airbag ON/OFF indicator operates normally.	A
Passenger airbag ON/OFF indicator ("OFF") and SRS warning light come on.	B

B → Go to step 5

A

11	CONFIRMATION TEST

NEXT

END

RS

INITIALIZATION

1. ZERO POINT CALIBRATION

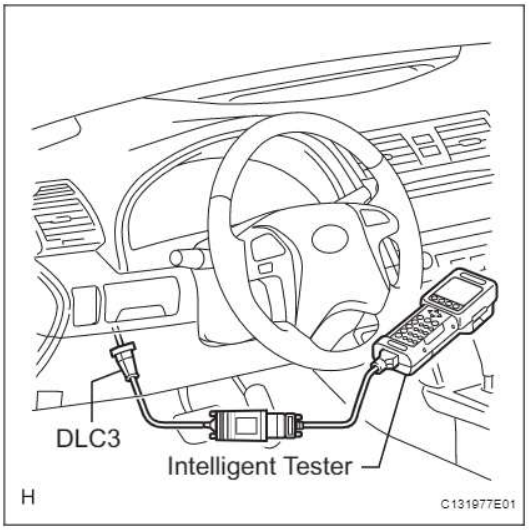
NOTICE:

Make sure that the front passenger seat is not occupied before performing the operation:

HINT:

Perform zero point calibration and sensitivity check if any of the following conditions occur.

- The occupant classification ECU is replaced.
- Accessories (seatback tray and seat cover, etc.) are installed.
- The front passenger seat is removed from the vehicle.
- The passenger airbag ON/OFF indicator ("OFF") comes on when the front passenger seat is not occupied.
- The vehicle is brought to the workshop for repair due to an accident or a collision.



(a) Zero point calibration and sensitivity check procedures.

HINT:

Make sure that zero point calibration has finished normally, and then perform the sensitivity check.

(1) Adjust the seat position according to the table below.

Adjustment Component	Position
Slide Direction	Rearmost position
Reclining Angle	Upright position
Headrest Height	Lowest position
Lifter Height	Lowest position

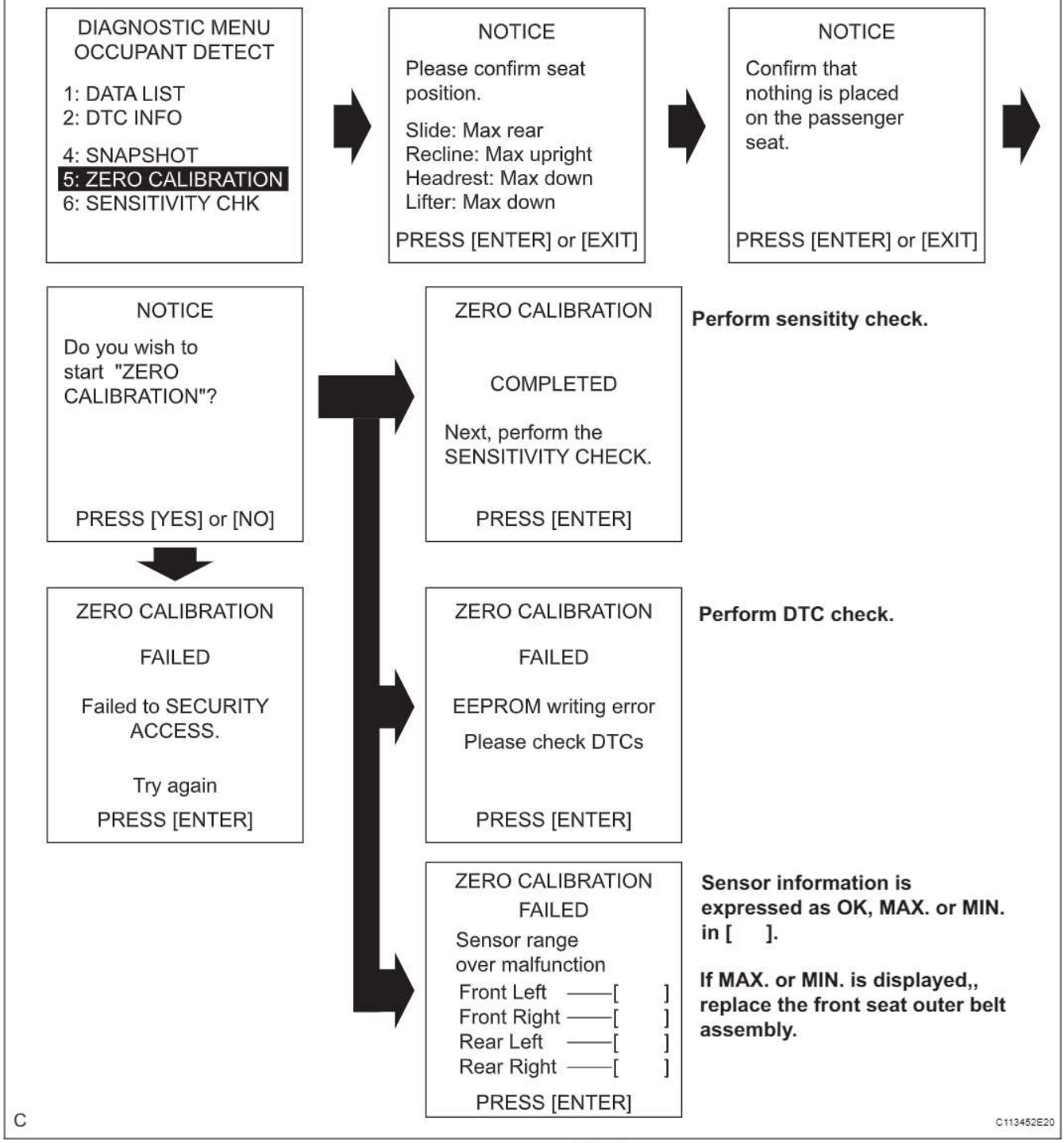
(2) Connect the intelligent tester to the DLC3.

(3) Turn the power switch on (IG).

(4) Perform the zero point calibration by following the prompts on the tester screen.

ZERO POINT CALIBRATION PROCEDURE

"1: DIAGNOSIS" - "1: OBD/MOBD" - "MODEL YEAR" - "MODEL SELECTION" - "CAMRY" - Select the option parts" - "9: OCCUPANT DETECT"
Refer to the following screen flow.



HINT:
Refer to the intelligent tester operator's manual for further details.

RS

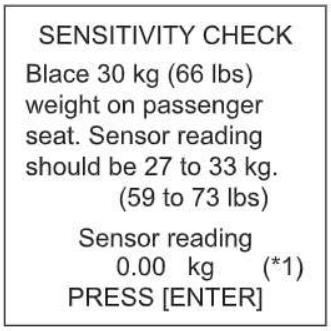
OK:
"COMPLETE" is displayed.

(5) Perform the sensitivity check by following the prompts on the tester screen.
(6) Confirm that the beginning sensor reading within standard value.
Standard value:
-3.2 to 3.2 kg (-7 to 7 lb)
(7) Place a 30 kg (66.14 lb) weight (eg. a 30 kg (66.14 lb) of lead mass) onto the front passenger seat.
(8) Confirm that the sensitivity is within the standard value.

SENSITIVITY CHECK PROCEDURE

"1: DIAGNOSIS" - "1: OBD/MOBD" - "MODEL YEAR" - "MODEL SELECTION = CAMRY" - Select the option parts - "9: OCCUPANT DETECT" - Refer to the following screen flow.





*1: kg = lb

Unit can be changed based on unit conversion setting.

[System Selection Screen]

"1: DIAGNOSIS" - "9: SETUP" - "4: UNIT CONVERSION" - "WEIGHT" (kg = lbs)

C

C113453E18

Standard value:
27 to 33 kg (59.52 to 72.75 lb)

HINT:

- When performing the sensitivity check, use a solid metal weight (the check result may not appear properly if the weight made from liquid is used).

RS

- When the sensitivity deviates from the standard value, retighten the bolts of the front passenger seat without deforming the seat rail. After performing this procedure, if the sensitivity is not within the standard value, replace the front seat assembly RH.
- When zero point calibration has not finished normally, replace the front seat assembly RH.

PROBLEM SYMPTOMS TABLE

HINT:
Proceed to the troubleshooting for each circuit in the table below.

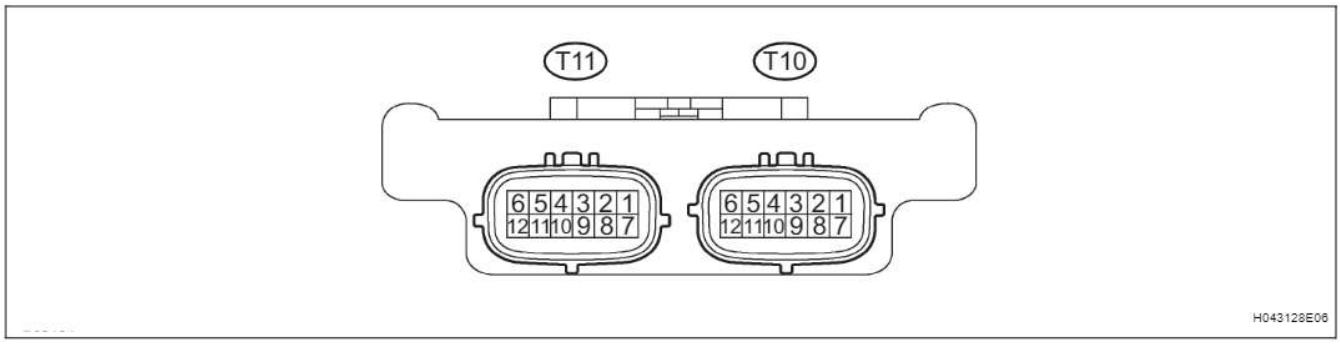
OCCUPANT CLASSIFICATION SYSTEM:

Symptom	Suspected area	See page
The front passenger seat condition differs from the indication by the passenger airbag ON/OFF indicator (DTC is not output).	Trouble in Passenger Airbag ON/OFF Indicator	RS-339

RS

TERMINALS OF ECU

1. OCCUPANT CLASSIFICATION ECU (for Power seat)

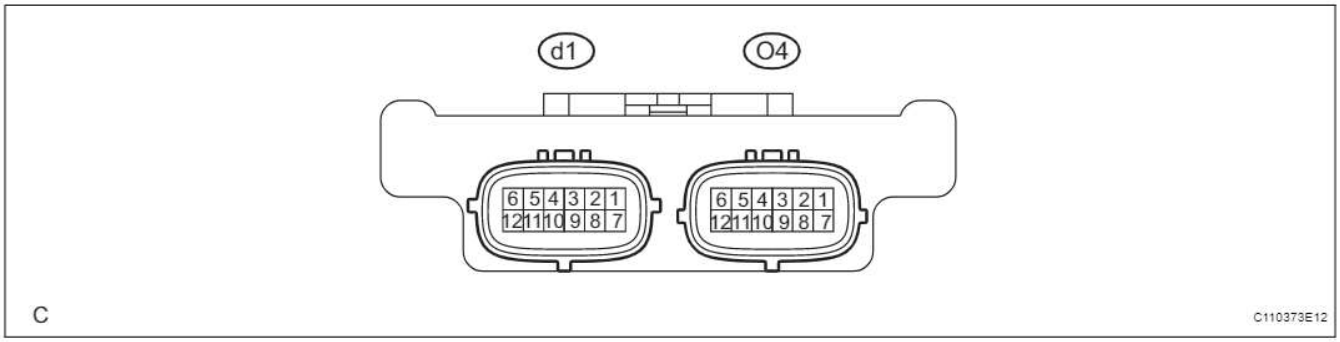


Terminal No. (Symbols)	Wiring Color	Terminal Description	Condition	Specification
T10-1 (+B) - T10-3 (GND)	W - W-B	Battery	Always	10 to 14 V
T10-2 (DIA) - T10-3 (GND)	GR - W-B	Diagnosis (DLC3)	Power switch on (IG)	Pulse generation
T10-3 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
T10-4 (FSR-) - T10-3 (GND)	Y - W-B	Center airbag sensor assembly communication line (-)	Always	Below 1 V
T10-5 (BGND) - T10-3 (GND)	GR - W-B	Passenger side buckle switch ground line	Always	Below 1 V
T10-7 (IG) - T10-3 (GND)	BR - W-B	Power source (ECU-B Fuse)	Power switch on (IG)	10 to 14 V
T10-8 (FSR+) - T10-4 (FSR-)	L - Y	Center airbag sensor assembly communication line	Power switch on (IG)	Pulse generation
T10-9 (BSW) - T10-5 (BGND)	B - GR	Passenger side buckle switch line	Always	Below 1 V
T11-1 (SGD1) - T10-3 (GND)	G - W-B	Front occupant classification sensor LH ground line	Always	Below 1 V
T11-2 (SGD2) - T10-3 (GND)	O - W-B	Front occupant classification sensor RH ground line	Always	Below 1 V
T11-3 (SGD3) - T10-3 (GND)	W - W-B	Rear occupant classification sensor LH ground line	Always	Below 1 V
T11-4 (SGD4) - T10-3 (GND)	BR - W-B	Rear occupant classification sensor RH ground line	Always	Below 1 V
T11-5 (SVC3) - T11-3 (SGD3)	GR - W	Rear occupant classification sensor LH power supply line	Power switch on (IG), a load is applied to rear occupant classification sensor LH	4.5 to 5.1 V
T11-6 (SVC4) - T11-4 (SGD4)	V - BR	Rear occupant classification sensor RH power supply line	Power switch on (IG), a load is applied to rear occupant classification sensor RH	4.5 to 5.1 V
T11-7 (SIG1) - T11-1 (SGD1)	P - G	Front occupant classification sensor LH signal line	Power switch on (IG), a load is applied to front occupant classification sensor LH	0.2 to 4.9 V
T11-8 (SIG2) - T11-2 (SGD2)	L - O	Front occupant classification sensor RH signal line	Power switch on (IG), a load is applied to front occupant classification sensor RH	0.2 to 4.9 V

RS

Terminal No. (Symbols)	Wiring Color	Terminal Description	Condition	Specification
T11-9 (SIG3) - T11-3 (SGD3)	Y - W	Rear occupant classification sensor LH signal line	Power switch on (IG), a load is applied to rear occupant classification sensor LH	0.2 to 4.9 V
T11-10 (SIG4) - T11-4 (SGD4)	B - BR	Rear occupant classification sensor RH signal line	Power switch on (IG), a load is applied to rear occupant classification sensor RH	0.2 to 4.9 V
T11-11 (SVC1) - T11-1 (SGD1)	R - G	Front occupant classification sensor LH power supply line	Power switch on (IG), a load is applied to front occupant classification sensor LH	4.5 to 5.1 V
T11-12 (SVC2) - T11-2 (SGD2)	W - O	Front occupant classification sensor RH power supply line	Power switch on (IG), a load is applied to front occupant classification sensor RH	4.5 to 5.1 V

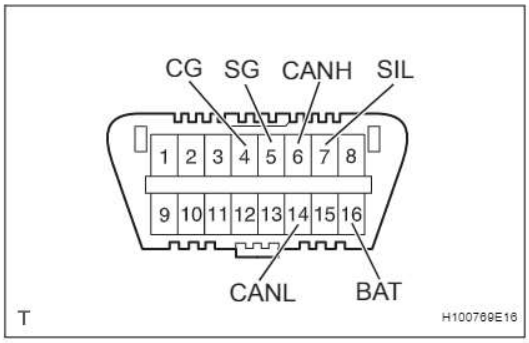
2. OCCUPANT CLASSIFICATION ECU (for Manual seat)



Terminal No. (Symbols)	Wiring Color	Terminal Description	Condition	Specification
O4-1 (+B) - O4-3 (GND)	LG - W-B	Battery	Always	10 to 14 V
O4-2 (DIA) - O4-3 (GND)	O - W-B	Diagnosis (DLC3)	Power switch on (IG)	Pulse generation
O4-3 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
O4-4 (FSR-) - O4-3 (GND)	B - W	Center airbag sensor assembly communication line (-)	Always	Below 1 V
O4-5 (BGND) - O4-3 (GND)	GR - W-B	Passenger side buckle switch ground line	Always	Below 1 V
O4-7 (IG) - O4-3 (GND)	BR - W-B	Power source (ECU-B Fuse)	Power switch on (IG)	10 to 14 V
O4-8 (FSR+) - O4-4 (FSR-)	W - B	Center airbag sensor assembly communication line	Power switch on (IG)	Pulse generation
O4-9 (BSW) - O4-5 (BGND)	P - GR	Passenger side buckle switch line	Always	Below 1 V
d1-1 (SGD1) - O4-3 (GND)	G - W-B	Front occupant classification sensor LH ground line	Always	Below 1 V
d1-2 (SGD2) - O4-3 (GND)	O - W-B	Front occupant classification sensor RH ground line	Always	Below 1 V
d1-3 (SGD3) - O4-3 (GND)	W - W-B	Rear occupant classification sensor LH ground line	Always	Below 1 V
d1-4 (SGD4) - O4-3 (GND)	BR - W-B	Rear occupant classification sensor RH ground line	Always	Below 1 V

RS

Terminal No. (Symbols)	Wiring Color	Terminal Description	Condition	Specification
d1-5 (SVC3) - d1-3 (SGD3)	GR - W	Rear occupant classification sensor LH power supply line	Power switch on (IG), a load is applied to rear occupant classification sensor LH	4.5 to 5.1 V
d1-6 (SVC4) - d1-4 (SGD4)	V - BR	Rear occupant classification sensor RH power supply line	Power switch on (IG), a load is applied to rear occupant classification sensor RH	4.5 to 5.1 V
d1-7 (SIG1) - d1-1 (SGD1)	SB - G	Front occupant classification sensor LH signal line	Power switch on (IG), a load is applied to front occupant classification sensor LH	0.2 to 4.9 V
d1-8 (SIG2) - d1-2 (SGD2)	L - O	Front occupant classification sensor RH signal line	Power switch on (IG), a load is applied to front occupant classification sensor RH	0.2 to 4.9 V
d1-9 (SIG3) - d1-3 (SGD3)	Y - W	Rear occupant classification sensor LH signal line	Power switch on (IG), a load is applied to rear occupant classification sensor LH	0.2 to 4.9 V
d1-10 (SIG4) - d1-4 (SGD4)	R - BR	Rear occupant classification sensor RH signal line	Power switch on (IG), a load is applied to rear occupant classification sensor RH	0.2 to 4.9 V
d1-11 (SVC1) - d1-1 (SGD1)	R - G	Front occupant classification sensor LH power supply line	Power switch on (IG), a load is applied to front occupant classification sensor LH	4.5 to 5.1 V
d1-12 (SVC2) - d1-2 (SGD2)	W - O	Front occupant classification sensor RH power supply line	Power switch on (IG), a load is applied to front occupant classification sensor RH	4.5 to 5.1 V



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The ECU uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

Symbols (Terminal No.)	Terminal Description	Condition	Pulse condition
SIL (7) - SG (5)	Bus "+" Line	During transmission	Pulse generation
CG (4) - Body ground	Chassis Ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery positive	Always	10 to 14 V
CANH (6) - CANL (14)	CAN bus line	Power switch off (*)	54 to 69 Ω
CANH (6) - BAT (16)	HIGH-level CAN bus line	Power switch off (*)	6 kΩ or higher
CANH (6) - CG (4)	HIGH-level CAN bus line	Power switch off (*)	200 Ω or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Power switch off (*)	6 kΩ or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Power switch off (*)	200 Ω or higher

NOTICE:

***: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the power switch, any other switches, or the door.**

RS

If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.

HINT:

If the display shows a communication error message when connecting the cable of the intelligent tester to the DLC3, turning the power switch on (IG) and operating the intelligent tester, there is a problem on the vehicle side or tester side.

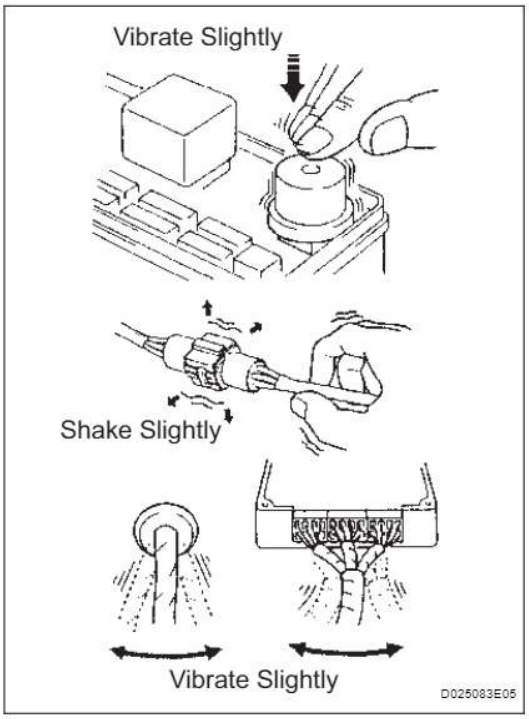
- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tester is connected to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's instruction manual.

2. SYMPTOM SIMULATION

HINT:

The most difficult case in troubleshooting is when no symptoms occur. In such cases, a thorough customer problem analysis must be carried out. Then the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be simulated. No matter how experienced or skilled a technician may be, if he proceeds to troubleshoot without confirming the problem symptoms, he will likely overlook something important and make a wrong guess at some points in the repair operation.

This leads to a standstill in troubleshooting.



(a) Vibration method: When vibration seems to be the major cause.

HINT:

Perform the simulation method only during the primary check period (for approximately 6 seconds after the power switch is turned on (IG)).

(1) Slightly vibrate the part of the sensor considered to be the problem cause with your fingers and check whether the malfunction occurs.

HINT:

Shaking the relays too strongly may result in open relays.

(2) Slightly shake the connector vertically and horizontally.

(3) Slightly shake the wire harness vertically and horizontally.

The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

RS

(b) Simulation method for DTC B1794:
Turn the power switch from the off to on (IG), hold it for 10 seconds, and back to off again 50 times in a row.
HINT:
DTC B1794 is output if the occupant classification ECU receives the power switch off-on (IG)-off signal 50 times in a row when a malfunction occurs in the power circuit for the occupant classification system.

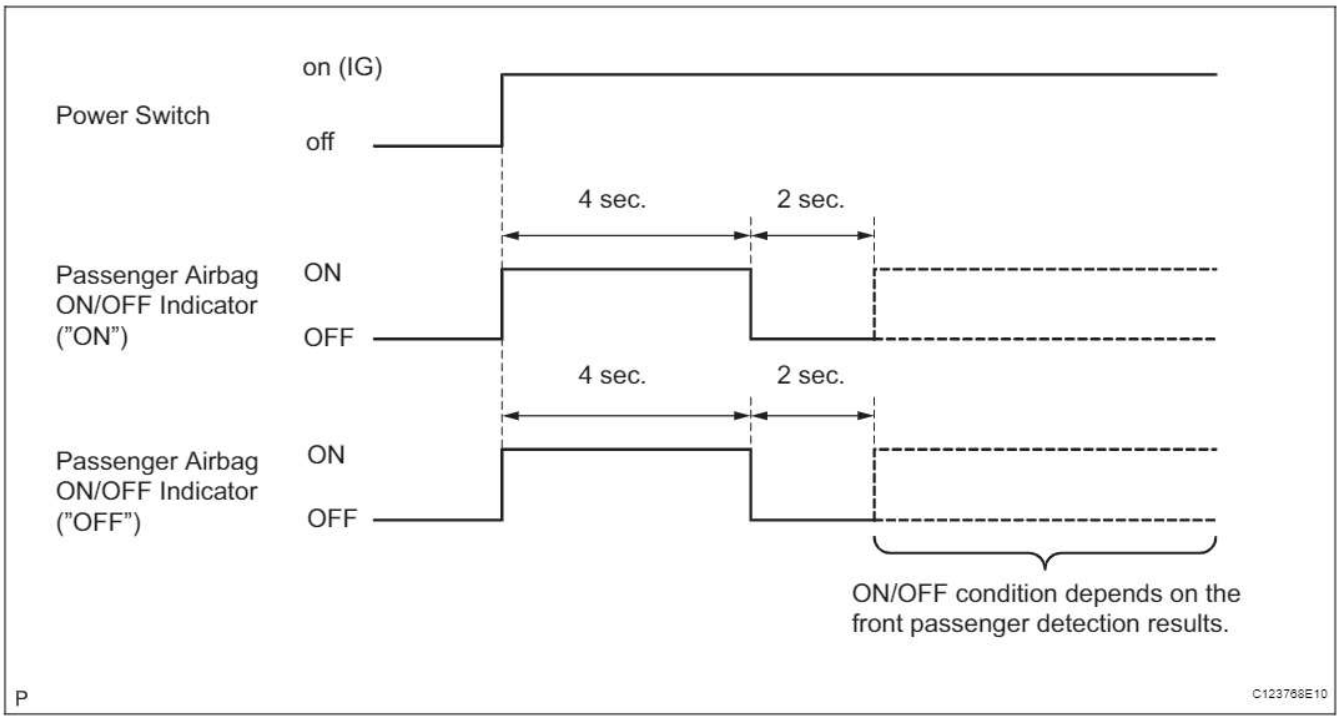
3. FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

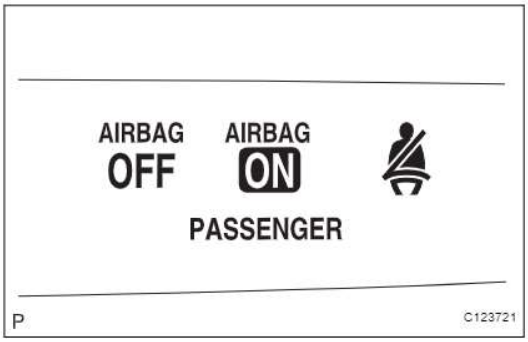
(a) Initial check.
(1) Turn the power switch on (IG).
(2) The passenger airbag ON/OFF indicator ("ON" and "OFF") comes on for approximately 4 seconds, then goes off for approximately 2 seconds.
(3) Approximately 6 seconds after the power switch is turned to on (IG), the passenger airbag ON/OFF indicator will show ON or OFF depending on the conditions listed below.

Condition	ON Indicator	OFF Indicator
Vacant	OFF	OFF
Adult is seated. (Above 36 kg (79.37 lb))	ON	OFF
Child is seated. (Less than 36 kg (79.37 lb))	OFF	ON
Child restraint system is set. (*)	OFF	ON
Front passenger occupant classification system failure	OFF	ON

*: Child restraint system less than 7 kg (15.43 lb) and passenger side buckle switch is ON, then 7 to 36 kg (15.43 to 79.37 lb) is set.
HINT:
- The passenger airbag ON/OFF indicator is based on the timing chart below in order to check the indicator light circuit.
- When the occupant classification system has trouble, both the SRS warning light and the passenger airbag ON/OFF indicator ("OFF") come on. In this case, check the DTCs in "AIRBAG SYSTEM" first.

RS





4. CHECK PASSENGER AIRBAG ON/OFF INDICATOR

(a) Turn the power switch on (IG).

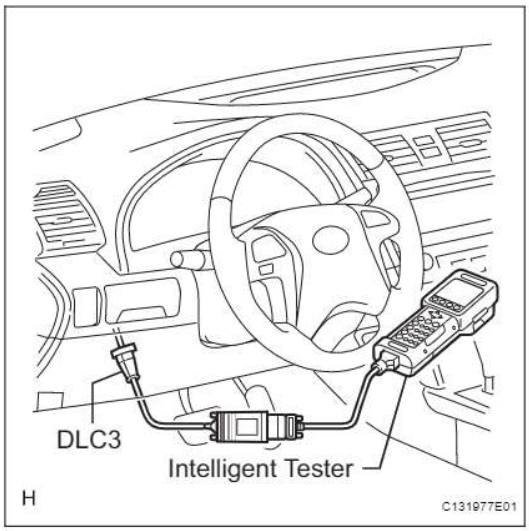
(b) Check that the passenger airbag ON/OFF indicator ("ON" and "OFF") come on for approximately 4 seconds, then goes off for approximately 2 seconds.
HINT:
Refer to the table in step 3 regarding the passenger airbag ON/OFF indicator when the power switch is turned on (IG) and approximately 6 seconds pass.

RS

DTC CHECK / CLEAR

1. DTC CHECK

HINT:
When DTC B1650/32 is detected as a result of troubleshooting for "AIRBAG SYSTEM", perform troubleshooting for the occupant classification system.



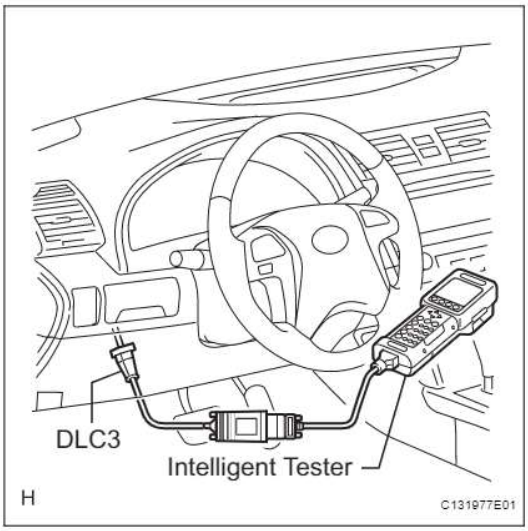
(a) Check for DTCs.
  (1) Connect the intelligent tester to the DLC3.
  (2) Turn the power switch on (IG).
  (3) Check the DTCs by following the prompts on the tester screen.
  HINT:
  Refer to the intelligent tester operator's manual for further details.

(b) Clear DTCs.
  (1) Connect the intelligent tester to the DLC3.
  (2) Turn the power switch on (IG).
  (3) Clear the DTCs by following the prompts on the tester screen.
  HINT:
  Refer to the intelligent tester operator's manual for further details.

RS

DATA LIST / ACTIVE TEST

HINT:
By accessing the DATA LIST displayed on the intelligent tester, you can perform such functions as reading the values of switches and sensors without removing any parts. Reading the DATA LIST is the first step in troubleshooting is one method to save labor time.



1. DATA LIST FOR OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Turn the tester ON.
(d) Enter the following menus: DIAGNOSIS / OBD/ MOBD / OCCUPANT DETECT / DATA LIST.
(e) Check the values by referring to: the table below.

DATA LIST:

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
IG SW	Power switch condition/ ON: Power switch on (IG) OFF: Power switch off	ON/OFF	-
P BUCKLE SW	Passenger side buckle switch/ SET: The seat belt is fastened UNSET: The seat belt is not fastened NG: Data is not determined	SET/UNSET	-
PASSENGER CLASS	Passenger classification/ AM50: Adult (more than 54 kg (119.05 lb)) is seated AF05: Adult (36 to 54 kg (79.37 to 119.05 lb)) is seated CHILD: Child (less than 36 kg (79.37 lb)) is seated CRS: Child restraint system (less than 7 kg (15.43 lb)) and passenger side buckle switch is ON, then 7 to 36 kg (15.43 to 79.37 lb) is set OFF: Vacant	AM50/AF05/CHILD/CRS/OFF	-
SENS RANGE INF	Sensor range information/ OK: The value of a sensor is within the range NG: The value of a sensor is over the range	OK	-
FL SENS RANGE	Front left sensor range information/ OK: Sensor range is -17 to 27 kg (-37.48 to 59.52 lb) Min.: Less than -17 kg (-37.48 lb) Max.: More than 27 kg (59.52 lb)	OK	-

RS

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
FR SENS RANGE	Front right sensor range information/ OK: Sensor range is -17 to 27 kg (-37.48 to 59.52 lb) Min.: Less than -17 kg (-37.48 lb) Max.: More than 27 kg (59.52 lb)	OK	-
RL SENS RANGE	Rear left sensor range information/ OK: Sensor range is -17 to 37 kg (-37.48 to 81.57 lb) Min.: Less than -17 kg (-37.48 lb) Max.: More than 37 kg (81.57 lb)	OK	-
RR SENS RANGE	Rear right sensor range information/ OK: Sensor range is -17 to 37 kg (-37.48 to 81.57 lb) Min.: Less than -17 kg (-37.48 lb) Max.: More than 37 kg (81.57 lb)	OK	-
FL SENS VOL	Front left sensor voltage/ Min.: 0 V Max.: 19.8 V	0 to 4.7 V	-
FR SENS VOL	Front right sensor voltage/ Min.: 0 V Max.: 19.8 V	0 to 4.7 V	-
RL SENS VOL	Rear left sensor voltage/ Min.: 0 V Max.: 19.8 V	0 to 4.7 V	-
RR SENS VOL	Rear right sensor voltage/ Min.: 0 V Max.: 19.8 V	0 to 4.7 V	-
FL SENS WEIGHT	Front left sensor weight information/ Min.: -17 kg (-37.48 lb) Max.: 27 kg (59.52 lb)	-17 to 27 kg (-37.48 to 59.52 lb)	-
FR SENS WEIGHT	Front right sensor weight information/ Min.: -17 kg (-37.48 lb) Max.: 27 kg (59.52 lb)	-17 to 27 kg (-37.48 to 59.52 lb)	-
RL SENS WEIGHT	Rear left sensor weight information/ Min.: -17 kg (-37.48 lb) Max.: 37 kg (81.57 lb)	-17 to 37 kg (-37.48 to 81.57 lb)	-
RR SENS WEIGHT	Rear right sensor weight information/ Min.: -17 kg (-37.48 lb) Max.: 37 kg (81.57 lb)	-17 to 37 kg (-37.48 to 81.57 lb)	-
TOTAL WEIGHT	Total weight information/ Min.: -68 kg (-149.91 lb) Max.: 128 kg (282.19 lb)	-68 to 128 kg (-149.91 to 282.19 lb)	-
#PRESENT CODES	Number of present DTC recorded/ Min.: 0, Max.: 255	0	-
#PAST CODES	Number of past DTC recorded/ Min.: 0, Max.: 255	0	-

DIAGNOSTIC TROUBLE CODE CHART

If a trouble code is displayed during the DTC check, check the circuit listed for the code in the table below (Proceed to the page listed for that circuit).

OCCUPANT CLASSIFICATION SYSTEM:

DTC Code	Detection Item	Trouble Area	Passenger Airbag ON/ OFF Indicator (OFF Indicator)	See page
B1771	Passenger Side Buckle Switch Circuit Malfunction	1. Front seat inner belt assembly RH (Passenger side buckle switch) 2. Occupant classification ECU 3. Floor wire No. 2 4. Front seat wire RH (for Power seat)	ON	RS-253
B1780	Front Occupant Classification Sensor LH Circuit Malfunction	1. Front seat assembly RH (Front occupant classification sensor LH) 2. Occupant classification ECU 3. Front seat wire RH	ON	RS-261
B1781	Front Occupant Classification Sensor RH Circuit Malfunction	1. Front seat assembly RH (Front occupant classification sensor RH) 2. Occupant classification ECU 3. Front seat wire RH	ON	RS-269
B1782	Rear Occupant Classification Sensor LH Circuit Malfunction	1. Front seat assembly RH (Rear occupant classification sensor LH) 2. Occupant classification ECU 3. Front seat wire RH	ON	RS-277
B1783	Rear Occupant Classification Sensor RH Circuit Malfunction	1. Front seat assembly RH (Rear occupant classification sensor RH) 2. Occupant classification ECU 3. Front seat wire RH	ON	RS-285
B1785	Front Occupant Classification Sensor LH Collision Detection	1. Front seat assembly RH (Front occupant classification sensor LH) 2. Occupant classification ECU	ON	RS-293
B1786	Front Occupant Classification Sensor RH Collision Detection	1. Front seat assembly RH (Front occupant classification sensor RH) 2. Occupant classification ECU	ON	RS-297
B1787	Rear Occupant Classification Sensor LH Collision Detection	1. Front seat assembly RH (Rear occupant classification sensor LH) 2. Occupant classification ECU	ON	RS-301
B1788	Rear Occupant Classification Sensor RH Collision Detection	1. Front seat assembly RH (Rear occupant classification sensor RH) 2. Occupant classification ECU	ON	RS-305

RS

DTC Code	Detection Item	Trouble Area	Passenger Airbag ON/ OFF Indicator (OFF Indicator)	See page
B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction	1. Occupant classification ECU 2. Center airbag sensor assembly 3. Floor wire No. 2 4. Front seat wire RH (for Power seat)	ON	RS-309
B1793	Occupant Classification Sensor Power Supply Circuit Malfunction	1. Front seat assembly RH (Occupant classification sensors) 2. Front seat wire RH 3. Occupant classification ECU	ON	RS-323
B1794	Open in Occupant Classification ECU Battery Positive Line	1. Battery 2. ECU-B fuse 3. Floor wire No. 2 4. Front seat wire RH (for Power seat) 5. Occupant classification ECU	ON	RS-330
B1795	Occupant Classification ECU Malfunction	1. Occupant classification ECU 2. Floor wire No. 2 3. Front seat wire RH (for Power seat) 4. Front seat inner belt assembly RH (Passenger side buckle switch)	ON	RS-334
B1796	Sleep Operation Failure of Occupant Classification ECU	Occupant classification ECU	ON	RS-337

RS

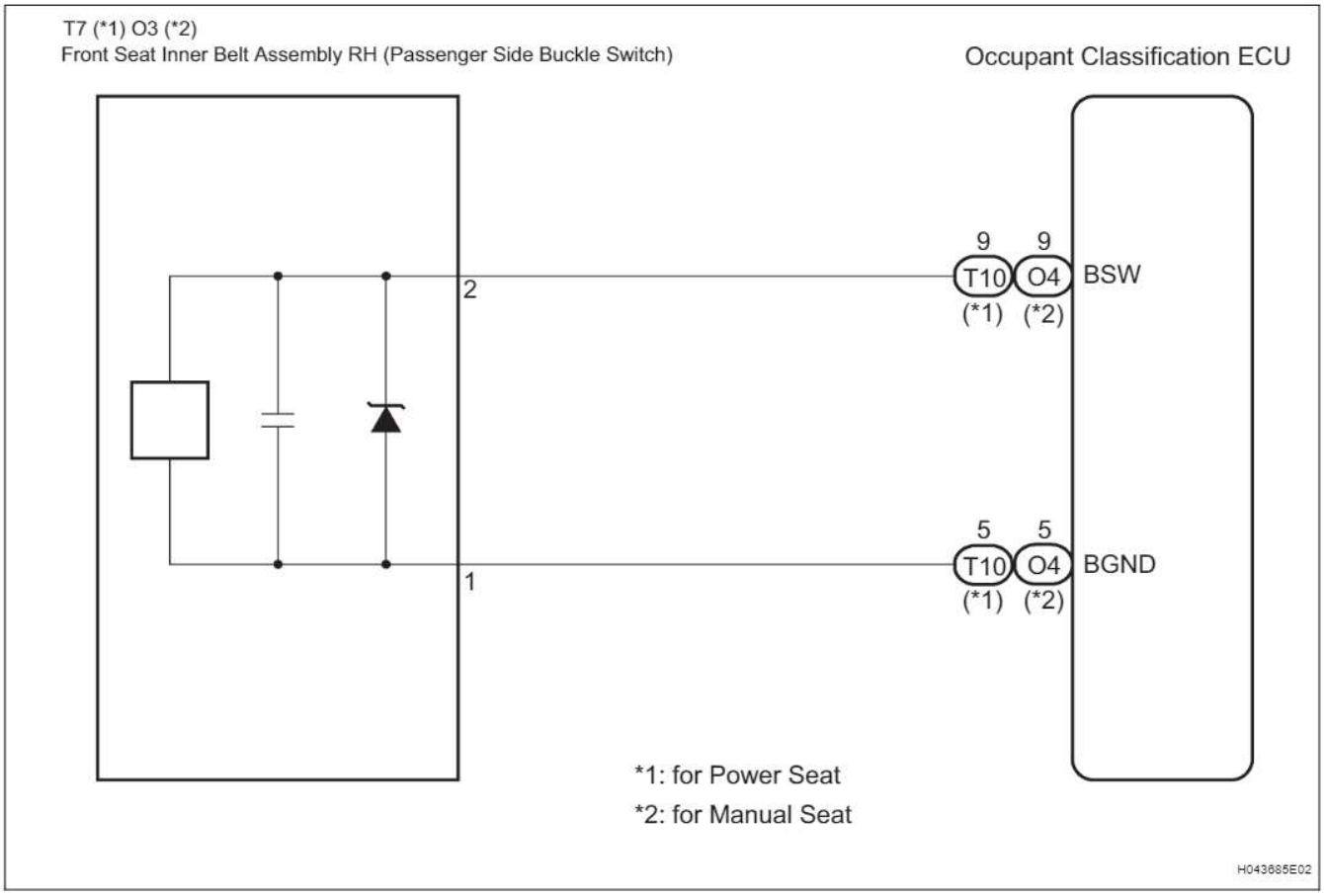
DTC	B1771	Passenger Side Buckle Switch Circuit Malfunction

DESCRIPTION

The passenger side buckle switch circuit consists of the occupant classification ECU and the front seat inner belt assembly RH.
DTC B1771 is recorded when a malfunction is detected in the passenger side buckle switch circuit.
Troubleshoot DTC B1771 first when the DTC B1771 and B1795 are output simultaneously.

DTC No.	DTC Detecting Condition	Trouble Area
B1771	• The occupant classification ECU 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 passenger side buckle switch circuit for 2 seconds. • Passenger side buckle switch malfunction • Occupant classification ECU malfunction	• Front seat inner belt assembly RH (Passenger side buckle switch) • Occupant classification ECU • Floor wire No. 2 • Front seat wire RH (for Power seat)

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

RS

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1771 is not output.

HINT:

Codes other than DTC B1771 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the front seat inner belt assembly RH.

OK:

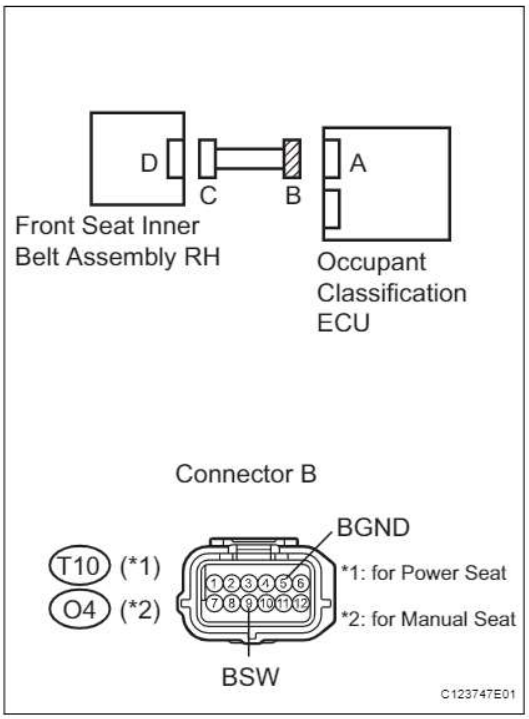
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3	CHECK WIRE HARNESS (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the front seat inner belt assembly RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - Body ground	Power switch on (IG)	Below 1 V
T10-5 (BGND) - Body ground	Power switch on (IG)	Below 1 V

for Manual seat

Tester connection	Condition	Specified condition
O4-9 (BSW) - Body ground)	Power switch on (IG)	Below 1 V
O4-5 (BGND) - Body ground	Power switch on (IG)	Below 1 V

Result

Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

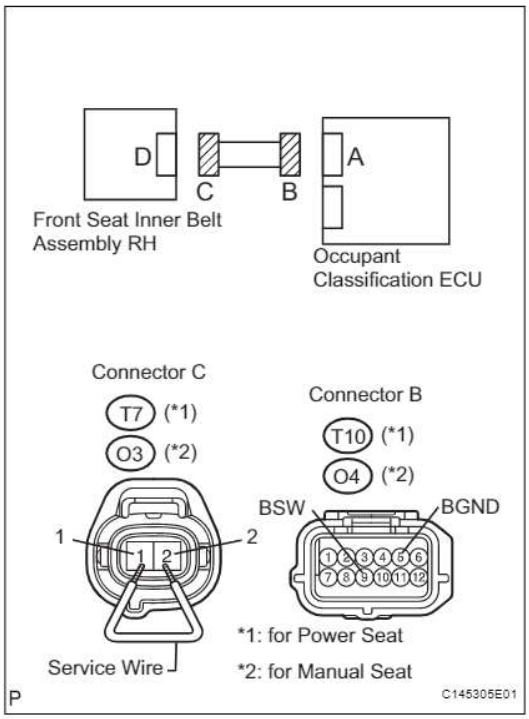
A → REPAIR OR REPLACE FRONT SEAT WIRE RH

B → REPAIR OR REPLACE FLOOR WIRE NO. 2

C

RS

4	CHECK WIRE HARNESS (OPEN)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Using a service wire, connect terminals 2 and 1 of connector C.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) Measure the resistance according to the value(s) in the table below.
Standard resistance:
for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - T10-5 (BGND)	Always	Below 1 Ω

for Manual seat

Tester connection	Condition	Specified condition
O4-9 (BSW) - O4-5 (BGND)	Always	Below 1 Ω

Result

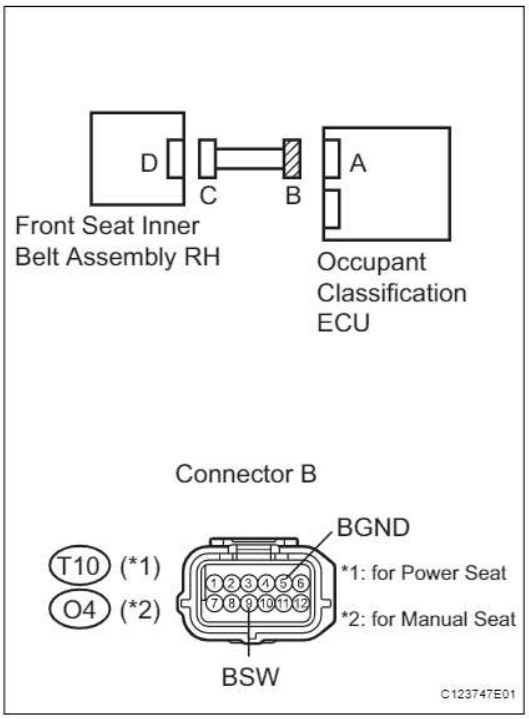
Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A	REPAIR OR REPLACE FRONT SEAT WIRE RH
B	REPAIR OR REPLACE FLOOR WIRE NO. 2

C

RS

5	CHECK WIRE HARNESS (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - T10-5 (BGND)	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
O4-9 (BSW) - O4-5 (BGND)	Always	1 MΩ or Higher

Result

Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

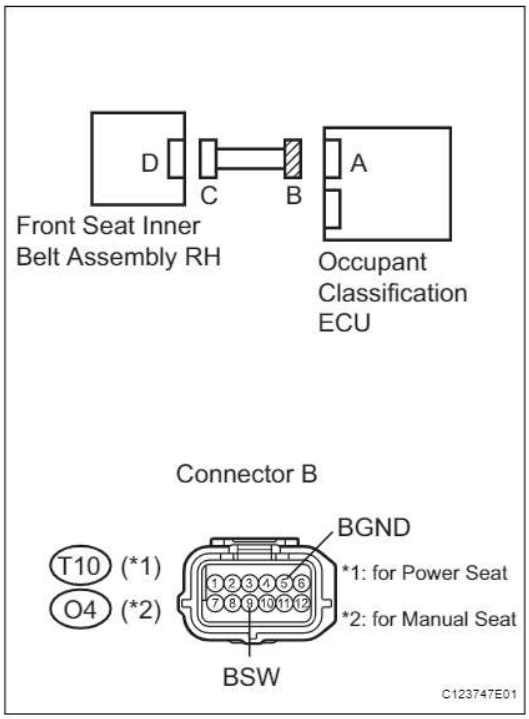
A → REPAIR OR REPLACE FRONT SEAT WIRE RH

B → REPAIR OR REPLACE FLOOR WIRE NO. 2

C

RS

6 CHECK WIRE HARNESS (SHORT TO GROUND)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T10-9 (BSW) - Body ground	Always	1 MΩ or Higher
T10-5 (BGND) - Body ground	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
O4-9 (BSW) - Body ground	Always	1 MΩ or Higher
O4-5 (BGND) - Body ground	Always	1 MΩ or Higher

Result

Result	Proceed to
NG (for Power seat)	A
NG (for Manual seat)	B
OK	C

A → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

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

C

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the front seat inner belt assembly RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).

OK:

DTC B1771 is not output.

HINT:

Codes other than DTC B1771 may be output at this time, but they are not related to this check.

RS

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8	REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat inner belt assembly RH (See page SB-16).
HINT:
Perform the inspection using parts from a normal vehicle if possible.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the power switch on (IG).
(f) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(g) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(h) Turn the power switch off.
(i) Turn the power switch on (IG).
(j) Check the DTCs (See page RS-248).
OK:
DTC B1771 is not output.
HINT:
Codes other than DTC B1771 may be output at this time, but they are not related to this check.

OK → **END**

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

10	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

RS

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

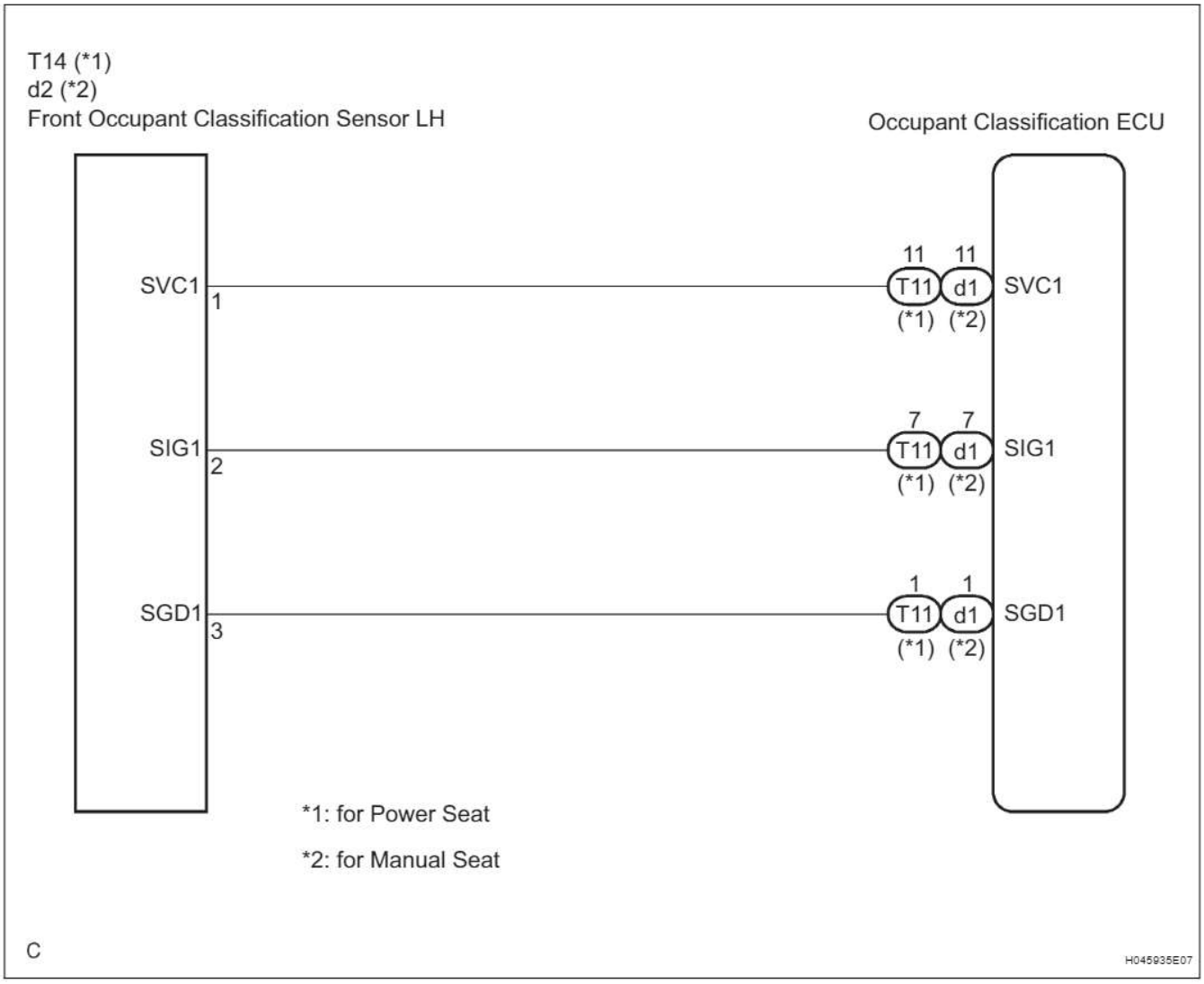
DTC	B1780	Front Occupant Classification Sensor LH Circuit Malfunction

DESCRIPTION

The front occupant classification sensor LH circuit consists of the occupant classification ECU and the front occupant classification sensor LH.
DTC B1780 is recorded when a malfunction is detected in the front occupant classification sensor LH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1780	• The occupant classification ECU 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 front occupant classification sensor LH circuit for 2 seconds. • Front occupant classification sensor LH malfunction • Occupant classification ECU malfunction	• Front seat assembly RH (Front occupant classification sensor LH) • Front seat wire RH • Occupant classification ECU

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1780 is not output.

HINT:

Codes other than DTC B1780 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the front occupant classification sensor LH.

OK:

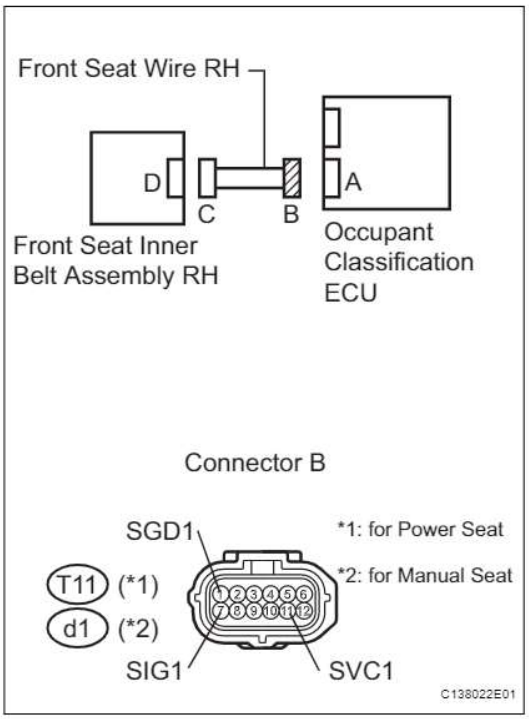
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3	CHECK FRONT SEAT WIRE RH (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the front occupant classification sensor LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T11-1 (SGD1) - Body ground	Power switch on (IG)	Below 1 V
T11-7 (SIG1) - Body ground	Power switch on (IG)	Below 1 V
T11-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V

for Manual seat

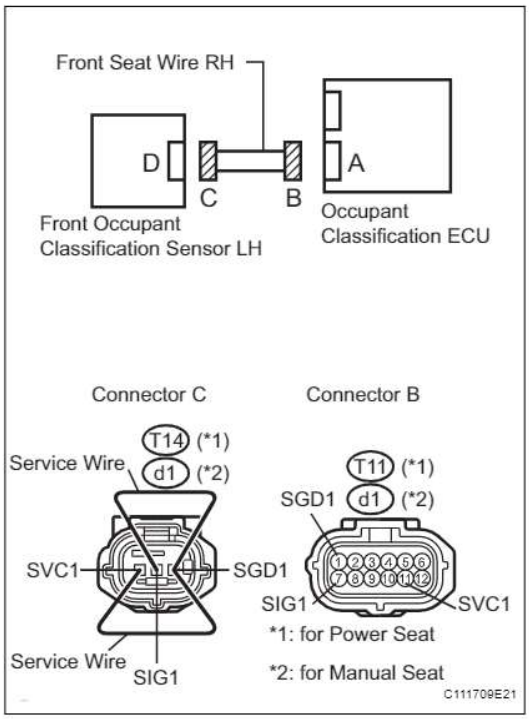
Tester connection	Condition	Specified condition
d1-1 (SGD1) - Body ground	Power switch on (IG)	Below 1 V
d1-7 (SIG1) - Body ground	Power switch on (IG)	Below 1 V
d1-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

4	CHECK FRONT SEAT WIRE RH (OPEN)



(a) Turn the power switch off.

(b) Disconnect the negative (-) terminal cable from the battery.

(c) Using a service wire, connect terminals 1 (SVC1) and 3 (SGD1), and connect terminals 2 (SIG1) and 3 (SGD1) of connector C.

NOTICE:

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

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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-7 (SIG1) - T11-1 (SGD1)	Always	Below 1 Ω
T11-11 (SVC1) - T11-1 (SGD1)	Always	Below 1 Ω

for Manual seat

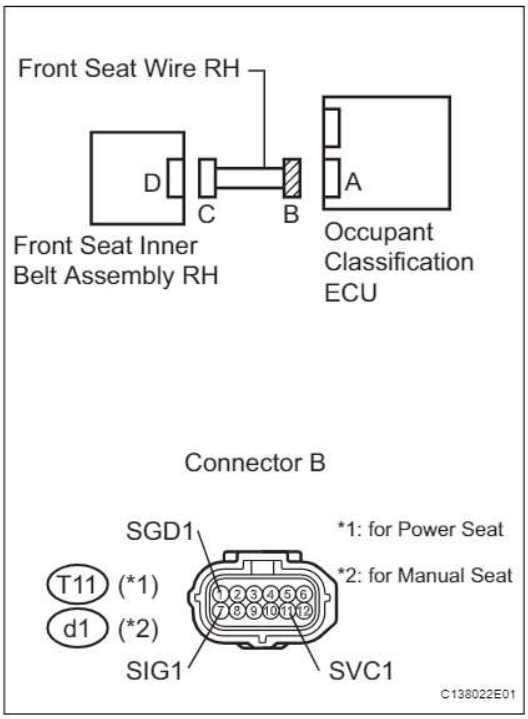
Tester connection	Condition	Specified condition
d1-7 (SIG1) - d1-1 (SGD1)	Always	Below 1 Ω
d1-11 (SVC1) - d1-1 (SGD1)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

5 CHECK FRONT SEAT WIRE RH (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-7 (SIG1) - T11-1 (SGD1)	Always	1 MΩ or Higher
T11-11 (SVC1) - T11-1 (SGD1)	Always	1 MΩ or Higher
T11-7 (SIG1) - T11-11 (SVC1)	Always	1 MΩ or Higher

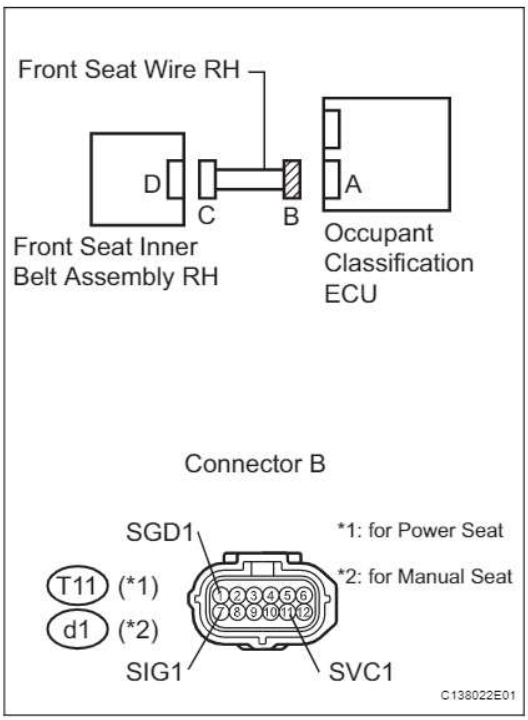
for Manual seat

Tester connection	Condition	Specified condition
d1-7 (SIG1) - d1-1 (SGD1)	Always	1 MΩ or Higher
d1-11 (SVC1) - d1-1 (SGD1)	Always	1 MΩ or Higher
d1-7 (SIG1) - d1-11 (SVC1)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-1 (SGD1) - Body ground	Always	1 MΩ or Higher
T11-7 (SIG1) - Body ground	Always	1 MΩ or Higher
T11-11 (SVC1) - Body ground	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-1 (SGD1) - Body ground	Always	1 MΩ or Higher
d1-7 (SIG1) - Body ground	Always	1 MΩ or Higher
d1-11 (SVC1) - Body ground	Always	1 MΩ or Higher

RS

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the front occupant classification sensor LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).
OK:
DTC B1780 is not output.
HINT:
Codes other than DTC B1780 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

9 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 12**

RS

OK

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 12**

OK

11	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1780 is not output.
HINT:
Codes other than DTC B1780 may be output at this time, but they are not related to this check.

OK → **END**

NG

12	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).

NEXT

13	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

RS

NEXT

14	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

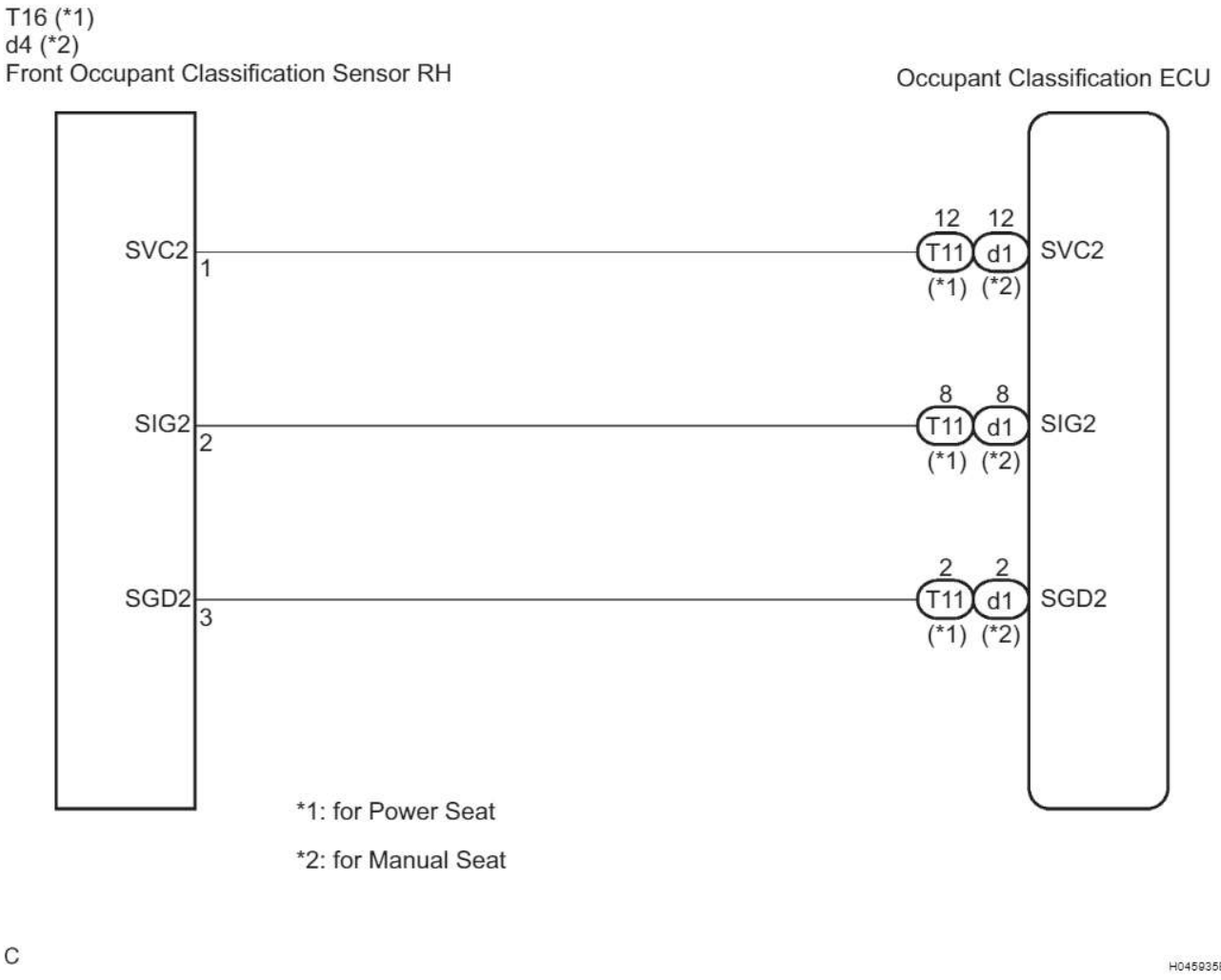
DTC	B1781	Front Occupant Classification Sensor RH Circuit Malfunction

DESCRIPTION

The front occupant classification sensor RH circuit consists of the occupant classification ECU and the front occupant classification sensor RH.
DTC B1781 is recorded when a malfunction is detected in the front occupant classification sensor RH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1781	• The occupant classification ECU 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 front occupant classification sensor RH circuit for 2 seconds. • Front occupant classification sensor RH malfunction • Occupant classification ECU malfunction	• Front seat assembly RH (Front occupant classification sensor RH) • Front seat wire RH • Occupant classification ECU

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-41).

OK:

DTC B1781 is not output.

HINT:

Codes other than DTC B1781 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the front occupant classification sensor RH.

OK:

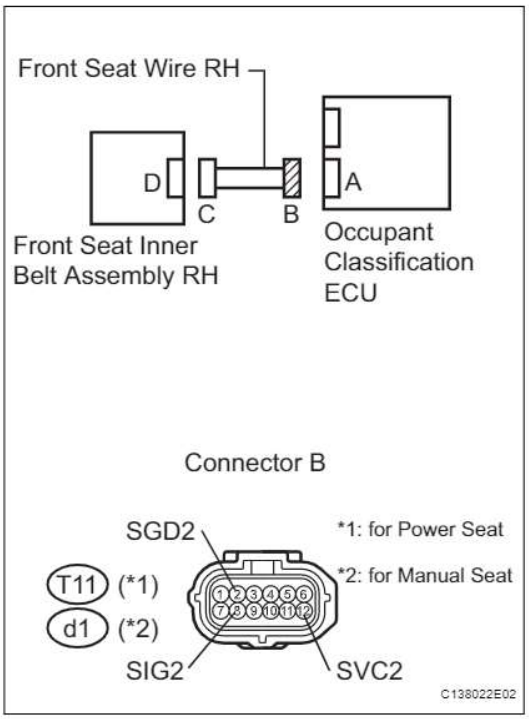
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3	CHECK FRONT SEAT WIRE RH (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the front occupant classification sensor RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T11-2 (SGD2) - Body ground	Power switch on (IG)	Below 1 V
T11-8 (SIG2) - Body ground	Power switch on (IG)	Below 1 V
T11-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

for Manual seat

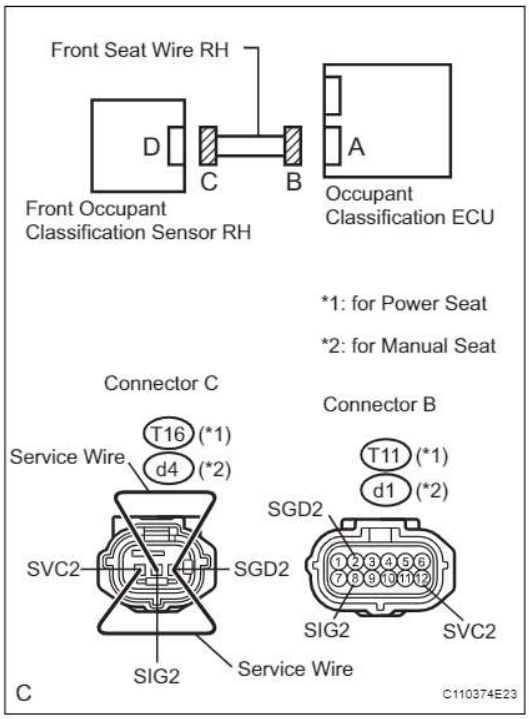
Tester connection	Condition	Specified condition
d1-2 (SGD2) - Body ground	Power switch on (IG)	Below 1 V
d1-8 (SIG2) - Body ground	Power switch on (IG)	Below 1 V
d1-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

4	CHECK FRONT SEAT WIRE RH (OPEN)



(a) Turn the power switch off.

(b) Disconnect the negative (-) terminal cable from the battery.

(c) Using a service wire, connect terminals 1 (SVC2) and 3 (SGD2), and connect terminals 2 (SIG2) and 3 (SGD2) of connector C.

NOTICE:

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

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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-8 (SIG2) - T11-2 (SGD2)	Always	Below 1 Ω
T11-12 (SVC2) - T11-2 (SGD2)	Always	Below 1 Ω

for Manual seat

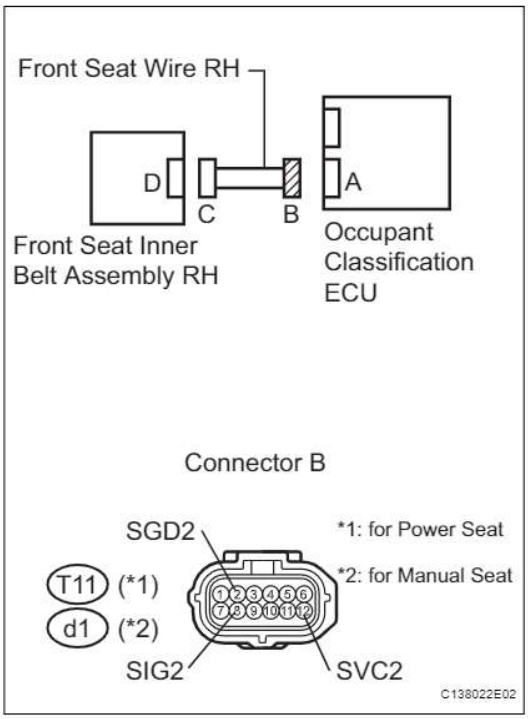
Tester connection	Condition	Specified condition
d1-8 (SIG2) - d1-2 (SGD2)	Always	Below 1 Ω
d1-12 (SVC2) - d1-2 (SGD2)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

RS

5 CHECK FRONT SEAT WIRE RH (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-8 (SIG2) - T11-2 (SGD2)	Always	1 MΩ or Higher
T11-12 (SVC2) - T11-2 (SGD2)	Always	1 MΩ or Higher
T11-8 (SIG2) - T11-12 (SVC2)	Always	1 MΩ or Higher

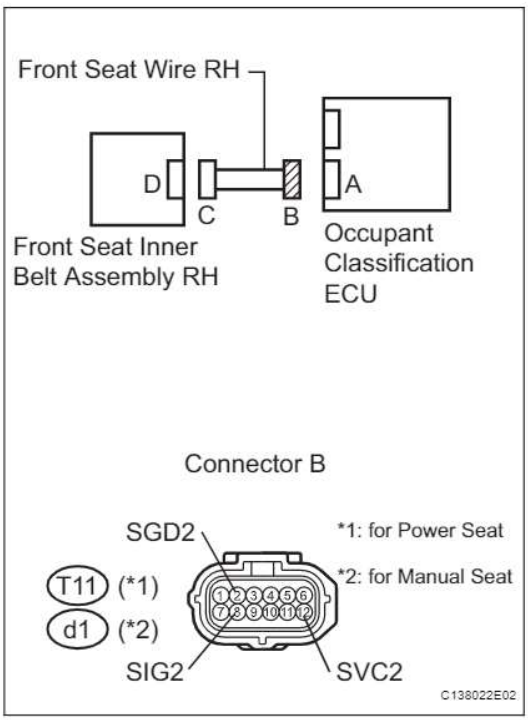
for Manual seat

Tester connection	Condition	Specified condition
d1-8 (SIG2) - d1-2 (SGD2)	Always	1 MΩ or Higher
d1-12 (SVC2) - d1-2 (SGD2)	Always	1 MΩ or Higher
d1-8 (SIG2) - d1-12 (SVC2)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-2 (SGD2) - Body ground	Always	1 MΩ or Higher
T11-8 (SIG2) - Body ground	Always	1 MΩ or Higher
T11-12 (SVC2) - Body ground	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-2 (SGD2) - Body ground	Always	1 MΩ or Higher
d1-8 (SIG2) - Body ground	Always	1 MΩ or Higher
d1-12 (SVC2) - Body ground	Always	1 MΩ or Higher

RS

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the front occupant classification sensor RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).
OK:
DTC B1781 is not output.
HINT:
Codes other than DTC B1781 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

9 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 12**

RS

OK

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 12**

OK

11	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1781 is not output.
HINT:
Codes other than DTC B1781 may be output at this time, but they are not related to this check.

OK → **END**

NG

12	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).

NEXT

13	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

RS

NEXT

14	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

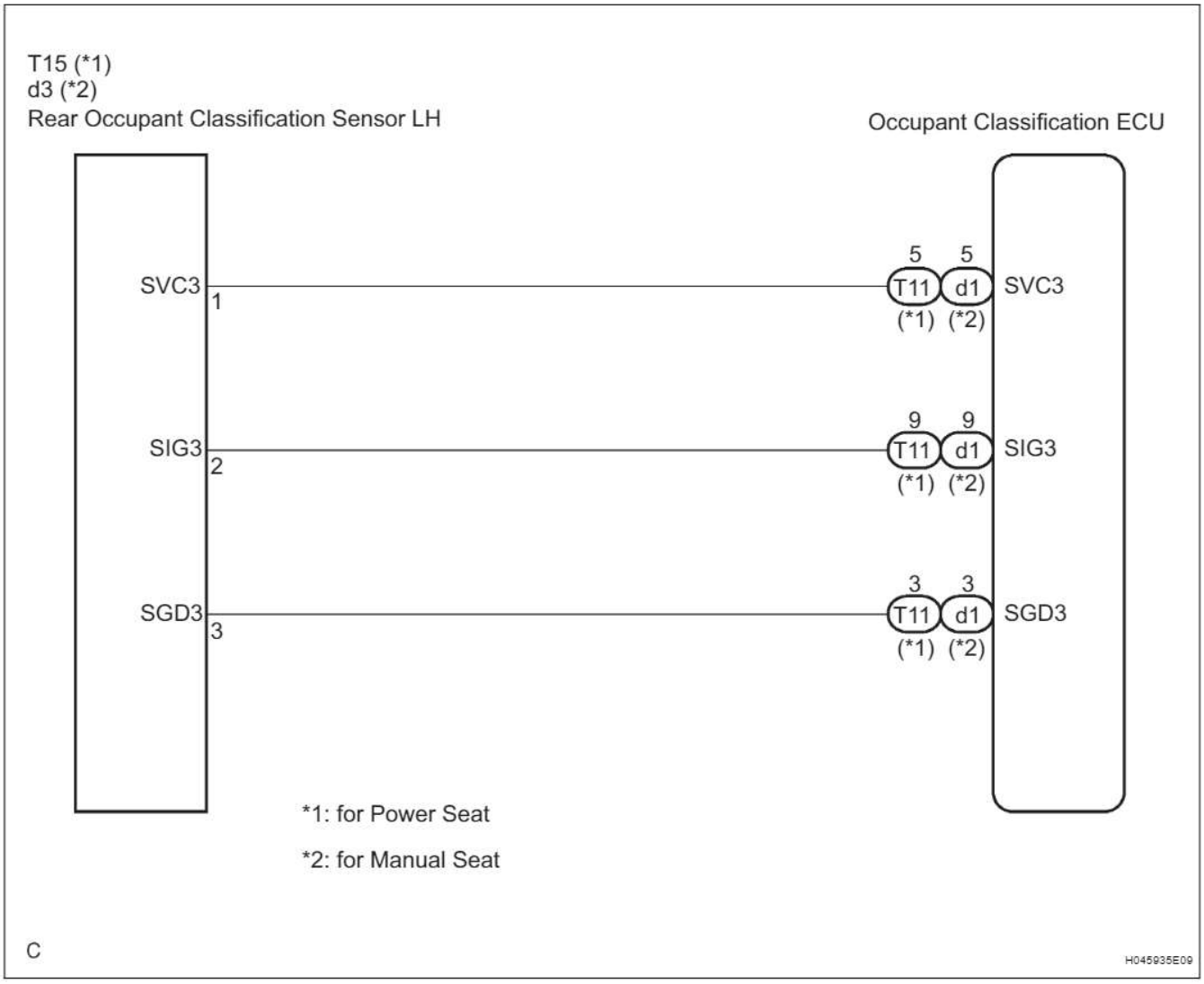
DTC	B1782	Rear Occupant Classification Sensor LH Circuit Malfunction

DESCRIPTION

The rear occupant classification sensor LH circuit consists of the occupant classification ECU and the rear occupant classification sensor LH.
DTC B1782 is recorded when a malfunction is detected in the rear occupant classification sensor LH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1782	• The occupant classification ECU 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 rear occupant classification sensor LH circuit for 2 seconds. • Rear occupant classification sensor LH malfunction • Occupant classification ECU malfunction	• Front seat assembly RH (Rear occupant classification sensor LH) • Front seat wire RH • Occupant classification ECU

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1782 is not output.

HINT:

Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the rear occupant classification sensor LH.

OK:

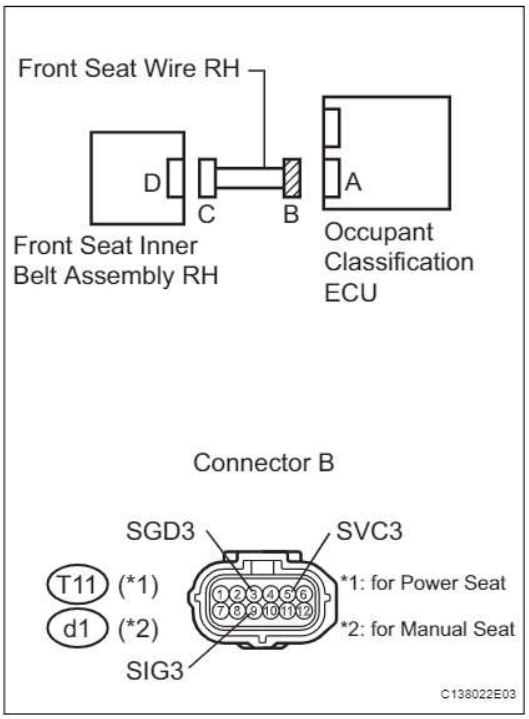
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3	CHECK FRONT SEAT WIRE RH (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the rear occupant classification sensor LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T11-3 (SGD3) - Body ground	Power switch on (IG)	Below 1 V
T11-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V
T11-9 (SIG3) - Body ground	Power switch on (IG)	Below 1 V

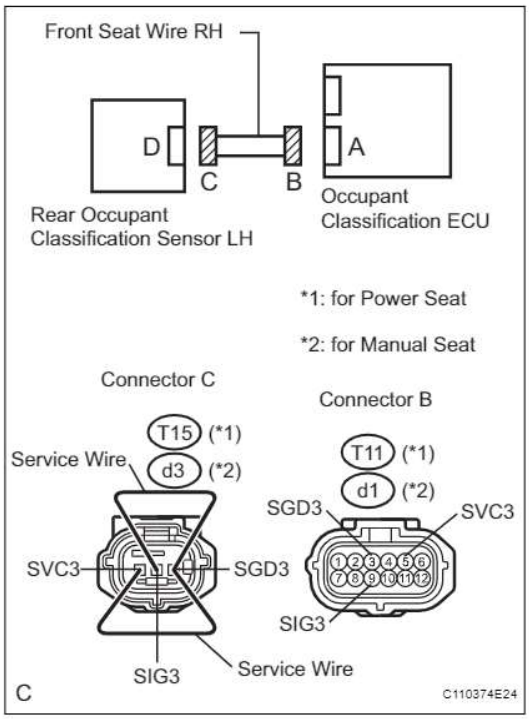
for Manual seat

Tester connection	Condition	Specified condition
d1-3 (SGD3) - Body ground	Power switch on (IG)	Below 1 V
d1-9 (SIG3) - Body ground	Power switch on (IG)	Below 1 V
d1-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4	CHECK FRONT SEAT WIRE RH (OPEN)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Using a service wire, connect terminals 1 (SVC3) and 3 (SGD3), and connect terminals 2 (SIG3) and 3 (SGD3) of connector C.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) Measure the resistance according to the value(s) in the table below.
Standard resistance:
for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T11-3 (SGD3)	Always	Below 1 Ω
T11-9 (SIG3) - T11-3 (SGD3)	Always	Below 1 Ω

for Manual seat

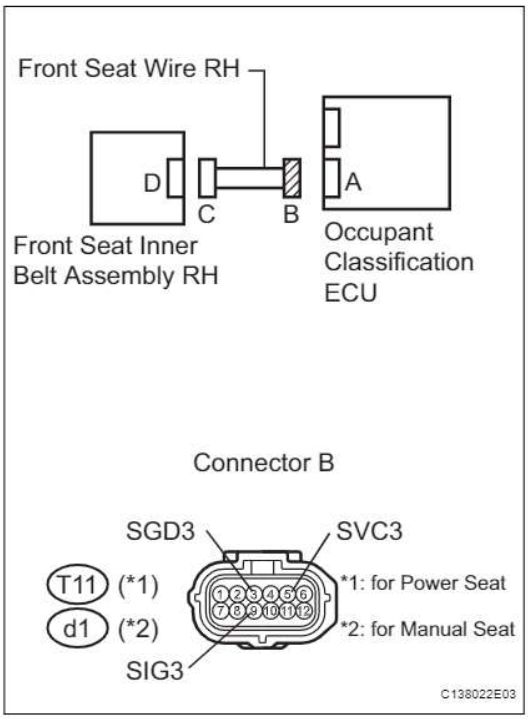
Tester connection	Condition	Specified condition
d1-9 (SIG3) - d1-3 (SGD3)	Always	Below 1 Ω
d1-5 (SVC3) - d1-3 (SGD3)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

5 CHECK FRONT SEAT WIRE RH (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:
for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T11-3 (SGD3)	Always	1 MΩ or Higher
T11-9 (SIG3) - T11-3 (SGD3)	Always	1 MΩ or Higher
T11-5 (SVC3) - T11-9 (SIG3)	Always	1 MΩ or Higher

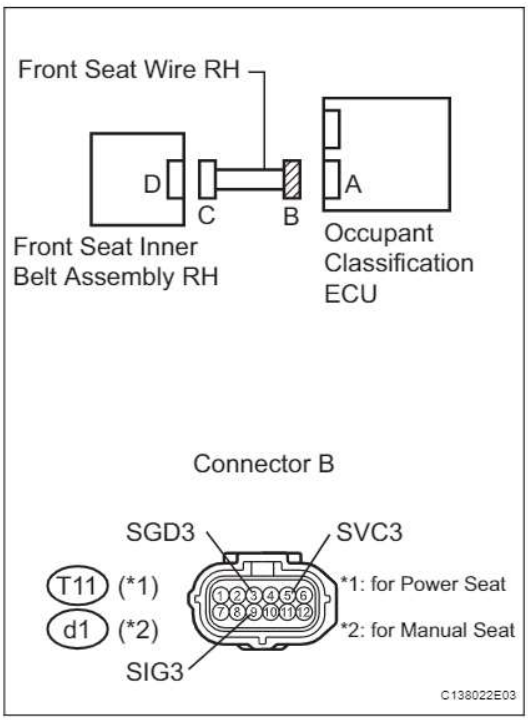
for Manual seat

Tester connection	Condition	Specified condition
d1-9 (SIG3) - d1-3 (SGD3)	Always	1 MΩ or Higher
d1-5 (SVC3) - d1-3 (SGD3)	Always	1 MΩ or Higher
d1-9 (SIG3) - d1-5 (SVC3)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



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

Standard resistance:
for Power seat

Tester connection	Condition	Specified condition
T11-3 (SGD3) - Body ground	Always	1 MΩ or Higher
T11-5 (SVC3) - Body ground	Always	1 MΩ or Higher
T11-9 (SIG3) - Body ground	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-3 (SGD3) - Body ground	Always	1 MΩ or Higher
d1-9 (SIG3) - Body ground	Always	1 MΩ or Higher
d1-5 (SVC3) - Body ground	Always	1 MΩ or Higher

RS

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the rear occupant classification sensor LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).
OK:
DTC B1782 is not output.
HINT:
Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

9 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 12**

RS

OK

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 12**

OK

11	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1782 is not output.
HINT:
Codes other than DTC B1782 may be output at this time, but they are not related to this check.

OK → **END**

NG

12	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).

NEXT

13	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

RS

NEXT

14	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS

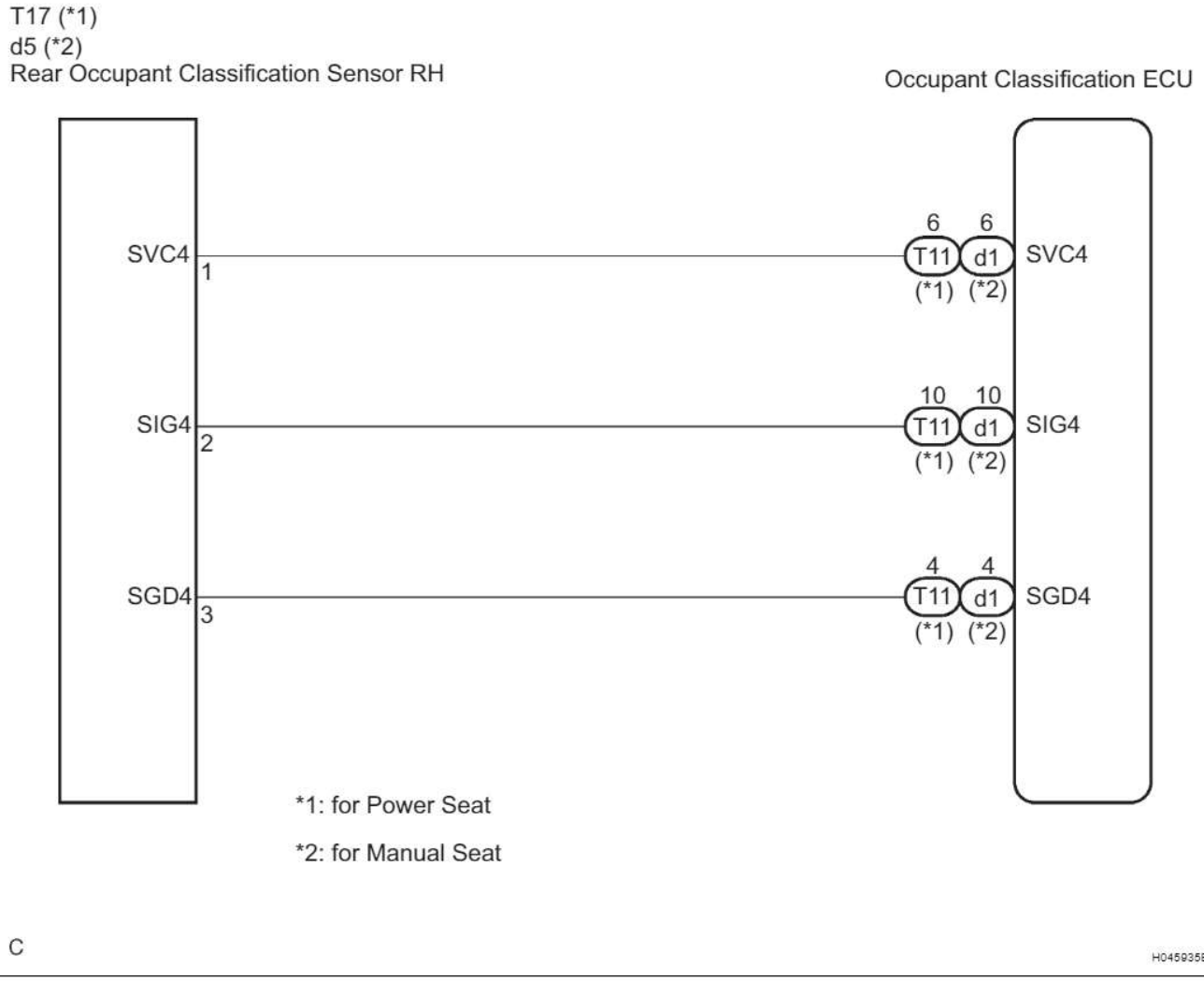
DTC	B1783	Rear Occupant Classification Sensor RH Circuit Malfunction

DESCRIPTION

The rear occupant classification sensor RH circuit consists of the occupant classification ECU and the rear occupant classification sensor RH.
DTC B1783 is recorded when a malfunction is detected in the rear occupant classification sensor RH circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1783	• The occupant classification ECU 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 rear occupant classification sensor RH circuit for 2 seconds. • Rear occupant classification sensor RH malfunction. • Occupant classification ECU malfunction.	• Front seat assembly RH (Rear occupant classification sensor RH) • Front seat wire RH • Occupant classification ECU

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1783 is not output.

HINT:

Codes other than DTC B1783 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the rear occupant classification sensor RH.

OK:

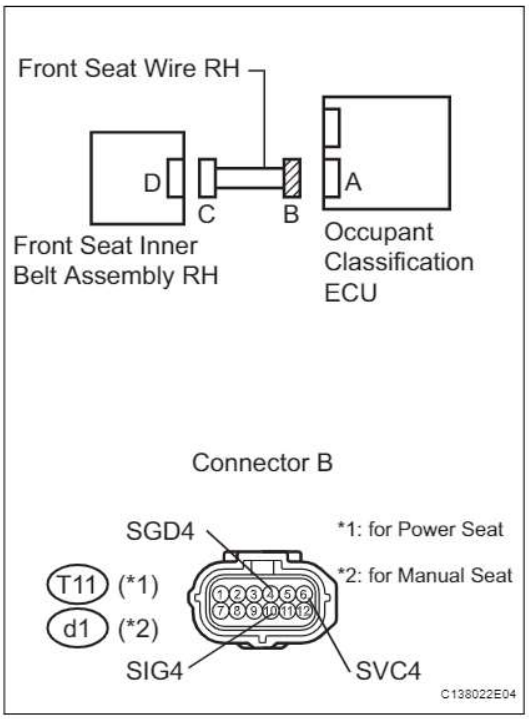
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3	CHECK FRONT SEAT WIRE RH (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the rear occupant classification sensor RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T11-4 (SGD4) - Body ground	Power switch on (IG)	Below 1 V
T11-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V
T11-10 (SIG4) - Body ground	Power switch on (IG)	Below 1 V

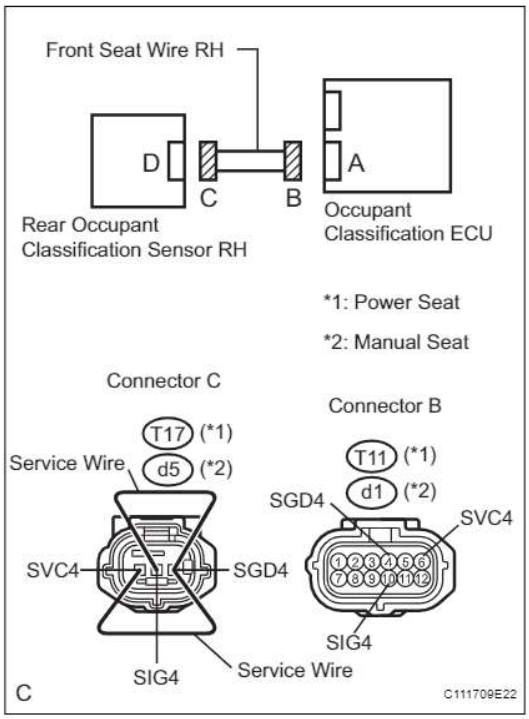
for Manual seat

Tester connection	Condition	Specified condition
d1-4 (SGD4) - Body ground	Power switch on (IG)	Below 1 V
d1-10 (SIG4) - Body ground	Power switch on (IG)	Below 1 V
d1-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4	CHECK FRONT SEAT WIRE RH (OPEN)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Using a service wire, connect terminals 1 (SVC4) and 3 (SGD4), and connect terminals 2 (SIG4) and 3 (SGD4) of connector C.
(d) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-6 (SVC4) - T11-4 (SGD4)	Always	Below 1 Ω
T11-10 (SIG4) - T11-4 (SGD4)	Always	Below 1 Ω

for Manual seat

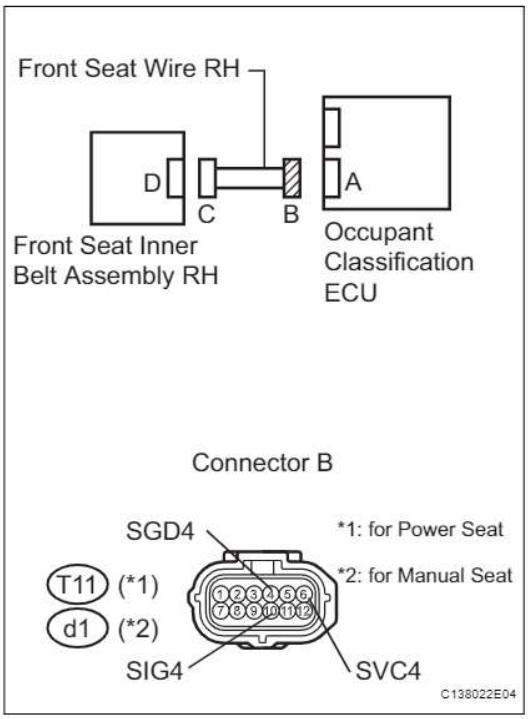
Tester connection	Condition	Specified condition
d1-10 (SIG4) - d1-4 (SGD4)	Always	Below 1 Ω
d1-6 (SVC4) - d1-4 (SGD4)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

5 CHECK FRONT SEAT WIRE RH (SHORT)



(a) Disconnect the service wire from connector C.
(b) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-6 (SVC4) - T11-4 (SGD4)	Always	1 MΩ or Higher
T11-10 (SIG4) - T11-4 (SGD4)	Always	1 MΩ or Higher
T11-6 (SVC4) - T11-10 (SIG4)	Always	1 MΩ or Higher

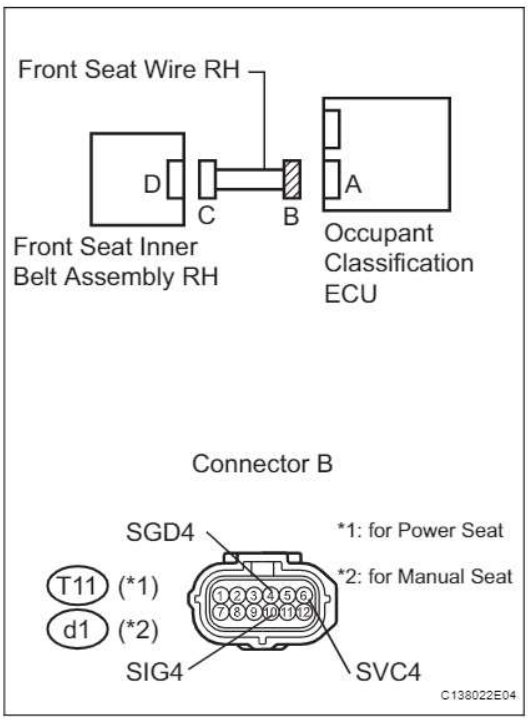
for Manual seat

Tester connection	Condition	Specified condition
d1-10 (SIG4) - d1-4 (SGD4)	Always	1 MΩ or Higher
d1-6 (SVC4) - d1-4 (SGD4)	Always	1 MΩ or Higher
d1-10 (SIG4) - d1-6 (SVC4)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

6 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-4 (SGD4) - Body ground	Always	1 MΩ or Higher
T11-6 (SVC4) - Body ground	Always	1 MΩ or Higher
T11-10 (SIG4) - Body ground	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-4 (SGD4) - Body ground	Always	1 MΩ or Higher
d1-10 (SIG4) - Body ground	Always	1 MΩ or Higher
d1-6 (SVC4) - Body ground	Always	1 MΩ or Higher

RS

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the rear occupant classification sensor RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).
OK:
DTC B1783 is not output.
HINT:
Codes other than DTC B1783 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

9 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 12**

RS

OK

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 12**

OK

11	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1783 is not output.
HINT:
Codes other than DTC B1783 may be output at this time, but they are not related to this check.

OK → **END**

NG

12	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-16 for power seat or SE-13 for manual seat).

NEXT

13	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

RS

NEXT

14	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

DTC	B1785	Front Occupant Classification Sensor LH Collision Detection

DESCRIPTION

DTC B1785 is output when the occupant classification ECU receives a collision detection signal sent by the front occupant classification sensor LH if an accident occurs.
DTC B1785 is also output when the front seat assembly RH is subjected to a strong impact, even if an actual accident does not occur.
However, when the occupant classification ECU outputs a collision detection signal, even if the vehicle is not in a collision, DTC B1785 can be cleared by "zero point calibration" and "sensitivity check".
Therefore, if DTC B1785 is output, first perform "zero point calibration" and "sensitivity check".

DTC No.	DTC Detecting Condition	Trouble Area
B1785	• Front seat assembly RH malfunction • Occupant classification ECU malfunction • Front occupant classification sensor LH sensed large load	• Occupant classification ECU • Front seat assembly RH (Front occupant classification sensor LH)

WIRING DIAGRAM

See page RS-261.

INSPECTION PROCEDURE

1	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 4**

OK

2	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 4**

OK

3	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).

RS

(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1785 is not output.
HINT:
Codes other than DTC B1785 may be output at this time, but they are not related to this check.

OK → END

NG

4	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-16 for power seat or SE-29 for manual seat).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → Go to step 8

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → Go to step 8

OK

RS

7	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1785 is not output.
HINT:
Codes other than DTC B1785 may be output at this time, but they are not related to this check.

OK → END

NG

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

RS

NEXT

END

DTC	B1786	Front Occupant Classification Sensor RH Collision Detection

DESCRIPTION

DTC B1786 is output when the occupant classification ECU receives a collision detection signal sent by the front occupant classification sensor RH if an accident occurs.
DTC B1786 is also output when the front seat assembly RH is subjected to a strong impact, even if an actual accident does not occur.
However, when the occupant classification ECU outputs a collision detection signal, even if the vehicle is not in a collision, DTC B1786 can be cleared by "zero point calibration" and "sensitivity check".
Therefore, if DTC B1786 is output, first perform "zero point calibration" and "sensitivity check".

DTC No.	DTC Detection Condition	Trouble Area
B1786	• Front seat assembly RH malfunction • Occupant classification ECU malfunction • Front occupant classification sensor RH sensed large load	• Occupant classification ECU • Front seat assembly RH (Front occupant classification sensor RH)

WIRING DIAGRAM

See page RS-269.

INSPECTION PROCEDURE

1	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 4**

OK

2	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 4**

OK

3	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).

RS

(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1786 is not output.
HINT:
Codes other than DTC B1786 may be output at this time, but they are not related to this check.

OK	END

NG

4	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG	Go to step 8

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG	Go to step 8

OK

RS

7	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1786 is not output.
HINT:
Codes other than DTC B1786 may be output at this time, but they are not related to this check.

OK → END

NG

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

RS

NEXT

END

DTC	B1787	Rear Occupant Classification Sensor LH Collision Detection

DESCRIPTION

DTC B1787 is output when the occupant classification ECU receives a collision detection signal sent by the rear occupant classification sensor LH if an accident occurs.
DTC B1787 is also output when the front seat assembly RH is subjected to a strong impact, even if an actual accident does not occur.
However, when the occupant classification ECU outputs a collision detection signal, even if the vehicle is not in a collision, DTC B1787 can be cleared by "zero point calibration" and "sensitivity check".
Therefore, if DTC B1787 is output, first perform "zero point calibration" and "sensitivity check".

DTC No.	DTC Detecting Condition	Trouble Area
B1787	• Front seat assembly RH malfunction • Occupant classification ECU malfunction • Rear occupant classification sensor LH sensed large load	• Occupant classification ECU • Front seat assembly RH (Rear occupant classification sensor LH)

WIRING DIAGRAM

See page RS-277.

INSPECTION PROCEDURE

1 PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 4**

OK

2 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 4**

OK

3 CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).

RS

(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1787 is not output.
HINT:
Codes other than DTC B1787 may be output at this time, but they are not related to this check.

OK → END

NG

4	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 8**

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 8**

OK

RS

7	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1787 is not output.
HINT:
Codes other than DTC B1787 may be output at this time, but they are not related to this check.

OK → END

NG

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

RS

NEXT

END

DTC	B1788	Rear Occupant Classification Sensor RH Collision Detection

DESCRIPTION

DTC B1788 is output when the occupant classification ECU receives a collision detection signal sent by the rear occupant classification sensor RH if an accident occurs.
DTC B1788 is also output when the front seat assembly RH is subjected to a strong impact, even if an actual accident does not occur.
However, when the occupant classification ECU outputs a collision detection signal, even if the vehicle is not in a collision, DTC B1788 can be cleared by "zero point calibration" and "sensitivity check".
Therefore, if DTC B1788 is output, first perform "zero point calibration" and "sensitivity check".

DTC No.	DTC Detection Condition	Trouble Area
B1788	• Front seat assembly RH malfunction • Occupant classification ECU malfunction • Rear occupant classification sensor RH sensed large load	• Occupant classification ECU • Front seat assembly RH (Rear occupant classification sensor RH)

WIRING DIAGRAM

See page RS-285.

INSPECTION PROCEDURE

1	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 4**

OK

2	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 4**

OK

3	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).

RS

(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1788 is not output.
HINT:
Codes other than DTC B1788 may be output at this time, but they are not related to this check.

OK → END

NG

4	REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → Go to step 8

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → Go to step 8

OK

RS

7	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1788 is not output.
HINT:
Codes other than DTC B1788 may be output at this time, but they are not related to this check.

OK → END

NG

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

RS

NEXT

END

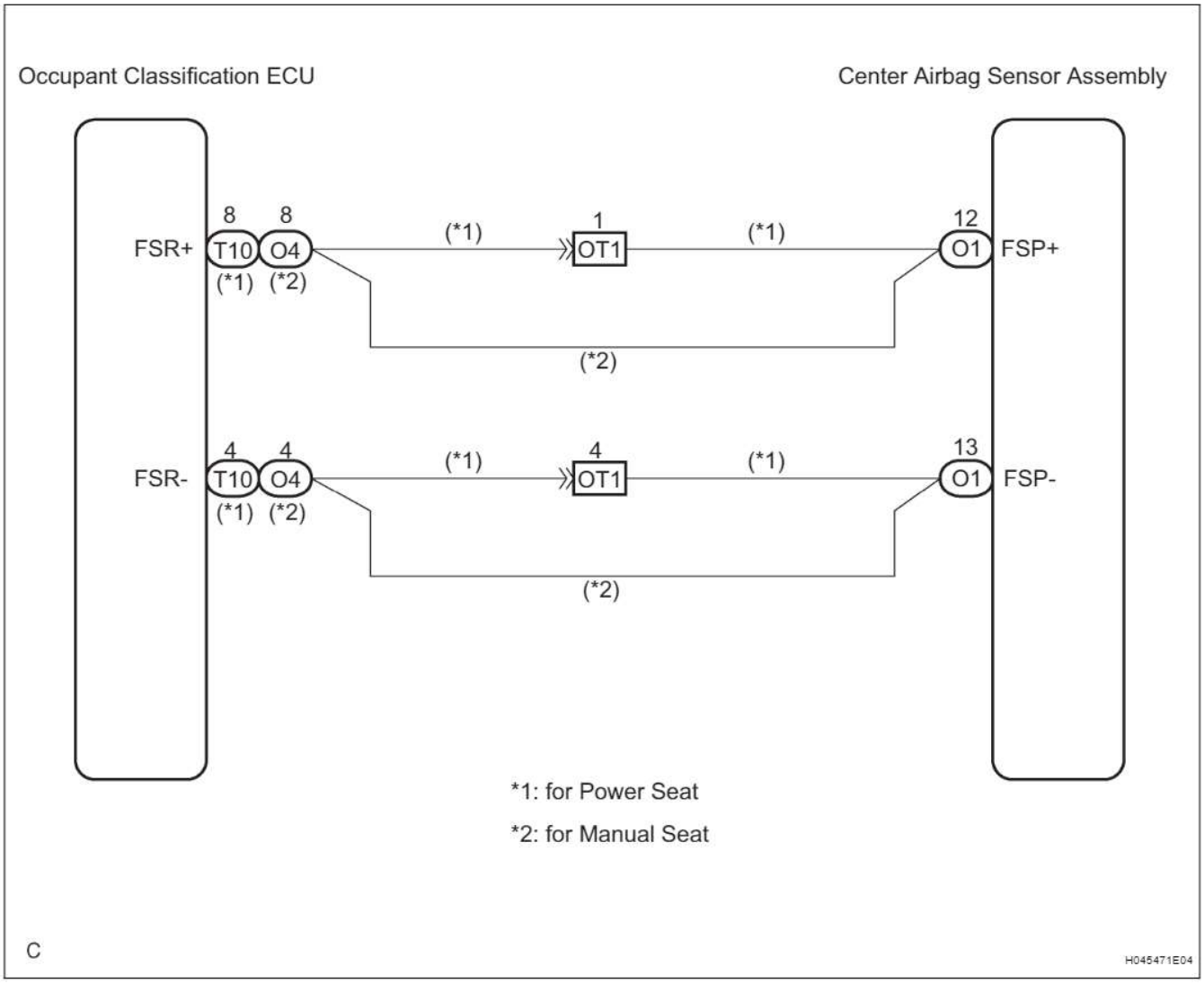
DTC	B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction

DESCRIPTION

The center airbag sensor assembly communication circuit consists of the occupant classification ECU and the center airbag sensor assembly.
DTC B1790 is recorded when a malfunction is detected in the center airbag sensor assembly communication circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1790	• The occupant classification ECU 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 center airbag sensor assembly communication circuit for 2 seconds. • Center airbag sensor assembly malfunction • Occupant classification ECU malfunction	• Occupant classification ECU • Center airbag sensor assembly • Floor wire No. 2 • Front seat wire RH (for Power seat)

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1790 is not output.

HINT:

Codes other than DTC B1790 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Check that the connectors are properly connected to the occupant classification ECU and the center airbag sensor assembly.

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

3	CHECK VEHICLE CONDITION

(a) Check the passenger seat type.

Result:

A:
for Manual seat

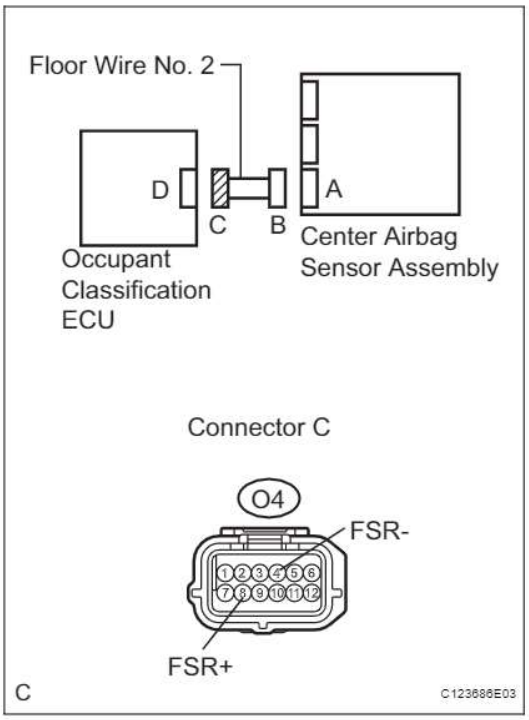
B:
for Power seat

RS

B → Go to step 13

A

4 CHECK FLOOR WIRE NO. 2 (SHORT TO B+)



(a) Disconnect the connector from the center airbag sensor assembly and occupant classification ECU.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value (s) in the table below.

Standard voltage

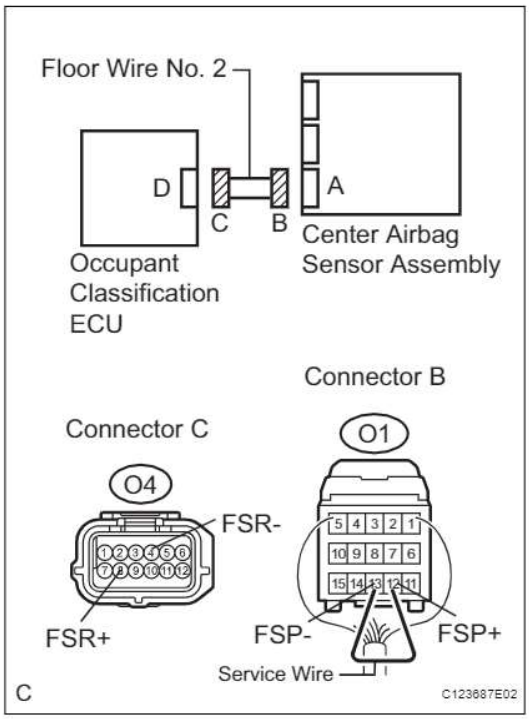
Tester connection	Condition	Specified condition
O4-8 (FSR+) - Body ground	Power switch on (IG)	Below 1 V
O4-4 (FSR-) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

5 CHECK FLOOR WIRE NO. 2 (OPEN)



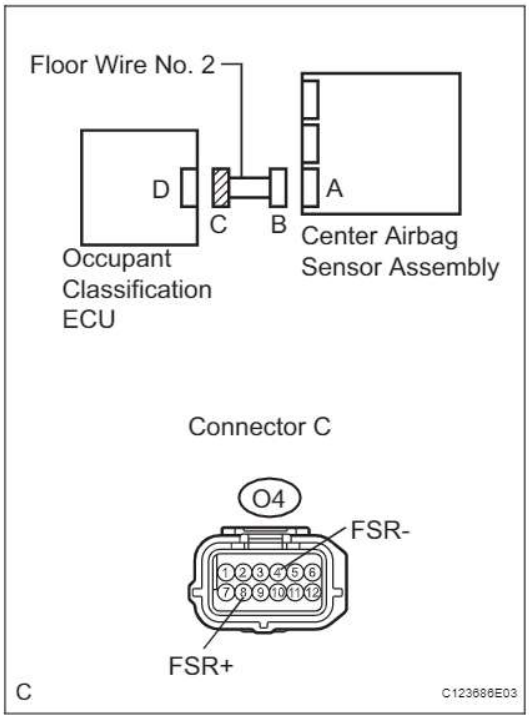
(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect terminals 12 (FSP+) and 13 (FSP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
O4-8 (FSR+) - O4-4 (FSR-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

6 CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

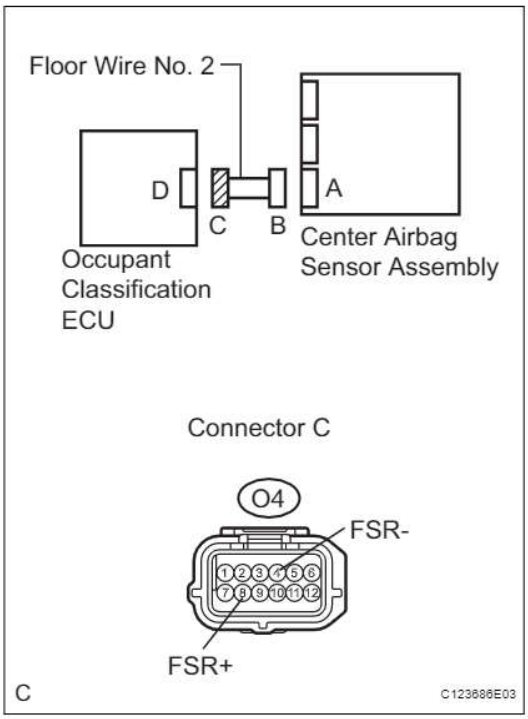
Tester connection	Condition	Specified condition
O4-8 (FSR+) - O4-4 (FSR-)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

RS

7	CHECK FLOOR WIRE NO. 2 (SHORT TO GROUND)



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

Standard resistance

Tester connection	Condition	Specified condition
O4-8 (FSR+) - Body ground	Always	1 MΩ or Higher
O4-4 (FSR-) - Body ground	Always	1 MΩ or Higher

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

OK

8	RECHECK DTC

(a) Connect the connectors to the occupant classification ECU and the center airbag sensor assembly.
(b) Connect the intelligent tester to the DLC3.
(c) Connect the negative (-) terminal cable to the battery.
(d) Turn the power switch on (IG).
(e) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(f) Clear the DTCs stored in the center airbag sensor assembly (See page RS-248).
(g) Turn the power switch off.
(h) Turn the power switch on (IG).
(i) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-41).

OK:

DTC B1790 is not output.

HINT:

Codes other than DTC B1790 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

RS

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

10	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

12	RECHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-248).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-41).
OK:
DTC B1790 is not output.
HINT:
Codes other than DTC B1790 may be output at this time, but they are not related to this check.

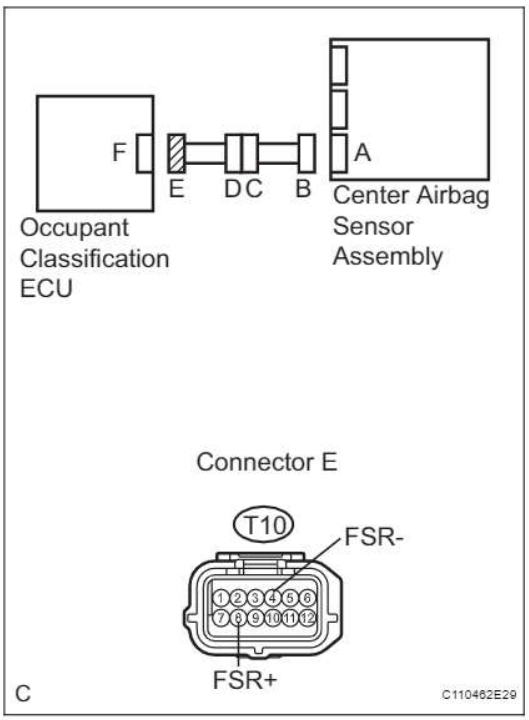
RS

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

OK

END

13 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (TO B+)



(a) Disconnect the connector from the center airbag sensor assembly and occupant classification ECU.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage

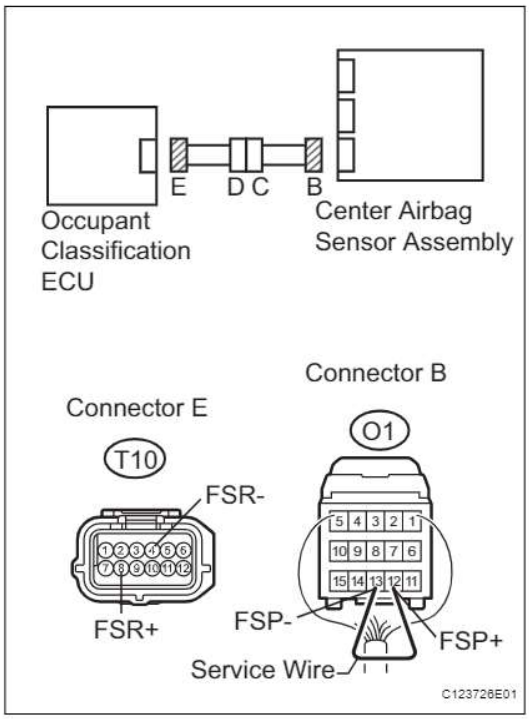
Tester connection	Condition	Specified condition
T10-8 (FSR+) - Body ground	Power switch on (IG)	Below 1 V
T10-4 (FSR-) - Body ground	Power switch on (IG)	Below 1 V

NG → Go to step 22

OK

RS

14 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (OPEN)



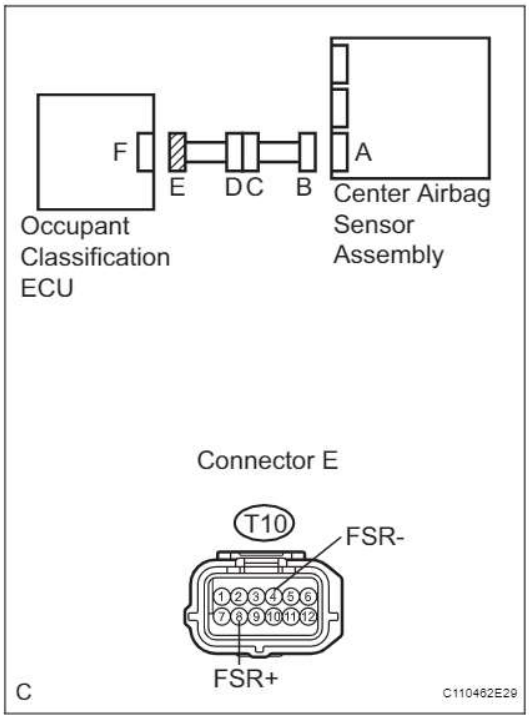
(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Using a service wire, connect terminals 12 (FSP+) and 13 (FSP-) of connector B.
NOTICE:
Do not forcibly insert a service wire into the terminals of the connector when connecting.
(d) Measure the resistance according to the value(s) in the table below.
Standard resistance

Tester connection	Condition	Specified condition
T10-8 (FSR+) - T10-4 (FSR-)	Always	Below 1 Ω

NG → **Go to step 23**

OK

15 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (SHORT)



(a) Disconnect the service wire from connector B.
(b) Measure the resistance according to the value(s) in the table below.
Standard resistance

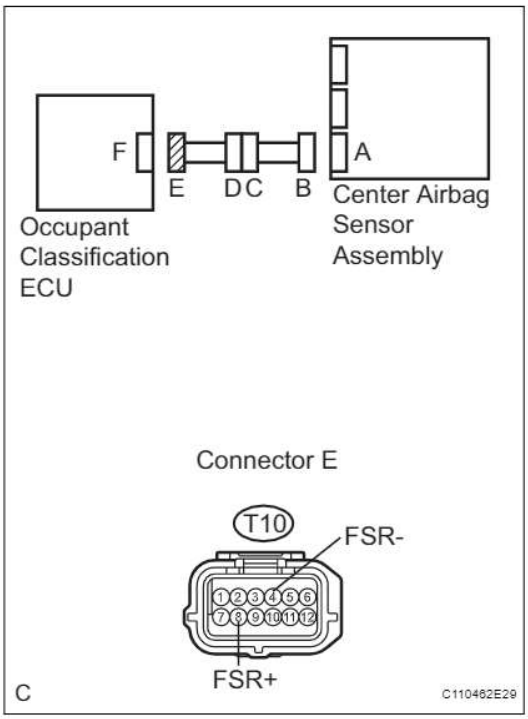
Tester connection	Condition	Specified condition
T10-8 (FSR+) - T10-4 (FSR-)	Always	1 MΩ or Higher

NG → **Go to step 24**

OK

RS

16 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (TO GROUND)



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

Standard resistance

Tester connection	Condition	Specified condition
T10-8 (FSR+) - Body ground	Always	1 MΩ or Higher
T10-4 (FSR-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 25**

OK

17 RECHECK DTC

(a) Connect the connectors to the occupant classification ECU and the center airbag sensor assembly.
(b) Connect the intelligent tester to the DLC3.
(c) Connect the negative (-) terminal cable to the battery.
(d) Turn the power switch on (IG).
(e) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(f) Clear the DTCs stored in the center airbag sensor assembly (See page RS-248).
(g) Turn the power switch off.
(h) Turn the power switch on (IG).
(i) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-41).

OK:

DTC B1790 is not output.

HINT:

Codes other than DTC B1790 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

18	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-445).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

19	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

20	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

21	RECHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-248).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-41).
OK:
DTC B1790 is not output.
HINT:
Codes other than DTC B1790 may be output at this time, but they are not related to this check.

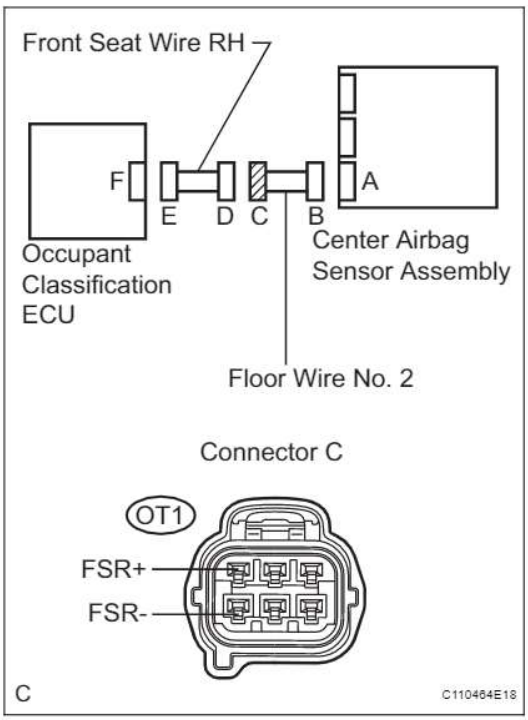
RS

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)

OK

END

22 CHECK FLOOR WIRE NO. 2 (TO B+)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the front seat wire RH connector from the floor wire No. 2.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage

Tester connection	Condition	Specified condition
OT1-1 (FSR+) - Body ground	Power switch on (IG)	Below 1 V
OT1-4 (FSR-) - Body ground	Power switch on (IG)	Below 1 V

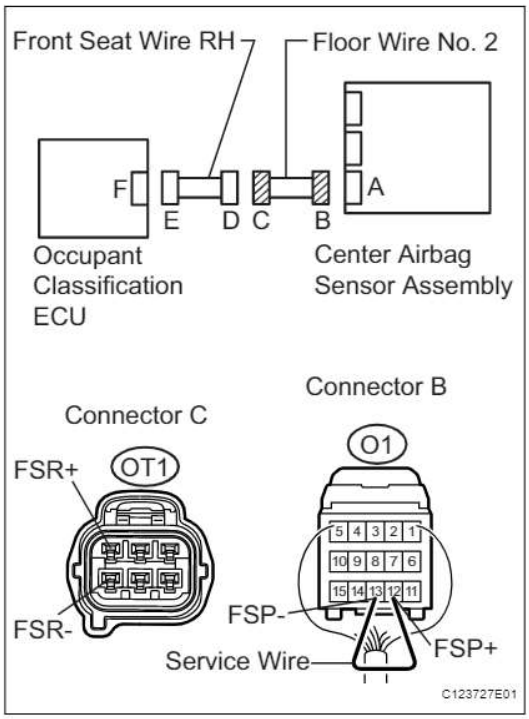
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

23 **CHECK FLOOR WIRE NO. 2 (OPEN)**



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.
HINT:
The service wire has already been inserted into connector B.

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

Standard resistance

Tester connection	Condition	Specified condition
OT1-1 (FSR+) - OT1-4 (FSR-)	Always	Below 1 Ω

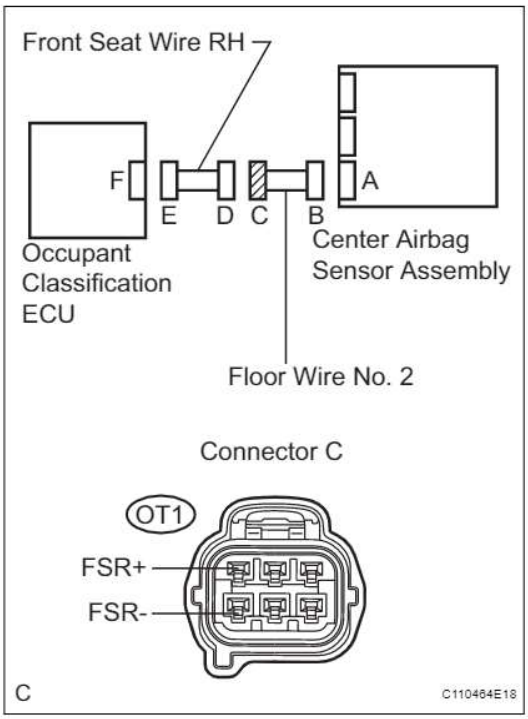
NG → **REPAIR OR REPLACE FLOOR WIRE NO. 2**

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

24	CHECK FLOOR WIRE NO. 2 (SHORT)



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.

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

Standard resistance

Tester connection	Condition	Specified condition
OT1-1 (FSR+) - OT1-4 (FSR-)	Always	1 MΩ or Higher

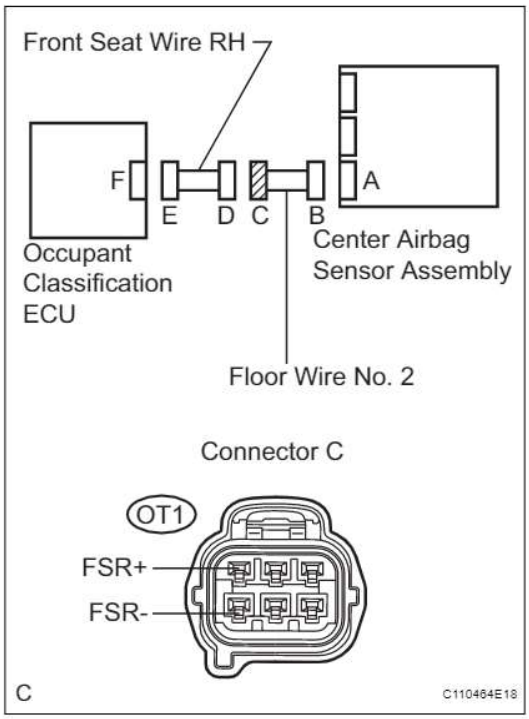
NG → REPAIR OR REPLACE FLOOR WIRE NO. 2

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

25 **CHECK FLOOR WIRE NO. 2 (TO GROUND)**



(a) Disconnect the front seat wire RH connector from the floor wire No. 2.

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

Standard resistance

Tester connection	Condition	Specified condition
OT1-1 (FSR+) - Body ground	Always	1 MΩ or Higher
OT1-4 (FSR-) - Body ground	Always	1 MΩ or Higher

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

OK

REPAIR OR REPLACE FRONT SEAT WIRE RH

RS

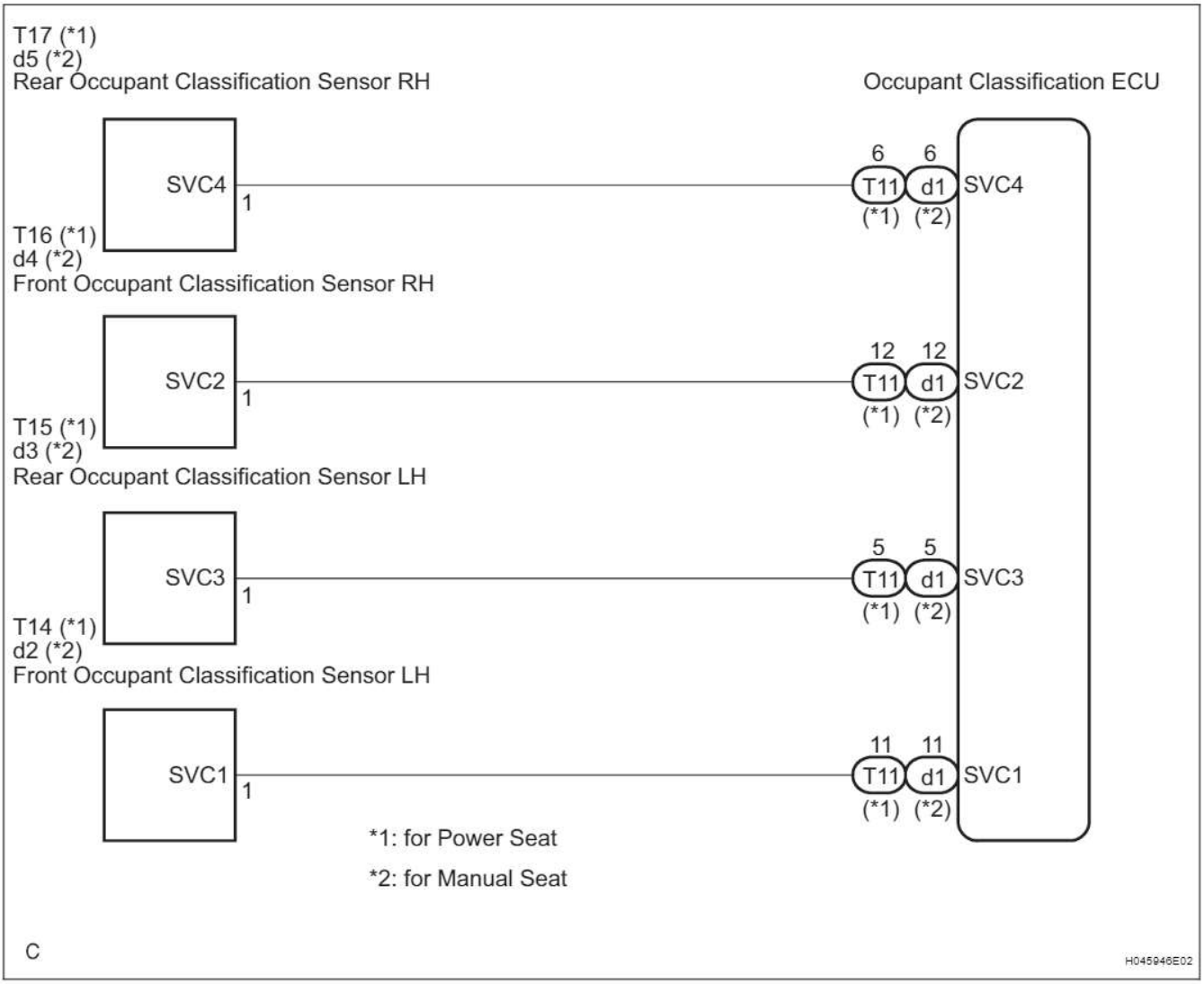
DTC	B1793	Occupant Classification Sensor Power Supply Circuit Malfunction

DESCRIPTION

The occupant classification sensor power supply circuit consists of the occupant classification ECU and the occupant classification sensors.
DTC B1793 is recorded when a malfunction is detected in the occupant classification sensor power supply circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1793	• The occupant classification ECU 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 occupant classification sensor power supply circuit for 2 seconds. • Occupant classification ECU malfunction	• Front seat assembly RH (Occupant classification sensors) • Front seat wire RH • Occupant classification ECU

WIRING DIAGRAM



RS

INSPECTION PROCEDURE

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of seat cushion.
- In the above case, hold the seat so that it does not fall down. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat only as necessary.

1	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1793 is not output.

HINT:

Codes other than DTC B1793 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the power switch off.
(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 occupant classification ECU and the occupant classification sensors.

OK:

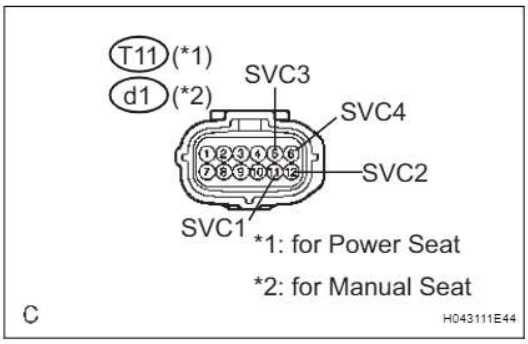
The connectors are properly connected.

NG → **CONNECT CONNECTORS PROPERLY, THEN GO TO STEP 1**

OK

RS

3 CHECK FRONT SEAT WIRE RH (SHORT TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the 4 occupant classification sensors.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V
T11-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V
T11-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V
T11-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

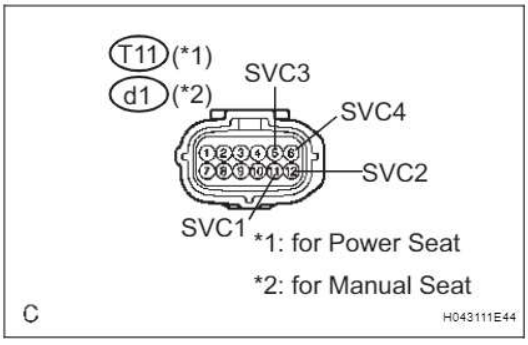
for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - Body ground	Power switch on (IG)	Below 1 V
d1-6 (SVC4) - Body ground	Power switch on (IG)	Below 1 V
d1-11 (SVC1) - Body ground	Power switch on (IG)	Below 1 V
d1-12 (SVC2) - Body ground	Power switch on (IG)	Below 1 V

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

4 CHECK FRONT SEAT WIRE RH (SHORT TO GROUND)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - Body ground	Always	1 MΩ or Higher
T11-6 (SVC4) - Body ground	Always	1 MΩ or Higher
T11-11 (SVC1) - Body ground	Always	1 MΩ or Higher

RS

Tester connection	Condition	Specified condition
T11-12 (SVC2) - Body ground	Always	1 MΩ or Higher

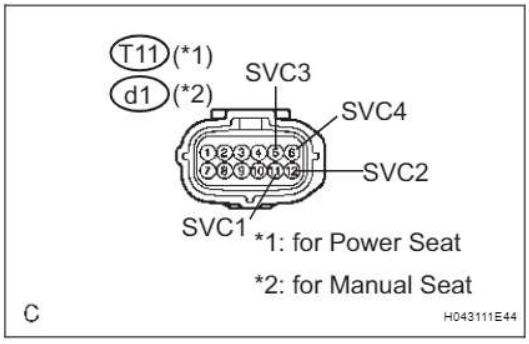
for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - Body ground	Always	1 MΩ or Higher
d1-6 (SVC4) - Body ground	Always	1 MΩ or Higher
d1-11 (SVC1) - Body ground	Always	1 MΩ or Higher
d1-12 (SVC2) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

5 CHECK FRONT SEAT WIRE RH (OPEN)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T15-1 (SVC3)	Always	Below 1 Ω
T11-6 (SVC4) - T17-1 (SVC4)	Always	Below 1 Ω
T11-11 (SVC1) - T14-1 (SVC1)	Always	Below 1 Ω
T11-12 (SVC2) - T16-1 (SVC2)	Always	Below 1 Ω

for Manual seat

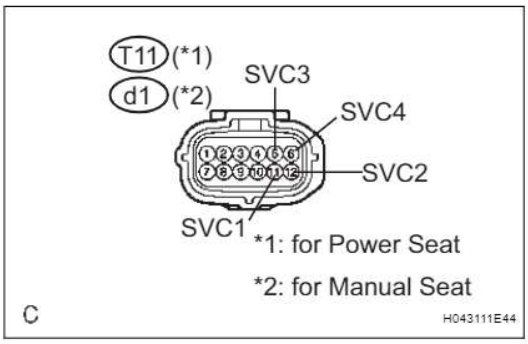
Tester connection	Condition	Specified condition
d1-5 (SVC3) - d3-1 (SVC3)	Always	Below 1 Ω
d1-6 (SVC4) - d5-1 (SVC4)	Always	Below 1 Ω
d1-11 (SVC1) - d2-1 (SVC1)	Always	Below 1 Ω
d1-12 (SVC2) - d4-1 (SVC2)	Always	Below 1 Ω

NG → REPAIR OR REPLACE FRONT SEAT WIRE RH

OK

RS

6 CHECK FRONT SEAT WIRE RH (SHORT)



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

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T11-5 (SVC3) - T11-6 (SVC4)	Always	1 MΩ or Higher
T11-5 (SVC3) - T11-11 (SVC1)	Always	1 MΩ or Higher
T11-5 (SVC3) - T11-12 (SVC2)	Always	1 MΩ or Higher
T11-6 (SVC4) - T11-11 (SVC1)	Always	1 MΩ or Higher
T11-6 (SVC4) - T11-12 (SVC2)	Always	1 MΩ or Higher
T11-11 (SVC1) - T11-12 (SVC2)	Always	1 MΩ or Higher

for Manual seat

Tester connection	Condition	Specified condition
d1-5 (SVC3) - d1-6 (SVC4)	Always	1 MΩ or Higher
d1-5 (SVC3) - d1-11 (SVC1)	Always	1 MΩ or Higher
d1-5 (SVC3) - d1-12 (SVC2)	Always	1 MΩ or Higher
d1-6 (SVC4) - d1-11 (SVC1)	Always	1 MΩ or Higher
d1-6 (SVC4) - d1-12 (SVC2)	Always	1 MΩ or Higher
d1-11 (SVC1) - d1-12 (SVC2)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FRONT SEAT WIRE RH**

OK

7 CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the 4 occupant classification sensors.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG).
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG).
(h) Check the DTCs (See page RS-248).

RS

OK:
DTC B1793 is not output.
HINT:
Codes other than DTC B1793 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

NG

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-248).
HINT:
Perform the inspection using parts from a normal vehicle if possible.

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NG → **Go to step 12**

OK

10	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 12**

OK

11	CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).

RS

(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).
OK:
DTC B1793 is not output.
HINT:
Codes other than DTC B1793 may be output at this time, but they are related to this check.

OK → END

NG

12 REPLACE FRONT SEAT ASSEMBLY RH

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the front seat assembly RH (See page SE-29 for power seat or SE-16 for manual seat).

NEXT

13 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

14 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS

DTC	B1794	Open in Occupant Classification ECU Battery Positive Line

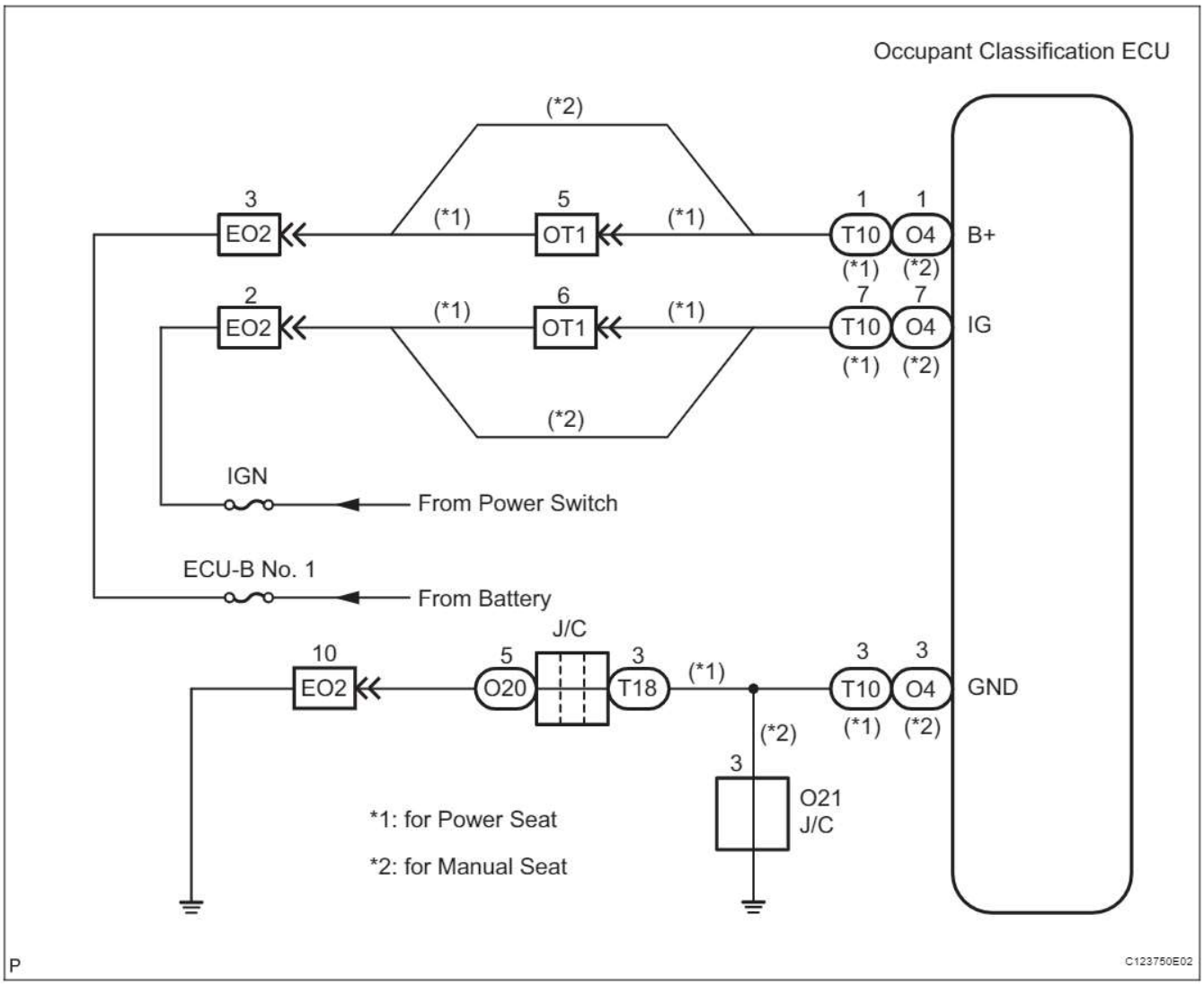
DESCRIPTION

This circuit consists of the occupant classification ECU and the power source circuit (battery, fuse, and wire harness).
DTC B1794 is recorded when a malfunction is detected in the occupant classification ECU or the power source circuit.
HINT:
If DTC B1794 is output after switching the power switch off-on (IG)-off 50 times in a row when a malfunction occurs in the power circuit for the occupant classification system, the DTC is output again.
This DTC is output when a malfunction is detected even after being cleared unless the normal system code is input.

DTC No.	DTC Detecting Condition	Trouble Area
B1794	• The power switch is turned from off to on (IG), hold if for 10 seconds or more, and back to off again 50 times in a row when a malfunction occurs in the circuit for the occupant classification system. • Occupant classification ECU malfunction	• Battery • ECU-B Fuse • Floor wire No. 2 • Front seat wire RH (for Power seat) • Occupant classification ECU

RS

WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK BATTERY

(a) Measure the voltage of the battery.
Standard voltage:
11 to 14 V

NG → REPLACE BATTERY

OK

2	CHECK FUSE

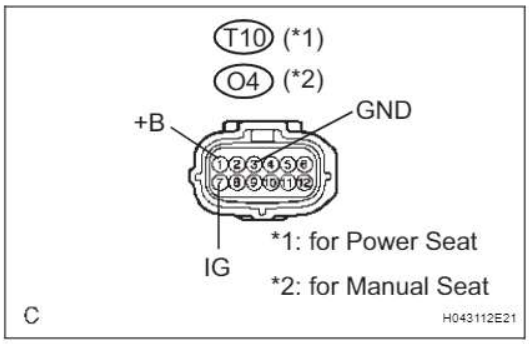
(a) Check the ECU-B fuse.
Standard resistance:
Below 1 Ω

RS

NG → REPLACE FUSE

OK

3 CHECK WIRE HARNESS (SOURCE VOLTAGE)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the occupant classification ECU.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the power switch on (IG).
(f) Measure the voltage and resistance according to the value(s) in the table below.

Standard voltage and resistance:

for Power seat

Tester connection	Condition	Specified condition
T10-1 (+B) - Body ground	Always	10 to 14 V
T10-3 (GND) - Body ground	Always	Below 1 Ω
T10-7 (IG) - Body ground	Power switch on (IG)	10 to 14 V

for Manual seat

Tester connection	Condition	Specified condition
O4-1 (+B) - Body ground	Always	10 to 14 V
O4-3 (GND) - Body ground	Always	Below 1 Ω
O4-7 (IG) - Body ground	Power switch on (IG)	10 to 14 V

NG → REPAIR OR REPLACE WIRE HARNESS

OK

4 CHECK DTC

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Connect the connector to the occupant classification ECU.
(d) Connect the intelligent tester to the DLC3.
(e) Connect the negative (-) terminal cable to the battery.
(f) Turn the power switch on (IG).
(g) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(h) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(i) Turn the power switch off.

RS

(j) Turn the power switch on (IG), and wait for at least 10 seconds.
(k) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-248).
OK:
B1794 is not output.
HINT:
Codes other than DTC B1794 may be output at this time, but they are not related to this check.

NG → **USE SIMULATION METHOD TO CHECK (See page RS-245)**

OK

5	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

6	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform the "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

7	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS

DTC	B1795	Occupant Classification ECU Malfunction

DESCRIPTION

DTC B1795 is recorded when a malfunction is detected in the occupant classification ECU.
Troubleshoot the DTC B1771 first when the DTC B1771 and B1795 are output simultaneously.

DTC No.	DTC Detecting Condition	Trouble Area
B1795	• Occupant classification ECU circuit malfunction • The occupant classification ECU receives a short circuit to ground signal in the passenger side buckle switch circuit for 2 seconds. • Occupant classification ECU malfunction	• Front seat wire RH (for Power seat) • Floor wire No. 2 • Front seat inner belt assembly RH (Passenger side buckle switch) • Occupant classification ECU

INSPECTION PROCEDURE

1 CHECK DTC

(a) Turn the power switch on (IG), and wait for at least 10 seconds.
(b) Check the DTCs (See page RS-248).
Result:
A:
DTC B1771 and B1795 are output.
B:
DTC B1795 is output.
HINT:
Codes other than DTC B1771 and B1795 may be output at this time, but they are not related to this check.

A → **GO TO DTC B1771 (See page RS-253)**

B

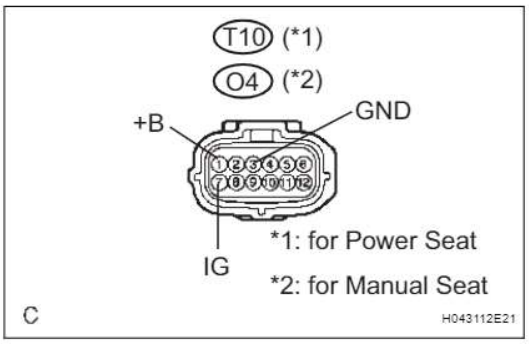
2 CHECK FUSE

(a) Check the ECU-B fuse.
Resistance:
Below 1 Ω

NG → **REPLACE FUSE**

OK

3 CHECK WIRE HARNESS (SOURCE VOLTAGE)



(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Disconnect the connector from the occupant classification ECU.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the power switch on (IG).
(f) Measure the voltage according to the value(s) in the table below.

Standard voltage:

for Power seat

Tester connection	Condition	Specified condition
T10-1 (+B) - Body ground	Always	10 to 14 V
T10-7 (IG) - Body ground	Power switch on (IG)	10 to 14 V

for Manual seat

Tester connection	Condition	Specified condition
O4-1 (+B) - Body ground	Always	10 to 14 V
O4-7 (IG) - Body ground	Power switch on (IG)	10 to 14 V

(g) Turn the power switch off.
(h) Measure the resistance according to the value(s) in the table below.

Standard resistance:

for Power seat

Tester connection	Condition	Specified condition
T10-3 (GND) - Body ground	Always	Below 1 Ω

for Manual seat

Tester connection	Condition	Specified condition
O4-3 (GND) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE WIRE HARNESS

OK

4 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-248).

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

RS

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETED" is displayed.

NEXT

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS

DTC	B1796	Sleep Operation Failure of Occupant Classification ECU

DESCRIPTION

During sleep mode, the occupant classification ECU reads the condition of each sensor while the power switch is off.
In this mode, if occupant classification ECU detects an internal malfunction, DTC B1796 is output.

DTC No.	DTC Detecting Condition	Trouble Area
B1796	• Occupant classification ECU malfunction	• Occupant classification ECU

INSPECTION PROCEDURE

1 CHECK DTC

(a) Turn the power switch on (IG).
(b) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(c) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(d) Turn the power switch off, and wait for at least 10 seconds.
(e) Turn the power switch on (IG).
(f) Check the DTCs (See page RS-248).

OK:

DTC B1796 is not output.

HINT:
Codes other than DTC B1796 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK (See page RS-33)**

NG

2 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

3 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).

RS

OK:
"COMPLETED" is displayed.

NEXT

4	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

Trouble in Passenger Airbag ON / OFF Indicator

DESCRIPTION

The occupant classification system detects the front passenger seat condition. It then informs a passenger of the front passenger airbag assembly and front seat side airbag assembly condition (activated/not activated) by the passenger airbag ON/OFF indicator.
HINT:
Approximately 6 seconds after the power switch is turned to the on (IG), the passenger airbag ON/OFF indicator will be ON/OFF depending on the conditions listed below.

Front passenger seat condition	ON Indicator	OFF Indicator
Adult is seated.	ON	OFF
Child is seated.	OFF	ON
Vacant	OFF	OFF
Occupant classification system failure	OFF	ON

INSPECTION PROCEDURE

1 CHECK SRS WARNING LIGHT

(a) Turn the power switch on (IG), and check the SRS warning light condition.
HINT:
If this trouble occurs, the SRS warning light is off. If the light is on, a DTC is output. Troubleshoot for the output DTC.
OK:
After the primary check period, SRS warning light goes off.
HINT:
The primary check period is approximately 6 seconds after the power switch is turned on (IG).

NG → **GO TO DTC CHART (See page RS-45)**

OK

2 PERFORM ZERO POINT CALIBRATION

(a) Turn the power switch off.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETE" is displayed.

NG → **Go to step 4**

OK

RS

3	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

OK → END

NG

4	RETIGHTEN FRONT SEAT ASSEMBLY RH BOLT

(a) Turn the power switch off.
(b) Loosen the 4 installation bolts of the front seat assembly RH.
(c) Tighten the 4 installation bolts of the front seat assembly RH to the specified torque.
Torque: 37 N*m (377 kgf*cm, 27 ft.*lbf)

NEXT

5	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the power switch on (IG).
(c) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETE" is displayed.

NG → Go to step 7

OK

6	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

OK → END

NG

7	CHECK CONNECTORS

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.

RS

(c) Check that the connectors are properly connected to the occupant classification ECU and the 4 occupant classification sensors.
OK:
The connectors are properly connected.
(d) Disconnect the connectors from the occupant classification ECU and the 4 occupant classification sensors.
(e) Check that the connectors are not damaged or deformed.
OK:
The connectors are normal.

NG → **REPAIR OR REPLACE CONNECTOR, THEN GO TO STEP 1**

OK

8	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the 4 occupant classification sensors.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the power switch on (IG), and wait for at least 60 seconds.
(d) Clear the DTCs stored in the occupant classification ECU (See page RS-248).
(e) Clear the DTCs stored in the center airbag sensor assembly (See page RS-41).
(f) Turn the power switch off.
(g) Turn the power switch on (IG), and wait for at least 60 seconds.
(h) Check the DTCs (See page RS-248).
OK:
DTC is not output.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (See page RS-423)**

OK

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the power switch off.
(b) Disconnect the negative (-) terminal cable from the battery.
(c) Replace the occupant classification ECU (See page RS-445).

NEXT

RS

10	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.

(b) Connect the intelligent tester to the DLC3.
(c) Turn the power switch on (IG).
(d) Using the intelligent tester, perform "zero point calibration" (See page RS-239).
OK:
"COMPLETE" is displayed.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform "sensitivity check" (See page RS-239).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

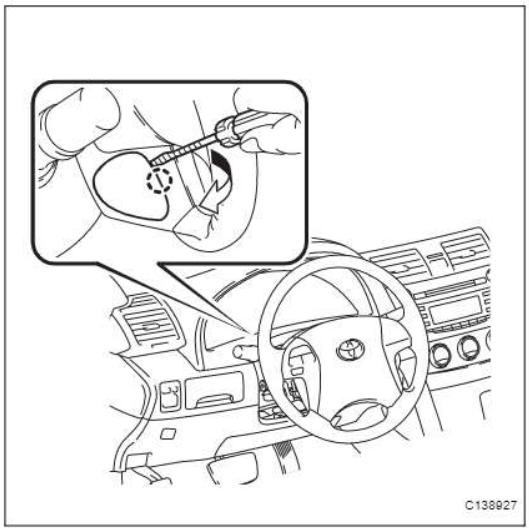
END

RS

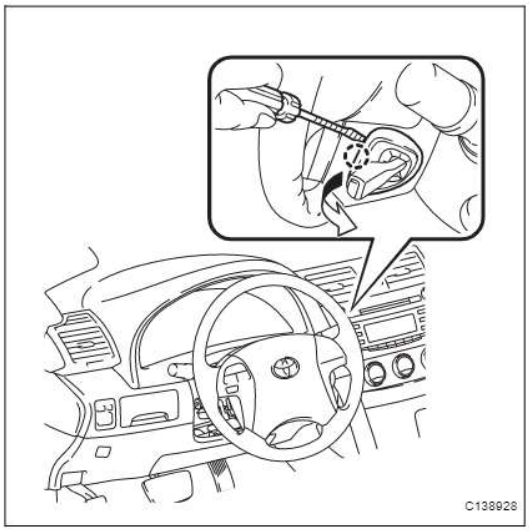
REMOVAL

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).

2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.

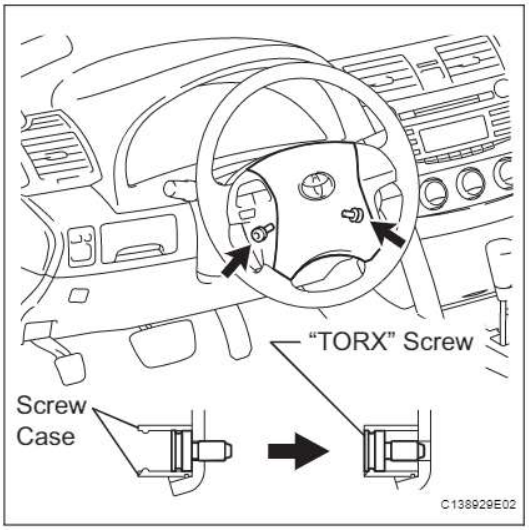


3. **REMOVE NO. 3 LOWER STEERING WHEEL COVER**
   (a) Using a screwdriver, disengage the claw and remove the No. 3 lower steering wheel cover.
   HINT:
   Tape up the screwdriver tip before use.



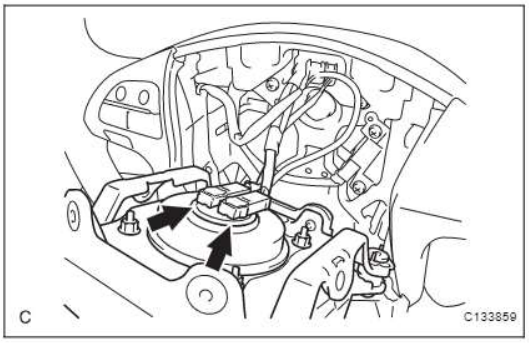
4. **REMOVE NO. 2 LOWER STEERING WHEEL COVER**
   (a) Using a screwdriver, disengage the claw and remove the No. 2 lower steering wheel cover.
   HINT:
   Tape up the screwdriver tip before use.

RS



5. REMOVE STEERING PAD

(a) Using a "TORX" socket (T30), loosen the 2 "TORX" screws until the groove along the screw circumference catches on the screw case.



(b) Pull out the steering pad from the steering wheel assembly and support the steering pad with one hand.

NOTICE:
When removing the steering pad, do not pull the airbag wire harness.

(c) Disconnect the horn connector from the steering pad.

(d) Disconnect the 2 airbag connectors and remove the steering pad.

NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

RS

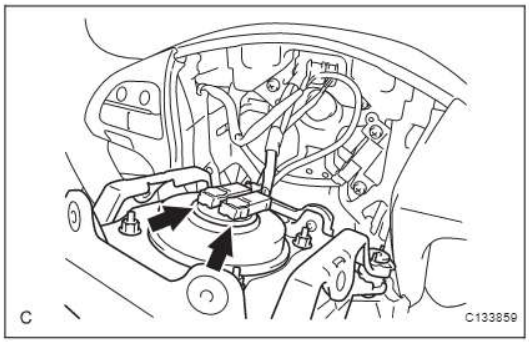
INSTALLATION

1. INSTALL STEERING PAD

(a) Check that the power switch is turned off.

(b) Check that the battery negative (-) terminal is disconnected.

CAUTION:
Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.



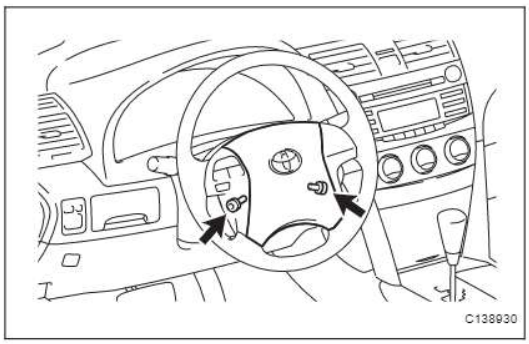
(c) Support the steering pad with one hand.

(d) Connect the 2 airbag connectors to the steering pad.

NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

(e) Connect the horn connector to the steering pad.

(f) Confirm that the circumference groove of the "TORX" screw fits in the screw case, and place the steering pad onto the steering wheel assembly.

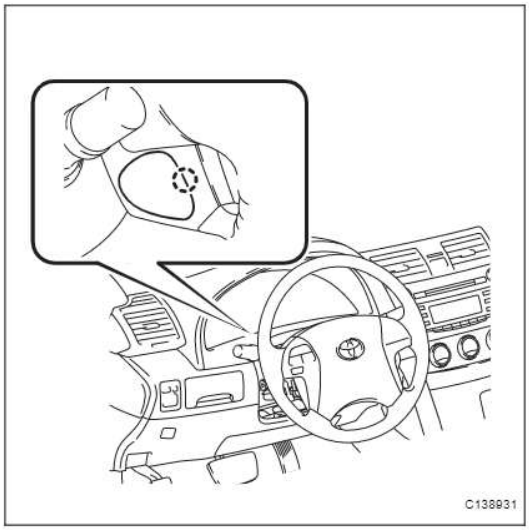


(g) Using a "TORX" socket (T30), tighten the 2 "TORX" screws.

Torque: 8.8 N*m (90 kgf*cm, 78 in.*lbf)

2. INSTALL NO. 3 LOWER STEERING WHEEL COVER

(a) Engage the claw and install the No. 3 lower steering wheel cover.



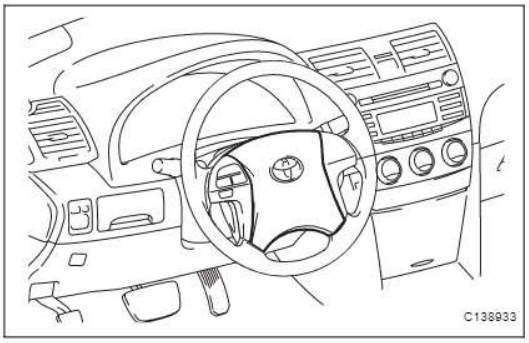
RS



3. **INSTALL NO. 2 LOWER STEERING WHEEL COVER**
   (a) Engage the claw and install the No. 2 lower steering wheel cover.

4. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

5. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.



6. **INSPECT STEERING PAD**
   (a) With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
   Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.
   (b) Make sure that the horn sounds.
   HINT:
   If the horn does not sound, inspect the horn system (See page HO-3).

7. **INSPECT SRS WARNING LIGHT**
   (a) Inspect the SRS warning light (See page RS-33).

RS

DISPOSAL

HINT:
When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

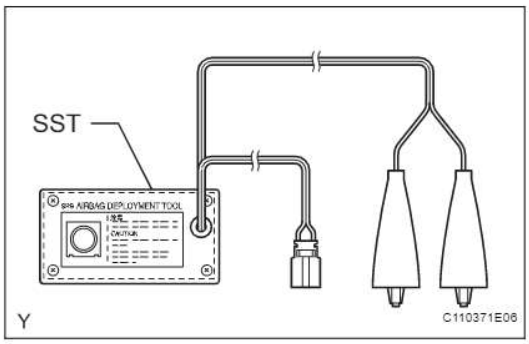
CAUTION:

- **Never dispose of a steering pad that has an undeployed airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors where it will not be a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (33 ft) away from the steering pad.**
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water, etc. to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

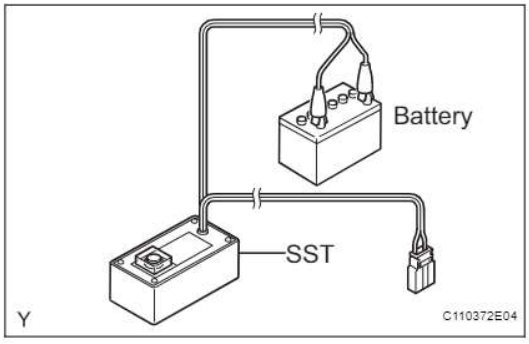
1. DISPOSE OF STEERING PAD (WHEN INSTALLED IN VEHICLE)

HINT:
Prepare a battery as the power source to deploy the airbag.

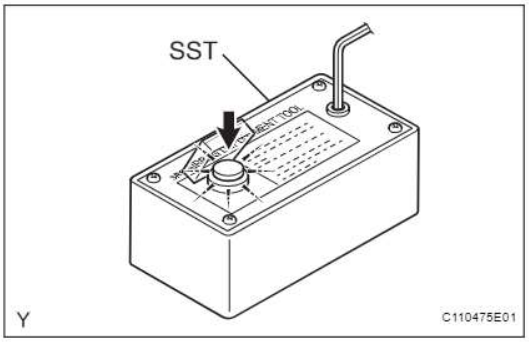
(a) Check the function of the SST.
SST 09082-00700
CAUTION:
When deploying the airbag, always use the specified SST:
SRS Airbag Deployment Tool



(1) Connect the SST to the battery.
Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.



RS

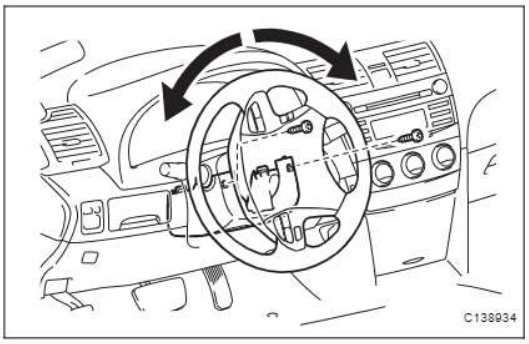


(2) Check the function of the SST.
Press the SST activation switch, and check that the LED of the SST activation switch comes on.
CAUTION:
- **Do not connect the SST connector (yellow colored one) to the airbag.**
- **If the LED comes on when the activation switch is not being pressed, SST malfunction is possible, so replace the SST with a new one.**

(3) Disconnect the SST from the battery.

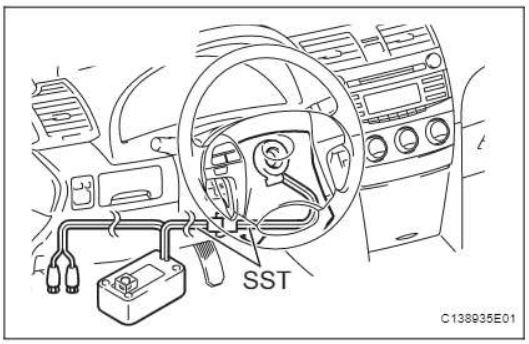
(b) Refer to PRECAUTION (See page RS-1).

(c) Disconnect the cable from the negative battery terminal.
CAUTION:
Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.

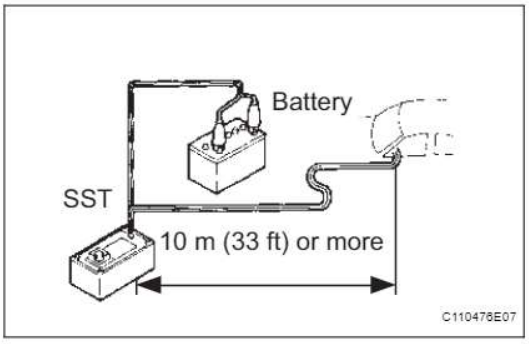


(d) Remove the steering column cover (lower).
(1) While turning the steering wheel assembly to the right and left, remove the 2 screws and steering column cover (lower).

(e) Install the SST.
CAUTION:
Check that there is no looseness in the steering wheel assembly and steering pad.
(1) Disconnect the airbag connector (yellow colored one) from the spiral cable.
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.



(2) Connect the SST connector to the airbag connector of the spiral cable.
SST 09082-00700, 09082-00780
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.



(3) Move the SST at least 10 m (33 ft) away from the vehicle front side window.
(4) Maintaining enough clearance for the SST wire harness in the front side window, close all doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.
(5) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.

RS

(f) Deploy the airbag.

(1) Check that no one is inside the vehicle or within a 10 m (33 ft) radius of the vehicle.

(2) Press the SST activation switch and deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water, etc. to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of the SST activation switch comes on.

2. DISPOSE OF STEERING PAD (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

- **When disposing of the steering pad, never use the customer's vehicle to deploy the airbag.**
- **Be sure to follow the procedure detailed below when deploying the airbag.**

HINT:

Prepare a battery as the power source to deploy the airbag.

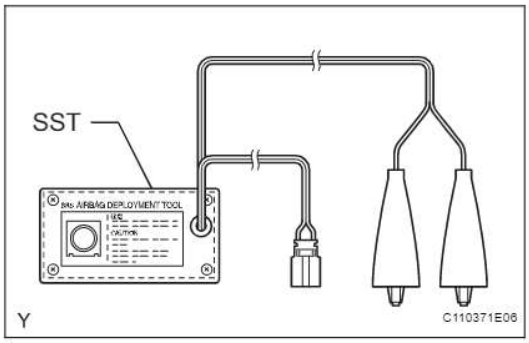
(a) Check the function of the SST.

SST 09082-00700

CAUTION:

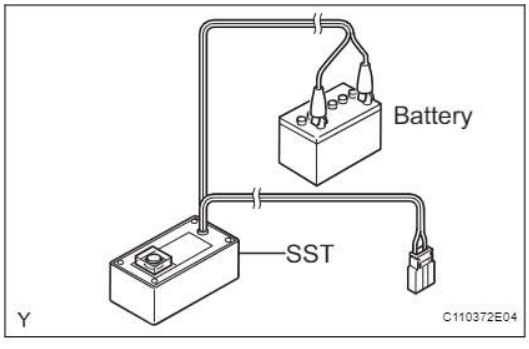
When deploying the airbag, always use the specified SST:

SRS Airbag Deployment Tool

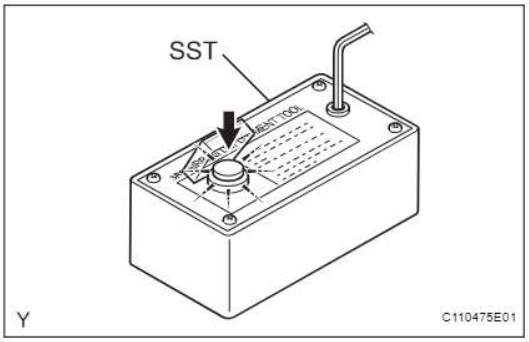


(1) Connect the SST to the battery.

Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.



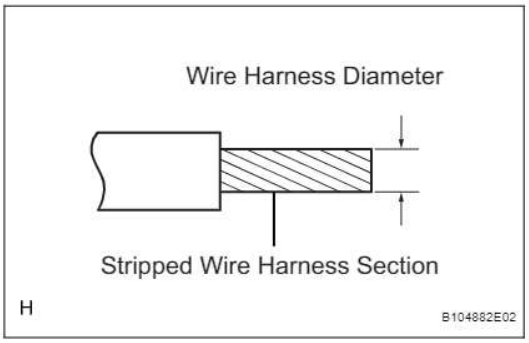
RS



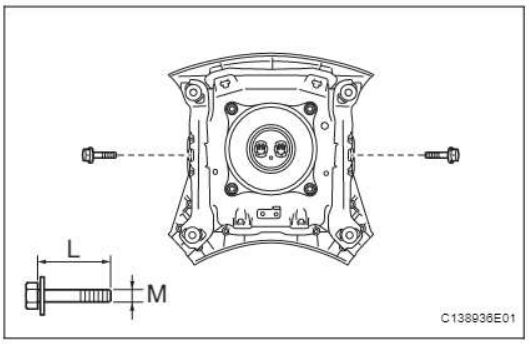
(2) Check the function of the SST.
Press the SST activation switch, and check that the LED of the SST activation switch comes on.
CAUTION:
- **Do not connect the SST connector (yellow colored one) to the airbag.**
- **If the LED comes on when the activation switch is not being pressed, SST malfunction is possible, so replace the SST with a new one.**

(3) Disconnect the SST from the battery.

(b) Remove the steering pad (See page RS-344).
CAUTION:
- **When removing the steering pad, work must be started 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery.**
- **When storing the steering pad, keep the airbag deployment side facing upward.**

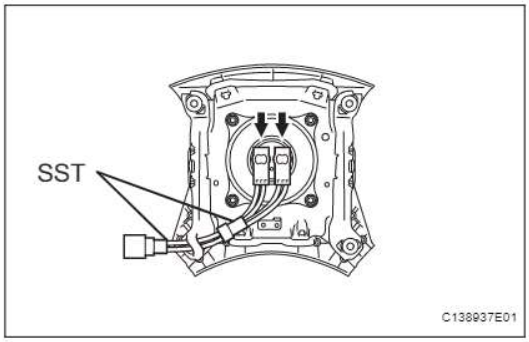


(c) Using a service-purpose wire harness for the vehicle, tie down the steering pad to the disc wheel.
Wire harness:
Stripped wire harness section
1.25 mm^2 or more (0.0019 $in.^2$ or more)
CAUTION:
If the wire harness is too thin or an alternative object is used to tie down the steering pad, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with an area of at least 1.25 mm^2 (0.0019 $in.^2$).
HINT:
To calculate the area of the stripped wire harness section:
Area = 3.14 x $(Diameter)^2$ divided by 4

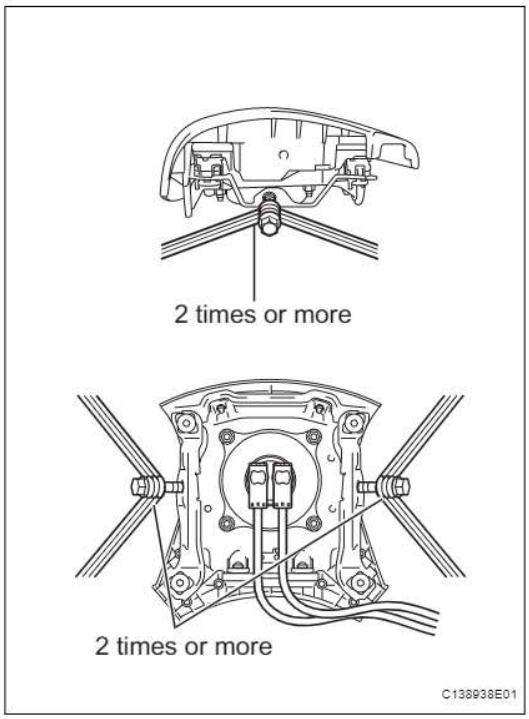


(1) Install the 2 bolts with washers into the 2 bolt holes on the steering pad.
Bolt:
L:
35.0 mm (1.378 in.)
M:
6.0 mm (0.236 in.)
Pitch:
1.0 mm (0.039 in.)
NOTICE:
- **Tighten the bolts by hand until they do not move.**
- **Do not tighten the bolts excessively.**

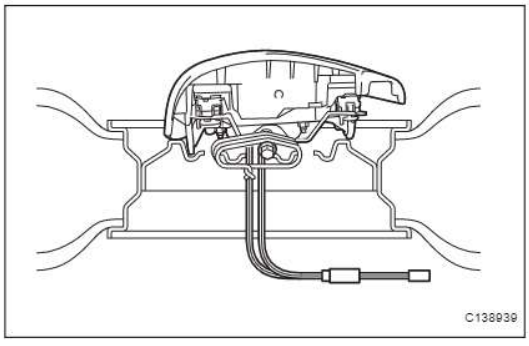
RS



(2) After connecting the SST below to each other, connect them to the steering pad.
SST 09082-00802 (09082-10801, 09082-30801)



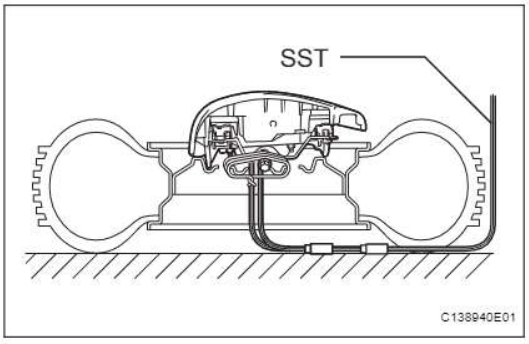
(3) Using 3 wire harnesses, wind wire harness at least 2 times each around each of the bolts installed on the left and right sides of the steering pad.
CAUTION:
- **Tightly wind the wire harness around the bolts so that there is no slack.**
- **Make sure that the wire harness is tight. If there is slack in the wire harness, the steering pad may become loose due to the shock when the airbag is deployed.**



(4) Face the airbag deployment side of the steering pad upward on top of a tire and wheel set. Separately tie the left and right sides of the steering pad to the disc wheel through the hub nut holes. Position the SST connector so that it hangs downward through the hub hole of the disc wheel.
CAUTION:
- **Make sure that the wire harness is tight. If there is slack in the wire harness, the steering pad may become loose due to the shock when the airbag is deployed.**
- **Always tie down the steering pad with the airbag deployment side facing upward.**

NOTICE:
The disc wheel will be damaged by the airbag deployment, so use an extra disc wheel.

RS



(d) Install the SST.

CAUTION:

Place the disc wheel on level ground.

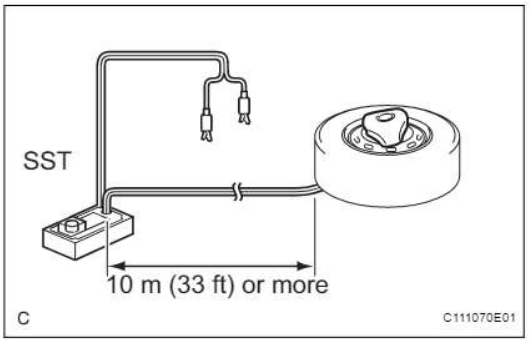
(1) Connect the SST connector.

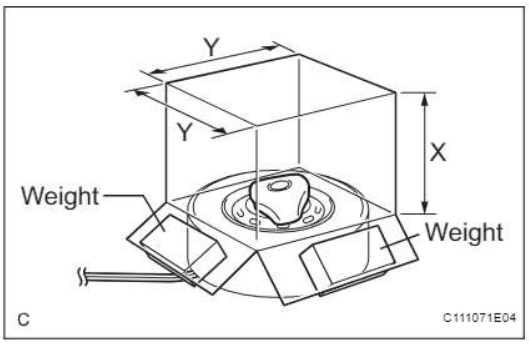
SST 09082-00700

NOTICE:

To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the disc wheel.

(2) Move the SST at least 10 m (33 ft) away from the airbag tied down to the disc wheel.





(e) Cover the steering pad (Using a cardboard box).

(1) Cover the steering pad with the cardboard box.

(2) Place weights on the cardboard box in 4 places totalling at least 190 N (19 kg, 43 lb).

Cardboard box size:

Must exceed the following dimensions

X:

460 mm (18.11 in.)

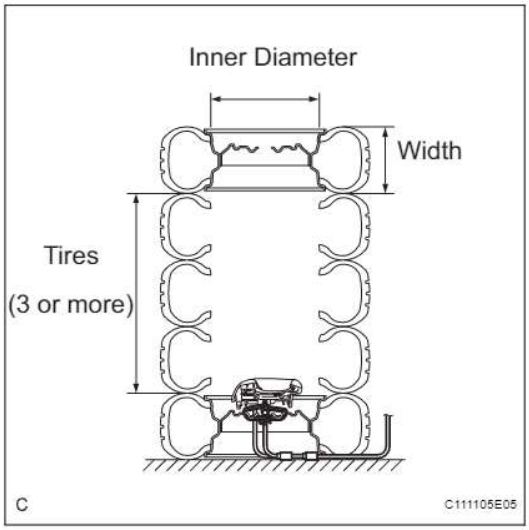
Y:

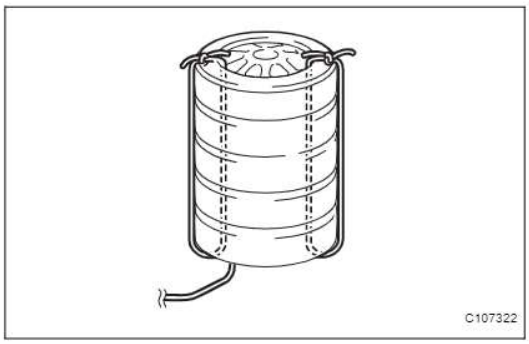
650 mm (25.59 in.)

NOTICE:

- **When dimension Y of the cardboard box exceeds the diameter of the disc wheel and tire that the steering pad is tied to, X should be the following size.**
  X = 460 mm (18.11 in.) + width of tire
- **If a cardboard box which is smaller than the specified size is used, the cardboard box will be broken by the shock from the airbag deployment.**

RS





(f) Cover the steering pad (Using tires).

(1) Place at least 3 tires without disc wheels on the tire and disc wheel that the steering pad is tied to.

(2) Place the tire with a disc wheel on top of them.

Tire size:

Must exceed the following dimensions

Width:

185 mm (7.28 in.)

Inner diameter:

360 mm (14.17 in.)

CAUTION:

Do not use tires with disc wheels except for the top and bottom.

NOTICE:

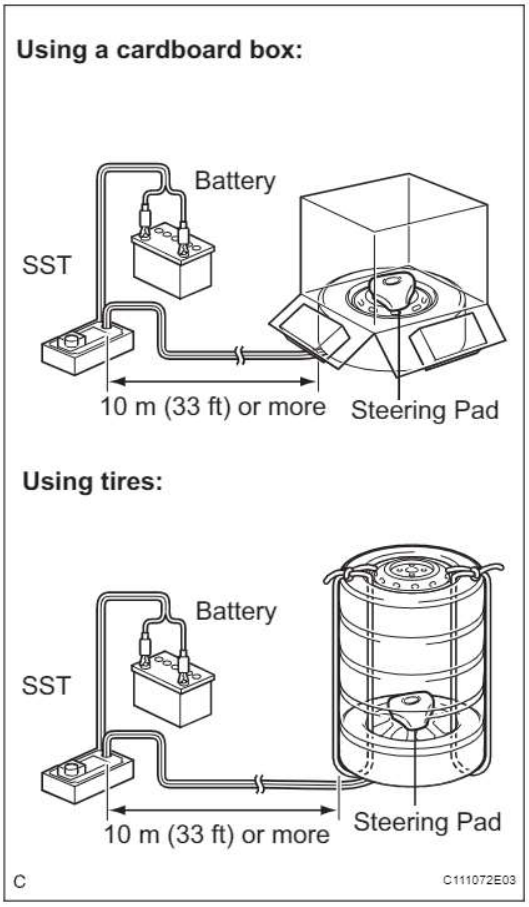
- **The tires may be damaged by the airbag deployment, so use an extra tire.**
- **Do not place the SST connector under the tire because it could be damaged.**

(3) Tie the tires together with 2 wire harnesses.

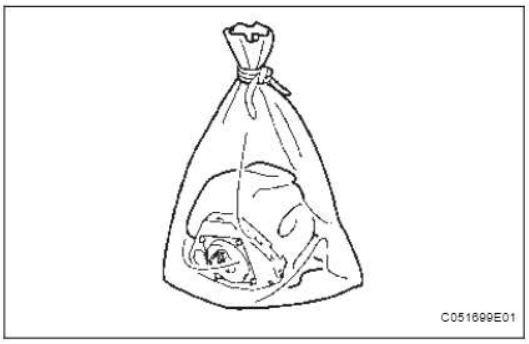
CAUTION:

Make sure that the wire harness is tight. Looseness in the wire harness results in the tires coming free due to the shock when the airbag is deployed.

RS



(g) Deploy the airbag.
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the disc wheel which the steering pad is tied to.
(3) Press the SST activation switch and deploy the airbag.
CAUTION:
When deploying the airbag, make sure that no one is near the tire.
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.



(h) Dispose of the steering pad.
CAUTION:
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water, etc. to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

(1) Remove the steering pad from the disc wheel.
(2) Place the steering pad in a plastic bag, tie it tightly and dispose of it as other general part disposal.

RS

INSPECTION

1. INSPECT SPIRAL CABLE

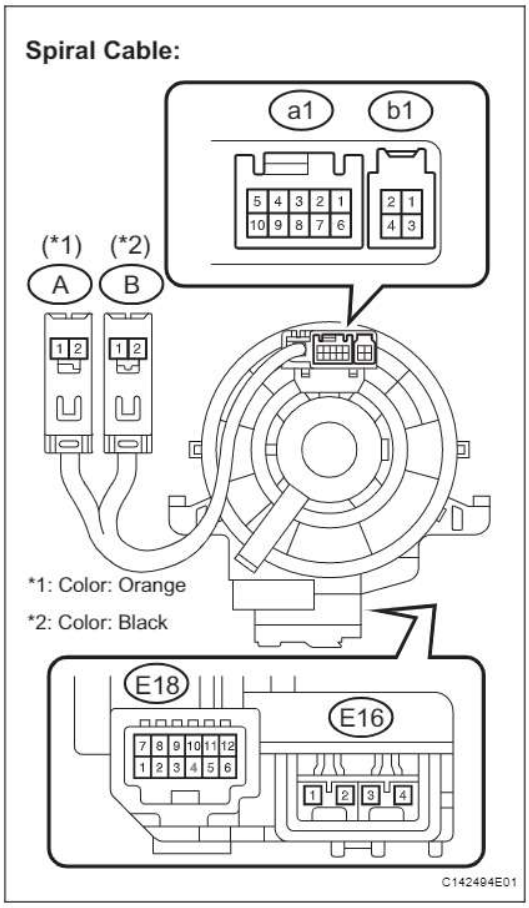
(a) If there are any defects as mentioned below, replace the spiral cable with a new one:
Scratches, cracks, dents or chips on the connector or the spiral cable.

(b) Inspect the spiral cable.

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

NOTICE:
To avoid breakage of the spiral cable, do not turn the spiral cable more than necessary.

Standard resistance

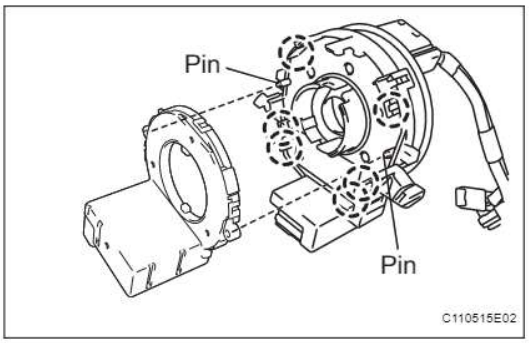


Tester connection	Condition	Specified condition
a1-1 - b1-2	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-1 - E18-8 (HO)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-2 - E18-9 (EAC)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-3 - E18-10 (AC1)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-5 - E18-12 (IL+2)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-6 - b1-4	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-6 - E18-2 (ECC)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-7 - E18-3 (+DP)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-8 - E18-4 (EAU)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-9 - E18-5 (AU2)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
a1-10 - E18-6 (AU1)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
b1-2 - E18-8 (HO)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	

RS

Tester connection	Condition	Specified condition
b1-3 - E18-1 (CCS)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
b1-4 - E18-2 (ECC)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
A-1 (D-) - E16-2 (D-)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
A-2 (D+) - E16-1 (D+)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
B-1 (D2-) - E16-3 (D2-)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	
B-2 (D2+) - E16-4 (D2+)	Center	Below 1 Ω
	2.5 rotations to the left	
	2.5 rotations to the right	

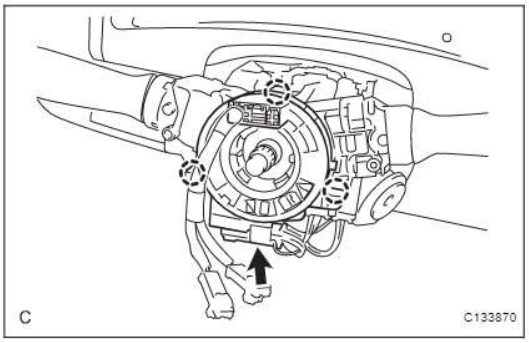
If the value is not within the specified range, replace the spiral cable.



INSTALLATION

1. **INSTALL SPIRAL CABLE**
   (a) Engage the 6 claws and and 2 pins, and install the spiral cable to the steering angle sensor.

2. **INSTALL SPIRAL CABLE WITH STEERING ANGLE SENSOR**
   (a) Check that the front wheels are facing straight ahead.
   (b) Set the turn signal switch to the neutral position.
   NOTICE:
   If it is not in the neutral position, the pin of the turn signal switch may be snapped.



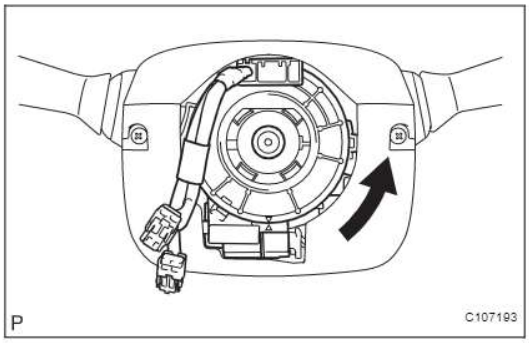
   (c) Engage the 3 claws and install the spiral cable with steering angle sensor.
   NOTICE:
   When replacing the spiral cable with a new one, remove the lock pin before installing the steering wheel assembly.
   (d) Connect the connectors to the spiral cable with steering angle sensor.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.

3. **INSTALL STEERING COLUMN COVER (See page SR-41)**

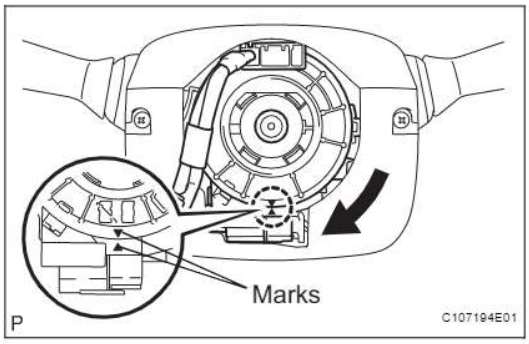
4. **ADJUST SPIRAL CABLE**
   (a) Check that the power switch is turned off.

RS

(b) Check that the battery negative (-) cable is disconnected.
CAUTION:
Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.



(c) Rotate the spiral cable counterclockwise slowly by hand until it feels firm.
NOTICE:
Do not turn the spiral cable by the airbag wire harness.



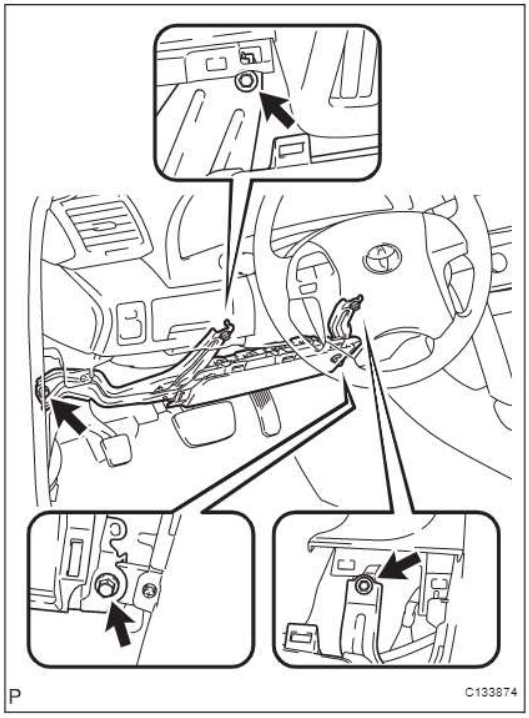
(d) Rotate the spiral cable clockwise approximately 2.5 turns to align the marks.
NOTICE:
Do not turn the spiral cable by the airbag wire harness.
HINT:
The spiral cable will rotate approximately 2.5 turns to both the left and right from the center.

5. **INSTALL STEERING WHEEL ASSEMBLY (See page SR-42)**
6. **INSPECT STEERING WHEEL CENTER POINT**
7. **INSTALL STEERING PAD (See page RS-346)**
8. **INSTALL NO. 3 LOWER STEERING WHEEL COVER (See page RS-347)**
9. **INSTALL NO. 2 LOWER STEERING WHEEL COVER (See page RS-347)**
10. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
11. **PERFORM INITIALIZATION**
    (a) Perform initialization (See page IN-43).
    NOTICE:
    Some systems need initialization after reconnecting the cable to the negative battery terminal.
12. **INSPECT STEERING PAD (See page RS-347)**
13. **INSPECT SRS WARNING LIGHT**
    (a) Inspect the SRS warning light (See page RS-33).

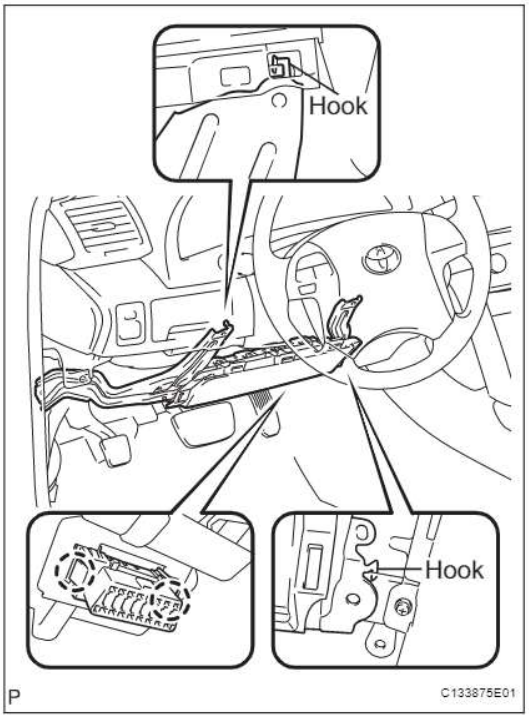
RS

REMOVAL

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE FRONT DOOR SCUFF PLATE LH (See page IR-13)**
4. **REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-14)**
5. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-11)**
6. **REMOVE DRIVER SIDE KNEE AIRBAG ASSEMBLY**
   (a) Remove the 4 bolts.
   (b) Disconnect the airbag connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.



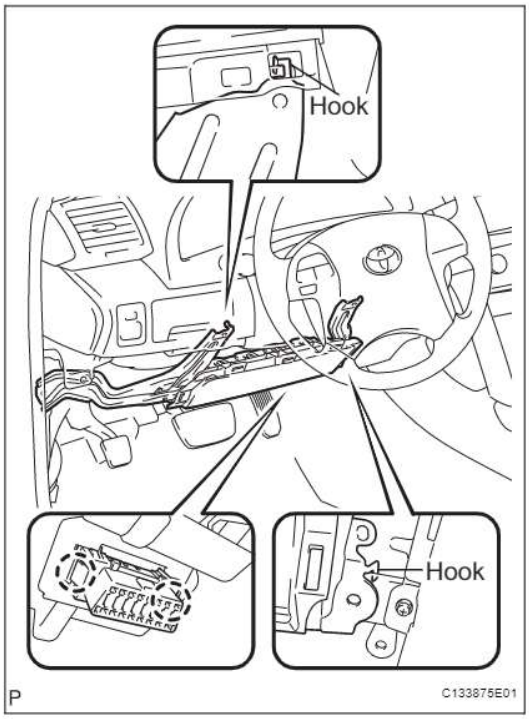
RS

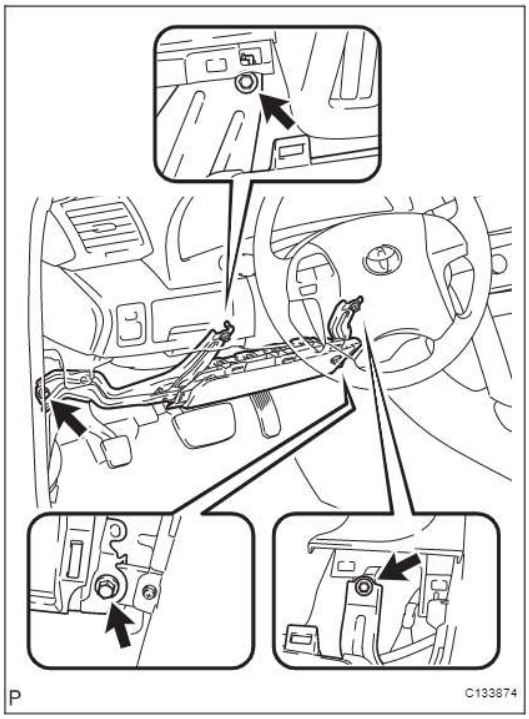


(c) Disengage the 2 claws and remove the DLC3.
(d) Disengage the 2 hooks and remove the driver side knee airbag assembly.

INSTALLATION

1. **INSTALL DRIVER SIDE KNEE AIRBAG ASSEMBLY**
   (a) Check that the power switch is turned off.
   (b) Check that the battery negative (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (c) Temporarily install the driver side knee airbag assembly with the 2 hooks.
   (d) Engage the 2 claws and install the DLC3.





   (e) Install the driver side knee airbag assembly with the 4 bolts.
   Torque: 10 N*m (102 kgf*cm, 7 ft.*lbf)
   (f) Connect the driver side knee airbag connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.

2. **INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-35)**

3. **INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-41)**

4. **INSTALL FRONT DOOR SCUFF PLATE LH (See page IR-41)**

5. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

6. **PERFORM INITIALIZATION**
   (a) Perform initialization (See page IN-43).
   NOTICE:
   Some systems need initialization after reconnecting the cable to the negative battery terminal.

RS

7. INSPECT SRS WARNING LIGHT

(a) Inspect the SRS warning light (See page RS-33).

DISPOSAL

HINT:
When scrapping a vehicle equipped with the SRS or disposing of the driver side knee airbag assembly, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

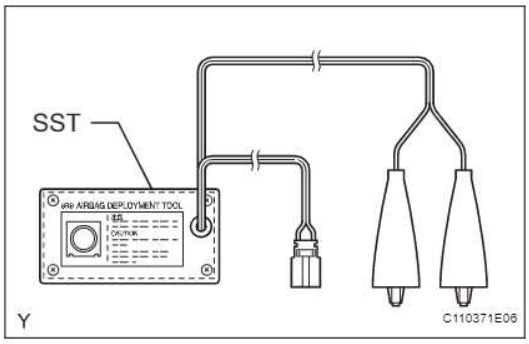
CAUTION:

- **Never dispose of a driver side knee airbag assembly that has an undeployed airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors where it will not be a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (33 ft) away from the driver side knee airbag assembly.**
- **The driver side knee airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a driver side knee airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

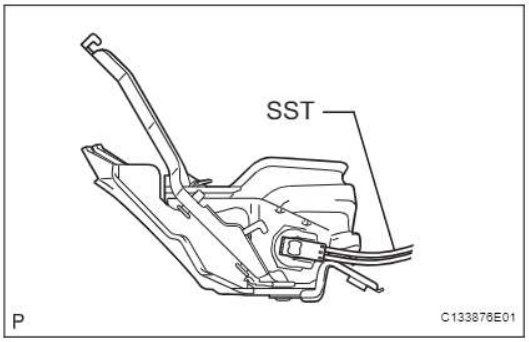
1. **DISPOSE OF DRIVER SIDE KNEE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)**

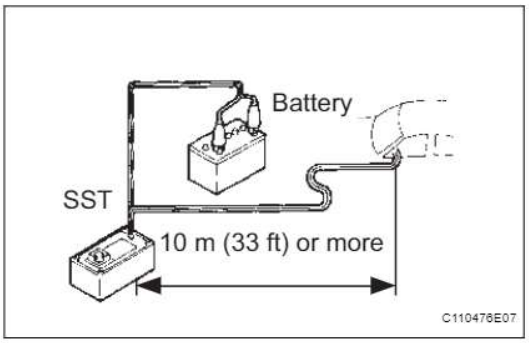
   HINT:
   Prepare a battery as the power source to deploy the airbag.

   (a) Check the function of the SST (See page RS-348).
   (b) Refer to PRECAUTION (See page RS-1).
   (c) Disconnect the cable from the negative battery terminal.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (d) Remove the driver side knee airbag assembly (See page RS-362).



RS





(e) Install the SST.

(1) Connect the SST connector to the driver side knee airbag assembly.

SST 09082-00700, 09082-00770

NOTICE:

To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(2) Install the driver side knee airbag assembly (See page RS-363).

NOTICE:

Take care not to damage the SST wire harness.

(3) Move the SST at least 10 m (33 ft) away from the vehicle front side window.

(4) Maintaining enough clearance for the SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage the SST wire harness.

(5) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.

(f) Deploy the airbag.

(1) Check that no one is inside the vehicle or within a 10 m (33 ft) radius of the vehicle.

(2) Press the SST activation switch and deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The driver side knee airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a driver side knee airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

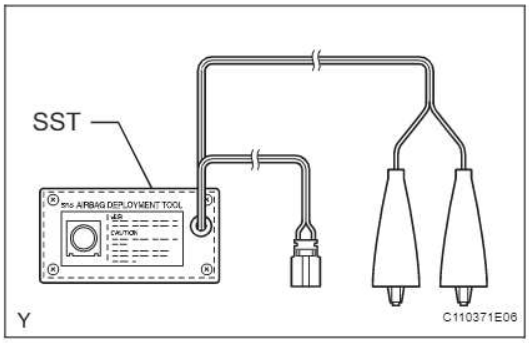
The airbag is deployed as the LED of the SST activation switch comes on.

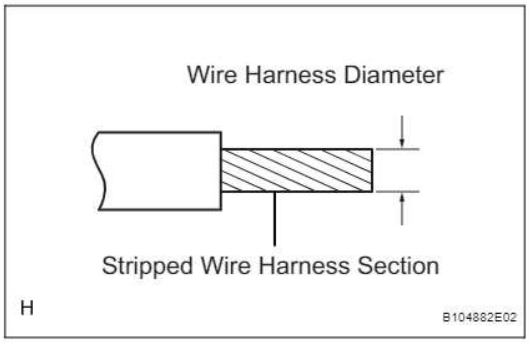
2. DISPOSE OF DRIVER SIDE KNEE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

- **When disposing of the driver side knee airbag assembly, never use the customer's vehicle to deploy the airbag.**

RS





- **Be sure to follow the procedure detailed below when deploying the airbag.**

HINT:
Prepare a battery as the power source to deploy the airbag.

(a) Check the function of the SST (See page RS-350).

(b) Remove the driver side knee airbag assembly (See page RS-362).

CAUTION:
- **When removing the driver side knee airbag assembly, work must be started 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery.**
- **When storing the driver side knee airbag assembly, keep the airbag deployment side facing upward.**

(c) Using a service-purpose wire harness for the vehicle, tie down the driver side knee airbag assembly to the tire.

Wire harness:
Stripped wire harness section
1.25 mm^2 or more (0.0019 $in.^2$ or more)

CAUTION:
If the wire harness is too thin or an alternative object is used to tie down the driver side knee airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with an area of at least 1.25 mm^2 (0.0019 $in.^2$).

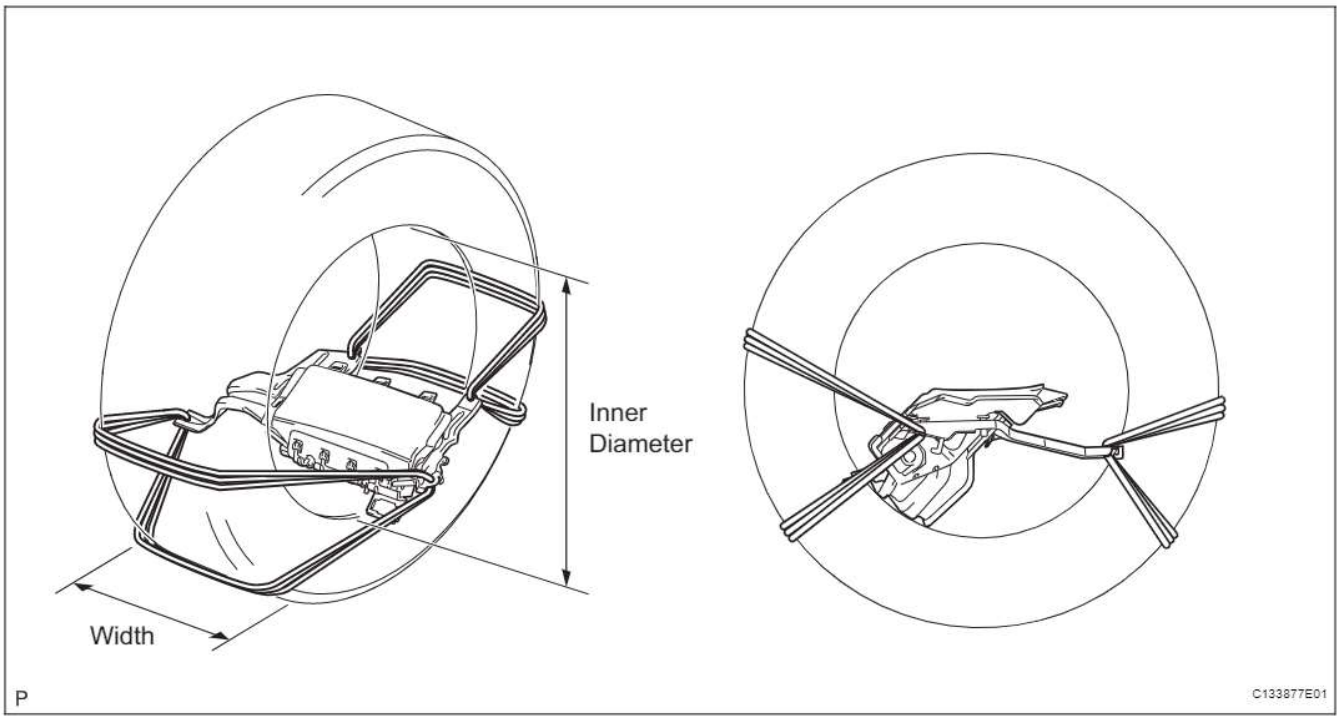
HINT:
To calculate the area of the stripped wire harness section:

Area = 3.14 x $(Diameter)^2$ divided by 4

(1) Position the driver side knee airbag assembly inside the tire with the airbag deployment side facing inside.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.17 in.)

RS

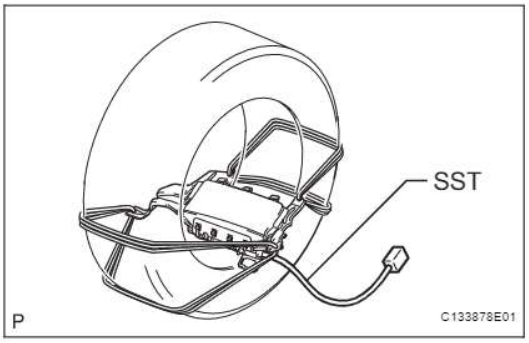


CAUTION:

- **Make sure that the wire harness is tight. If there is slack in the wire harness, the driver side knee airbag assembly may become loose due to the shock when the airbag is deployed.**
- **Always tie down the driver side knee airbag assembly with the airbag deployment side facing inside the tire.**

NOTICE:

The tire may be damaged by the airbag deployment, so use an extra tire.

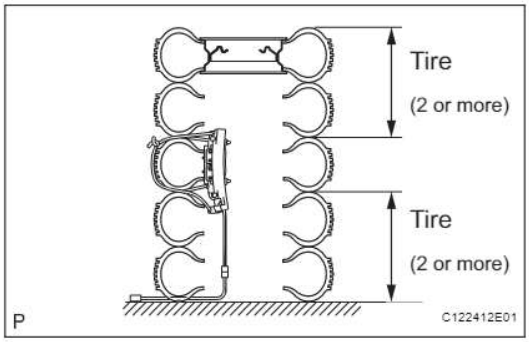


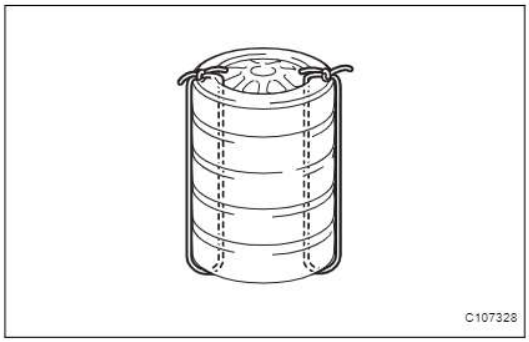
(d) Install the SST.

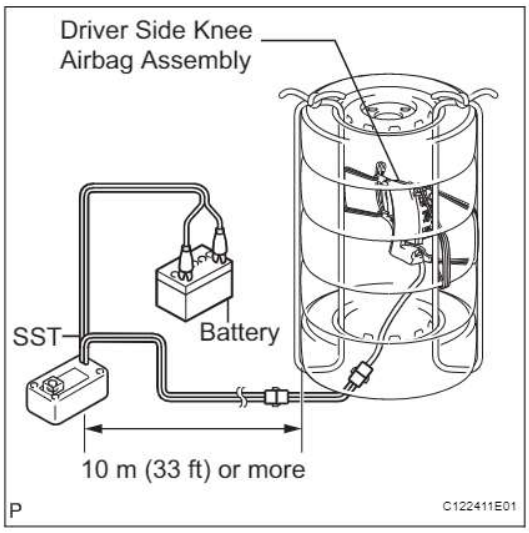
(1) Connect the SST connector to the driver side knee airbag assembly.

SST 09082-00770

RS







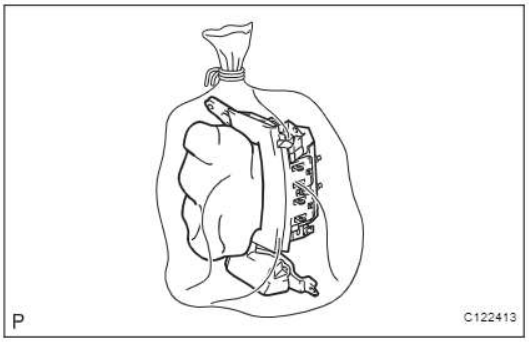
(e) Place the tires.
(1) Place at least 2 tires under the tire which the driver side knee airbag assembly is tied to.
(2) Place at least 2 tires over the tire which the driver side knee airbag assembly is tied to. The top tire should have the disc wheel installed.
NOTICE:
- **The tire may be damaged by the airbag deployment, so use an extra tire.**
- **Do not place the SST connector under the tire because it could be damaged.**

(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. Looseness in the wire harness results in the tires coming free due to the shock when the airbag is deployed.

(f) Install the SST.
(1) Connect the SST connector.
SST 09082-00700
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.
(2) Move the SST at least 10 m (33 ft) away from the airbag tied down to the tire.

(g) Deploy the airbag.
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire which the driver side knee airbag assembly is tied to.
(3) Press the SST activation switch and deploy the airbag.
CAUTION:
When deploying the airbag, make sure that no one is near the tire.
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.

RS



(h) Dispose of the driver side knee airbag assembly.

CAUTION:

- **The driver side knee airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a driver side knee airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

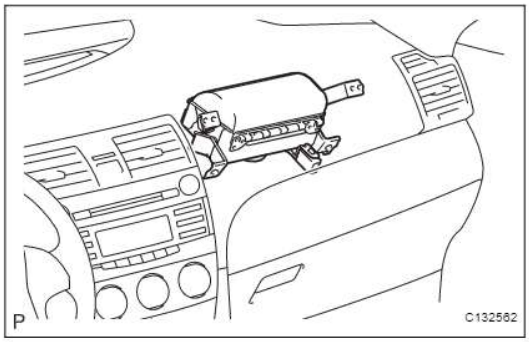
(1) Remove the driver side knee airbag assembly from the tire.

(2) Place the driver side knee airbag assembly in a plastic bag, tie it tightly and dispose of it as other general part disposal.

ON-VEHICLE INSPECTION

1. INSPECT FRONT PASSENGER AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

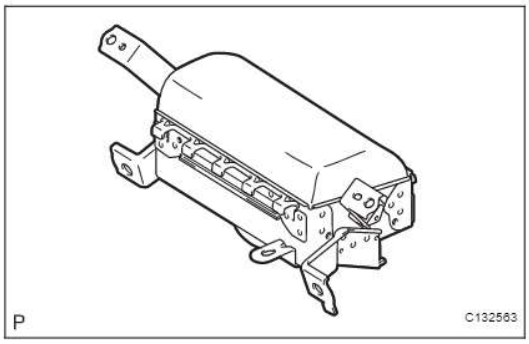
(a) Perform a diagnostic system check (See page RS-33).



(b) With the front passenger airbag assembly installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the instrument panel with a new one:
Cuts, minute cracks or marked discoloration on the instrument panel around the front passenger airbag assembly.

2. INSPECT FRONT PASSENGER AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

(a) Perform a diagnostic system check (See page RS-33).



(b) With the front passenger airbag assembly removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front passenger airbag assembly, instrument panel or instrument panel reinforcement with a new one:
- Cuts, minute cracks or marked discoloration on the front passenger airbag assembly.
- Cracks or other damage to the connectors.
- Deformation or cracks on the instrument panel or instrument panel reinforcement.

CAUTION:
Be sure to follow the correct removal and installation procedures.

RS

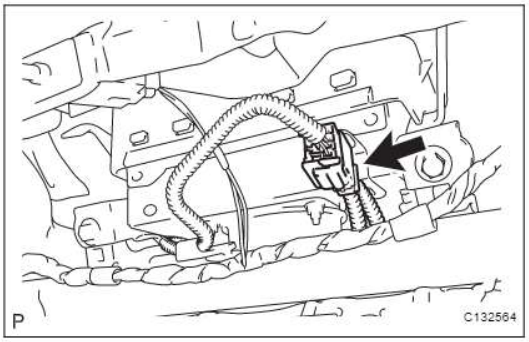
REMOVAL

1. PRECAUTION
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. ALIGN FRONT WHEELS FACING STRAIGHT AHEAD
3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
4. REMOVE NO. 3 LOWER STEERING WHEEL COVER (See page RS-345)
5. REMOVE NO. 2 LOWER STEERING WHEEL COVER (See page RS-345)
6. REMOVE STEERING PAD (See page RS-345)
7. REMOVE STEERING WHEEL ASSEMBLY (See page SR-36)
8. REMOVE FRONT DOOR SCUFF PLATE LH (See page IR-13)
9. REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-14)
10. REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-11)
11. REMOVE STEERING COLUMN COVER (See page SR-36)
12. REMOVE TURN SIGNAL SWITCH ASSEMBLY WITH SPIRAL CABLE SUB-ASSEMBLY (See page SR-37)
13. REMOVE NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-12)
14. REMOVE LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-12)
15. REMOVE INSTRUMENT CLUSTER FINISH PANEL (See page IP-13)
16. REMOVE COMBINATION METER ASSEMBLY (See page IP-13)
17. REMOVE FRONT DOOR SCUFF PLATE RH (See page IR-15)
18. REMOVE COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-15)
19. REMOVE INSTRUMENT PANEL NO. 2 UNDER COVER SUB-ASSEMBLY (See page IP-13)
20. REMOVE LOWER INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-14)

RS

21. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY (See page IP-14)
22. REMOVE NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-14)
23. REMOVE NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-14)
24. REMOVE FLOOR SHIFT POSITION INDICATOR HOUSING SUB-ASSEMBLY (See page IP-15)
25. REMOVE UPPER CONSOLE REAR PANEL SUB-ASSEMBLY (See page IP-15)
26. REMOVE UPPER CONSOLE PANEL SUB-ASSEMBLY (See page IP-16)
27. REMOVE INSTRUMENT PANEL NO. 2 REGISTER ASSEMBLY (See page IP-16)
28. REMOVE RADIO RECEIVER WITH HEATER CONTROL PANEL ASSEMBLY (w/o Navigation System) (See page AV-136)
29. REMOVE NAVIGATION RECEIVER WITH HEATER CONTROL PANEL ASSEMBLY (w/ Navigation System) (See page NS-193)
30. REMOVE CONSOLE BOX POCKET (See page IP-17)
31. REMOVE CONSOLE BOX CARPET (See page IP-17)
32. REMOVE CONSOLE BOX ASSEMBLY (See page IP-17)
33. REMOVE NO. 2 CONSOLE BOX INSERT FRONT (See page IP-18)
34. REMOVE NO. 1 CONSOLE BOX INSERT FRONT (See page IP-18)
35. REMOVE FRONT PILLAR GARNISH LH (See page IR-16)
36. REMOVE INSTRUMENT PANEL NO. 1 REGISTER ASSEMBLY (See page IP-18)
37. REMOVE INSTRUMENT PANEL NO. 1 SPEAKER PANEL SUB-ASSEMBLY (See page IP-19)
38. REMOVE FRONT NO. 2 SPEAKER ASSEMBLY (for LH Side) (See page AV-146)
39. REMOVE FRONT PILLAR GARNISH RH (See page IR-16)
40. REMOVE INSTRUMENT PANEL NO. 3 REGISTER ASSEMBLY (See page IP-19)
41. REMOVE INSTRUMENT PANEL NO. 2 SPEAKER PANEL SUB-ASSEMBLY (See page IP-19)
42. REMOVE FRONT NO. 2 SPEAKER ASSEMBLY (for RH Side) (See page IP-19)

43. REMOVE NO. 1 DEFROSTER NOZZLE GARNISH (See page IP-20)

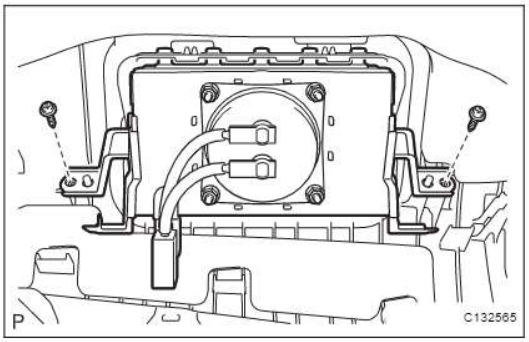


44. DISCONNECT INSTRUMENT PANEL WIRE ASSEMBLY

(a) Disconnect the connector.

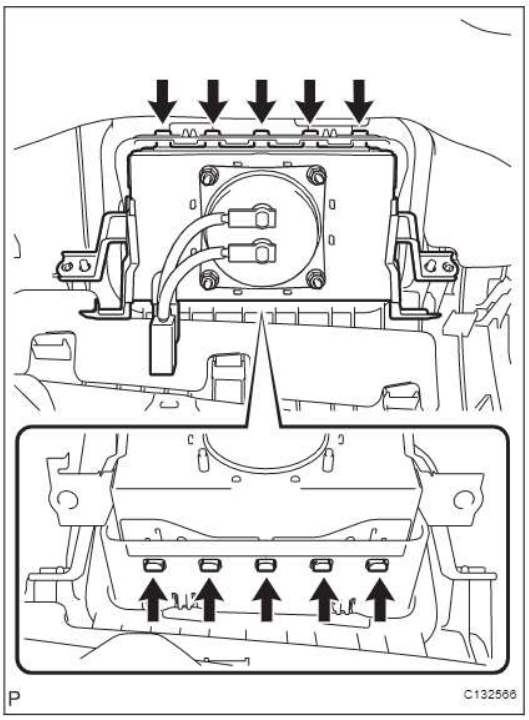
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

45. REMOVE INSTRUMENT PANEL SAFETY PAD ASSEMBLY (See page IP-20)



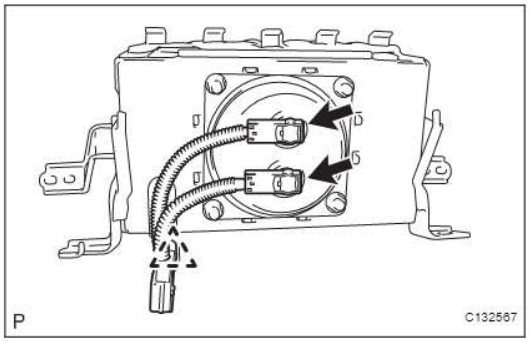
46. REMOVE FRONT PASSENGER AIRBAG ASSEMBLY

(a) Remove the 2 screws.



(b) Disengage the 10 hooks and remove the front passenger airbag assembly from the instrument panel.

RS



47. REMOVE INSTRUMENT PANEL WIRE ASSEMBLY

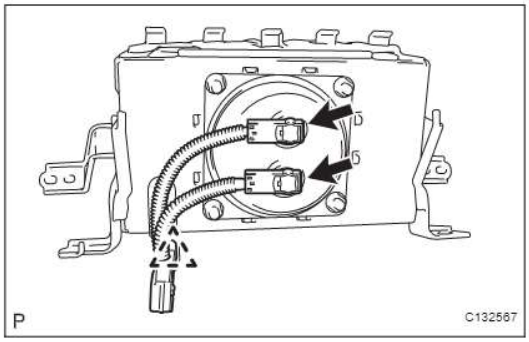
(a) Disconnect the 2 connectors.

(b) Remove the clamp and the instrument panel wire assembly from the front passenger airbag assembly.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

INSTALLATION



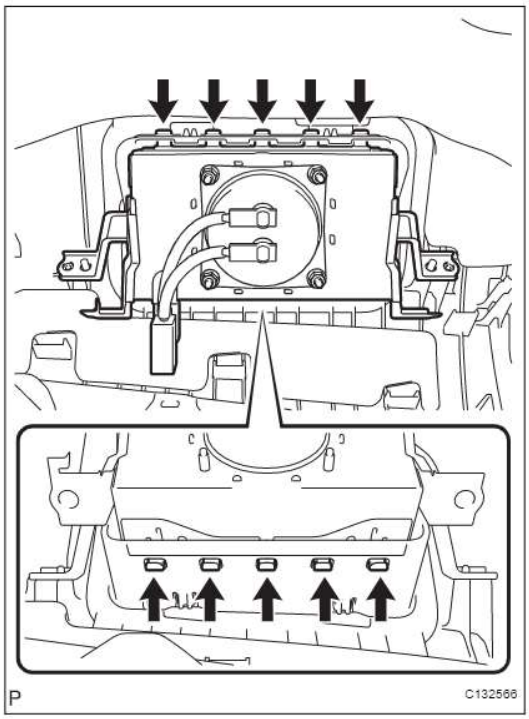
1. INSTALL INSTRUMENT PANEL WIRE ASSEMBLY

(a) Connect the 2 connectors.

(b) Install the clamp and the instrument panel wire assembly on the front passenger airbag assembly.

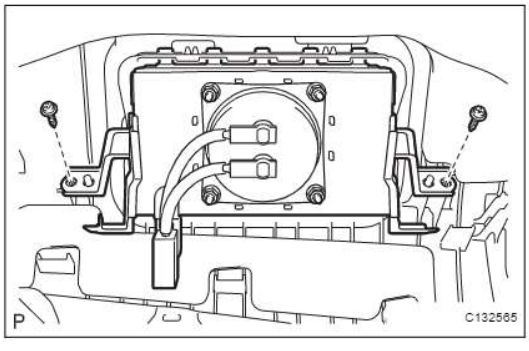
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



2. INSTALL FRONT PASSENGER AIRBAG ASSEMBLY

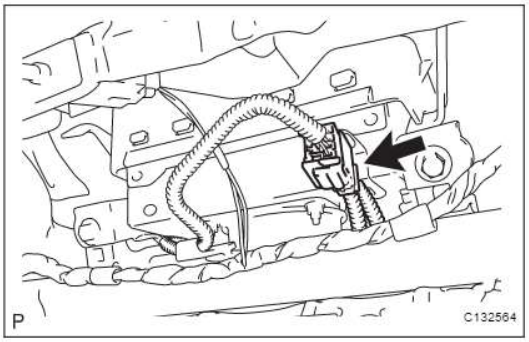
(a) Engage the 10 hooks and install the front passenger airbag assembly on the instrument panel.



(b) Install the 2 screws.

3. INSTALL INSTRUMENT PANEL SAFETY PAD ASSEMBLY (See page IP-25)

RS



4. **CONNECT INSTRUMENT PANEL WIRE ASSEMBLY**
   (a) Connect the connector.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
5. **INSTALL NO. 1 DEFROSTER NOZZLE GARNISH (See page IP-28)**
6. **INSTALL FRONT NO. 2 SPEAKER ASSEMBLY (for LH Side) (See page AV-146)**
7. **INSTALL INSTRUMENT PANEL NO. 1 SPEAKER PANEL SUB-ASSEMBLY (See page IP-28)**
8. **INSTALL INSTRUMENT PANEL NO. 1 REGISTER ASSEMBLY (See page IP-28)**
9. **INSTALL FRONT PILLAR GARNISH LH (See page IR-38)**
10. **INSTALL FRONT NO. 2 SPEAKER ASSEMBLY (for RH Side) (See page IP-28)**
11. **INSTALL INSTRUMENT PANEL NO. 2 SPEAKER PANEL SUB-ASSEMBLY (See page IP-29)**
12. **INSTALL INSTRUMENT PANEL NO. 3 REGISTER ASSEMBLY (See page IP-29)**
13. **INSTALL FRONT PILLAR GARNISH RH (See page IR-39)**
14. **INSTALL NO. 1 CONSOLE BOX INSERT FRONT (See page IP-29)**
15. **INSTALL NO. 2 CONSOLE BOX INSERT FRONT (See page IP-30)**
16. **INSTALL CONSOLE BOX ASSEMBLY (See page IP-30)**
17. **INSTALL CONSOLE BOX CARPET (See page IP-30)**
18. **INSTALL CONSOLE BOX POCKET (See page IP-30)**
19. **INSTALL RADIO RECEIVER WITH HEATER CONTROL PANEL ASSEMBLY (w/o Navigation System) (See page AV-137)**
20. **INSTALL NAVIGATION RECEIVER WITH HEATER CONTROL PANEL ASSEMBLY (w/ Navigation System) (See page NS-194)**
21. **INSTALL INSTRUMENT PANEL NO. 2 REGISTER ASSEMBLY (See page IP-31)**
22. **INSTALL UPPER CONSOLE PANEL SUB-ASSEMBLY (See page IP-31)**
23. **INSTALL UPPER CONSOLE REAR PANEL SUB-ASSEMBLY (See page IP-31)**
24. **INSTALL FLOOR SHIFT POSITION INDICATOR HOUSING SUB-ASSEMBLY (See page IP-31)**

RS

25. INSTALL NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-32)
26. INSTALL NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-32)
27. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY (See page IP-32)
28. INSTALL LOWER INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-33)
29. INSTALL INSTRUMENT PANEL NO. 2 UNDER COVER SUB-ASSEMBLY (See page IP-33)
30. INSTALL COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-42)
31. INSTALL FRONT DOOR SCUFF PLATE RH (See page IR-42)
32. INSTALL COMBINATION METER ASSEMBLY (See page IP-33)
33. INSTALL INSTRUMENT CLUSTER FINISH PANEL (See page IP-34)
34. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-34)
35. INSTALL NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-34)
36. INSTALL TURN SIGNAL SWITCH ASSEMBLY WITH SPIRAL CABLE SUB-ASSEMBLY (See page SR-41)
37. ADJUST SPIRAL CABLE (See page RS-360)
38. INSTALL STEERING COLUMN COVER (See page SR-41)
39. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-35)
40. INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-41)
41. INSTALL FRONT DOOR SCUFF PLATE LH (See page IR-41)
42. INSTALL STEERING WHEEL ASSEMBLY (See page SR-42)
43. INSTALL STEERING PAD (See page RS-346)
44. INSTALL NO. 3 LOWER STEERING WHEEL COVER (See page RS-347)
45. INSTALL NO. 2 LOWER STEERING WHEEL COVER (See page RS-347)
46. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

RS

47. PERFORM INITIALIZATION

(a) Perform initialization (See page IN-43).

NOTICE:
Some systems need initialization after reconnecting the cable to the negative battery terminal.

48. INSPECT STEERING PAD (See page RS-347)

49. INSPECT SRS WARNING LIGHT

(a) Inspect the SRS warning light (See page RS-33).

DISPOSAL

HINT:
When scrapping a vehicle equipped with the SRS or disposing of the front passenger airbag assembly, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the TOYOTA MOTOR SALES, U.S.A., INC.

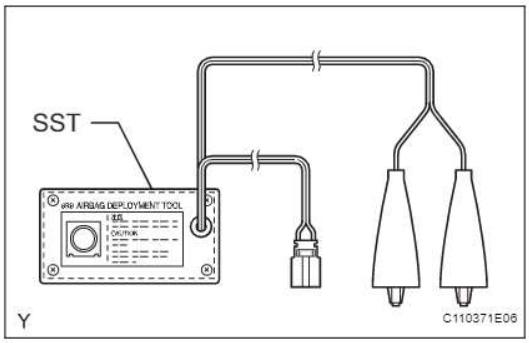
CAUTION:

- **Never dispose of a front passenger airbag assembly that has an undeployed airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors where it will not be a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (33 ft) away from the front passenger airbag assembly.**
- **The front passenger airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front passenger airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

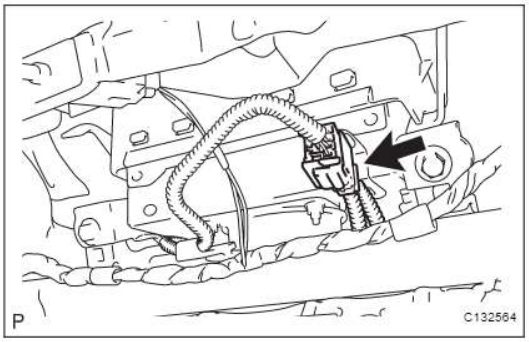
1. **DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)**

   HINT:
   Prepare a battery as the power source to deploy the airbag.

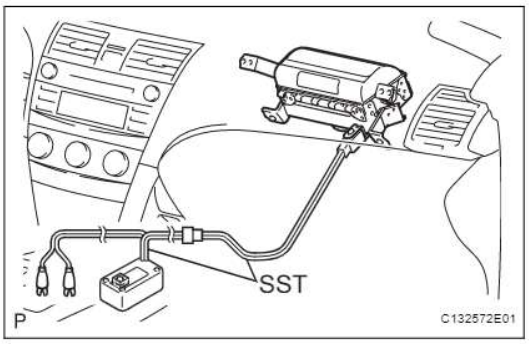
   (a) Check the function of the SST (See page RS-348).
   (b) Refer to PRECAUTION (See page RS-1).
   (c) Disconnect the cable from the negative battery terminal.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (d) Install the SST.
   (1) Remove the lower instrument panel sub-assembly (See page IP-14).



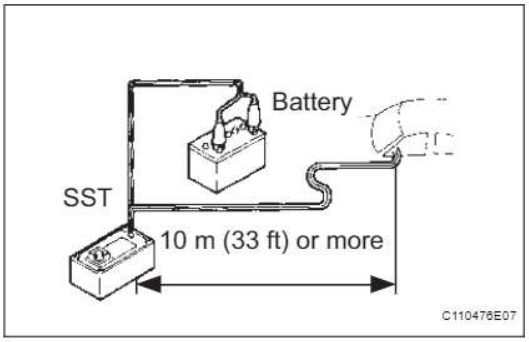
RS



(2) Disconnect the connector.
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.



(3) Connect the SST connector to the instrument panel wire assembly.
SST 09082-00700, 09082-00780
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.



(4) Move the SST at least 10 m (33 ft) away from the vehicle front side window.
(5) Maintaining enough clearance for the SST wire harness in the front side window, close all doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.
(6) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the negative (-) terminal.

(e) Deploy the airbag.
(1) Check that no one is inside the vehicle or within a 10 m (33 ft) radius of the vehicle.
(2) Press the SST activation switch and deploy the airbag.
CAUTION:
- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The front passenger airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front passenger airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

RS

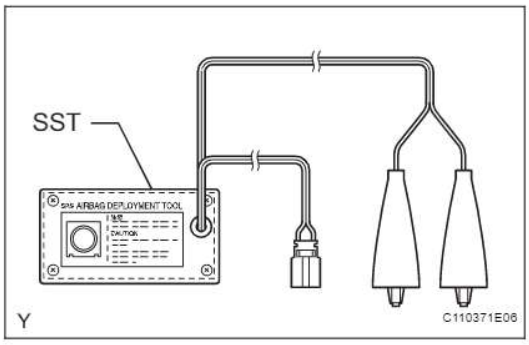
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.

2. DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

- **When disposing of the front passenger airbag assembly, never use the customer's vehicle to deploy the airbag.**
- **Be sure to follow the procedure detailed below when deploying the airbag.**

HINT:
Prepare a battery as the power source to deploy the airbag.

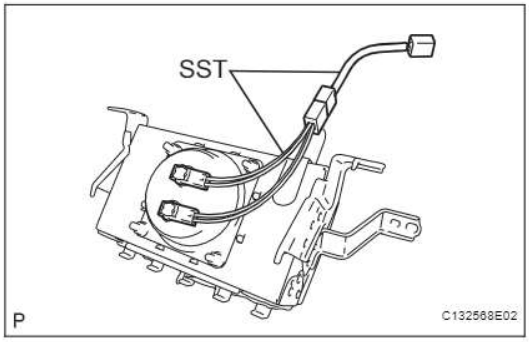


(a) Check the function of the SST (See page RS-350).

(b) Remove the front passenger airbag assembly (See page RS-379).

CAUTION:

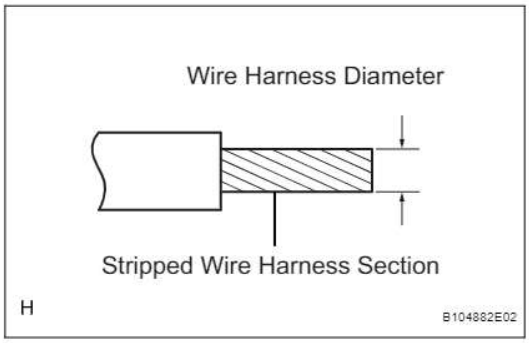
- **When removing the front passenger airbag assembly, work must be started 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery.**
- **When storing the front passenger airbag assembly, keep the airbag deployment side facing upward.**



(c) Install the SST.

(1) After connecting the SST below to each other, connect them to the front passenger airbag assembly.

SST 09082-00802 (09082-10801, 09082-30801)



(d) Using a service-purpose wire harness for the vehicle, tie down the front passenger airbag assembly to the tire.

Wire harness:
Stripped wire harness section
1.25 mm^2 or more (0.0019 $in.^2$ or more)

CAUTION:
If the wire harness is too thin or an alternative object is used to tie down the front passenger airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with an area of at least 1.25 mm^2 (0.0019 $in.^2$).

HINT:
To calculate the area of the stripped wire harness section:

RS

Area = 3.14 x (Diameter)^2 divided by 4

(1) Position the front passenger airbag assembly inside the tire with the airbag deployment side facing inside.

Tire size:

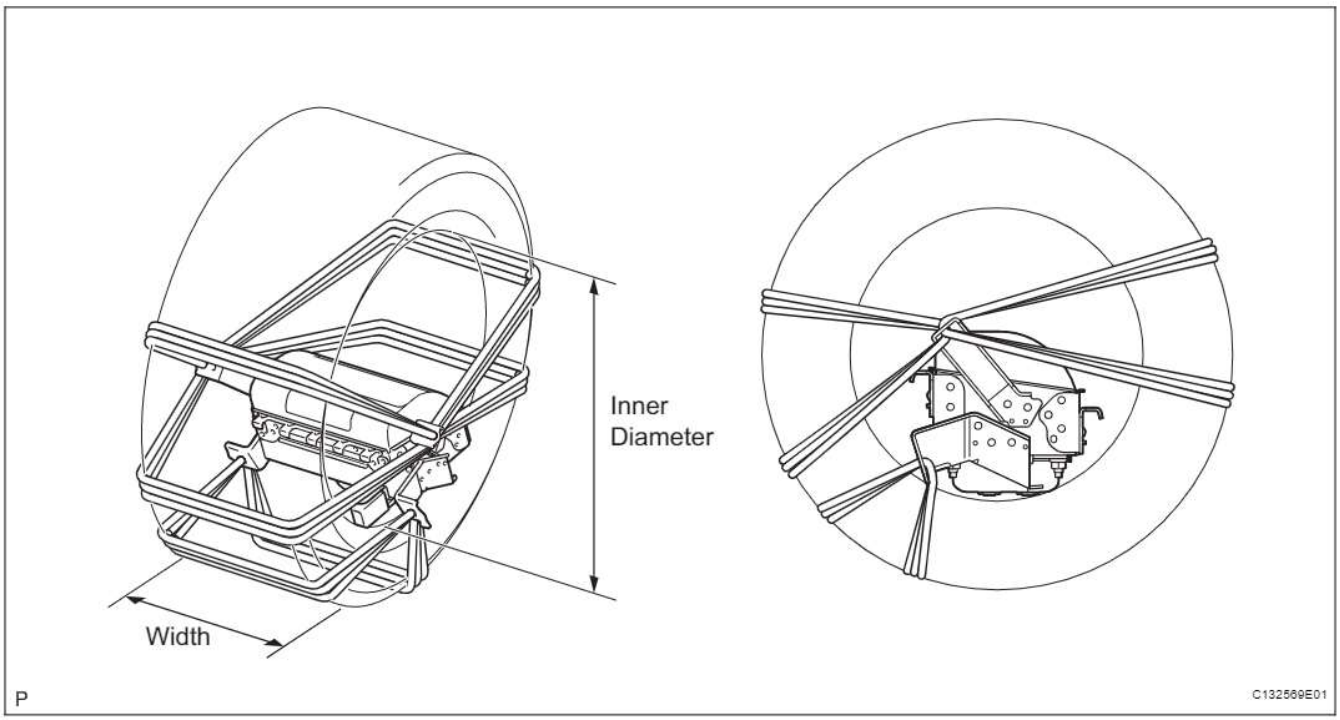
Must exceed the following dimensions

Width:

185 mm (7.28 in.)

Inner diameter:

360 mm (14.17 in.)



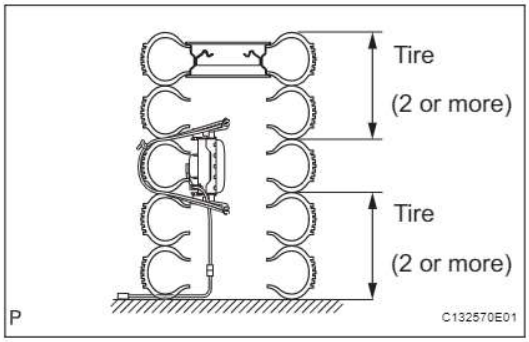
CAUTION:

- **Make sure that the wire harness is tight. If there is slack in the wire harness, the front passenger airbag assembly may become loose due to the shock when the airbag is deployed.**
- **Always tie down the front passenger airbag assembly with the airbag deployment side facing inside the tire.**

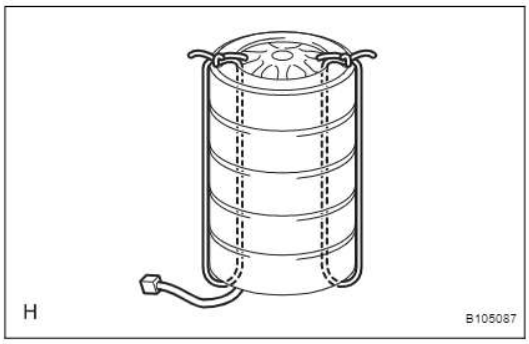
NOTICE:

The tire will be marked by the airbag deployment, so use an extra tire.

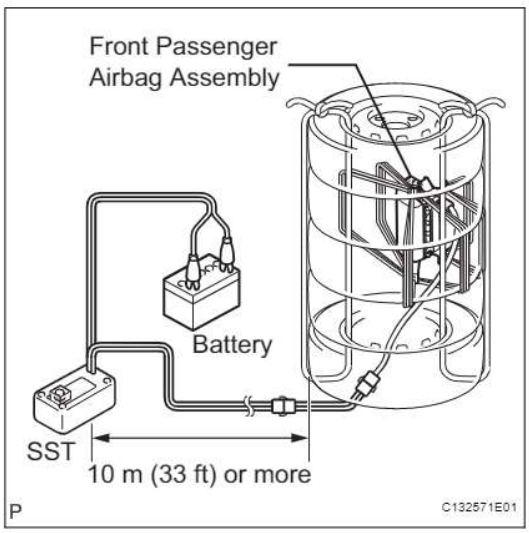
RS



(e) Place the tires.
(1) Place at least 2 tires under the tire which the front passenger airbag assembly is tied to.
(2) Place at least 2 tires over the tire which the front passenger airbag assembly is tied to. The top tire should have a disc wheel installed.
NOTICE:
Do not place the SST connector under the tire because it could be damaged.

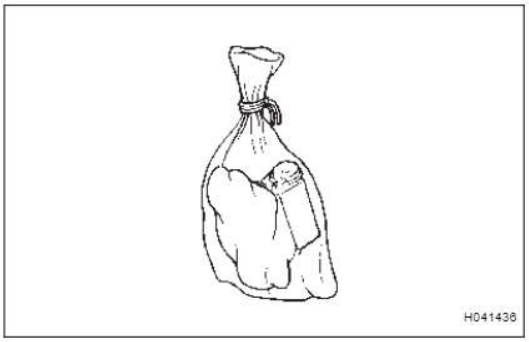


(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. Looseness in the wire harness results in the tires coming free due to the shock when the airbag is deployed.



(f) Install the SST.
(1) Connect the SST connector.
SST 09082-00700
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.
(2) Move the SST at least 10 m (33 ft) away from the airbag tied down to the tire.
(g) Deploy the airbag.
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire which the front passenger airbag assembly is tied to.
(3) Press the SST activation switch and deploy the airbag.
CAUTION:
When deploying the airbag, make sure that no one is near the tire.
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.

RS



(h) Dispose of the front passenger airbag assembly.

CAUTION:

- **The front passenger airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front passenger airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

(1) Remove the front passenger airbag assembly from the tire.

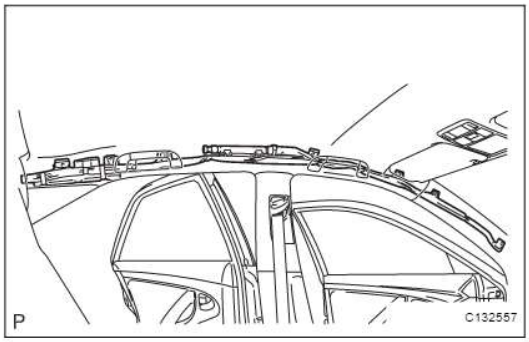
(2) Place the front passenger airbag assembly in a plastic bag, tie it tightly and dispose of it as other general part disposal.

RS

ON-VEHICLE INSPECTION

1. INSPECT CURTAIN SHIELD AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

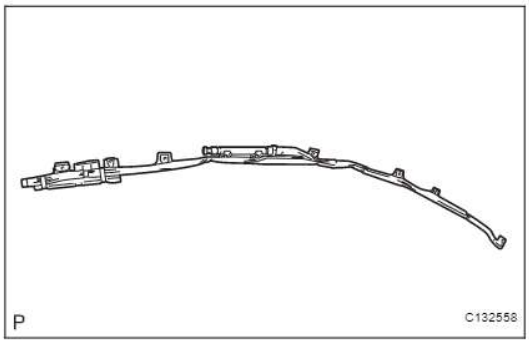
(a) Perform a diagnostic system check (See page RS-33).



(b) With the curtain shield airbag assembly installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front pillar garnish or roof headlining assembly with a new one:
Cuts, minute cracks or marked discoloration on the front pillar garnish or roof headlining assembly around the curtain shield airbag assembly.

2. INSPECT CURTAIN SHIELD AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

(a) Perform a diagnostic system check (See page RS-33).



(b) With the curtain shield airbag assembly removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the curtain shield airbag assembly with a new one:
- Cuts, minute cracks or marked discoloration on the curtain shield airbag assembly.
- Cracks or other damage to the connectors.

CAUTION:
Be sure to follow the correct removal and installation procedures.

RS

REMOVAL

HINT:

- Use the same procedure for the RH side and the LH side.
- The procedure listed below are for the LH side.

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL (for Manual Seat)**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **REMOVE FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
4. **REMOVE SEAT TRACK COVER LH (for Power Seat) (See page SE-29)**
5. **REMOVE INNER SEAT TRACK BRACKET COVER LH (for Power Seat) (See page SE-29)**
6. **REMOVE FRONT SEAT ASSEMBLY LH (for Power Seat) (See page SE-29)**
7. **REMOVE FRONT SEAT HEADREST ASSEMBLY (for Manual Seat)**
8. **REMOVE SEAT TRACK COVER RH (for Manual Seat) (See page SE-16)**
9. **REMOVE INNER SEAT TRACK BRACKET COVER RH (for Manual Seat) (See page SE-16)**
10. **REMOVE FRONT SEAT ASSEMBLY RH (for Manual Seat) (See page SE-16)**
11. **REMOVE FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
12. **REMOVE SEAT TRACK COVER RH (for Power Seat) (See page IR-12)**
13. **REMOVE INNER SEAT TRACK BRACKET COVER RH (for Power Seat) (See page IR-12)**
14. **REMOVE FRONT SEAT ASSEMBLY RH (for Power Seat) (See page IR-12)**
15. **REMOVE REAR DOOR SCUFF PLATE LH (See page IR-13)**
16. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH**
17. **REMOVE REAR DOOR SCUFF PLATE RH (See page IR-13)**
18. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP RH**

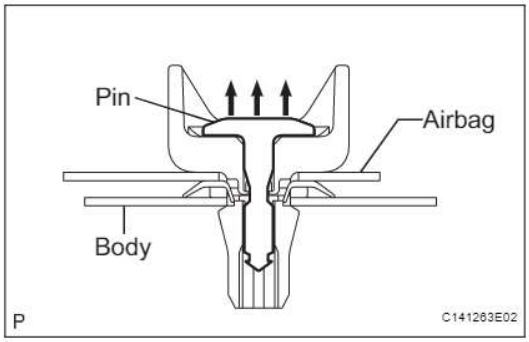
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19. REMOVE REAR SEAT CUSHION ASSEMBLY (See page SE-44)
20. REMOVE REAR SEAT HEADREST ASSEMBLY (See page SE-44)
21. REMOVE REAR CENTER SEAT HEADREST ASSEMBLY
22. REMOVE SEPARATE TYPE REAR SEATBACK ASSEMBLY LH (See page SE-44)
23. REMOVE SEPARATE TYPE REAR SEATBACK ASSEMBLY RH (See page SE-44)
24. REMOVE REAR SIDE SEATBACK ASSEMBLY LH (See page SE-45)
25. REMOVE REAR SIDE SEATBACK ASSEMBLY RH (See page SE-45)
26. REMOVE REAR DOOR INSIDE HANDLE BEZEL PLUG LH (See page ED-64)
27. REMOVE DOOR ASSIST GRIP COVER LH (See page ED-64)
28. REMOVE REAR DOOR TRIM BOARD SUB-ASSEMBLY LH (See page ED-65)
29. REMOVE REAR DOOR INNER GLASS WEATHERSTRIP LH (See page ED-66)
30. REMOVE FRONT DOOR SCUFF PLATE LH (See page IR-13)
31. REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-14)
32. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP LH
33. REMOVE LAP BELT OUTER ANCHOR COVER (for LH Side) (See page IR-14)
34. DISCONNECT FRONT SEAT OUTER BELT ASSEMBLY LH (See page IR-14)
35. REMOVE LOWER CENTER PILLAR GARNISH LH (See page IR-14)
36. REMOVE UPPER CENTER PILLAR GARNISH LH (See page IR-15)
37. REMOVE FRONT DOOR SCUFF PLATE RH (See page IR-15)
38. REMOVE COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-15)
39. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP RH
40. REMOVE LAP BELT OUTER ANCHOR COVER (for RH Side) (See page IR-15)

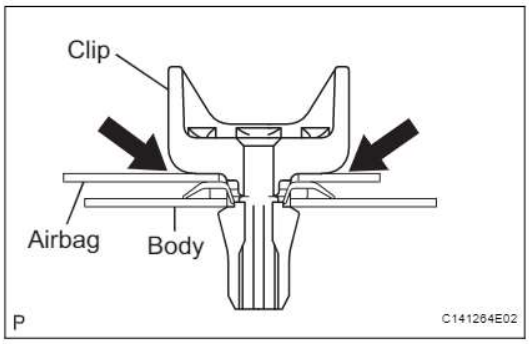
RS

41. DISCONNECT FRONT SEAT OUTER BELT ASSEMBLY RH (See page IR-15)
42. REMOVE LOWER CENTER PILLAR GARNISH RH (See page IR-15)
43. REMOVE UPPER CENTER PILLAR GARNISH RH (See page IR-15)
44. REMOVE ROOF SIDE INNER GARNISH LH (See page IR-15)
45. REMOVE ROOF SIDE INNER GARNISH RH (See page IR-15)
46. REMOVE FRONT PILLAR GARNISH LH (See page IR-16)
47. REMOVE FRONT PILLAR GARNISH RH (See page IR-16)
48. REMOVE ROOF CONSOLE BOX ASSEMBLY (See page IR-17)
49. REMOVE VISOR ASSEMBLY LH (See page IR-17)
50. REMOVE VISOR ASSEMBLY RH (See page IR-18)
51. REMOVE VISOR HOLDER (See page IR-18)
52. REMOVE FRONT ASSIST GRIP SUB-ASSEMBLY (See page IR-18)
53. REMOVE REAR ASSIST GRIP SUB-ASSEMBLY (See page IR-18)
54. REMOVE NO. 1 ROOM LIGHT ASSEMBLY (w/o Sliding Roof) (See page IR-19)
55. REMOVE SPOT LIGHT ASSEMBLY (w/ Sliding Roof) (See page IR-19)
56. REMOVE SUN ROOF OPENING TRIM MOULDING (w/ Sliding Roof) (See page IR-20)
57. REMOVE ROOF HEADLINING ASSEMBLY (w/o Sliding Roof) (See page IR-20)
58. REMOVE ROOF HEADLINING ASSEMBLY (w/ Sliding Roof) (See page IR-21)
59. REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY
    (a) Disconnect the connector.
    NOTICE:
    When handling the airbag connector, take care not to damage the airbag wire harness.

RS

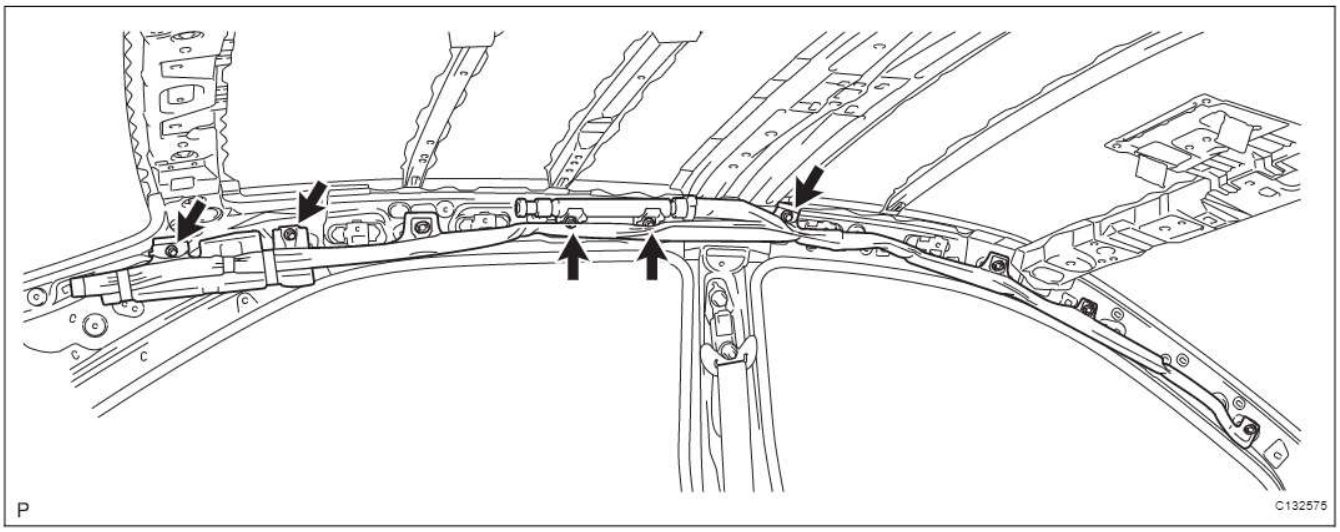


(b) Remove the 4 clips.
(1) Using a clip remover, remove the pin.



(2) Insert needle nose pliers in the position shown in the illustration.
(3) Catch the clip with the needle nose pliers, and remove the clip and curtain shield airbag assembly as a unit.

(c) Remove the 5 bolts and curtain shield airbag assembly.



(d) Remove the 4 clips and the 4 spacers from the curtain shield airbag assembly.

NOTICE:
Replace the clips and spacers with new ones even if they are not damaged.

RS

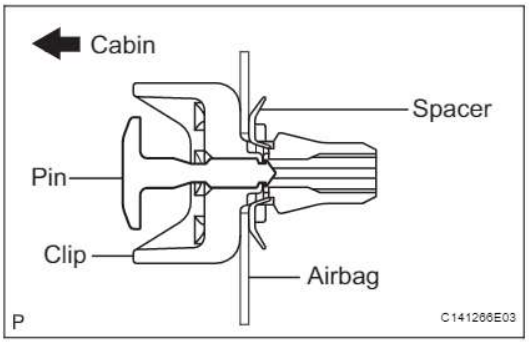
INSTALLATION

1. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY

(a) Check that the power switch is turned off.

(b) Check that the battery negative (-) cable is disconnected.

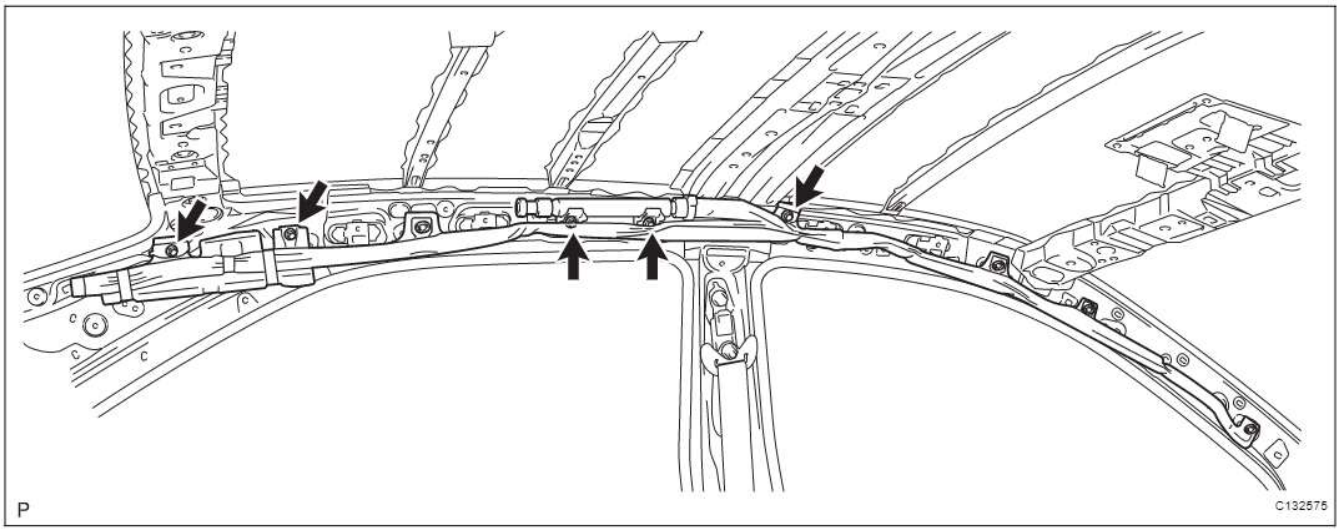
CAUTION:
Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.



(c) Install 4 new clips and 4 new spacers to the curtain shield airbag assembly as shown in the illustration.

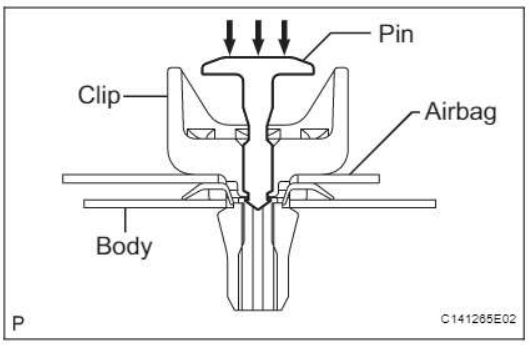
NOTICE:
- **Do not push the pin into the clip.**
- **Make sure that the clips are installed in the correct direction.**
- **Make sure that the spacers are not damaged, engaged securely, and installed in the correct direction.**

(d) Install the curtain shield airbag assembly with the 5 new bolts.



Torque: 11 N*m (112 kgf*cm, 8 ft.*lbf)

NOTICE:
Do not twist the curtain shield airbag assembly when installing it.



(e) Install the curtain shield airbag assembly to the body with the 4 clips as shown in the illustration.

NOTICE:
Securely push the pin in the clip.

(f) Mark the clips.

HINT:
Be sure to mark the clips to leave a record of replacement.

(g) Connect the connector.

NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

RS

2. INSTALL ROOF HEADLINING ASSEMBLY (w/o Sliding Roof) (See page IR-33)
3. INSTALL ROOF HEADLINING ASSEMBLY (w/ Sliding Roof) (See page IR-34)
4. INSTALL SUN ROOF OPENING TRIM MOULDING (w/ Sliding Roof) (See page IR-35)
5. INSTALL SPOT LIGHT ASSEMBLY (w/ Sliding Roof) (See page IR-35)
6. INSTALL NO. 1 ROOM LIGHT ASSEMBLY (w/o Sliding Roof) (See page IR-36)
7. INSTALL FRONT ASSIST GRIP SUB-ASSEMBLY (See page IR-36)
8. INSTALL REAR ASSIST GRIP SUB-ASSEMBLY (See page IR-37)
9. INSTALL VISOR HOLDER (See page IR-37)
10. INSTALL VISOR ASSEMBLY LH (See page IR-37)
11. INSTALL VISOR ASSEMBLY RH (See page IR-37)
12. INSTALL ROOF CONSOLE BOX ASSEMBLY (See page IR-38)
13. INSTALL FRONT PILLAR GARNISH LH (See page IR-38)
14. INSTALL FRONT PILLAR GARNISH RH (See page IR-39)
15. INSTALL ROOF SIDE INNER GARNISH LH (See page IR-39)
16. INSTALL ROOF SIDE INNER GARNISH RH (See page IR-39)
17. INSTALL UPPER CENTER PILLAR GARNISH LH (See page IR-40)
18. INSTALL LOWER CENTER PILLAR GARNISH LH (See page IR-40)
19. CONNECT FRONT SEAT OUTER BELT ASSEMBLY LH (See page IR-40)
20. INSTALL LAP BELT OUTER ANCHOR COVER (for LH Side) (See page IR-40)
21. INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-41)
22. INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-41)
23. INSTALL FRONT DOOR SCUFF PLATE LH (See page IR-41)
24. INSTALL UPPER CENTER PILLAR GARNISH RH (See page IR-41)

RS

25. INSTALL LOWER CENTER PILLAR GARNISH RH (See page IR-41)
26. CONNECT FRONT SEAT OUTER BELT ASSEMBLY RH (See page IR-41)
27. INSTALL LAP BELT OUTER ANCHOR COVER (for RH Side) (See page IR-41)
28. INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP RH (See page IR-42)
29. INSTALL COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-42)
30. INSTALL FRONT DOOR SCUFF PLATE RH (See page IR-42)
31. INSTALL REAR DOOR INNER GLASS WEATHERSTRIP LH (See page ED-80)
32. INSTALL REAR DOOR TRIM BOARD SUB-ASSEMBLY LH (See page ED-81)
33. INSTALL DOOR ASSIST GRIP COVER LH (See page ED-82)
34. INSTALL REAR DOOR INSIDE HANDLE BEZEL PLUG LH (See page ED-82)
35. INSTALL REAR SIDE SEATBACK ASSEMBLY LH (See page SE-54)
36. INSTALL REAR SIDE SEATBACK ASSEMBLY RH
37. INSTALL SEPARATE TYPE REAR SEATBACK ASSEMBLY LH (See page SE-54)
38. INSTALL SEPARATE TYPE REAR SEATBACK ASSEMBLY RH (See page SE-54)
39. INSTALL REAR SEAT CUSHION ASSEMBLY (See page SE-55)
40. INSTALL REAR CENTER SEAT HEADREST ASSEMBLY
41. INSTALL REAR SEAT HEADREST ASSEMBLY
42. INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-43)
43. INSTALL REAR DOOR SCUFF PLATE LH (See page IR-43)
44. INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP RH (See page IR-43)
45. INSTALL REAR DOOR SCUFF PLATE RH (See page IR-43)
46. INSTALL FRONT SEAT ASSEMBLY LH (for Power Seat) (See page SE-38)
47. INSTALL INNER SEAT TRACK BRACKET COVER LH (for Power Seat) (See page SE-39)

RS

48. **INSTALL SEAT TRACK COVER LH (for Power Seat) (See page SE-39)**
49. **INSTALL FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
50. **INSTALL FRONT SEAT ASSEMBLY RH (for Power Seat) (See page IR-44)**
51. **INSTALL INNER SEAT TRACK BRACKET COVER RH (for Power Seat) (See page IR-44)**
52. **INSTALL SEAT TRACK COVER RH (for Power Seat) (See page IR-44)**
53. **INSTALL FRONT SEAT HEADREST ASSEMBLY (for Power Seat)**
54. **INSTALL FRONT SEAT ASSEMBLY RH (for Manual Seat) (See page SE-23)**
55. **INSTALL INNER SEAT TRACK BRACKET COVER RH (for Manual Seat) (See page SE-24)**
56. **INSTALL SEAT TRACK COVER RH (for Manual Seat) (See page SE-24)**
57. **INSTALL FRONT SEAT HEADREST ASSEMBLY (for Manual Seat)**
58. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL (for Manual Seat)**
59. **PERFORM INITIALIZATION**
    (a) Perform initialization (See page IN-43).
    NOTICE:
    Some systems need initialization after reconnecting the cable to the negative battery terminal.
60. **INSPECT SRS WARNING LIGHT**
    (a) Inspect the SRS warning light (See page RS-33).
61. **INSPECT SLIDE ADJUSTER LOCK (for Manual Seat)**
62. **INSPECT FRONT SEAT ASSEMBLY (for Power Seat) (See page SE-39)**

RS

DISPOSAL

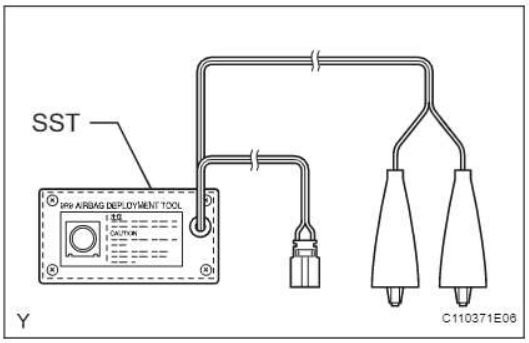
HINT:
When scrapping a vehicle equipped with the SRS or disposing of the curtain shield airbag assembly, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

- **Never dispose of a curtain shield airbag assembly that has an undeployed airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors where it will not be a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (33 ft) away from the curtain shield airbag assembly.**
- **The curtain shield airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a curtain shield airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

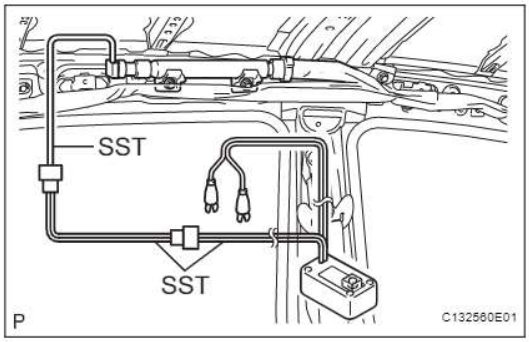
1. **DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)**

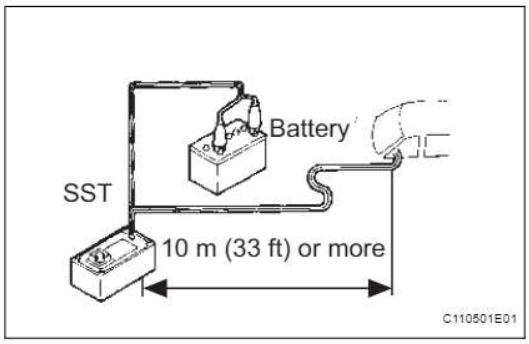
   HINT:
   Prepare a battery as the power source to deploy the airbag.



   (a) Check the function of the SST (See page RS-348).
   (b) Refer to PRECAUTION (See page RS-1).
   (c) Disconnect the cable from the negative battery terminal.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (d) Remove the roof headlining assembly (See page IR-12).
   (e) Install the SST.
      (1) Disconnect the connector from the curtain shield airbag assembly.
      NOTICE:
      When handling the airbag connector, take care not to damage the airbag wire harness.

RS





(2) After connecting the SST below to each other, connect them to the curtain shield airbag assembly.
SST 09082-00700, 09082-00802 (09082-10801, 09082-20801)
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(3) Move the SST at least 10 m (33 ft) away from the vehicle rear side window.

(4) Maintaining enough clearance for the SST wire harness in the rear side window, close all doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.

(5) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.

(f) Deploy the airbag.

(1) Check that no one is inside the vehicle or within a 10 m (33 ft) radius of the vehicle.

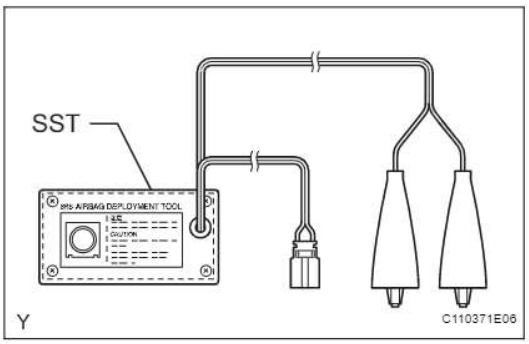
(2) Press the SST activation switch and deploy the airbag.
CAUTION:
- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The curtain shield airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a curtain shield airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:
The airbag is deployed as the LED of the SST activation switch comes on.

2. DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)
NOTICE:
- **When disposing of the curtain shield airbag assembly, never use the customer's vehicle to deploy the airbag.**
- **Be sure to follow the procedure detailed below when deploying the airbag.**

RS

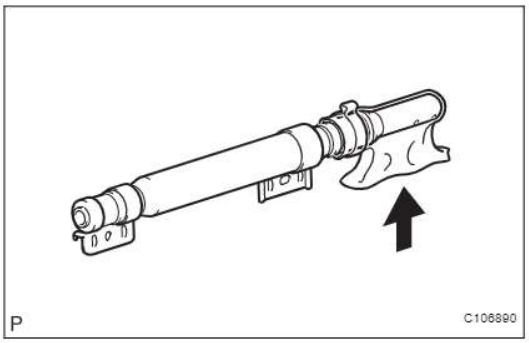
HINT:
Prepare a battery as the power source to deploy the airbag.



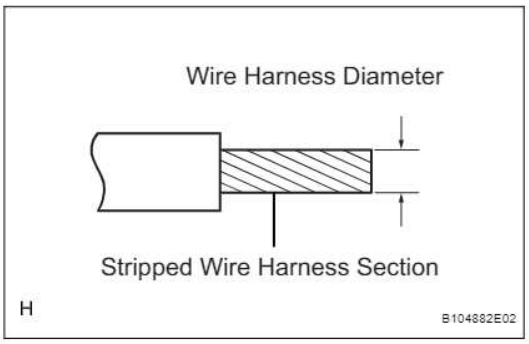
(a) Check the function of the SST (See page RS-350).

(b) Remove the curtain shield airbag assembly (See page RS-401).

CAUTION:
When removing the curtain shield airbag assembly, work must be started 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery.



(c) Cut off the deployment section of the curtain shield airbag assembly.



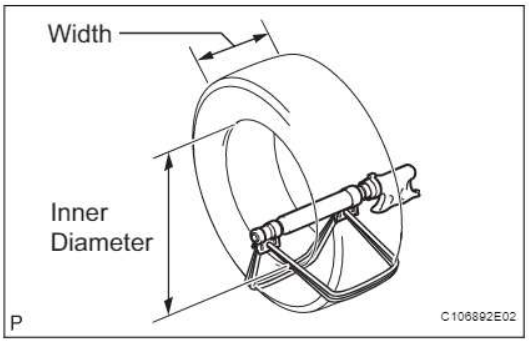
(d) Using a service-purpose wire harness for the vehicle, tie down the curtain shield airbag assembly to the tire.

Wire harness:
Stripped wire harness section
1.25 mm^2 or more (0.0019 in.^{2} or more)

CAUTION:
If the wire harness is too thin or an alternative object is used to tie down the curtain shield airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with an area of at least 1.25 mm^2 (0.0019 in.^{2}).

HINT:
To calculate the area of the stripped wire harness section:

Area = 3.14 x (Diameter)^2 divided by 4

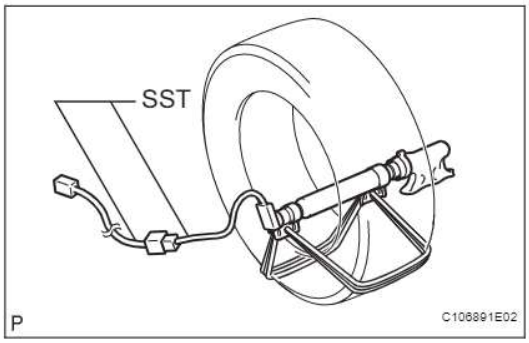


(1) Position the curtain shield airbag assembly inside the tire as shown in the illustration.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.17 in.)

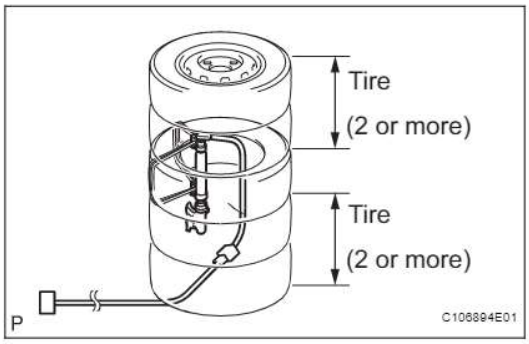
RS

CAUTION:
Make sure that the wire harness is tight. If there is slack in the wire harness, the curtain shield airbag assembly may become loose due to the shock when the airbag is deployed.
NOTICE:
The tire will be marked by the airbag deployment, so use an extra tire.

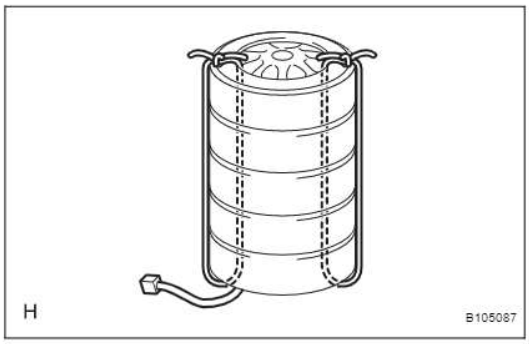


(e) Install the SST.
(1) After connecting the SST below to each other, connect them to the curtain shield airbag assembly.
SST 09082-00802 (09082-10801, 09082-20801)

(f) Place the tires.
CAUTION:
Do not place the deployment direction of the curtain shield airbag assembly facing toward the ground.

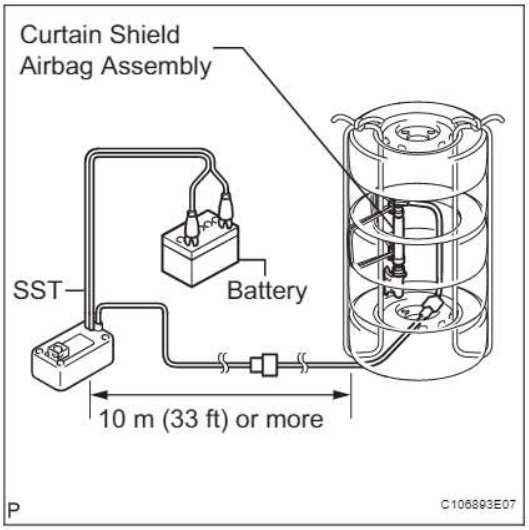


(1) Place at least 2 tires under the tire which the curtain shield airbag assembly is tied to.
(2) Place at least 2 tires over the tire which the curtain shield airbag assembly is tied to. The top tire should have the disc wheel installed.
NOTICE:
Do not place the SST connector under the tire because it could be damaged.



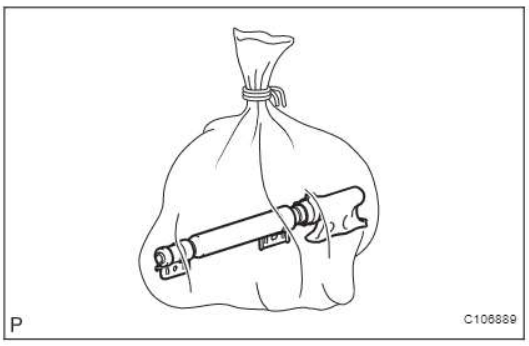
(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. Looseness in the wire harness results in the tires coming free due to the shock when the airbag is deployed.

RS



(g) Install the SST.
(1) Connect the SST connector.
SST 09082-00700
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.
(2) Move the SST at least 10 m (33 ft) away from the airbag tied down to the tire.

(h) Deploy the airbag.
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire which the curtain shield airbag assembly is tied to.
(3) Press the SST activation switch and deploy the airbag.
CAUTION:
When deploying the airbag, make sure that no one is near the tire.
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.



(i) Dispose of the curtain shield airbag assembly.
CAUTION:
- **The curtain shield airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a curtain shield airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

(1) Remove the curtain shield airbag assembly from the tire.
(2) Place the curtain shield airbag assembly in a plastic bag, tie it tightly and dispose of it as other general part disposal.

RS

ON-VEHICLE INSPECTION

1. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

2. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).

3. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)**
   (a) Replace the center airbag sensor assembly.
   CAUTION:
   Be sure to follow the correct removal and installation procedures.
   HINT:
   The center airbag sensor assembly should be replaced after any of the airbags has deployed, as it has been subjected to the impact.

RS

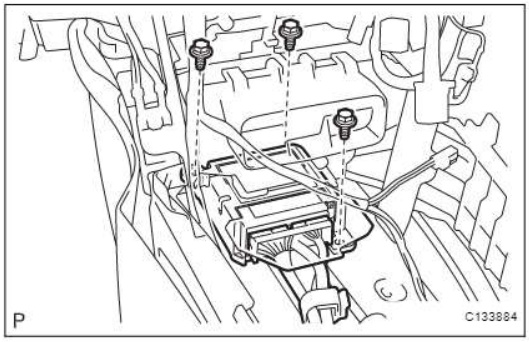
REMOVAL

1. PRECAUTION
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. REMOVE NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-14)
4. REMOVE NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-14)
5. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY (See page IP-14)
6. REMOVE FLOOR SHIFT POSITION INDICATOR HOUSING SUB-ASSEMBLY (See page IP-15)
7. REMOVE UPPER CONSOLE REAR PANEL SUB-ASSEMBLY (See page IP-15)
8. REMOVE FRONT DOOR SCUFF PLATE LH (See page IR-13)
9. REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-14)
10. REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-11)
11. REMOVE FRONT DOOR SCUFF PLATE RH (See page IR-15)
12. REMOVE COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-15)
13. REMOVE INSTRUMENT PANEL NO. 2 UNDER COVER SUB-ASSEMBLY (See page IP-13)
14. REMOVE LOWER INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-14)
15. REMOVE CONSOLE BOX POCKET (See page IP-17)
16. REMOVE CONSOLE BOX CARPET (See page IP-17)
17. REMOVE CONSOLE BOX ASSEMBLY (See page IP-17)
18. REMOVE UPPER CONSOLE PANEL SUB-ASSEMBLY (See page IP-16)
19. REMOVE NO. 1 CONSOLE BOX INSERT FRONT (See page IP-18)
20. REMOVE NO. 2 CONSOLE BOX INSERT FRONT (See page IP-18)

RS

21. **REMOVE NO. 1 CONSOLE BOX DUCT (See page AC-188)**

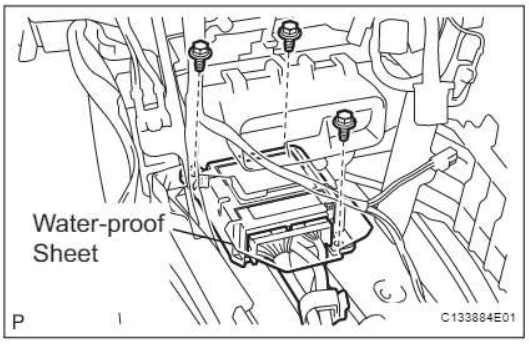
22. **REMOVE CENTER AIRBAG SENSOR ASSEMBLY**
    (a) Turn back the carpet.
    (b) Disconnect the holder (with connectors).
    NOTICE:
    When handling the airbag connector, take care not to damage the airbag wire harness.
    (c) Remove the 3 bolts and center airbag sensor assembly.



RS

INSTALLATION

1. **INSTALL CENTER AIRBAG SENSOR ASSEMBLY**
   (a) Check that the power switch is turned off.
   (b) Check that the battery negative (-) cable is disconnected.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.



   (c) Install the center airbag sensor assembly with the 3 bolts.
   Torque: 17.5 N*m (179 kgf*cm, 13 ft.*lbf)
   NOTICE:
   - **If the center airbag sensor assembly has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
   - **When installing the center airbag sensor assembly, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

   (d) Check that there is no looseness in the installation parts of the center airbag sensor assembly.
   (e) Connect the holder (with connectors).
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (f) Check that the water-proof sheet is properly set.
2. **INSTALL NO. 1 CONSOLE BOX DUCT (See page AC-204)**
3. **INSTALL NO. 2 CONSOLE BOX INSERT FRONT (See page IP-30)**
4. **INSTALL NO. 1 CONSOLE BOX INSERT FRONT (See page IP-29)**
5. **INSTALL UPPER CONSOLE PANEL SUB-ASSEMBLY (See page IP-31)**
6. **INSTALL CONSOLE BOX ASSEMBLY (See page IP-30)**
7. **INSTALL CONSOLE BOX CARPET (See page IP-30)**
8. **INSTALL CONSOLE BOX POCKET (See page IP-30)**
9. **INSTALL LOWER INSTRUMENT PANEL SUB-ASSEMBLY (See page IP-33)**
10. **INSTALL INSTRUMENT PANEL NO. 2 UNDER COVER SUB-ASSEMBLY (See page IP-33)**
11. **INSTALL COWL SIDE TRIM SUB-ASSEMBLY RH (See page IR-42)**
12. **INSTALL FRONT DOOR SCUFF PLATE RH (See page IR-42)**

RS

13. **INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (See page IP-35)**
14. **INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See page IR-41)**
15. **INSTALL FRONT DOOR SCUFF PLATE LH (See page IR-41)**
16. **INSTALL UPPER CONSOLE REAR PANEL SUB-ASSEMBLY (See page IP-31)**
17. **INSTALL FLOOR SHIFT POSITION INDICATOR HOUSING SUB-ASSEMBLY (See page IP-31)**
18. **INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY (See page IP-32)**
19. **INSTALL NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-32)**
20. **INSTALL NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH (See page IP-32)**
21. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
22. **PERFORM INITIALIZATION**
    (a) Perform initialization (See page IN-43).
    NOTICE:
    Some systems need initialization after reconnecting the cable to the negative battery terminal.
23. **INSPECT SRS WARNING LIGHT**
    (a) Inspect the SRS warning light (See page RS-33).

RS

AIRBAG SYSTEM

PRECAUTION

CAUTION:

- **The vehicle is equipped with a Supplemental Restraint System (SRS). It consists of a driver airbag, front passenger airbag, driver side knee airbag, front side airbag, curtain shield airbag, and front seat belt pretensioner. Failure to carry out service operations in the correct sequence could cause the SRS to unexpectedly deploy during servicing, possibly leading to a serious accident. Further, if a mistake is made in servicing the SRS, it is possible that the SRS may fail to operate when required. Before performing servicing (including removal or installation of parts, inspection or replacement), be sure to read the following items carefully, then follow the correct procedures indicated in the repair manual.**
- **Wait at least 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery before starting the operation.**
  (The SRS is equipped with a backup power source, so if work is started within 90 seconds after disconnecting the negative (-) terminal cable from the battery, the SRS may be deployed.)
- **Do not expose the steering pad, front passenger airbag assembly, driver side knee airbag assembly, center airbag sensor assembly, front airbag sensor, front seat inner belt assembly, seat position airbag sensor, occupant classification ECU, front seat side airbag assembly, side airbag sensor, curtain shield airbag assembly, rear airbag sensor, or front seat outer belt assembly directly to hot air or flames.**

NOTICE:

- **Malfunction symptoms of the SRS are difficult to confirm, so DTCs are the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect DTCs before disconnecting the battery.**
- **Even in the case of a minor collision when the SRS does not deploy, the steering pad, front passenger airbag assembly, driver side knee airbag assembly, center airbag sensor assembly, front airbag sensor, front seat inner belt assembly, seat position airbag sensor, occupant classification ECU, front seat side airbag assembly, side airbag sensor, curtain shield airbag assembly, rear airbag sensor, or front seat outer belt assembly should be inspected.**
- **Before repair work, remove the airbag sensor if any kind of shock is likely to occur to the airbag sensor during the operation.**
- **Never use SRS parts from another vehicle. When replacing parts, replace them with new ones.**

RS

- **Never disassemble or repair any of the following parts in order to reuse them. If any of these parts have been dropped, or a defect is found (e.g. cracks, dents or any other defects) in any of the housings, brackets or connectors, then replace the part with a new one.**
  (a) Steering Pad
  (b) Front Passenger Airbag Assembly
  (c) Driver Side Knee Airbag Assembly
  (d) Front Seat Side Airbag Assembly
  (e) Curtain Shield Airbag Assembly
  (f) Center Airbag Sensor Assembly
  (g) Front Airbag Sensor
  (h) Front Seat Inner Belt Assembly
  (i) Seat Position Airbag Sensor
  (j) Occupant Classification ECU
  (k) Side Airbag Sensor
  (l) Rear Airbag Sensor
  (m) Front Seat Outer Belt Assembly
- **Use an volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting the electrical circuits.**
- **Information labels are attached near the SRS components. Follow the instructions in the caution.**
- **After work on the SRS is completed, perform the SRS warning light check (See page RS-33).**
- **When the negative (-) terminal cable is disconnected from the battery, the memory will be cleared. Because of this, be sure to make a record of the contents memorized in each system before starting work. When work is finished, adjust each system as it was before. Never attempt to avoid erasing vehicle system memories by using a backup power supply from outside the vehicle.**
- **If the vehicle is equipped with a mobile communication system, refer to the precaution in the INTRODUCTION section.**
- **When disconnecting the negative (-) battery cable, initialize the following systems after the cable is reconnected.**

System Name	See procedure
SFI SYSTEM	IN-43

HINT:
In the airbag system, the center airbag sensor assembly, front airbag sensor LH and RH, side airbag sensor LH and RH, and rear airbag sensor LH and RH are collectively referred to as the airbag sensors.

1. HANDLING PRECAUTIONS FOR AIRBAG SENSORS

(a) Before starting the following operations, wait for at least 90 seconds after disconnecting the negative (-) terminal cable from the battery:
(1) Replacement of the airbag sensors.
(2) Adjustment of the front/rear doors of the vehicle equipped with the side airbag and curtain shield airbag (fitting adjustment).

RS

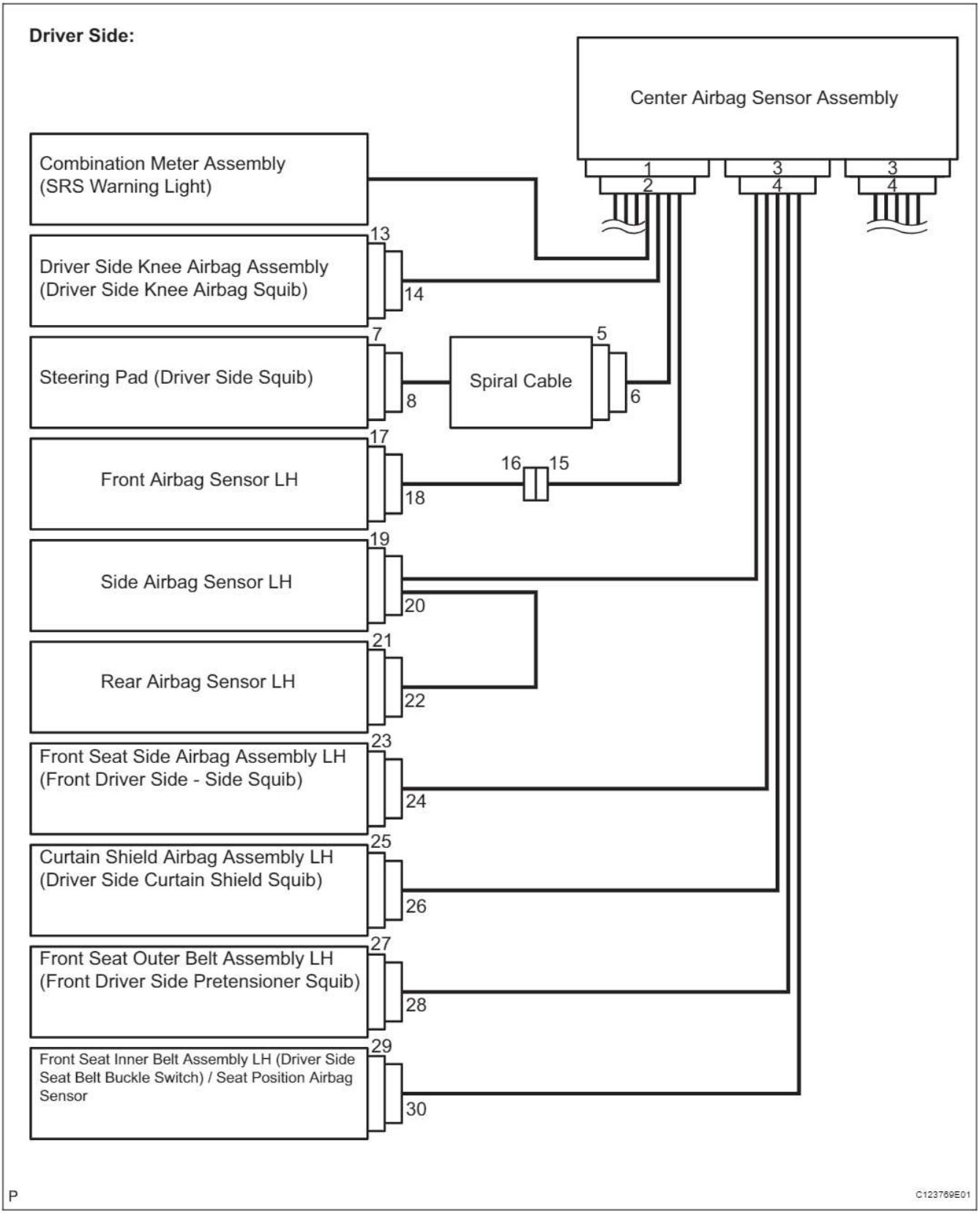
(b) When connecting or disconnecting the airbag sensor connectors, ensure that each sensor is installed in the vehicle.
(c) Do not use the airbag sensors which have been dropped during the operation or transportation.
(d) Do not disassemble the airbag sensors.

2. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

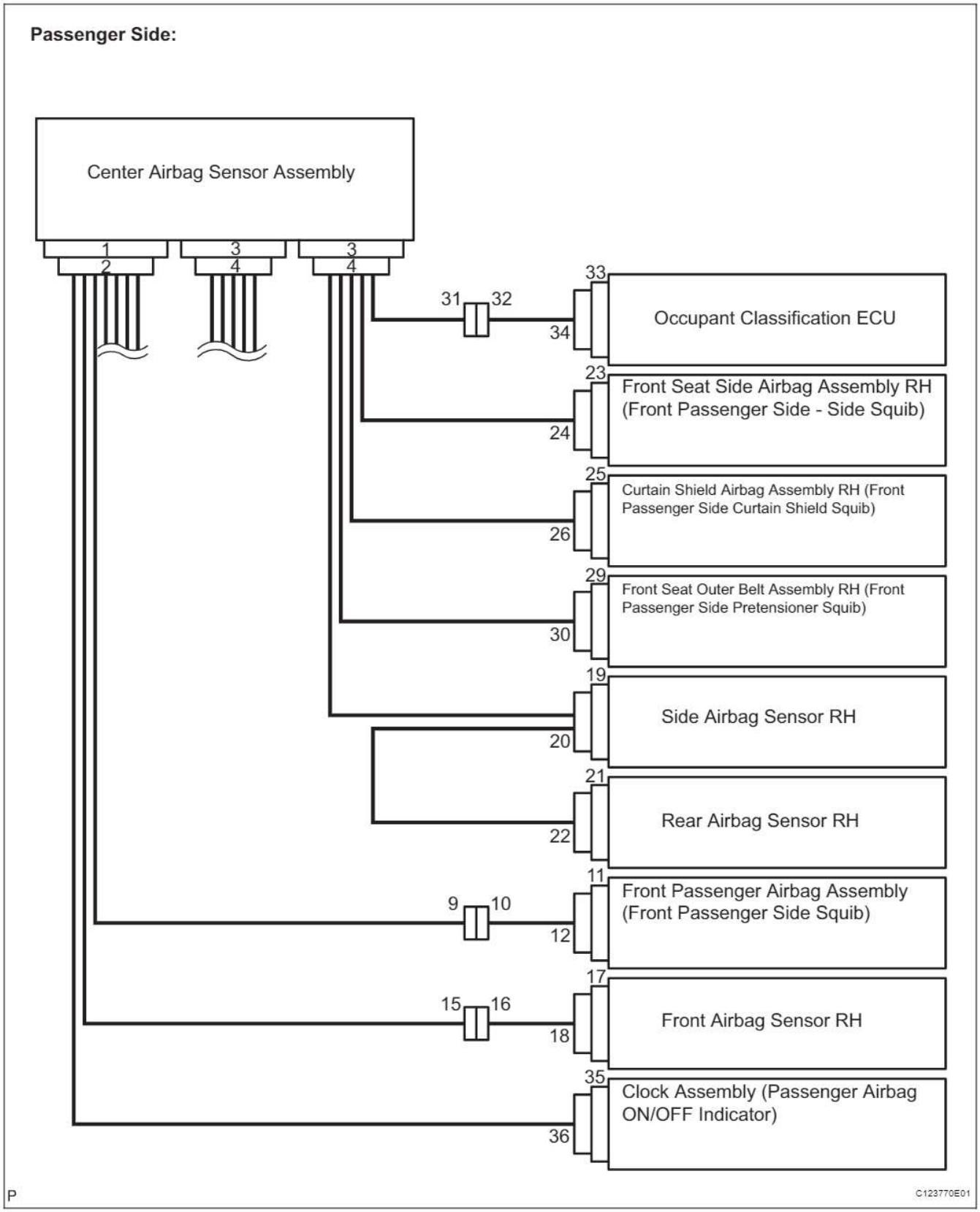
(a) When the airbag has not deployed, confirm the DTCs by checking the SRS warning light. If there is any malfunction in the SRS airbag system, perform troubleshooting.
(b) When any of the airbags have deployed, replace the airbag sensors and check the installation condition.

3. SRS CONNECTORS

(a) SRS connectors are located as shown in the following illustration.



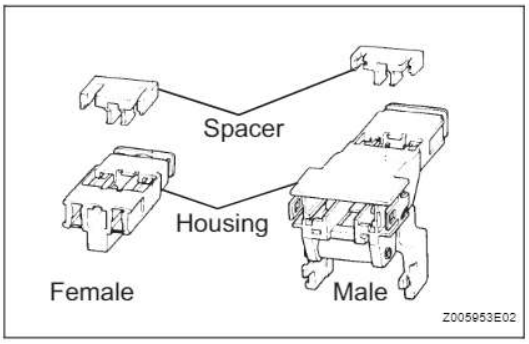
Passenger Side:



No.	Item	Application
(1)	Terminal Twin-Lock Mechanism	Connectors 5, 6, 9, 10, 15, 16, 20, 22, 23, 24, 31, 32
(2)	Activation Prevention Mechanism	Connectors 2, 4, 5, 10, 11, 13, 23, 25, 27
(3)	Half Connection Prevention Mechanism	Connectors 5, 6, 9, 16, 20, 22, 24

RS

No.	Item	Application
(4)	Connector Position Assurance Mechanism	Connector 18
(5)	Connector Lock Mechanism (1)	Connectors 8, 12, 14, 26, 28
(6)	Connector Lock Mechanism (2)	Connector 2, 4
(7)	Improper Connection Prevention Lock Mechanism	Connector 1, 3

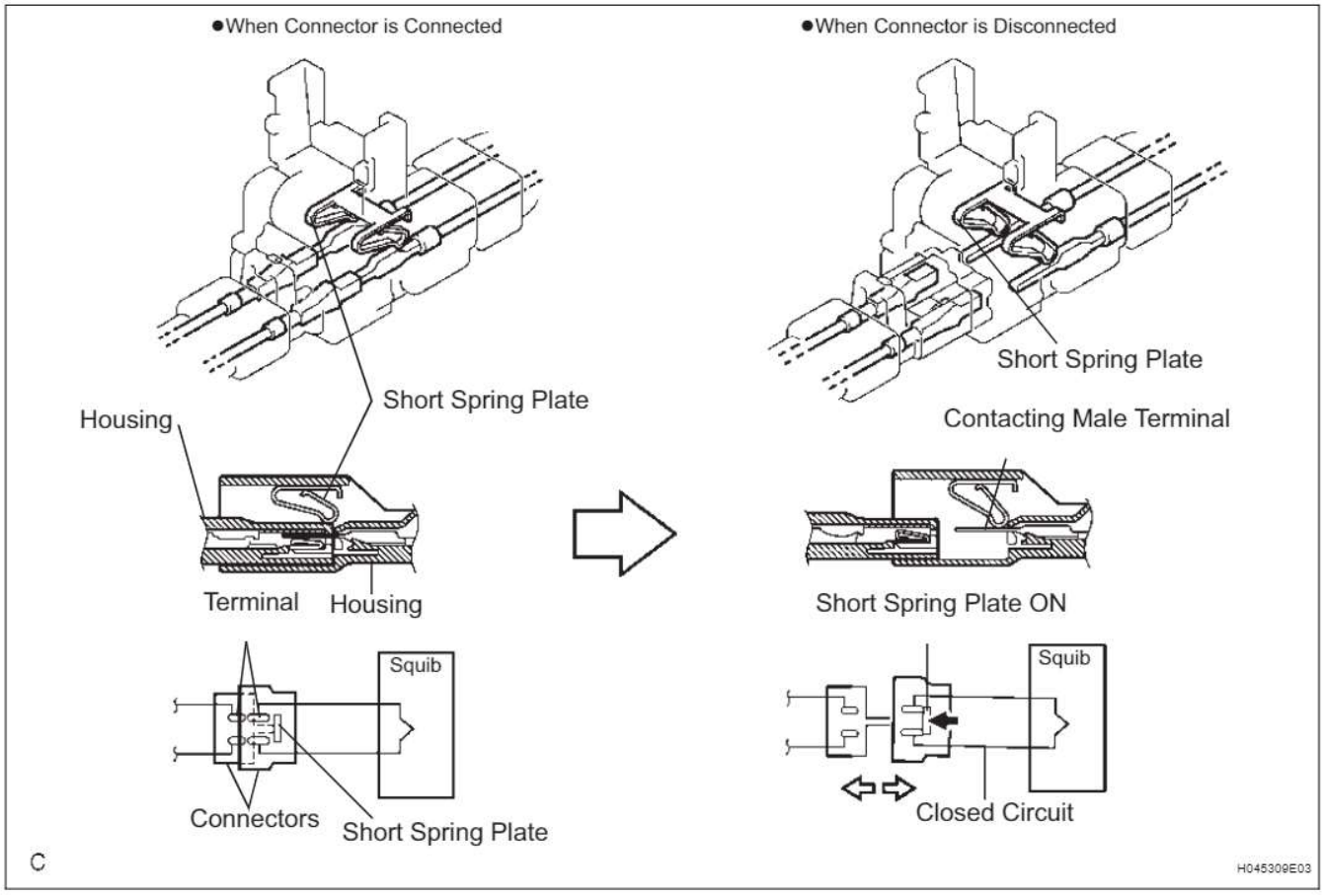


(b) All connectors in the SRS, except the seat position airbag sensor connector, are colored yellow to distinguish them from other connectors. These connectors have special functions, and are specially designed for the SRS. All SRS connectors use durable gold-plated terminals, and are placed in the locations shown on the previous page to ensure high reliability.

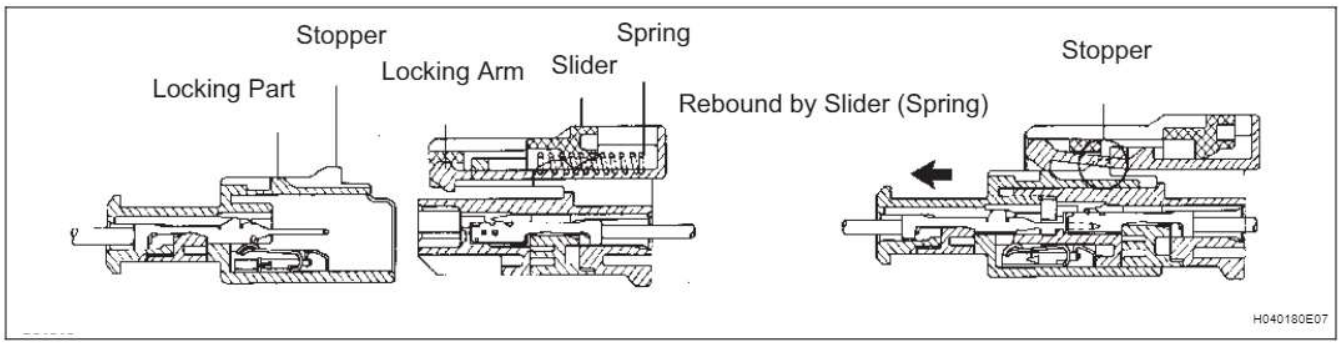
(1) Terminal twin-lock mechanism:
All connectors with a terminal twin-lock mechanism have a two-piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent terminals from coming out.

RS

(2) Activation prevention mechanism:
All connectors with an activation prevention mechanism contain a short spring plate. When these connectors are disconnected, the short spring plate creates a short circuit by automatically connecting the positive (+) and negative (-) terminals of the squib.

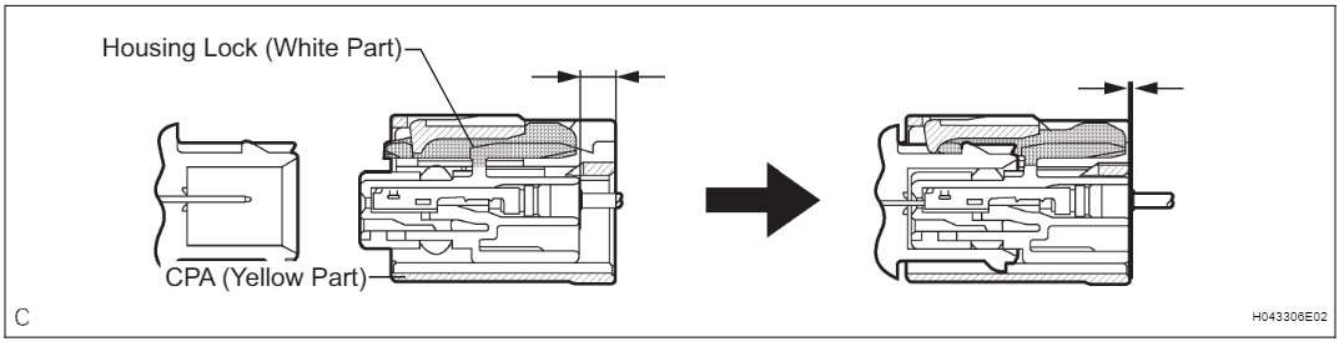


(3) Half connection prevention mechanism:
If the connector is not completely connected, the connector is disconnected due to the spring operation so that no continuity exists.

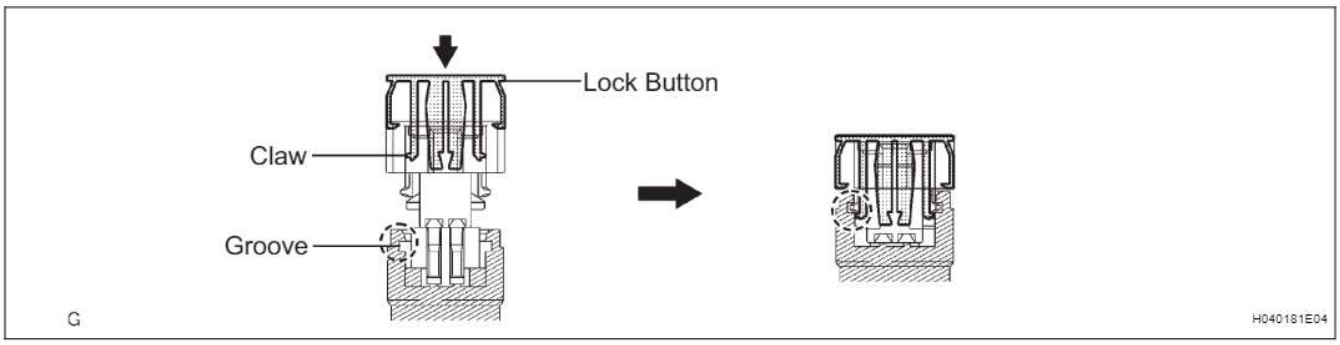


RS

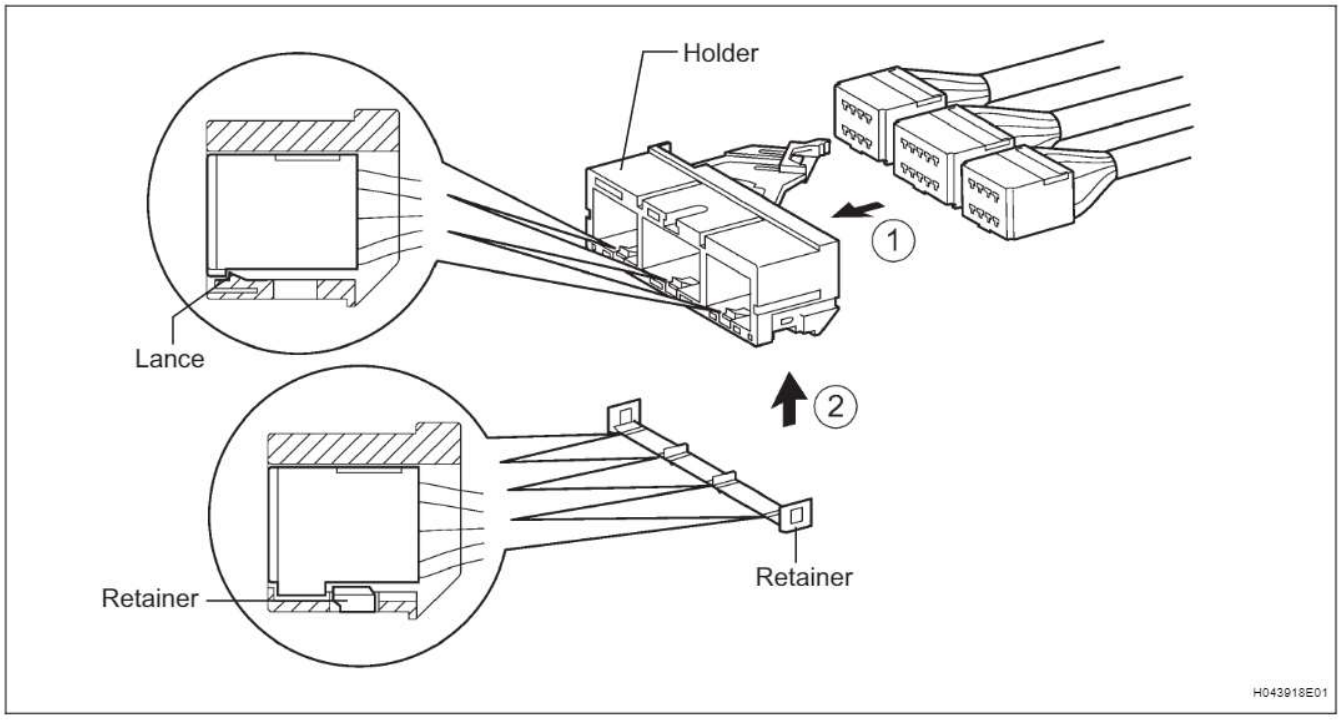
(4) Connector position assurance mechanism:
Only when the housing lock (white part) is completely engaged, the CPA (yellow part) slides, which completes the connector engagement.



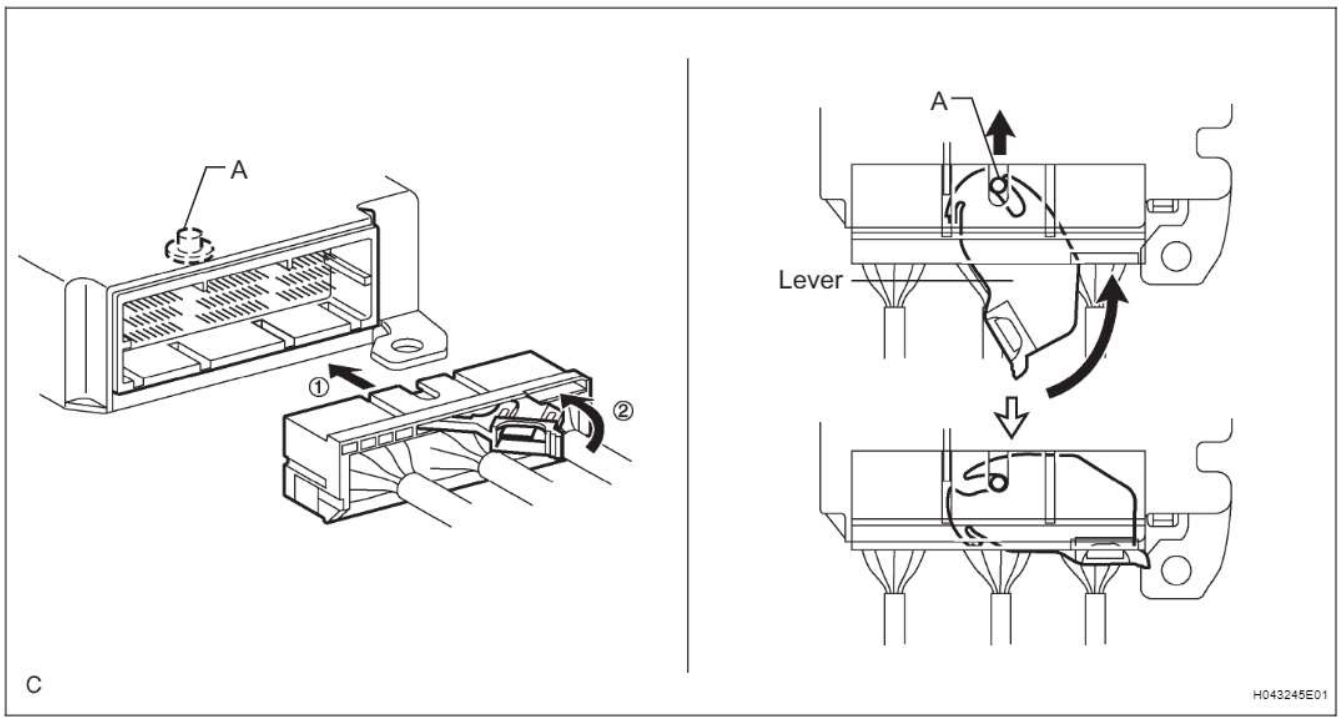
(5) Connector lock mechanism (1):
Locking the connector lock button connects the connector securely.



(6) Connector lock mechanism (2):
Both the primary lock with holder lances and the secondary lock with retainer prevent the connectors from becoming disconnected.



(7) Improper connection prevention lock mechanism:
When connecting the holder, the lever is pushed into the end by rotating around the A axis to lock the holder securely.



RS

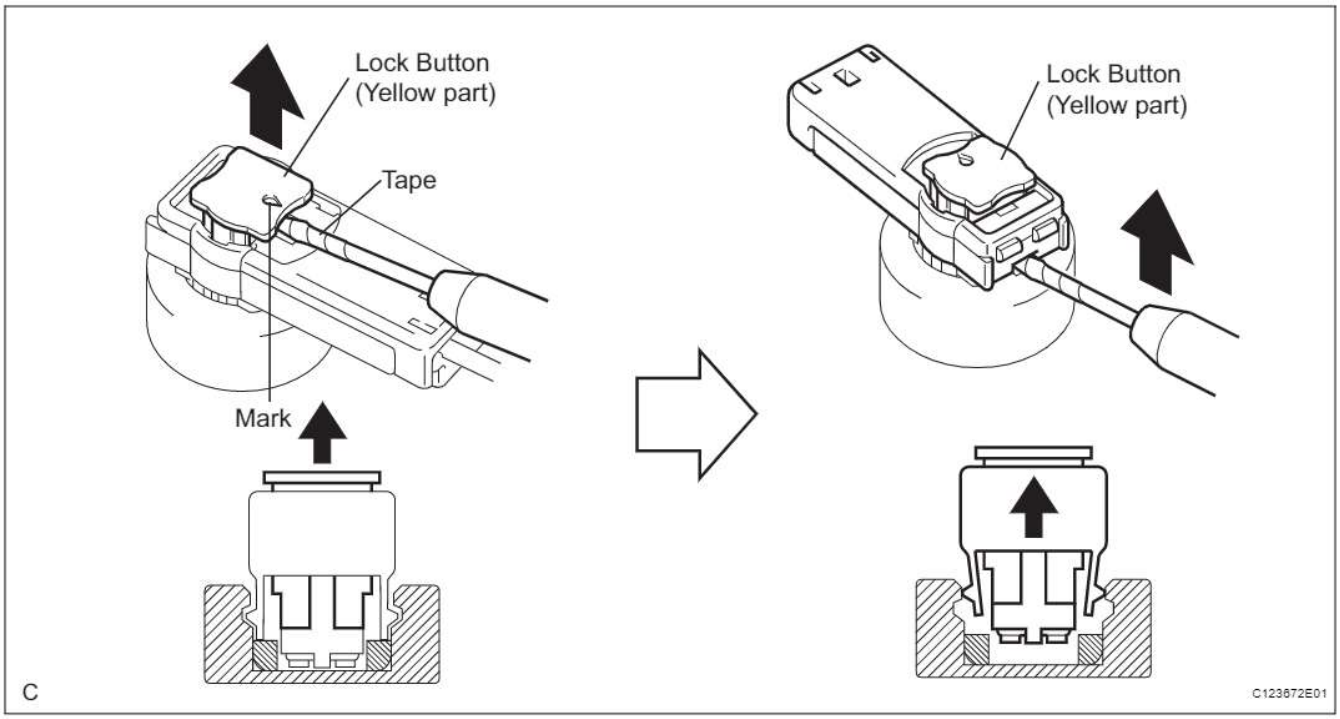
4. DISCONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY (SQUIB SIDE), DRIVER SIDE KNEE AIRBAG ASSEMBLY, CURTAIN SHIELD AIRBAG ASSEMBLY, AND FRONT SEAT OUTER BELT ASSEMBLY

HINT:

Tape up the screwdriver tip before use.

(a) Release the lock button (yellow part) of the connector using a screwdriver.

(b) Insert the screwdriver tip between the connector and the base, and then raise the connector.

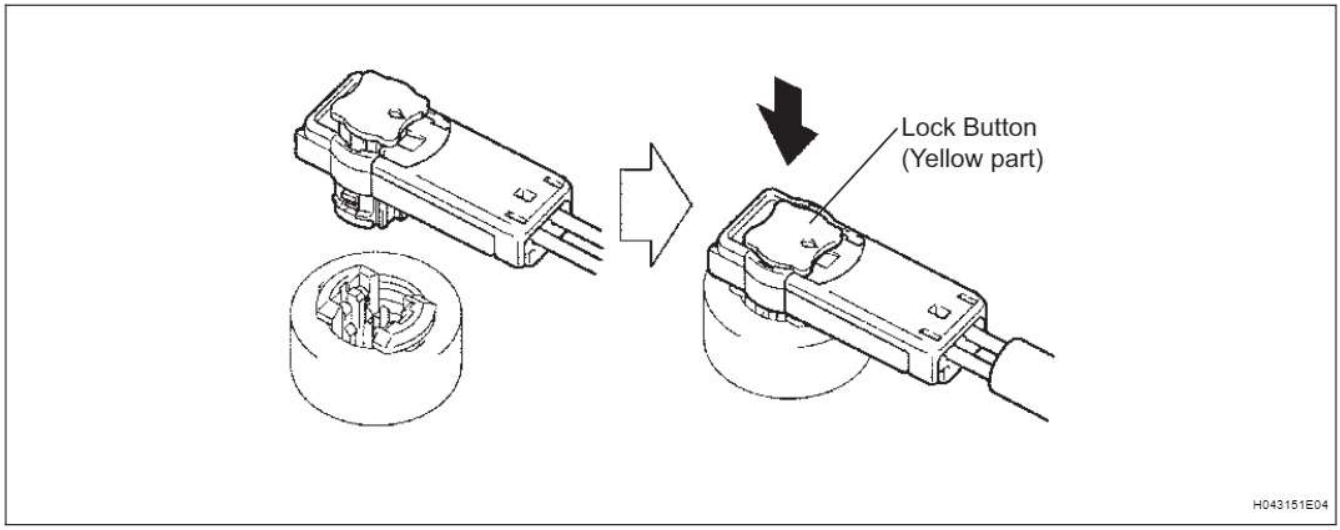


5. CONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY (SQUIB SIDE), DRIVER SIDE KNEE AIRBAG ASSEMBLY, CURTAIN SHIELD AIRBAG ASSEMBLY, AND FRONT SEAT OUTER BELT ASSEMBLY

(a) Connect the connector.

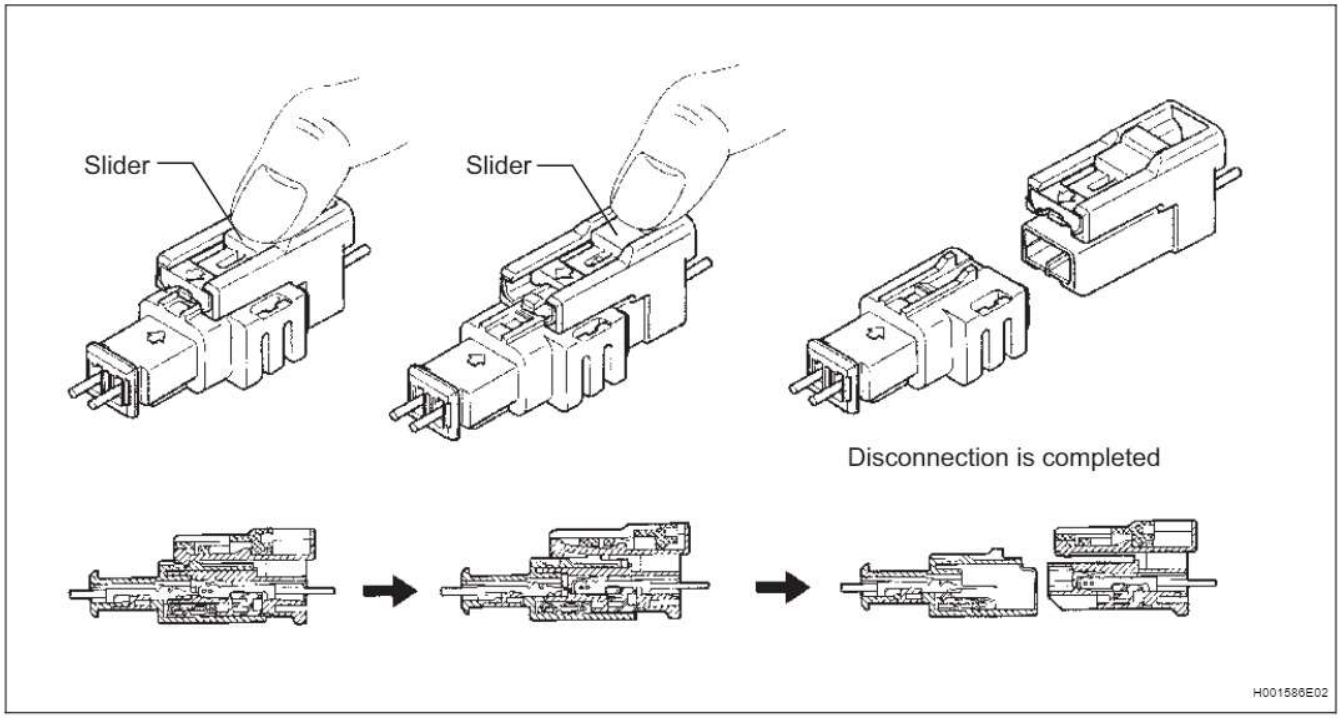
RS

(b) Push down securely on the lock button (yellow part) of the connector. (When locking, a click sound can be heard.)



6. DISCONNECTION OF CONNECTOR FOR SPIRAL CABLE (INSTRUMENT PANEL WIRE SIDE) AND FRONT PASSENGER AIRBAG ASSEMBLY (INSTRUMENT PANEL WIRE SIDE)

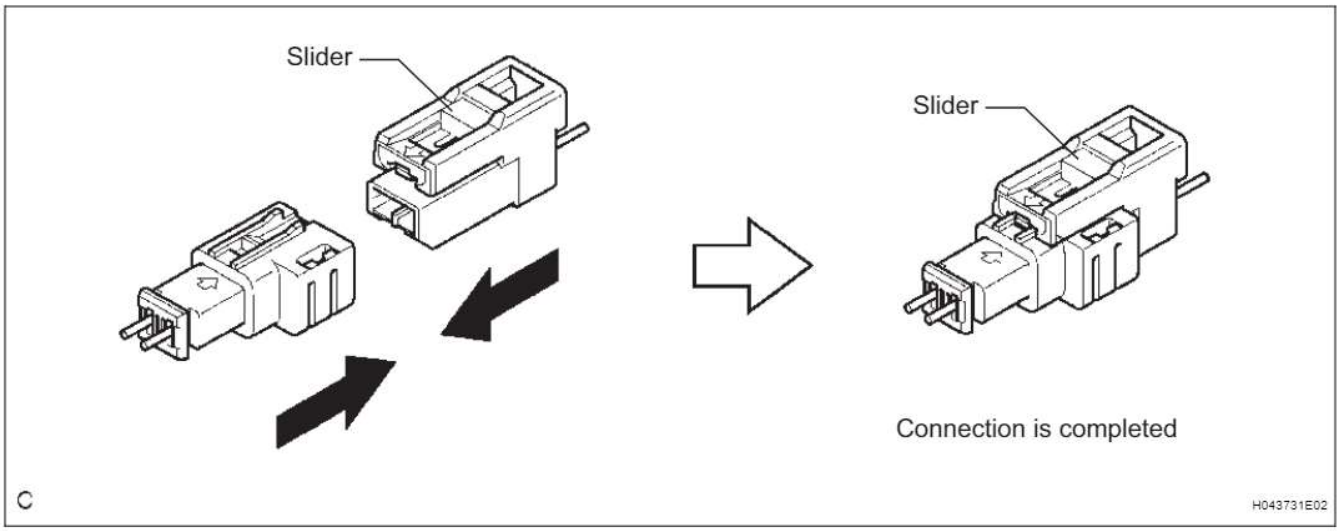
(a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.



RS

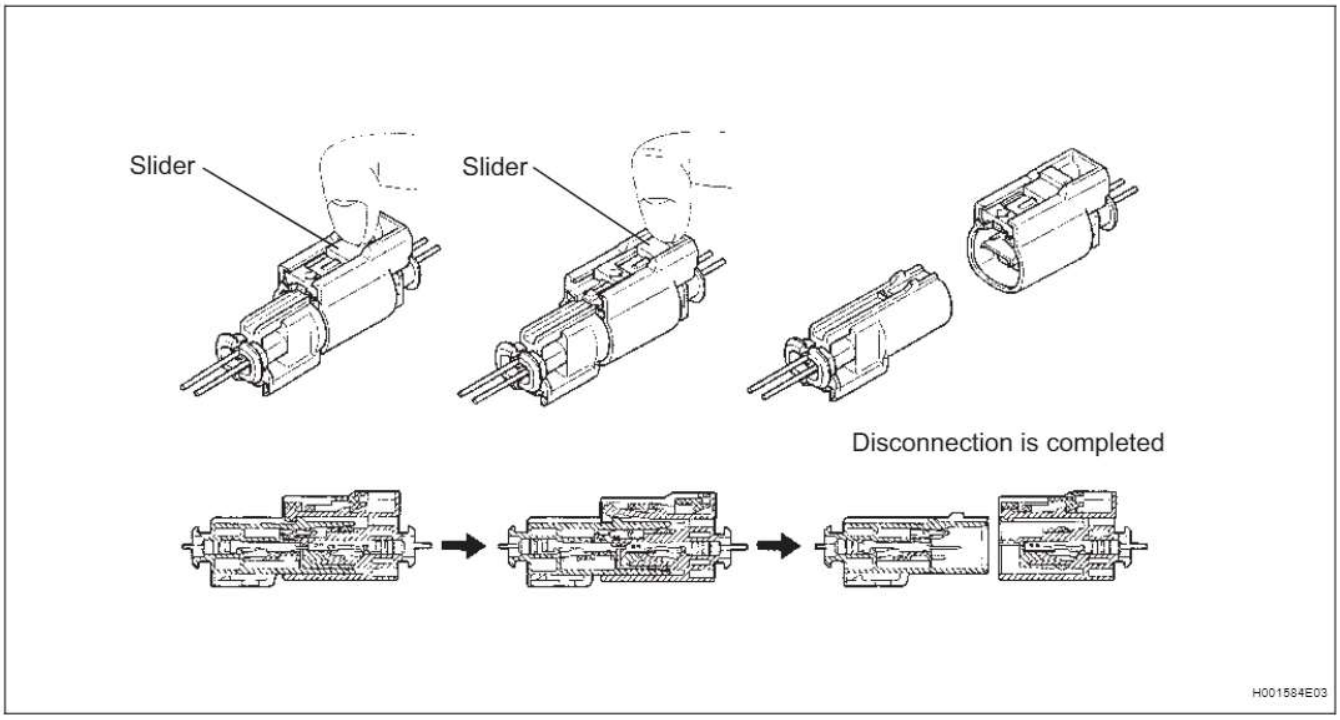
7. CONNECTION OF CONNECTOR FOR SPIRAL CABLE (INSTRUMENT PANEL WIRE SIDE) AND FRONT PASSENGER AIRBAG ASSEMBLY (INSTRUMENT PANEL WIRE SIDE)

(a) Connect the connector as shown in the illustration. (When locking, make sure that the slider returns to its original position and a click sound can be heard.)
HINT:
When connecting, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.



8. DISCONNECTION OF CONNECTORS FOR FRONT SEAT SIDE AIRBAG ASSEMBLY

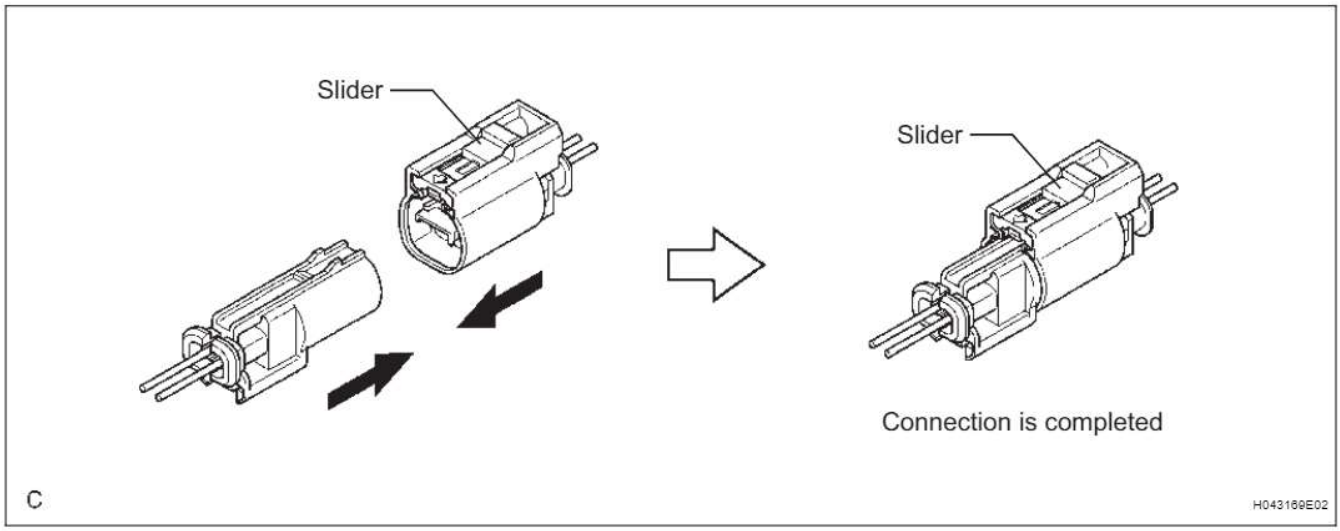
(a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.



RS

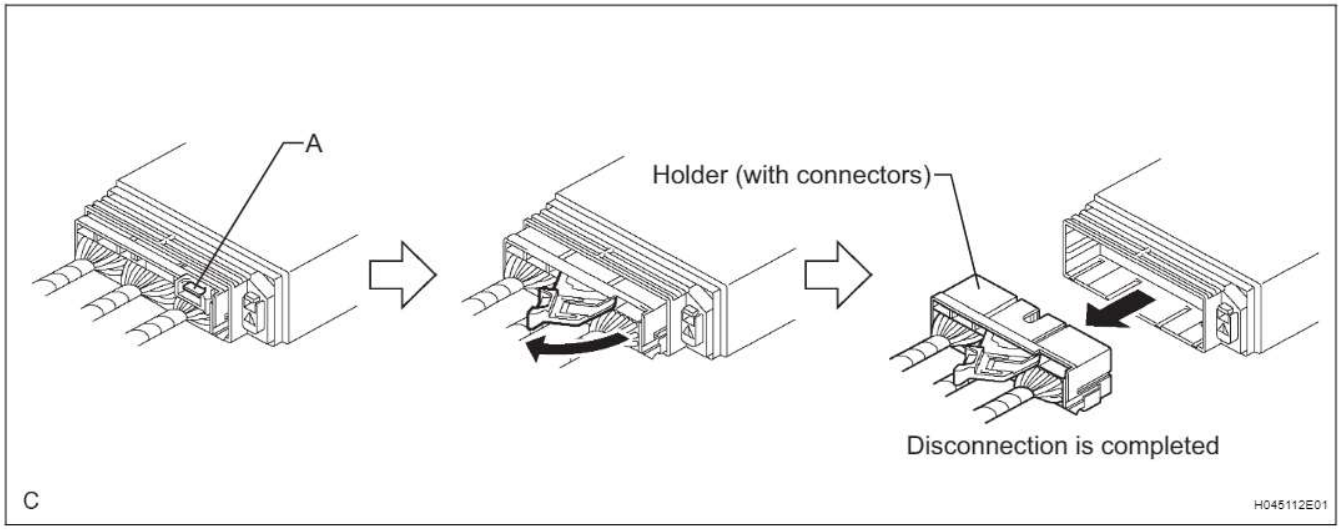
9. CONNECTION OF CONNECTORS FOR FRONT SEAT SIDE AIRBAG ASSEMBLY

(a) Connect the connector as shown in the illustration. (When locking, make sure that the slider returns to its original position and a click sound can be heard.)
HINT:
When connecting, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.



10. DISCONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR ASSEMBLY

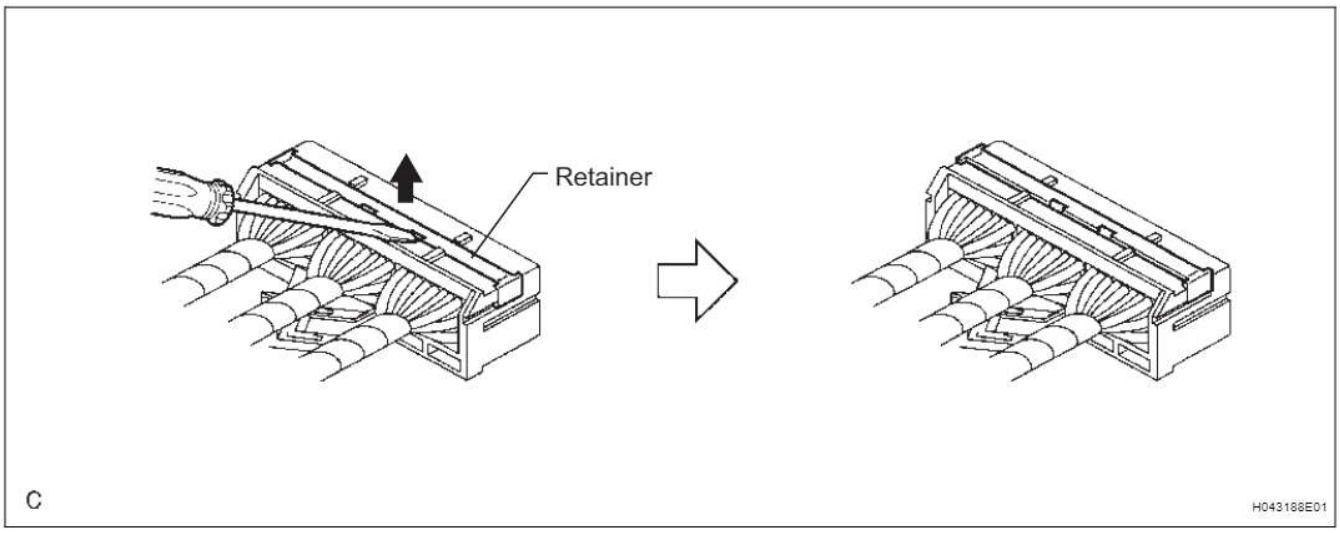
(a) Pull the lever by pushing part A as shown in the illustration and disconnect the holder (with connectors).



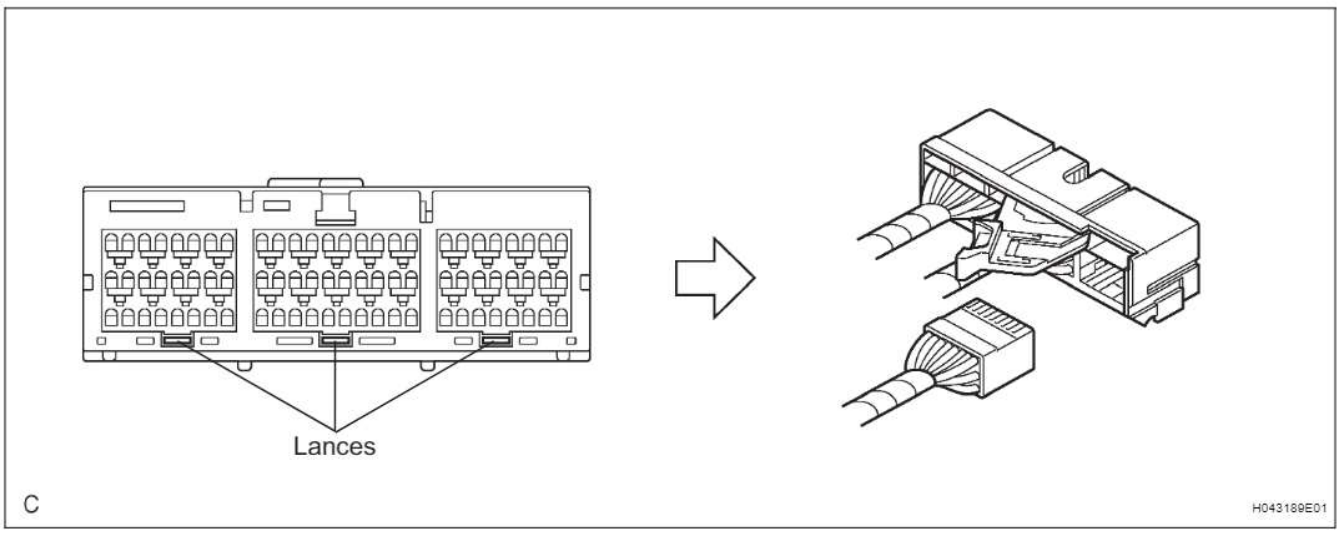
HINT:
Perform the following procedures when replacing the holder.

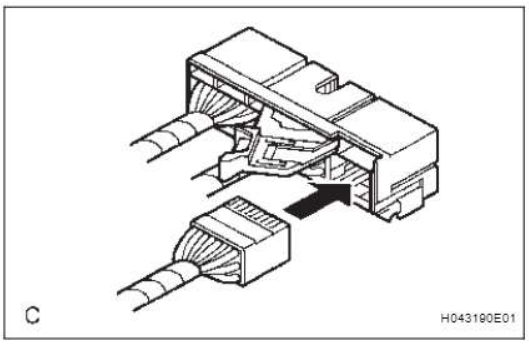
RS

(b) Remove the holder.
(1) Using a screwdriver, unlock the retainer.



(2) Release the fitting lance and remove the holder.





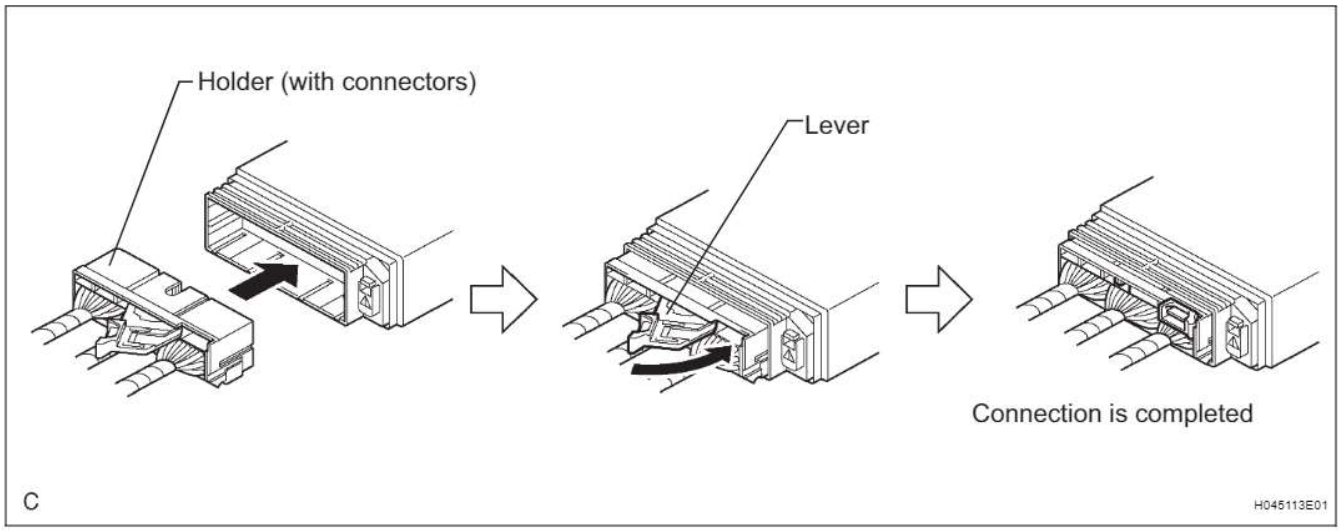
(c) Install the holder.
(1) Install the connectors to the holder. (When locking, a click sound can be heard.)
HINT:
The retainer is locked when the holder is connected.

11. CONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR ASSEMBLY

(a) Firmly insert the holder (with connectors) into the center airbag sensor assembly until it cannot be pushed any further.

RS

(b) Push the lever to connect the holder (with connectors). (When locking, a click sound can be heard.)
HINT:
The holder slides into the center airbag sensor assembly when it is being connected. Be sure not to hold the holder while connecting, as it may result in an insecure fit.

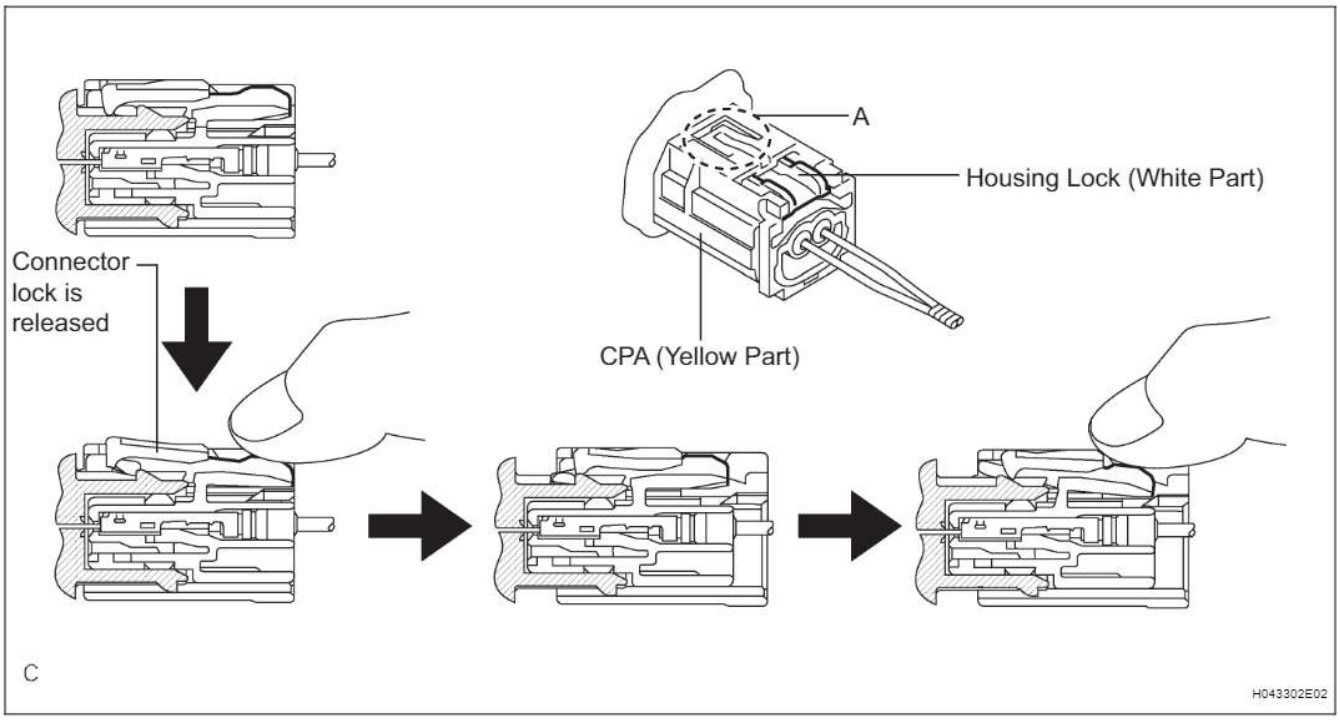


12. DISCONNECTION OF CONNECTOR FOR FRONT AIRBAG SENSOR

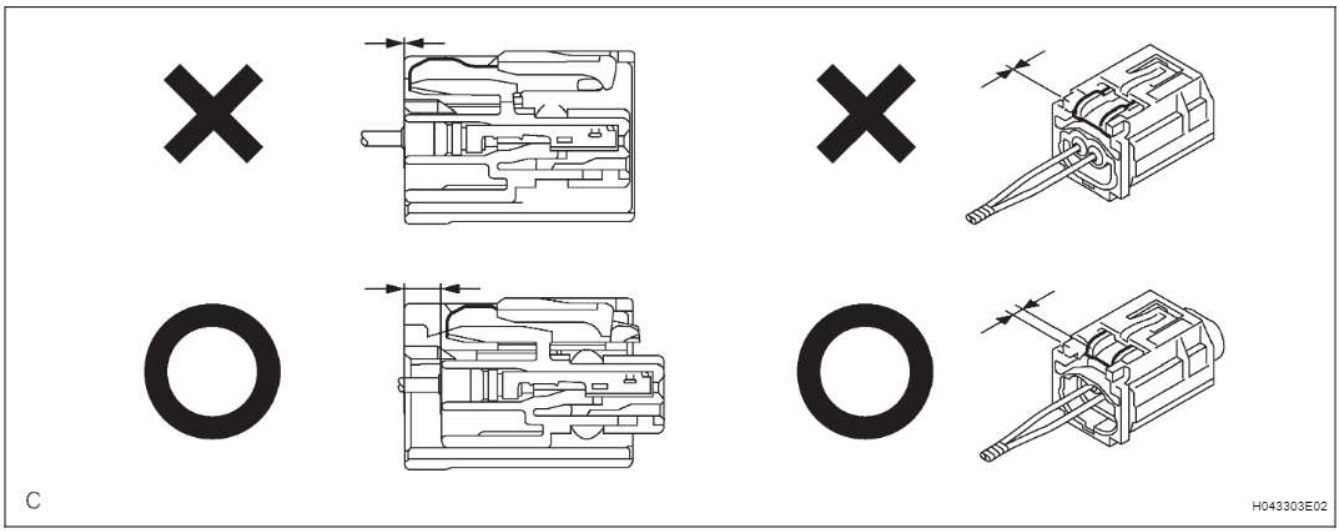
(a) Push down the housing lock (white part) and slide the CPA (yellow part). (At this time, the connector cannot be disconnected yet.)

(b) Push down the housing lock (white part) again and disconnect the connector.
HINT:
Do not push down the A part shown in the illustration when disconnecting.

RS



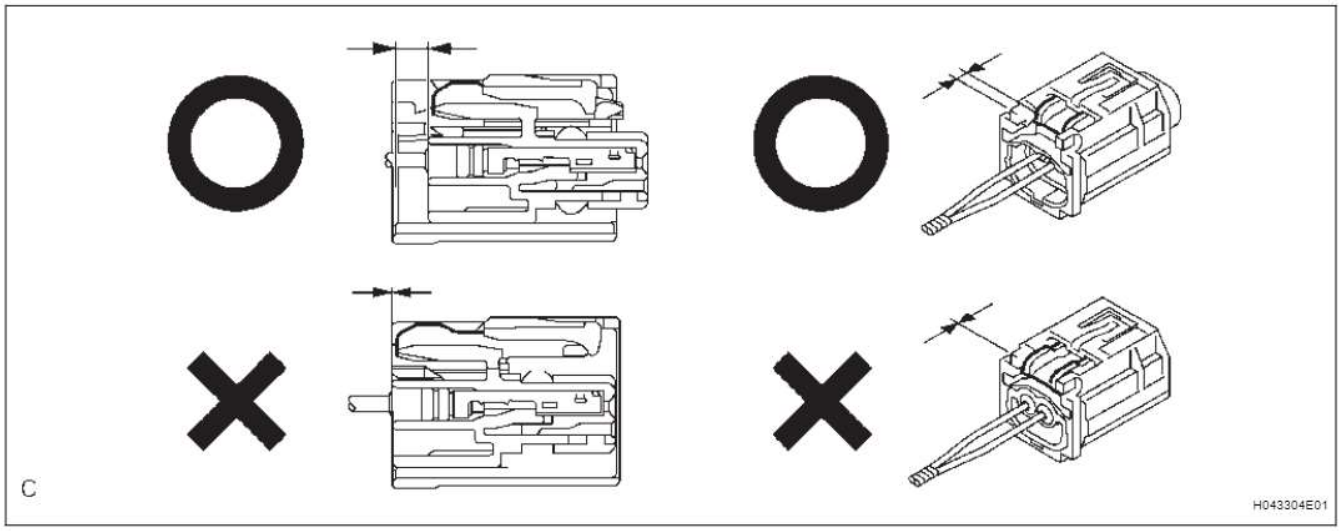
(c) After disconnecting the connector, check that the position of the housing lock (white part) is as shown in the illustration.



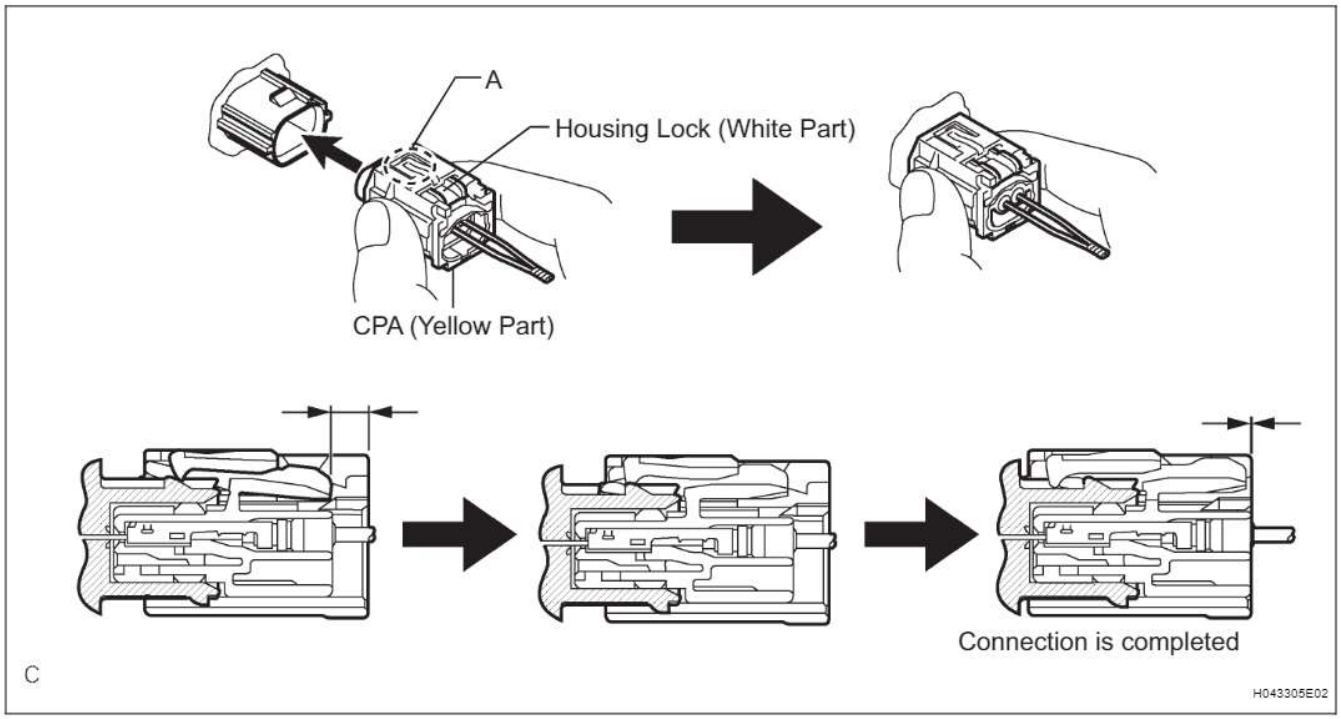
RS

13. CONNECTION OF CONNECTOR FOR FRONT AIRBAG SENSOR

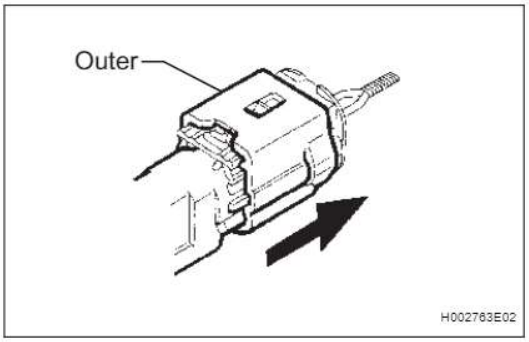
(a) Before connecting the connectors, check that the position of the housing lock (white part) is as shown in the illustration.



(b) Be sure to engage the connectors until they are locked. (When locking, make sure that a click sound can be heard.)
HINT:
When connecting them, the housing lock (white part) slides. Be sure not to hold the housing lock (white part) and A part, as it may result in an insecure fit.



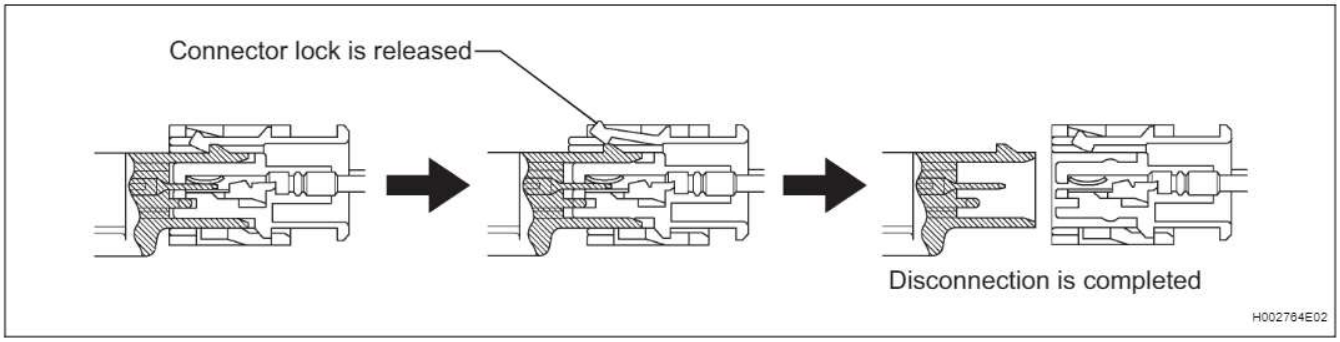
RS



14. DISCONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR

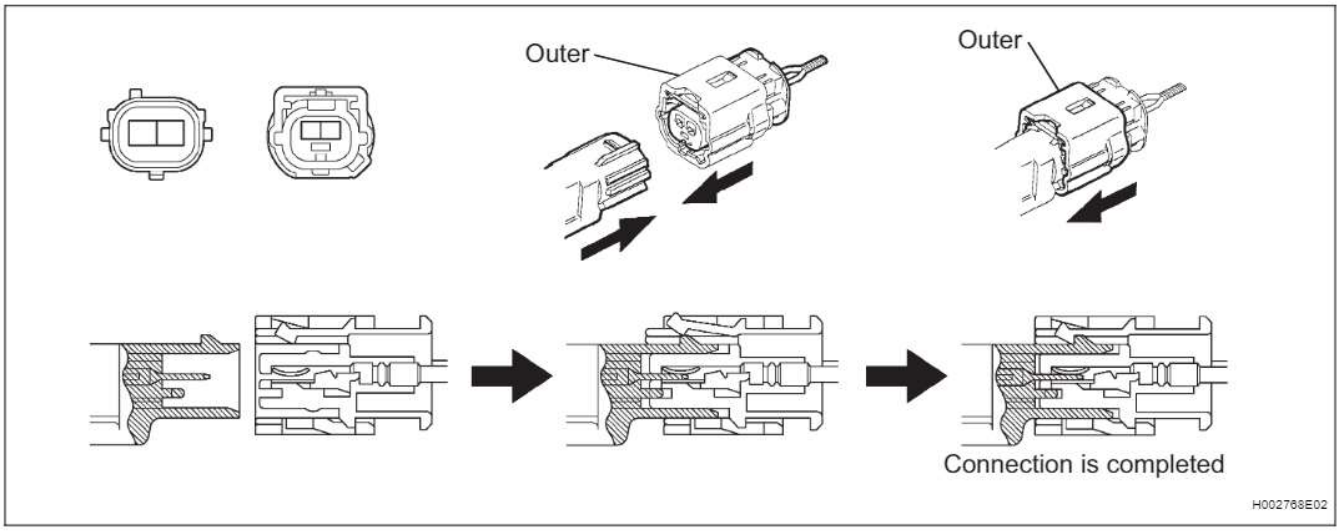
(a) While holding the sides of the outer connector locking sleeve, slide the outer in the direction shown by the arrow.

(b) When the connector lock is released, the connectors are disconnected.
HINT:
Be sure to hold both outer flank sides. Holding the top and bottom will make disconnection difficult.



15. CONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR

(a) Connect the connector as shown in the illustration (When locking, make sure that the outer returns to its original position and a click sound can be heard).
HINT:
When connecting, the outer will slide. Be sure not to hold the outer while connecting, as it may result in an insecure fit.



RS

OCCUPANT CLASSIFICATION SYSTEM

PRECAUTION

NOTICE:
When disconnecting the negative (-) battery cable, initialize the following systems after the cable is reconnected.

System Name	See procedure
SFI SYSTEM	IN-43

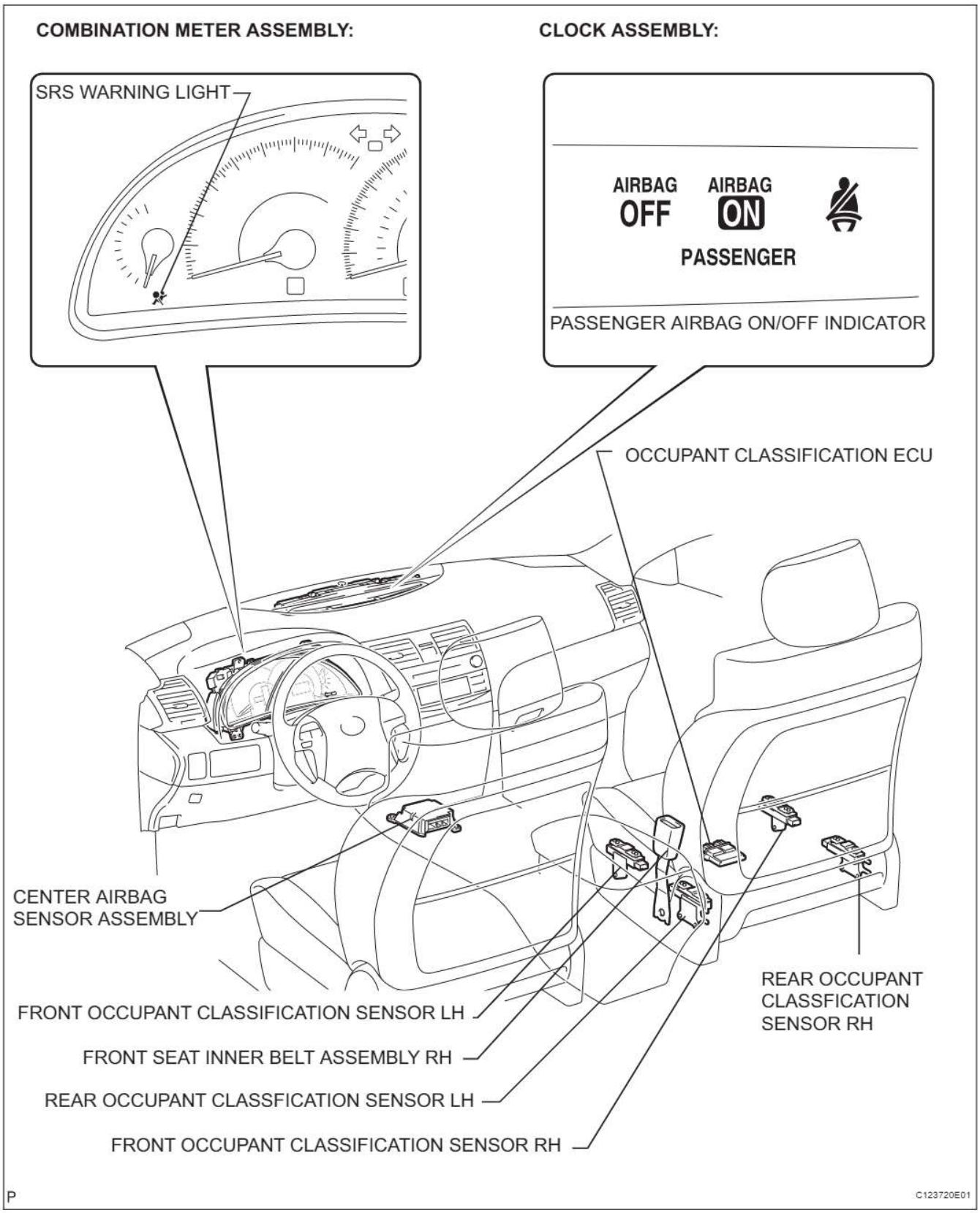
1. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

(a) Perform zero point calibration and sensitivity check if any of the following conditions occur:
- The occupant classification ECU is replaced.
- Accessories (seatback tray and seat cover, etc.) are installed.
- The front passenger seat is removed from the vehicle.
- The passenger airbag ON/OFF indicator ("OFF") comes on when the front passenger seat is not occupied.
- The vehicle is brought to the workshop for repair due to an accident or a collision.

NOTICE:
When an accident vehicle is brought into the workshop for repair, check the flatness of the body side that is equipped with the passenger seat. If the flatness is not within +- 3.0 mm (0.118 in.), adjust it to the specified range.

RS

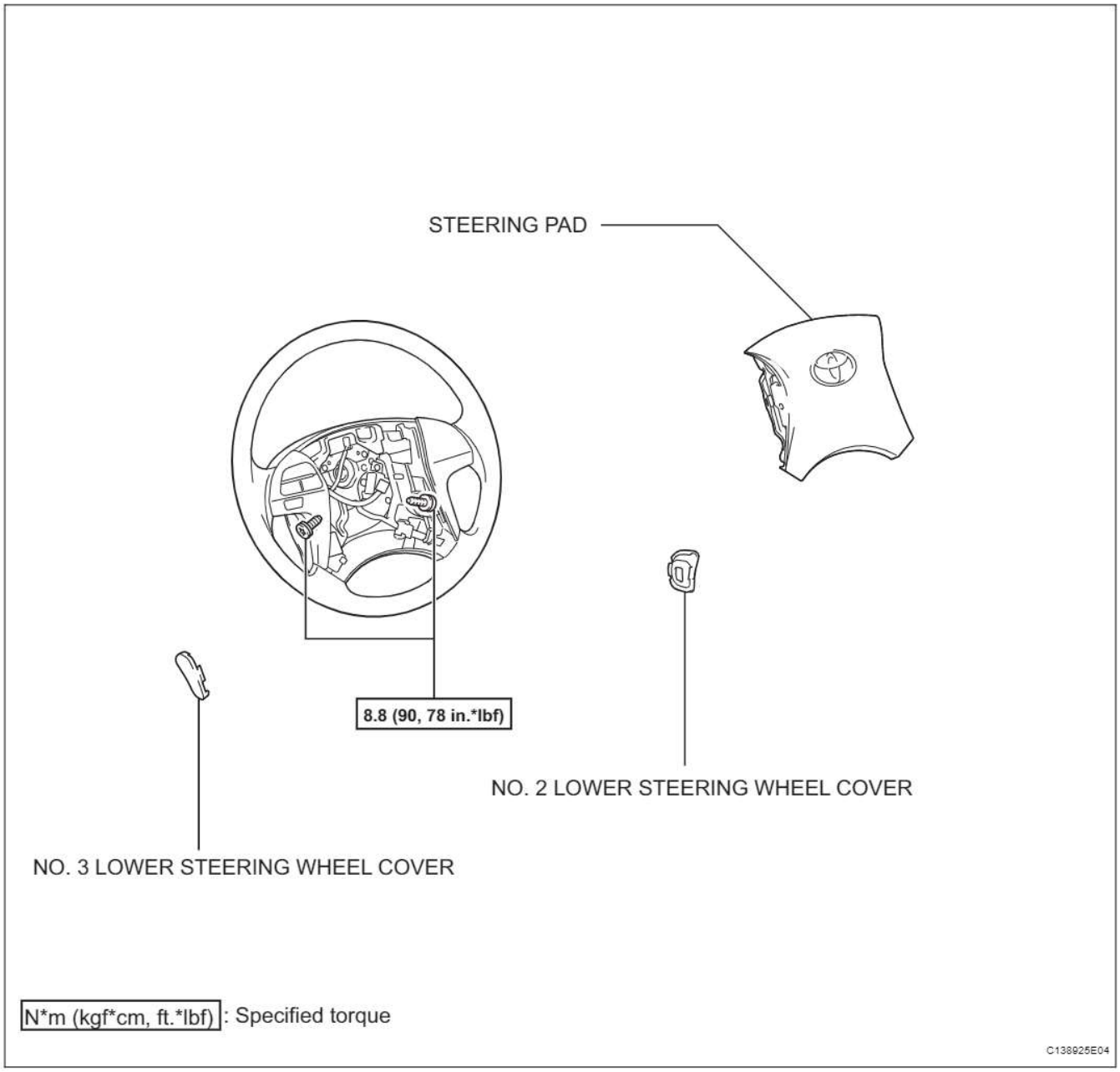
PARTS LOCATION



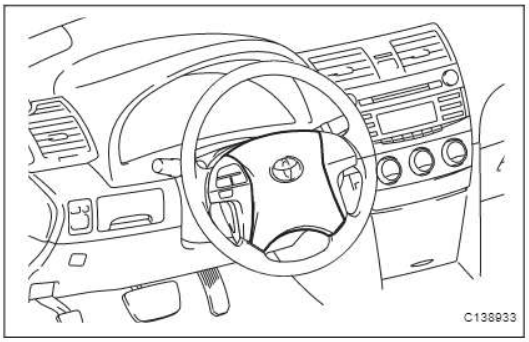
RS

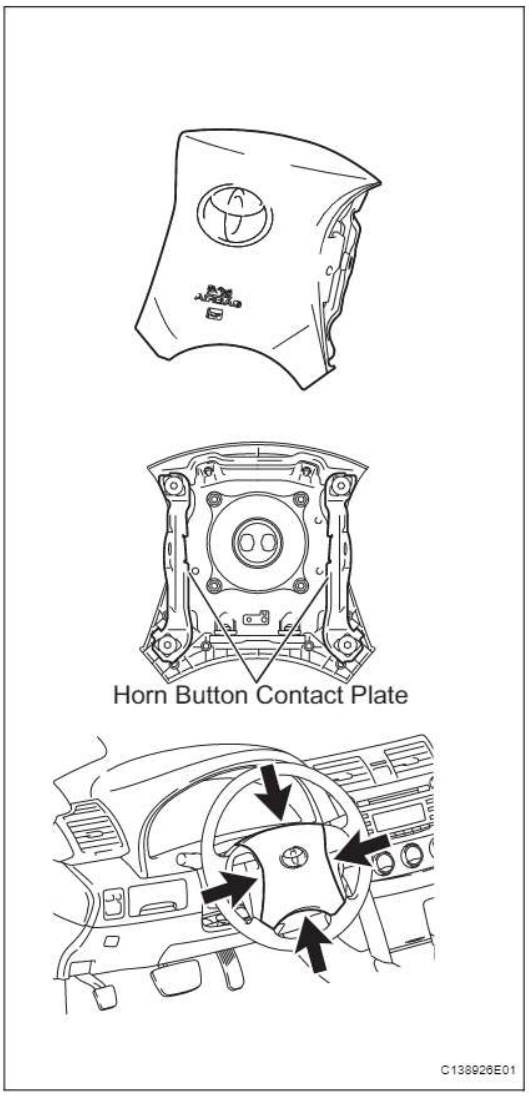
STEERING PAD

COMPONENTS



ON-VEHICLE INSPECTION





1. **INSPECT STEERING PAD (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
   Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.

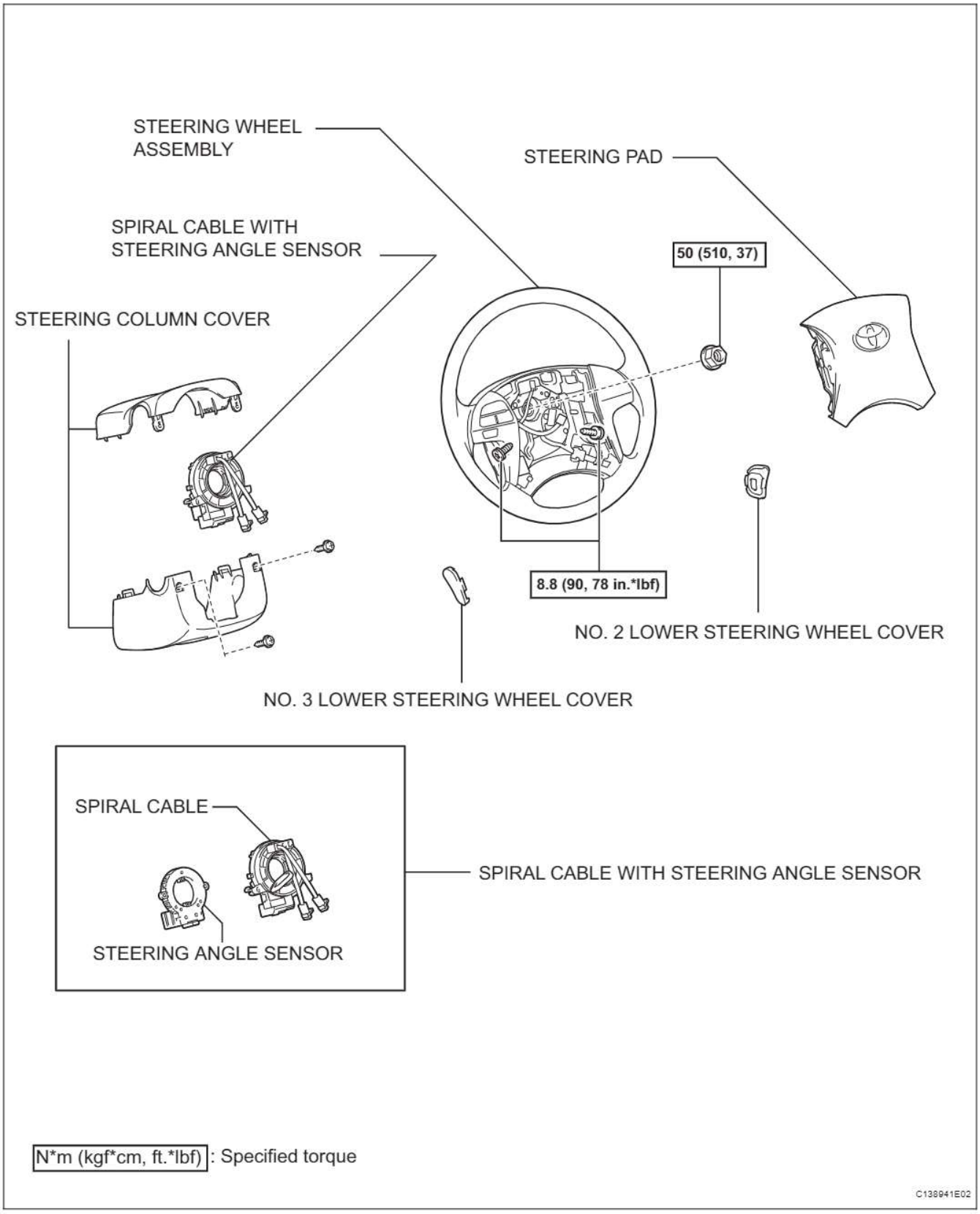
2. **INSPECT STEERING PAD (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) With the steering pad removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad or steering wheel assembly with a new one:
   - Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.
   - Cracks or other damage to the connectors.
   - Deformation of the steering wheel assembly.
   - Deformation of the horn button contact plates of the steering pad.
   - There should be no interference between the steering pad and steering wheel assembly, and the clearance should be uniform all the way around when the new steering pad is installed on the steering wheel assembly.

   CAUTION:
   Be sure to follow the correct removal and installation procedures.

RS

SPIRAL CABLE

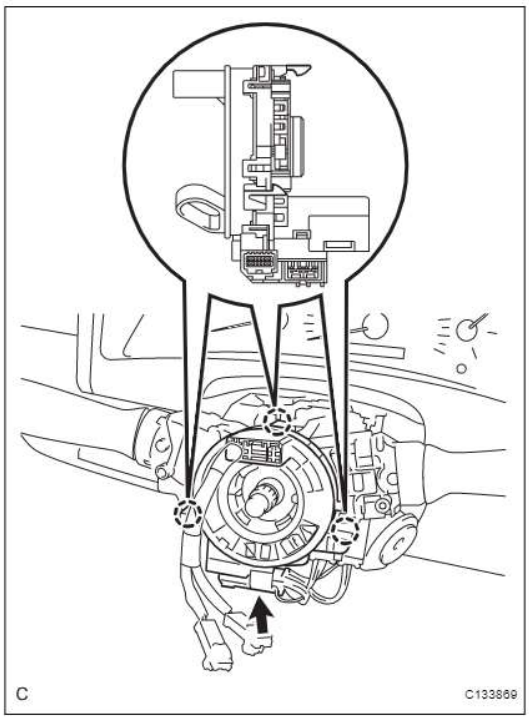
COMPONENTS



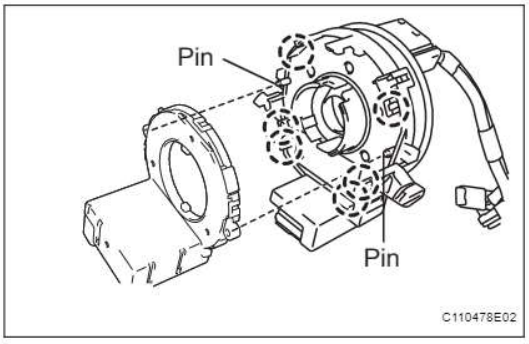
RS

REMOVAL

1. **PRECAUTION**
   CAUTION:
   Be sure to read "PRECAUTION" thoroughly before servicing (See page RS-1).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
3. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
4. **REMOVE NO. 3 LOWER STEERING WHEEL COVER (See page RS-345)**
5. **REMOVE NO. 2 LOWER STEERING WHEEL COVER (See page RS-345)**
6. **REMOVE STEERING PAD (See page RS-345)**
7. **REMOVE STEERING WHEEL ASSEMBLY (See page SR-36)**
8. **REMOVE STEERING COLUMN COVER (See page SR-36)**
9. **REMOVE SPIRAL CABLE WITH STEERING ANGLE SENSOR**
   (a) Disconnect the connectors from the spiral cable with steering angle sensor.
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (b) Disengage the 3 claws and remove the spiral cable with steering angle sensor.



RS

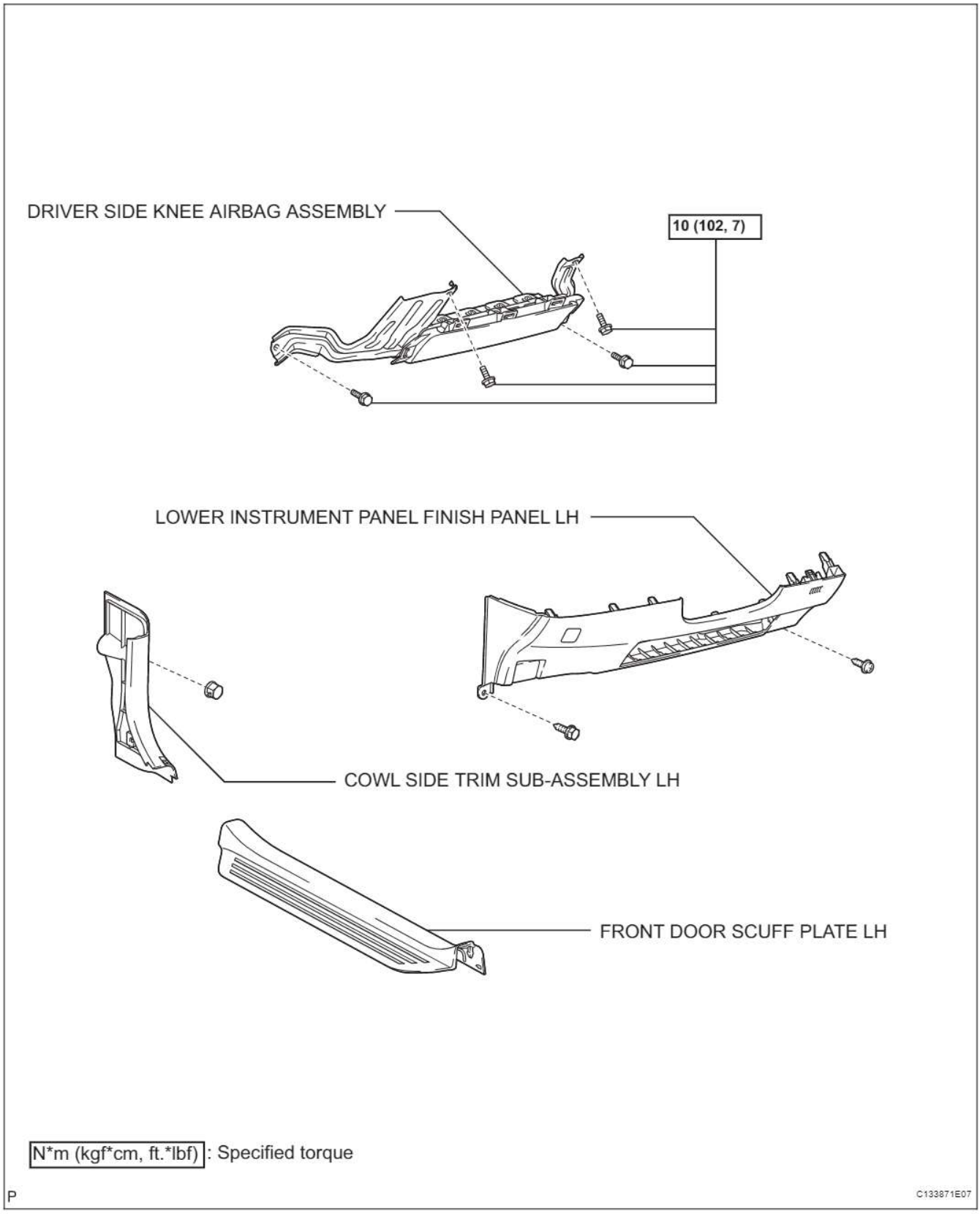


10. SEPARATE SPIRAL CABLE

(a) Disengage the 6 claws and 2 pins, and remove the spiral cable from the steering angle sensor.

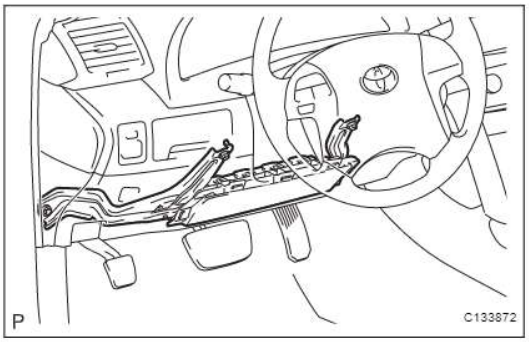
DRIVER SIDE KNEE AIRBAG ASSEMBLY

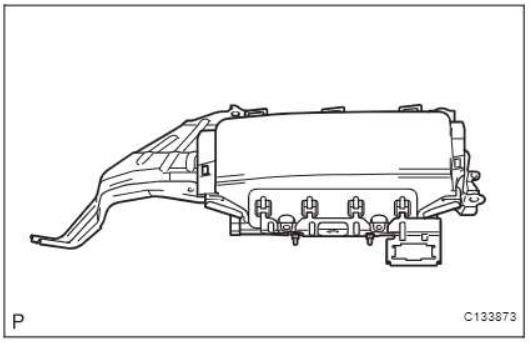
COMPONENTS



RS

ON-VEHICLE INSPECTION





1. **INSPECT DRIVER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) With the driver side knee airbag assembly installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the driver side knee airbag assembly with a new one:
   Cuts, minute cracks or marked discoloration on the driver side knee airbag assembly.

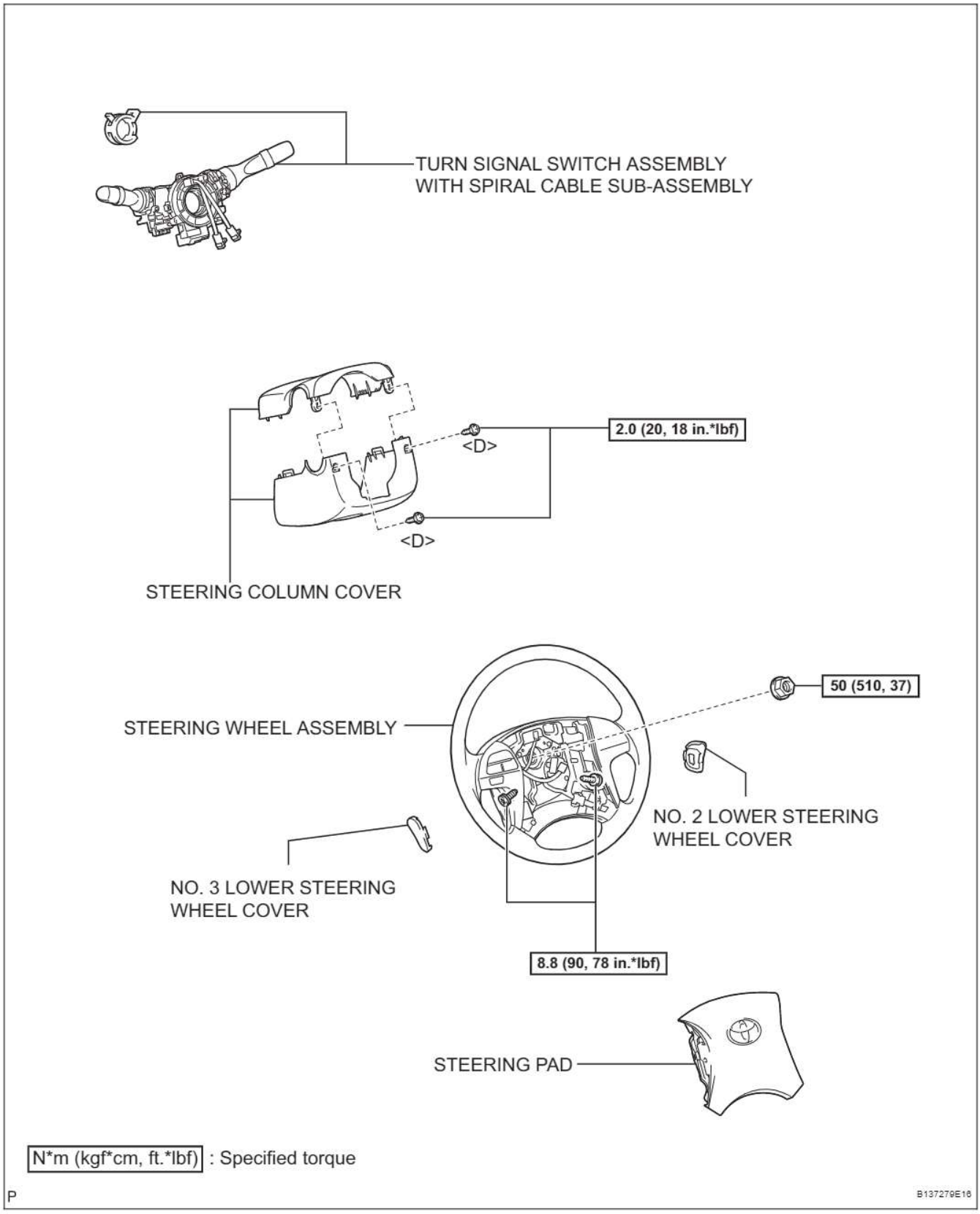
2. **INSPECT DRIVER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) With the driver side knee airbag assembly removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the driver side knee airbag assembly with a new one:
   - Cuts, minute cracks or marked discoloration on the driver side knee airbag assembly.
   - Cracks or other damage to the connector.
   - Deformation or cracks on the instrument panel reinforcement.

   CAUTION:
   Be sure to follow the correct removal and installation procedures.

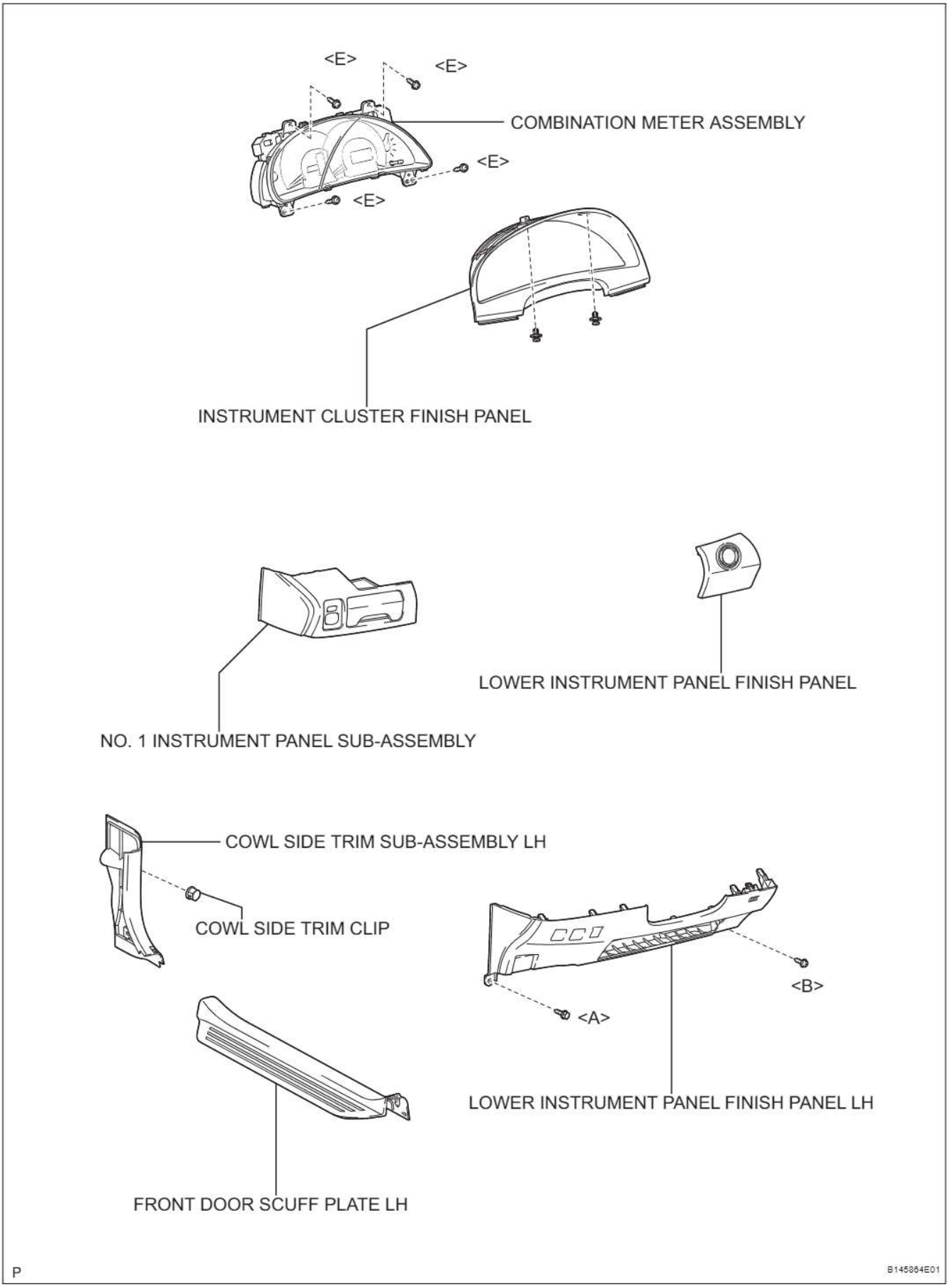
RS

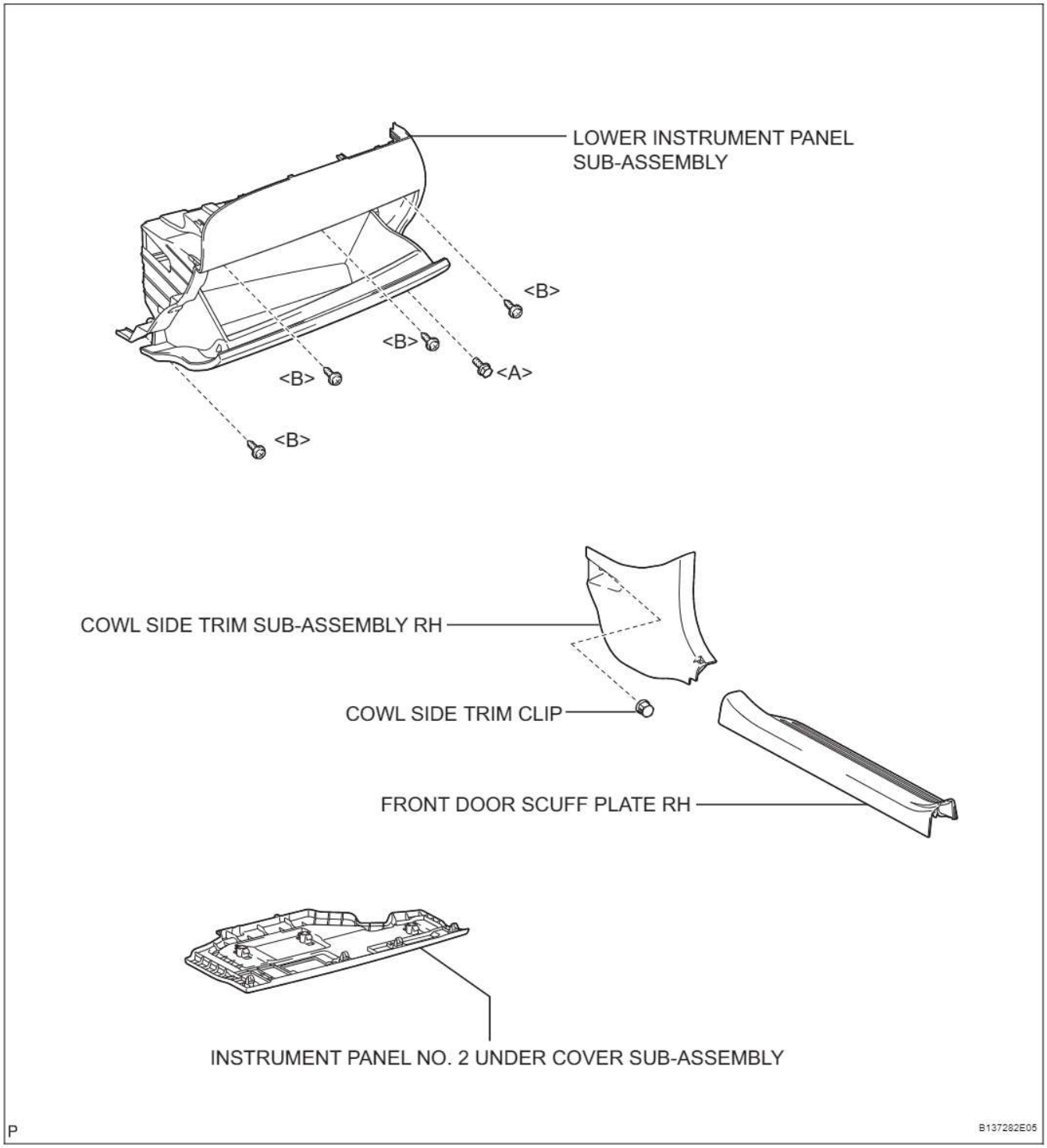
FRONT PASSENGER AIRBAG ASSEMBLY

COMPONENTS

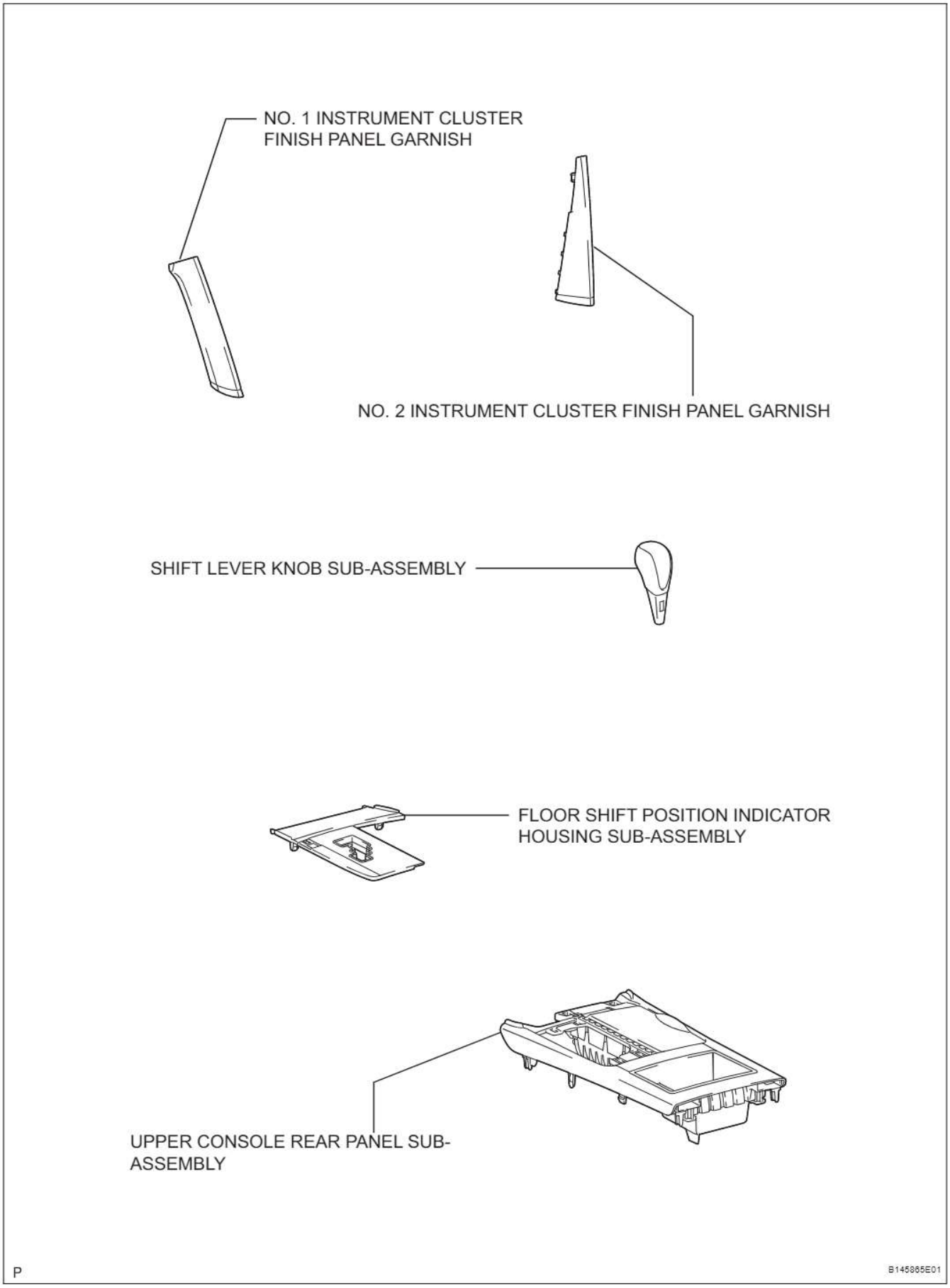


RS

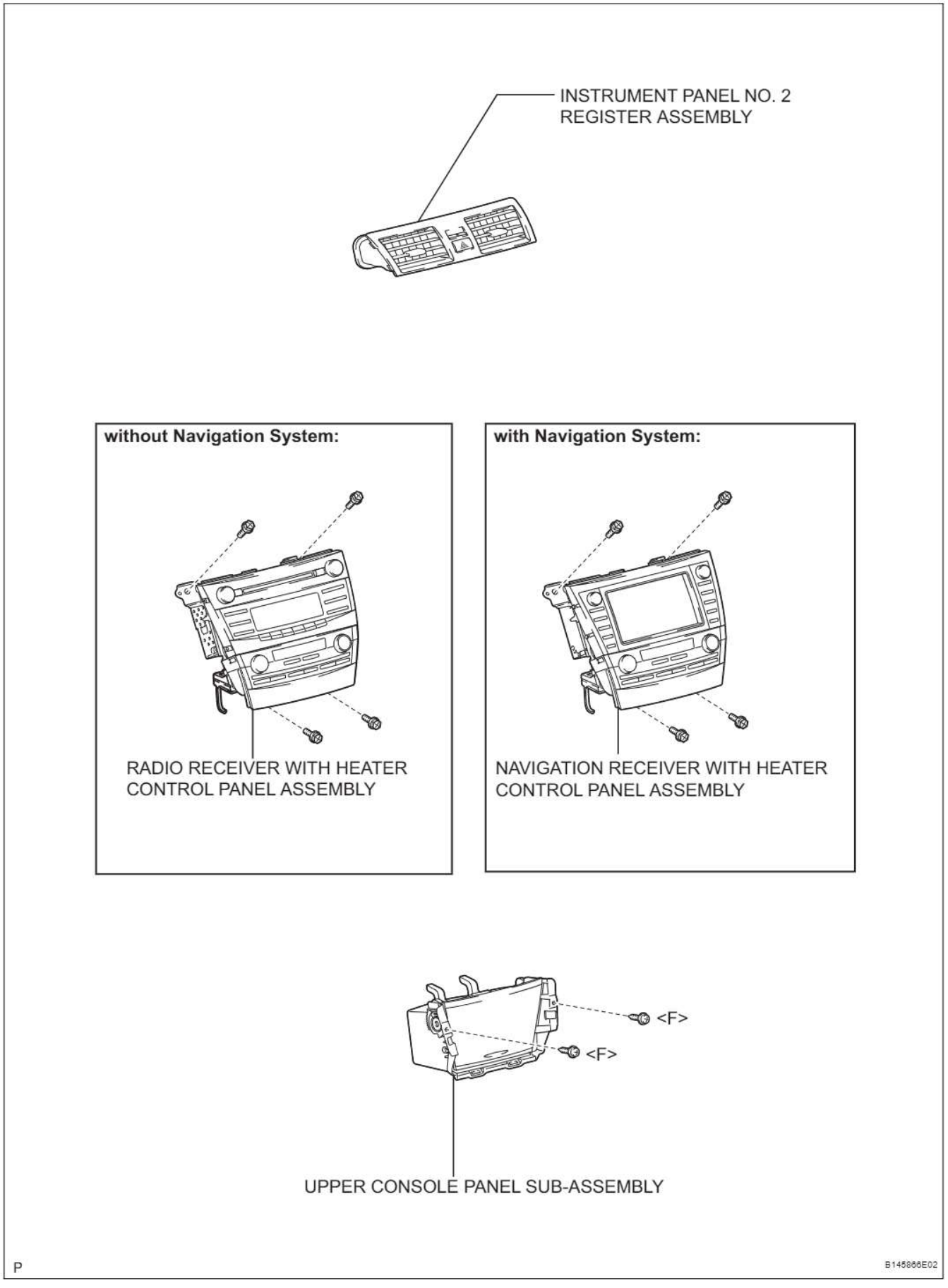

<E>
<E>
COMBINATION METER ASSEMBLY
<E>
<E>
INSTRUMENT CLUSTER FINISH PANEL
NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY
LOWER INSTRUMENT PANEL FINISH PANEL
COWL SIDE TRIM SUB-ASSEMBLY LH
COWL SIDE TRIM CLIP
<B>
<A>
LOWER INSTRUMENT PANEL FINISH PANEL LH
FRONT DOOR SCUFF PLATE LH
P
B145864E01


LOWER INSTRUMENT PANEL SUB-ASSEMBLY
<B>
<B>
<B>
<A>
<B>
COWL SIDE TRIM SUB-ASSEMBLY RH
COWL SIDE TRIM CLIP
FRONT DOOR SCUFF PLATE RH
INSTRUMENT PANEL NO. 2 UNDER COVER SUB-ASSEMBLY
P
B137282E05

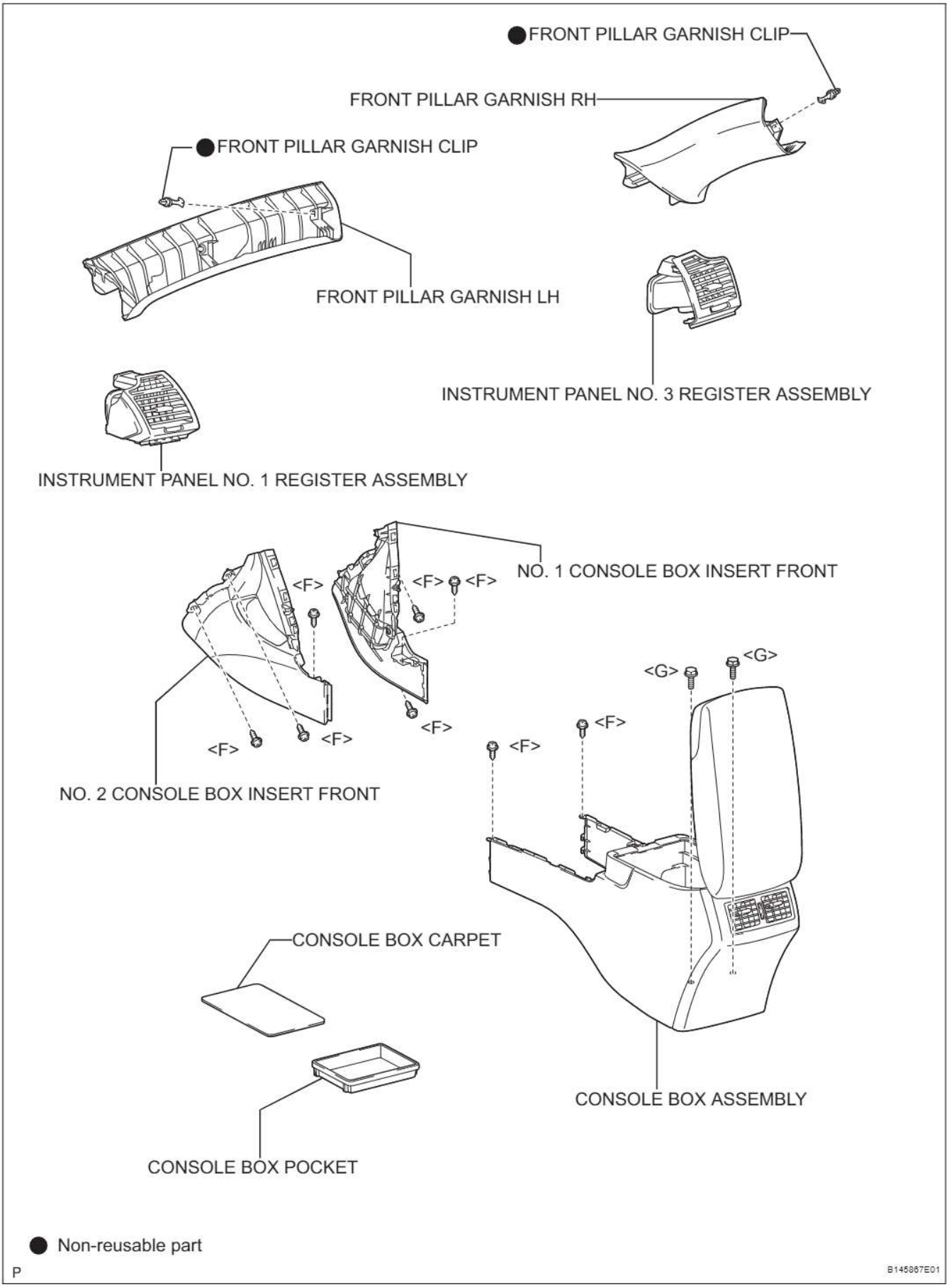
RS

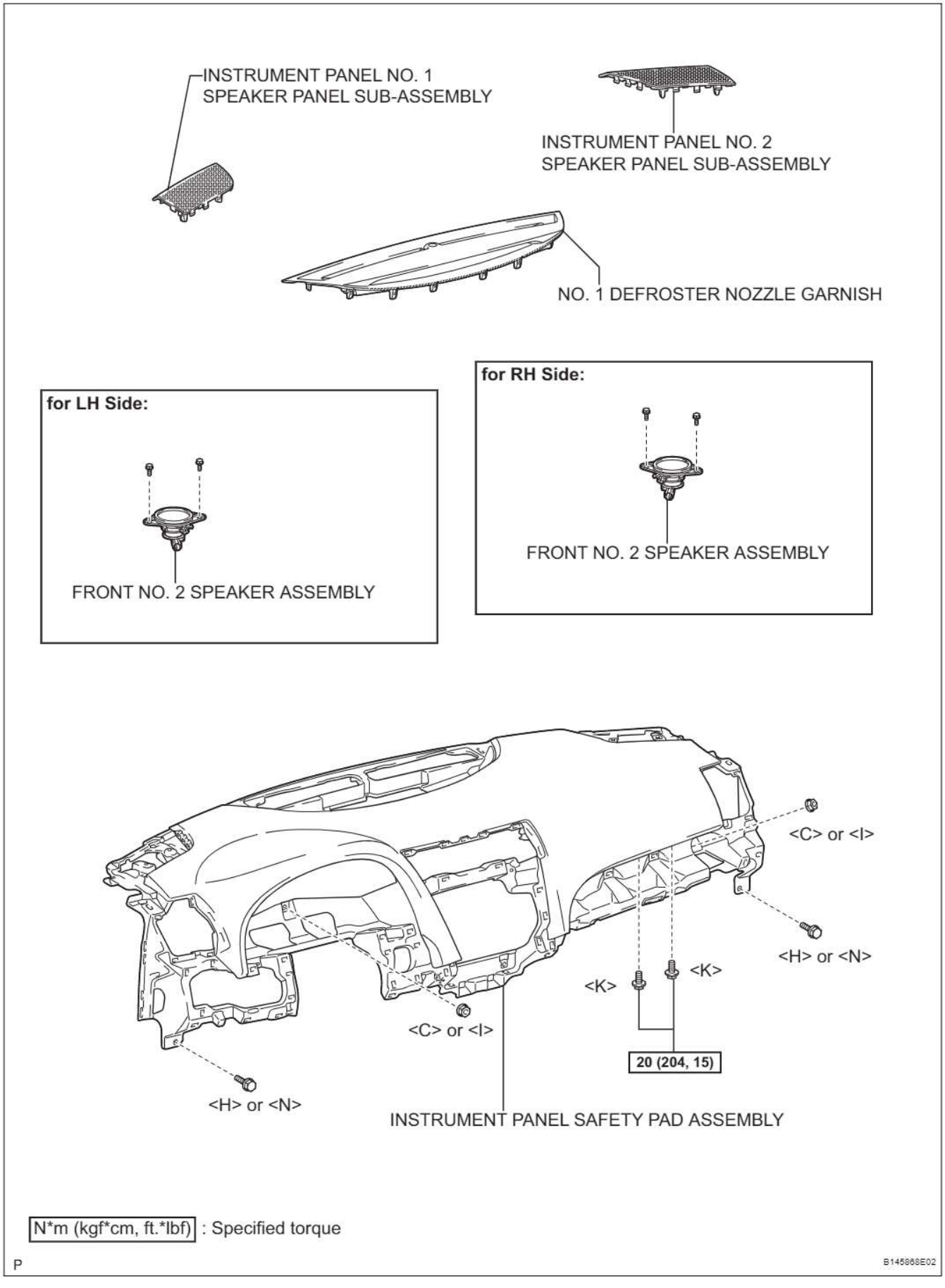

NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH
NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH
SHIFT LEVER KNOB SUB-ASSEMBLY
FLOOR SHIFT POSITION INDICATOR HOUSING SUB-ASSEMBLY
UPPER CONSOLE REAR PANEL SUB-ASSEMBLY
P
B145865E01

RS


INSTRUMENT PANEL NO. 2
REGISTER ASSEMBLY
without Navigation System:
RADIO RECEIVER WITH HEATER
CONTROL PANEL ASSEMBLY
with Navigation System:
NAVIGATION RECEIVER WITH HEATER
CONTROL PANEL ASSEMBLY
<F>
<F>
UPPER CONSOLE PANEL SUB-ASSEMBLY
P
B145866E02

RS


● FRONT PILLAR GARNISH CLIP
FRONT PILLAR GARNISH RH
● FRONT PILLAR GARNISH CLIP
FRONT PILLAR GARNISH LH
INSTRUMENT PANEL NO. 3 REGISTER ASSEMBLY
INSTRUMENT PANEL NO. 1 REGISTER ASSEMBLY
NO. 1 CONSOLE BOX INSERT FRONT
<F>
<F>
<F>
<F>
<F>
<F>
NO. 2 CONSOLE BOX INSERT FRONT
<G>
<G>
<F>
<F>
CONSOLE BOX CARPET
CONSOLE BOX ASSEMBLY
CONSOLE BOX POCKET
● Non-reusable part
P
B145867E01

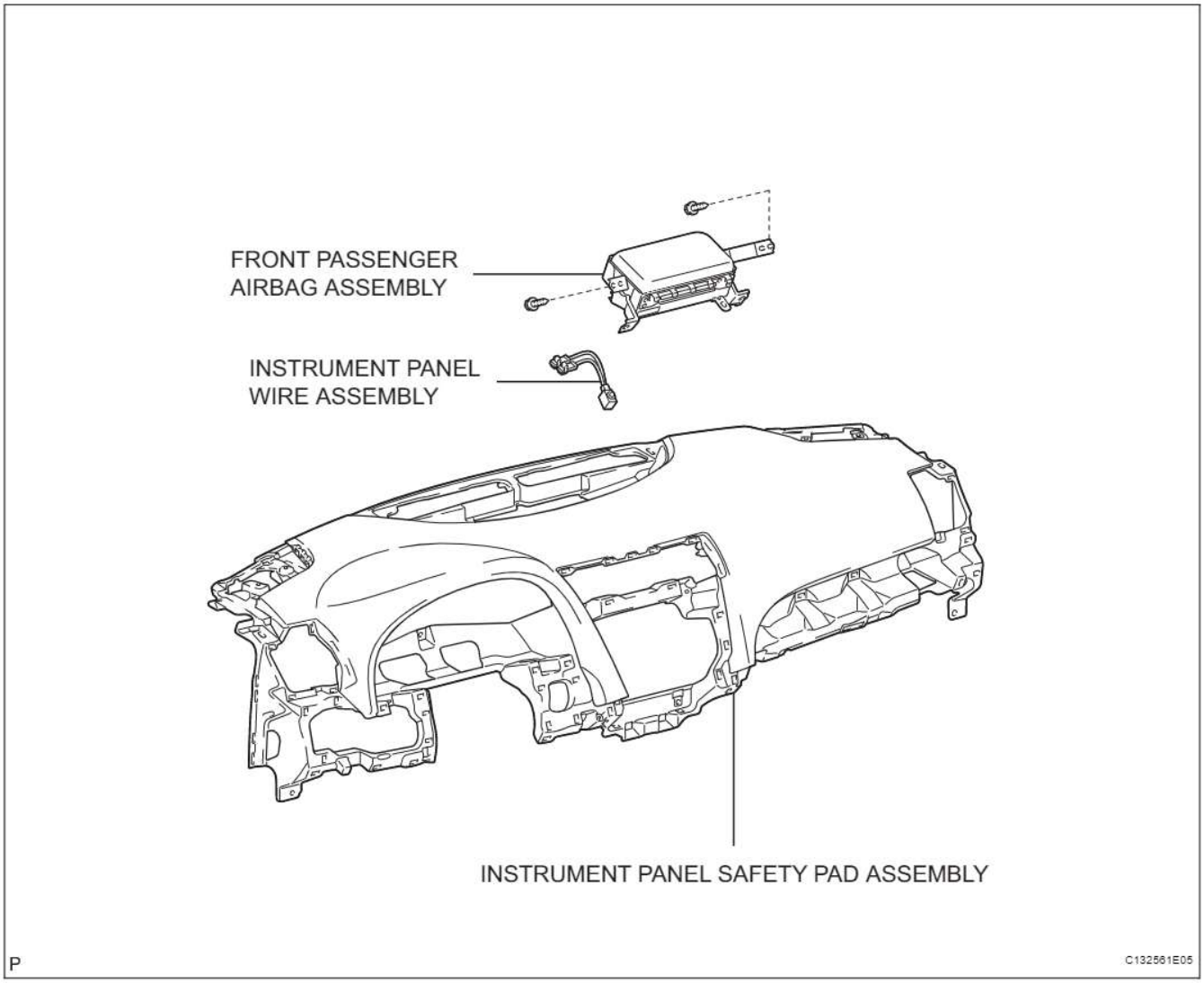


N*m (kgf*cm, ft.*lbf) : Specified torque

P

B145868E02

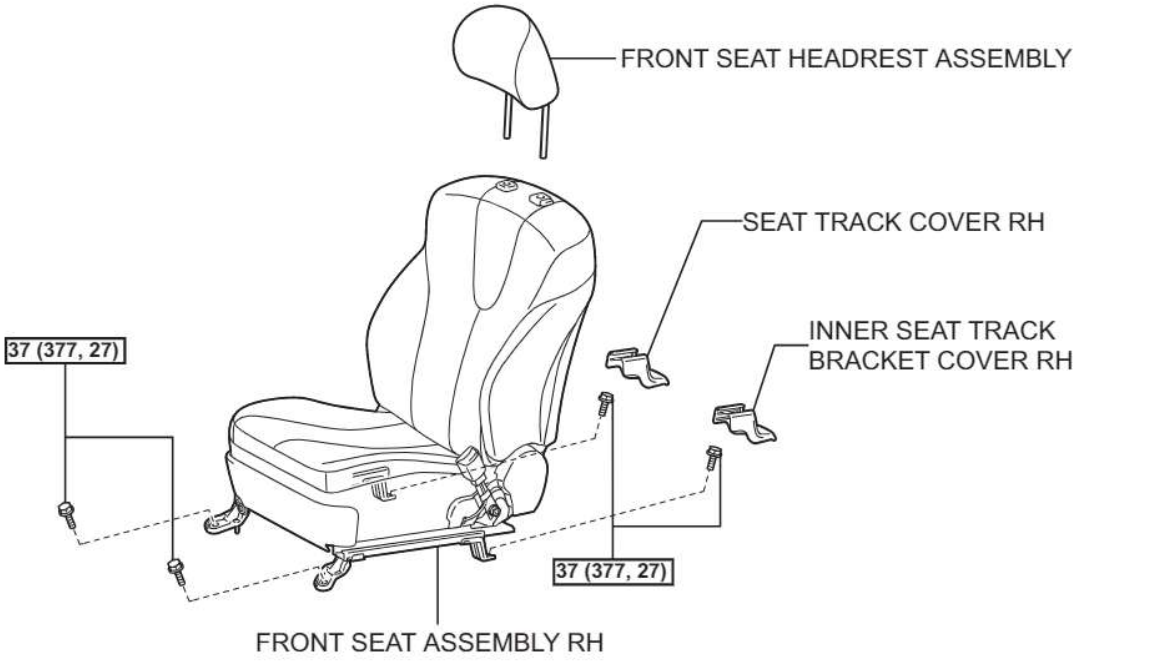
RS

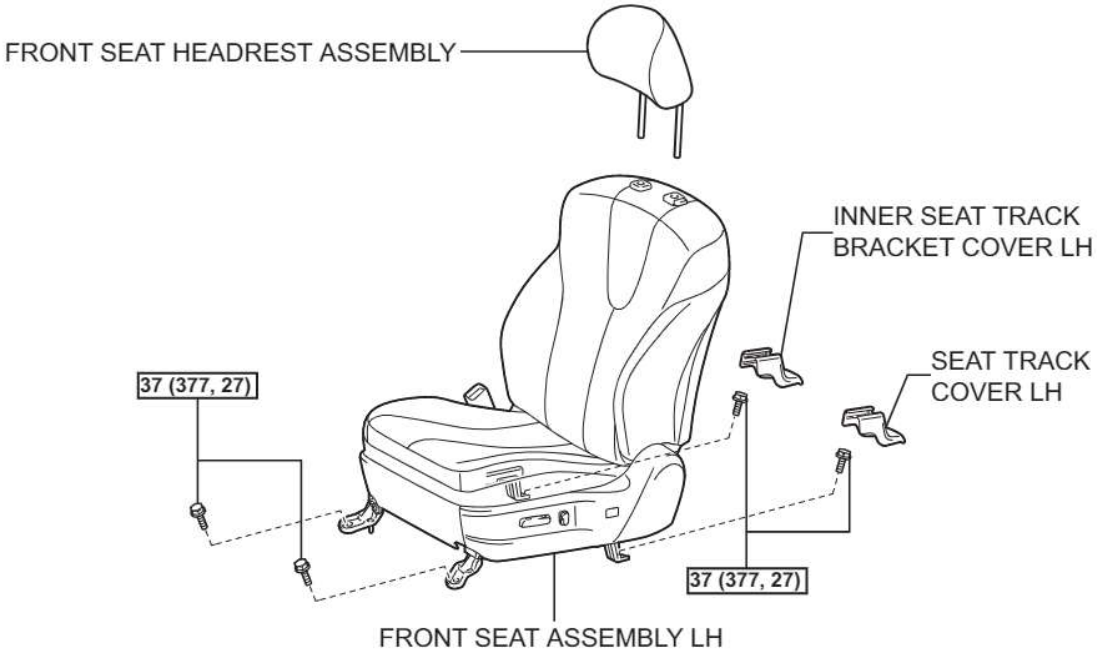

FRONT PASSENGER
AIRBAG ASSEMBLY
INSTRUMENT PANEL
WIRE ASSEMBLY
INSTRUMENT PANEL SAFETY PAD ASSEMBLY
P
C132561E05

CURTAIN SHIELD AIRBAG ASSEMBLY

COMPONENTS

for Power Seat:





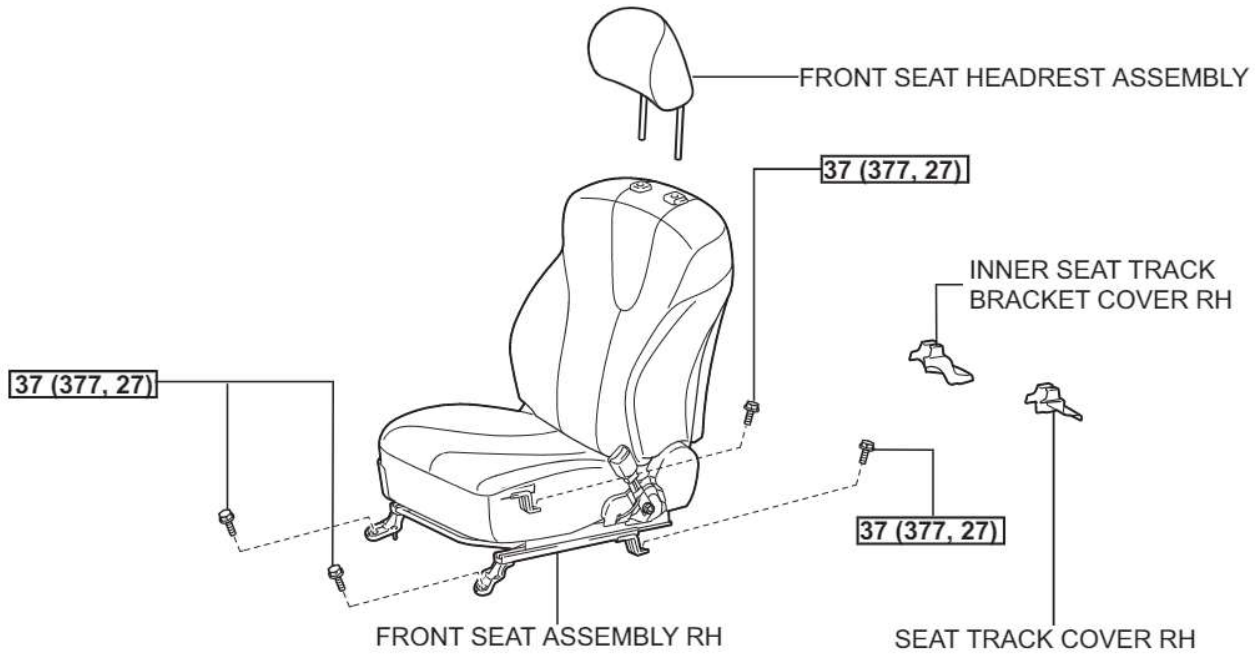
N*m (kgf*cm, ft.*lbf) : Specified torque

RS

P

B132047E16

for Manual Seat:

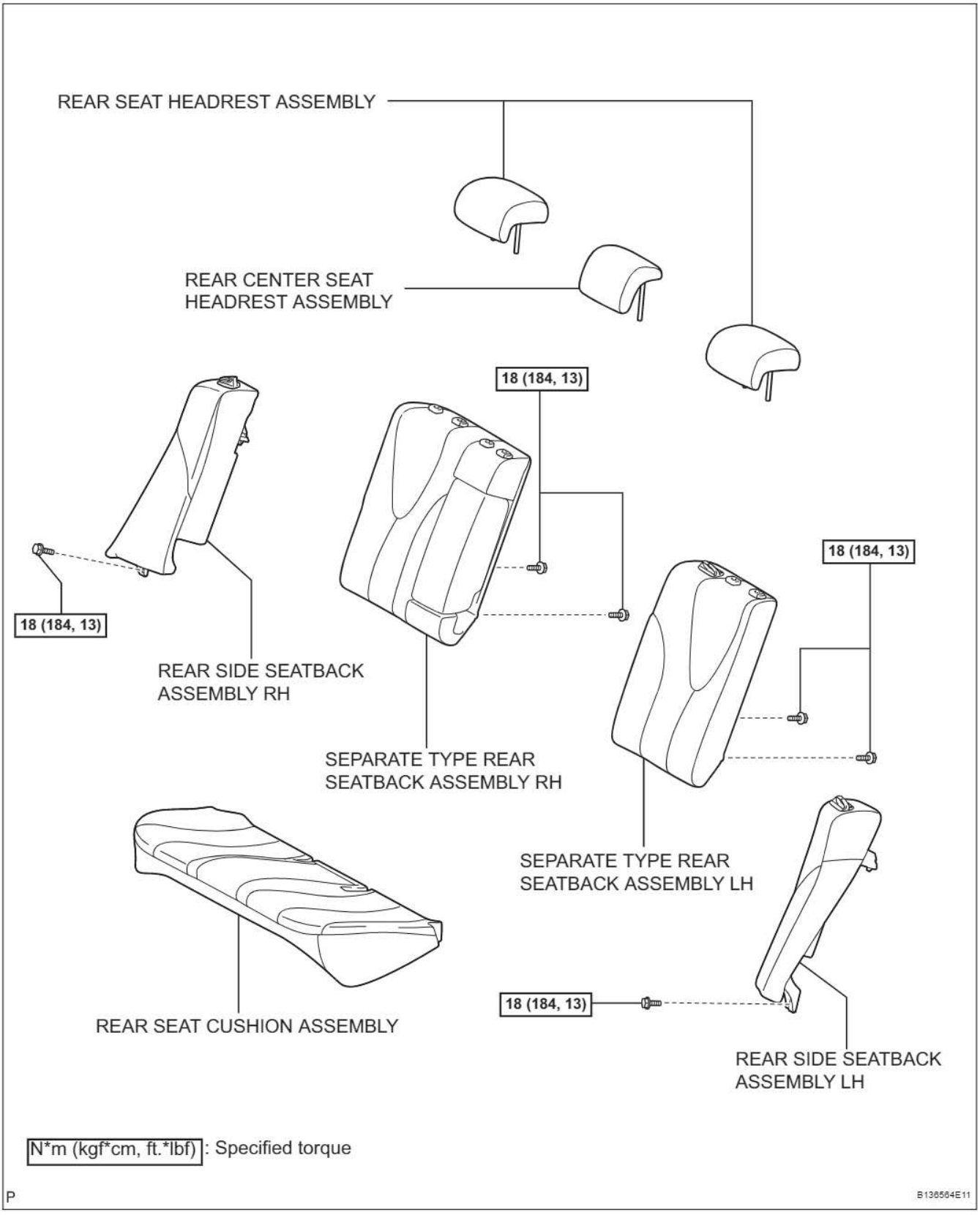


N*m (kgf*cm, ft.*lbf) : Specified torque

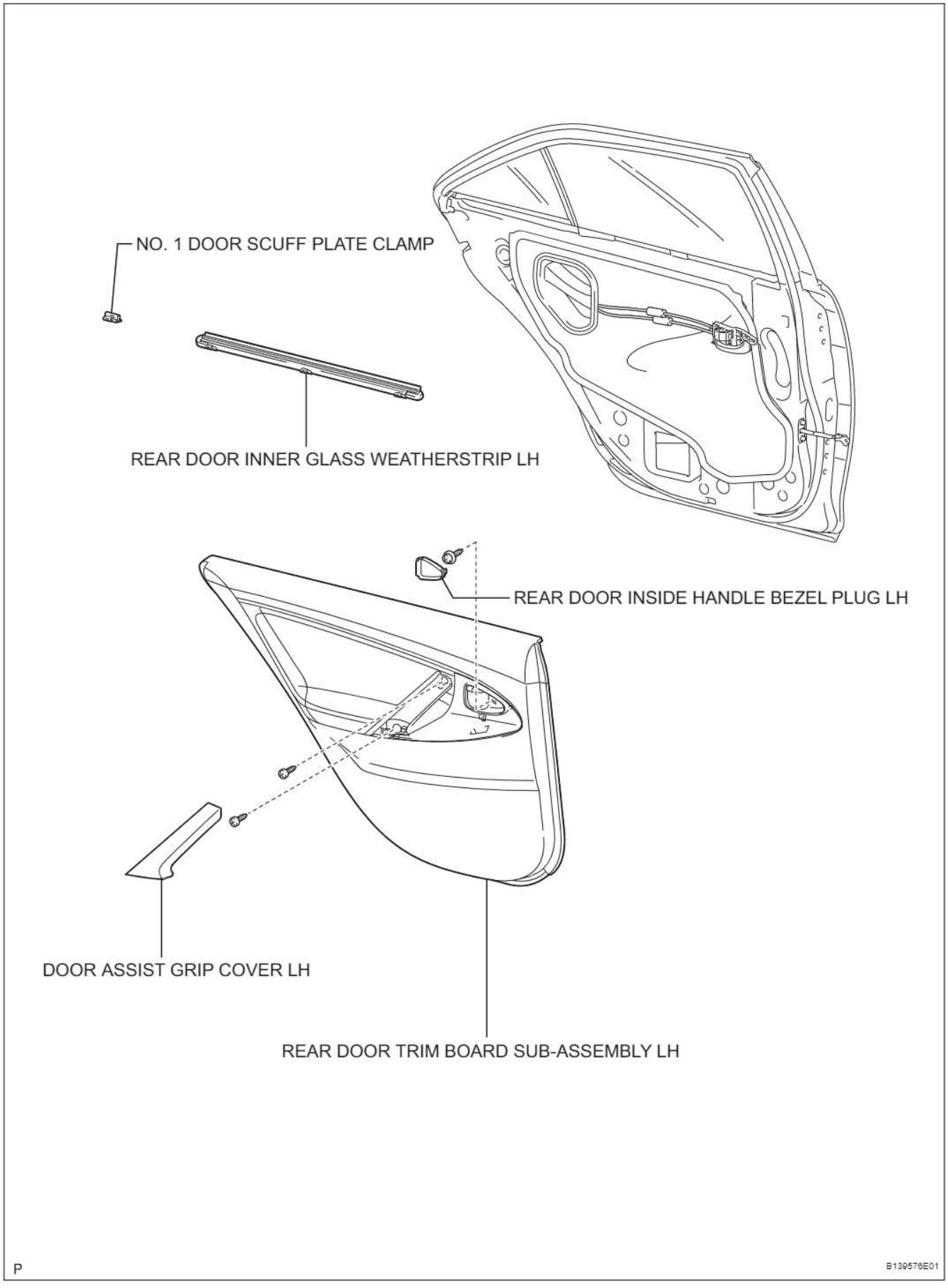
P

B146208E01

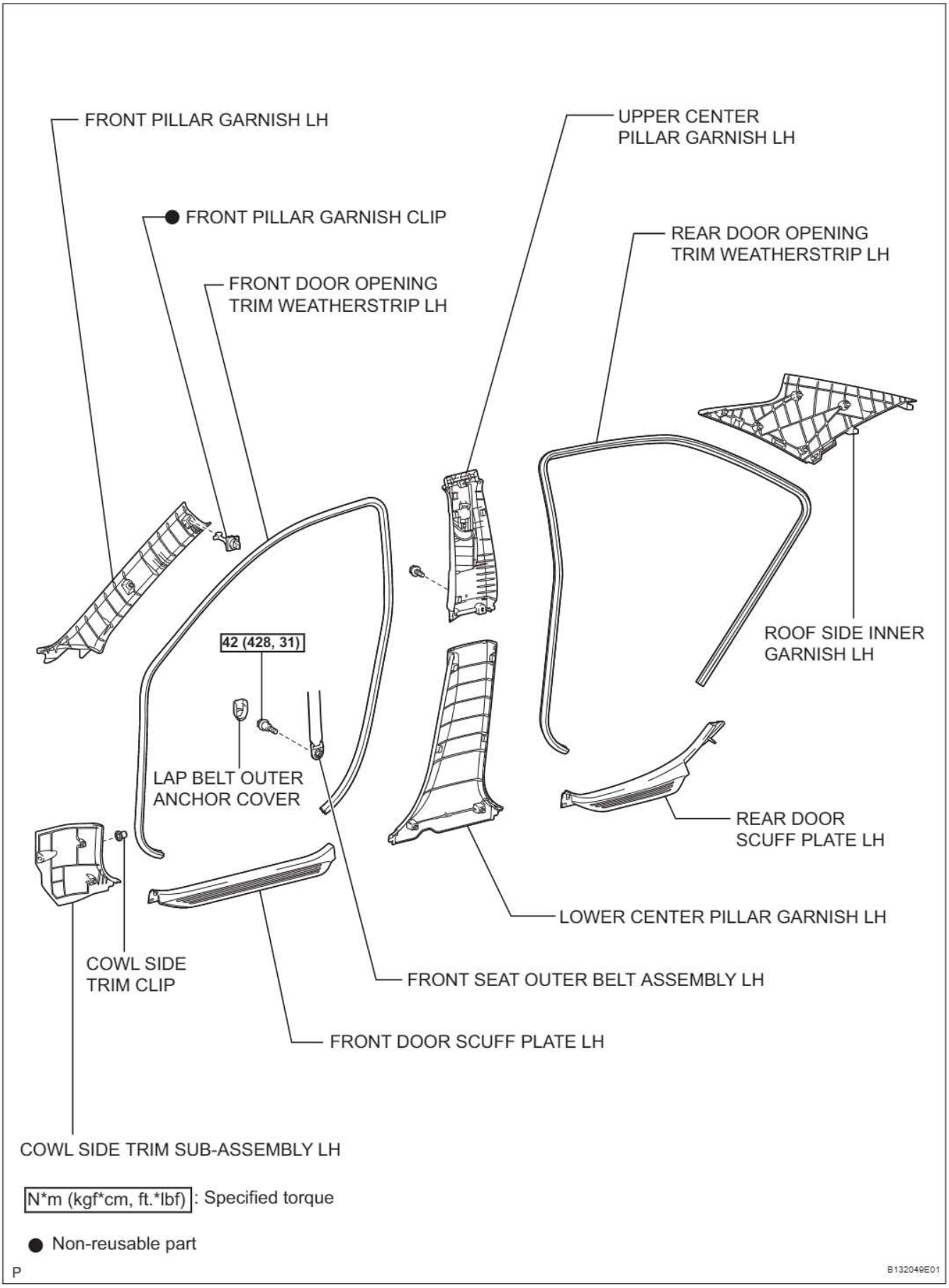
RS


REAR SEAT HEADREST ASSEMBLY
REAR CENTER SEAT HEADREST ASSEMBLY
18 (184, 13)
18 (184, 13)
18 (184, 13)
18 (184, 13)
REAR SIDE SEATBACK ASSEMBLY RH
SEPARATE TYPE REAR SEATBACK ASSEMBLY RH
SEPARATE TYPE REAR SEATBACK ASSEMBLY LH
REAR SEAT CUSHION ASSEMBLY
REAR SIDE SEATBACK ASSEMBLY LH
N*m (kgf*cm, ft.*lbf): Specified torque
P
B136564E11

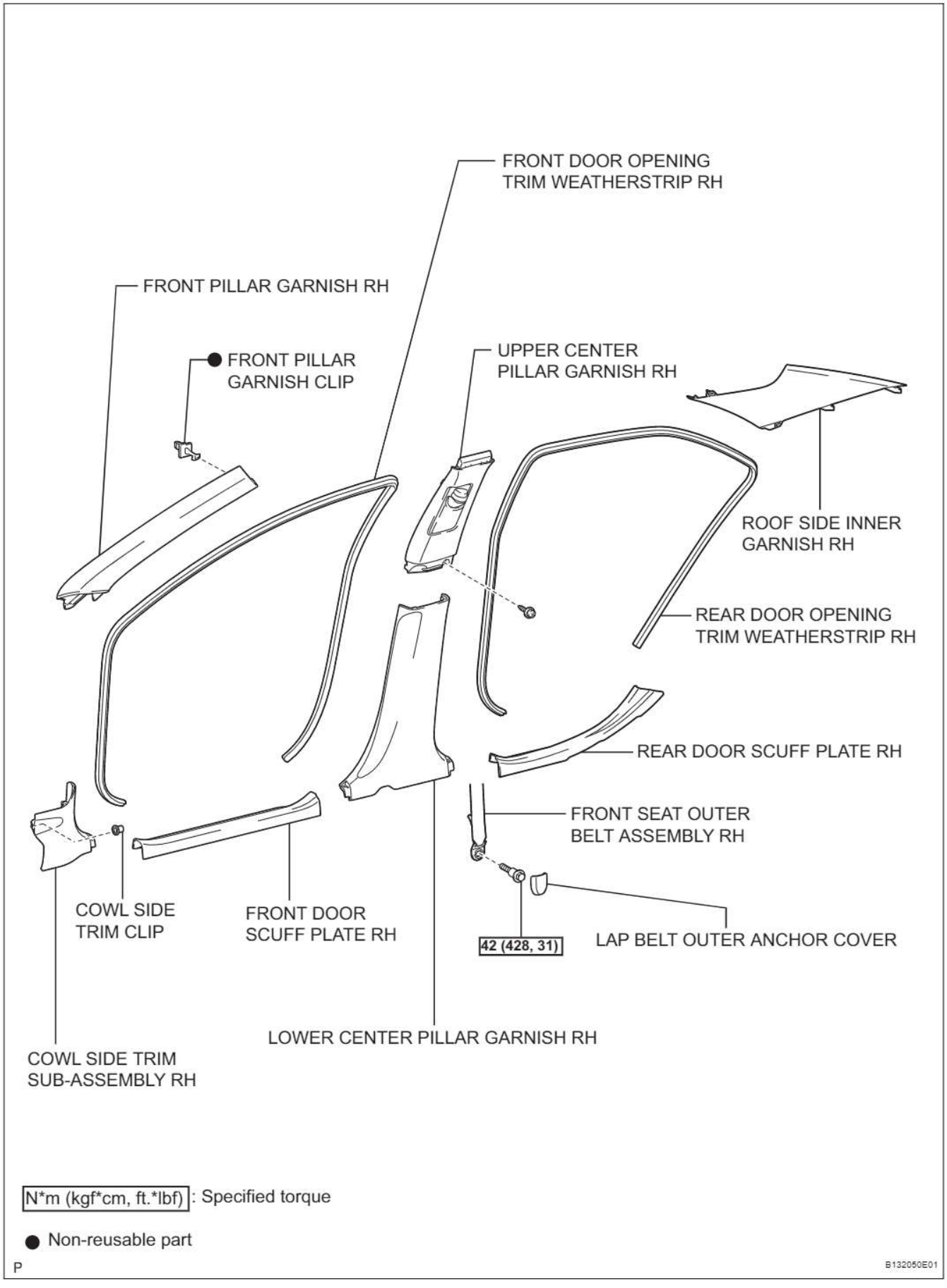
RS


NO. 1 DOOR SCUFF PLATE CLAMP
REAR DOOR INNER GLASS WEATHERSTRIP LH
REAR DOOR INSIDE HANDLE BEZEL PLUG LH
DOOR ASSIST GRIP COVER LH
REAR DOOR TRIM BOARD SUB-ASSEMBLY LH
P
B139576E01

RS

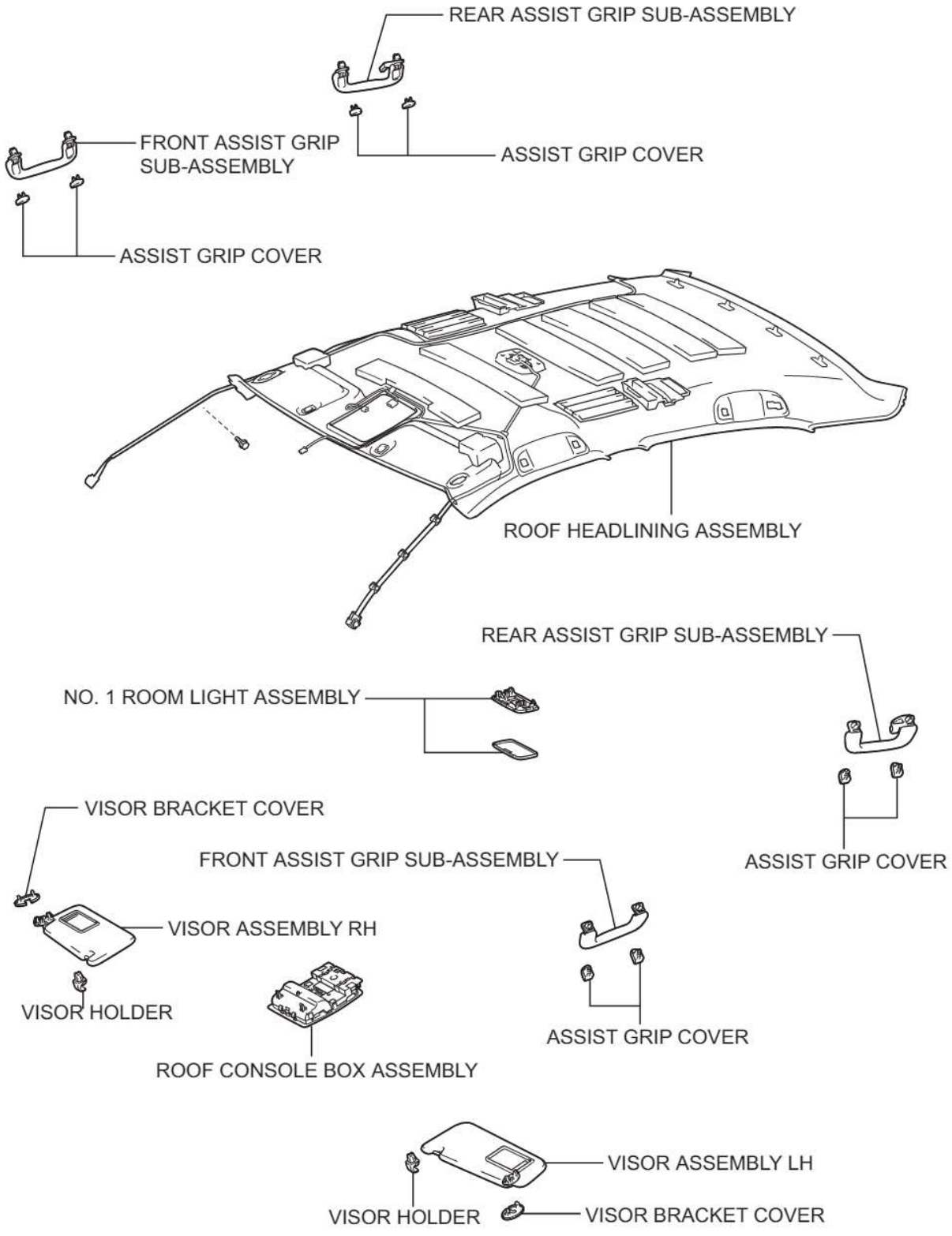

FRONT PILLAR GARNISH LH
FRONT PILLAR GARNISH CLIP
FRONT DOOR OPENING TRIM WEATHERSTRIP LH
UPPER CENTER PILLAR GARNISH LH
REAR DOOR OPENING TRIM WEATHERSTRIP LH
ROOF SIDE INNER GARNISH LH
42 (428, 31)
LAP BELT OUTER ANCHOR COVER
REAR DOOR SCUFF PLATE LH
LOWER CENTER PILLAR GARNISH LH
COWL SIDE TRIM CLIP
FRONT SEAT OUTER BELT ASSEMBLY LH
FRONT DOOR SCUFF PLATE LH
COWL SIDE TRIM SUB-ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
P
B132049E01

RS


FRONT DOOR OPENING TRIM WEATHERSTRIP RH
FRONT PILLAR GARNISH RH
● FRONT PILLAR GARNISH CLIP
UPPER CENTER PILLAR GARNISH RH
ROOF SIDE INNER GARNISH RH
REAR DOOR OPENING TRIM WEATHERSTRIP RH
REAR DOOR SCUFF PLATE RH
FRONT SEAT OUTER BELT ASSEMBLY RH
COWL SIDE TRIM CLIP
FRONT DOOR SCUFF PLATE RH
42 (428, 31)
LAP BELT OUTER ANCHOR COVER
LOWER CENTER PILLAR GARNISH RH
COWL SIDE TRIM SUB-ASSEMBLY RH
N*m (kgf*cm, ft.*lbf): Specified torque
● Non-reusable part
P
B132050E01

RS

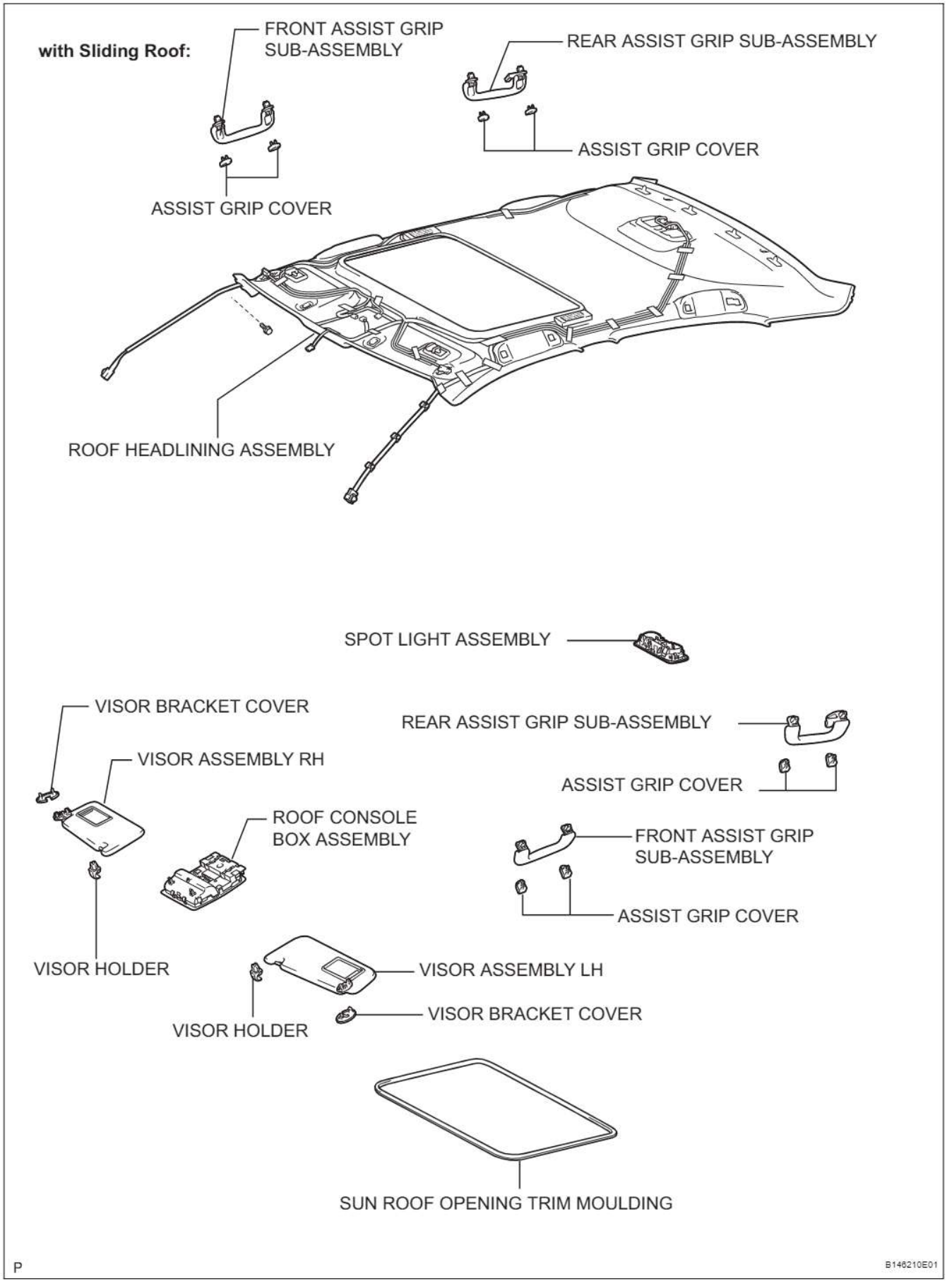
without Sliding Roof:



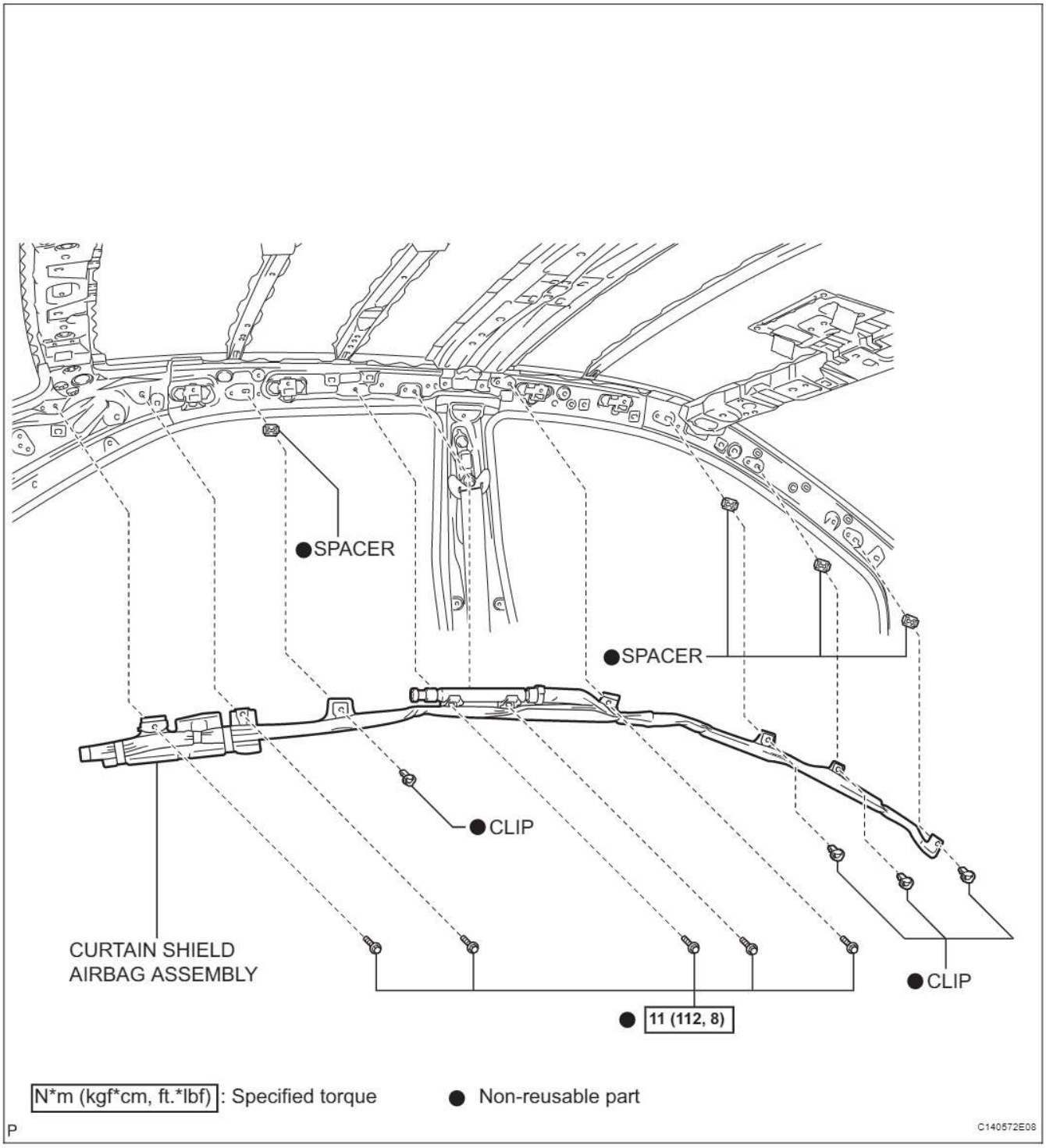
RS

P

B146211E01


with Sliding Roof:
FRONT ASSIST GRIP SUB-ASSEMBLY
REAR ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP COVER
ASSIST GRIP COVER
ROOF HEADLINING ASSEMBLY
SPOT LIGHT ASSEMBLY
VISOR BRACKET COVER
VISOR ASSEMBLY RH
ROOF CONSOLE BOX ASSEMBLY
VISOR HOLDER
REAR ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP COVER
FRONT ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP COVER
VISOR ASSEMBLY LH
VISOR BRACKET COVER
VISOR HOLDER
SUN ROOF OPENING TRIM MOULDING
P
B146210E01

RS

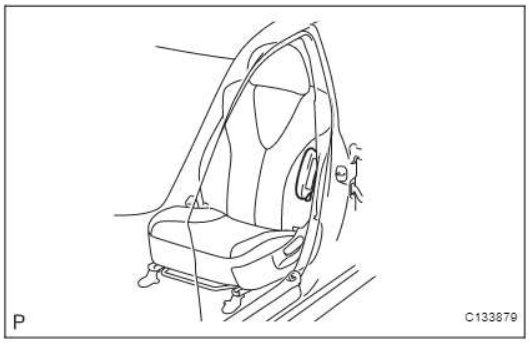

SPACER
SPACER
CLIP
CURTAIN SHIELD
AIRBAG ASSEMBLY
CLIP
11 (112, 8)
N*m (kgf*cm, ft.*lbf): Specified torque
Non-reusable part
P
C140572E08

FRONT SEAT SIDE AIRBAG ASSEMBLY

ON-VEHICLE INSPECTION

1. **FRONT SEAT SIDE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

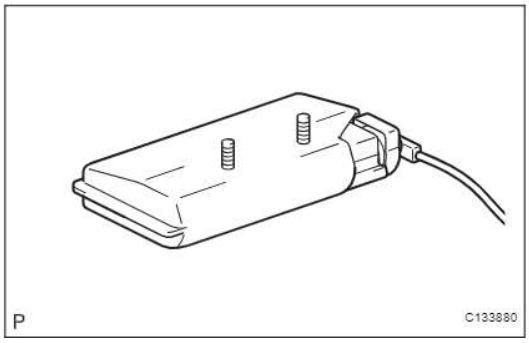
   (b) With the front seat side airbag assembly installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front seat assembly with a new one:
   Cuts, minute cracks or marked discoloration on the front seat back assembly around the front seat side airbag assembly.



2. **FRONT SEAT SIDE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).

   (b) With the front seat side airbag assembly removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front seat side airbag assembly with a new one:
   - Cuts, minute cracks or marked discoloration on the front seat side airbag assembly.
   - Cracks or other damage to the wire harness or connector.

   CAUTION:
   Be sure to follow the correct removal and installation procedures.



RS

DISPOSAL

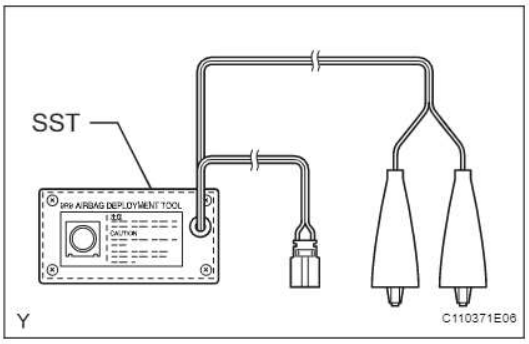
HINT:
When scrapping a vehicle equipped with the SRS or disposing of the front seat side airbag assembly, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

- **Never dispose of a front seat side airbag assembly that has an undeployed airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors where it will not be a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (33 ft) away from the front seat side airbag assembly.**
- **The front seat side airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front seat side airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

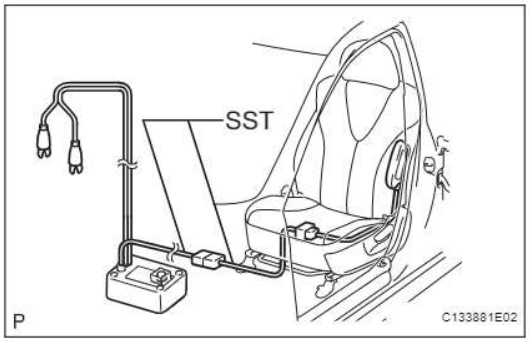
1. **DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)**

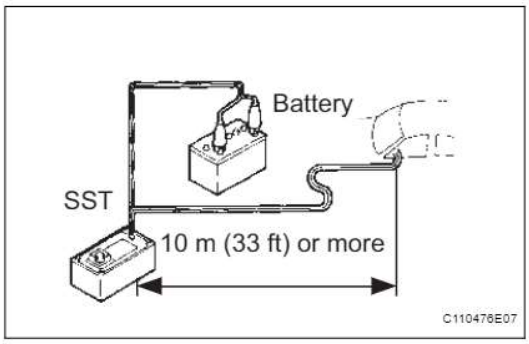
   HINT:
   Prepare a battery as the power source to deploy the airbag.



   (a) Check the function of the SST (See page RS-348).
   (b) Refer to PRECAUTION (See page RS-1).
   (c) Disconnect the cable from the negative battery terminal.
   CAUTION:
   Wait for 90 seconds after disconnecting the cable to prevent airbag deployment.
   (d) Remove the front seat assembly (See page SE-16 for Manual Seat, SE-29 for Power Seat).
   (e) Install the SST.
      (1) Disconnect the connector (yellow colored one) from the front seat side airbag assembly.
      NOTICE:
      When handling the airbag connector, take care not to damage the airbag wire harness.

RS





(2) Connect the SST connector to the front seat side airbag assembly connector.
SST 09082-00700, 09082-00750
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(3) Install the front seat assembly (See page SE-23 for Manual Seat, SE-38 for Power Seat).

(4) Move the SST at least 10 m (33 ft) away from the vehicle front side window.

(5) Maintaining enough clearance for the SST wire harness in the front side window, close all doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.

(6) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.

(f) Deploy the airbag.

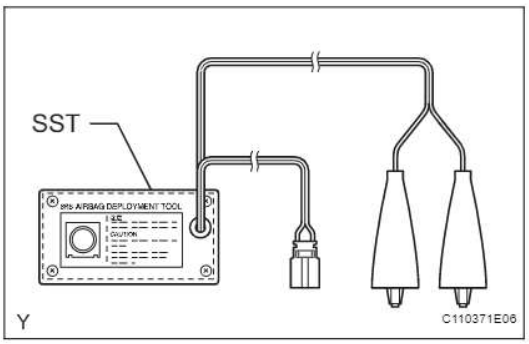
(1) Check that no one is inside the vehicle or within a 10 m (33 ft) radius of the vehicle.

(2) Press the SST activation switch and deploy the airbag.
CAUTION:
- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The front seat side airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front seat side airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:
The airbag is deployed as the LED of the SST activation switch comes on.

2. DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)
NOTICE:
- **When disposing of the front seat side airbag assembly, never use the customer's vehicle to deploy the airbag.**
- **Be sure to follow the procedure detailed below when deploying the airbag.**

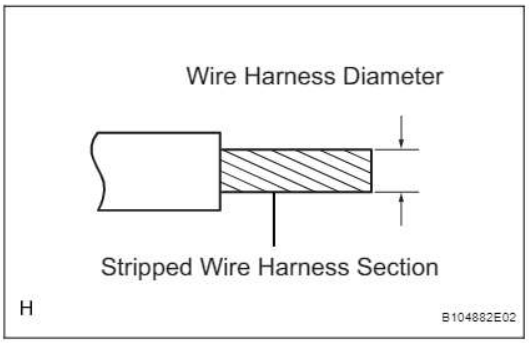
RS



HINT:
Prepare a battery as the power source to deploy the airbag.

(a) Check the function of the SST (See page RS-350).
(b) Remove the front seat side airbag assembly.
  (1) Remove the front seat assembly (See page SE-16 for Manual Seat, SE-29 for Power Seat).
  (2) Remove the 2 nuts and the front seat side airbag assembly from the seat back assembly (See page SE-17 for Manual Seat, SE-30 for Power Seat).

CAUTION:
- **When removing the front seat side airbag assembly, work must be started 90 seconds after the power switch is turned off and the negative (-) terminal cable is disconnected from the battery.**
- **When storing the front seat side airbag assembly, keep the airbag deployment side facing upward.**



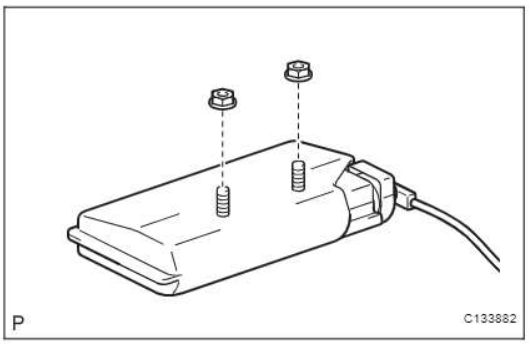
(c) Using a service-purpose wire harness for the vehicle, tie down the front seat side airbag assembly to the tire.

Wire harness:
Stripped wire harness section
1.25 mm^2 or more (0.0019 $in.^2$ or more)

HINT:
To calculate the area of the stripped wire harness section:

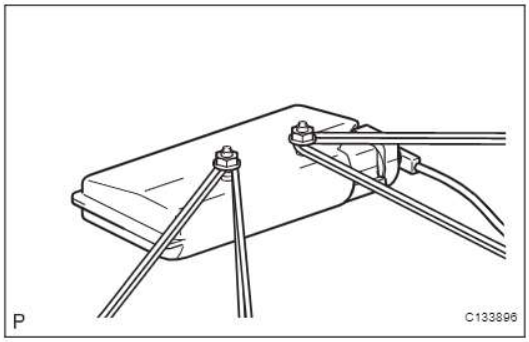
Area = 3.14 x $(Diameter)^2$ divided by 4

CAUTION:
If the wire harness is too thin or an alternative object is used to tie down the front seat side airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with an area of at least 1.25 mm^2 (0.0019 $in.^2$).

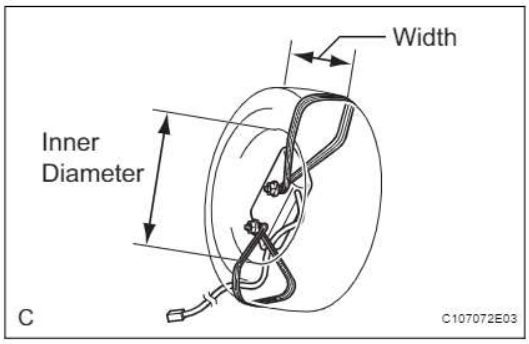


  (1) Install the 2 nuts to the front seat side airbag assembly.

RS



(2) Wind the wire harness around the stud bolts of the front seat side airbag assembly as shown in the illustration.

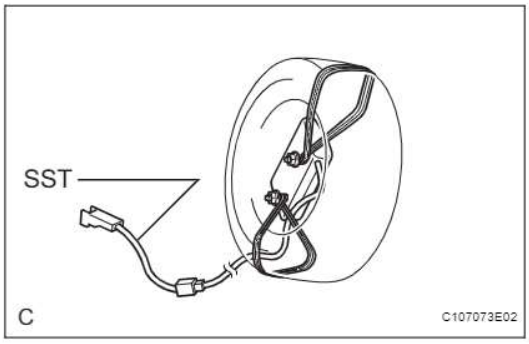


(3) Position the front seat side airbag assembly inside the tire.

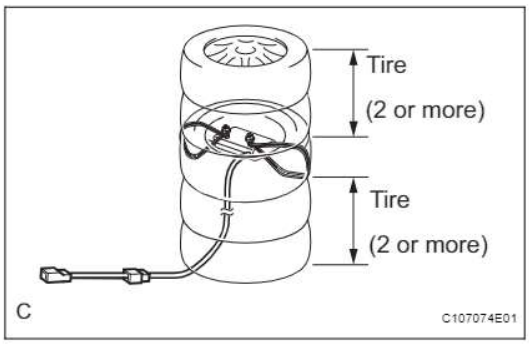
Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.17 in.)
CAUTION:

- **Make sure that the wire harness is tight. If there is slack in wire harness, the front seat side airbag assembly may become loose due to the shock when the airbag is deployed.**
- **Always tie down the front seat side airbag assembly with the airbag deployment direction facing inside the tire.**

NOTICE:
The tire will be marked by the airbag deployment, so use an extra tire.

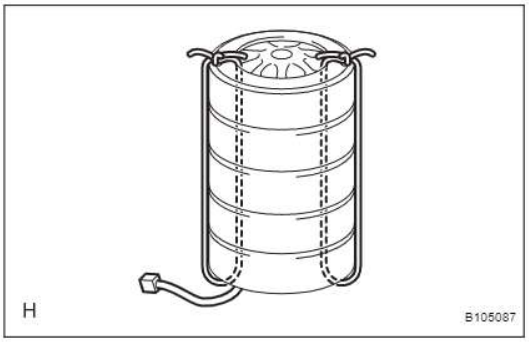


(d) Install the SST.
(1) Connect the SST connector to the front seat side airbag assembly connector.
SST 09082-00750

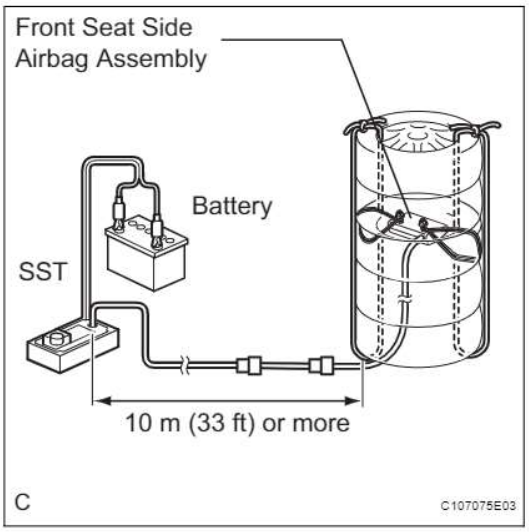


(e) Place the tires.
(1) Place at least 2 tires under the tire which the front seat side airbag assembly is tied to.
(2) Place at least 2 tires over the tire which the front seat side airbag assembly is tied to. The top tire should have the disc wheel installed.
NOTICE:
Do not place the SST connector under the tire because it could be damaged.

RS

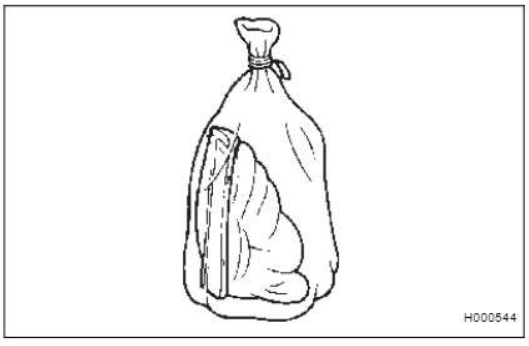


(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. Looseness in the wire harness results in the tires coming free due to the shock when the airbag is deployed.



(f) Install the SST.
(1) Connect the SST connector.
SST 09082-00700
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the tire.
(2) Move the SST at least 10 m (33 ft) away from the airbag tied down to the tire.

(g) Deploy the airbag.
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire which the front seat side airbag assembly is tied to.
(3) Press the SST activation switch and deploy the airbag.
CAUTION:
When deploying the airbag, make sure that no one is near the tire.
HINT:
The airbag is deployed as the LED of the SST activation switch comes on.



(h) Dispose of the front seat side airbag assembly.
CAUTION:
- **The front seat side airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag assembly with a deployed airbag.**
- **Do not apply water, etc. to a front seat side airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

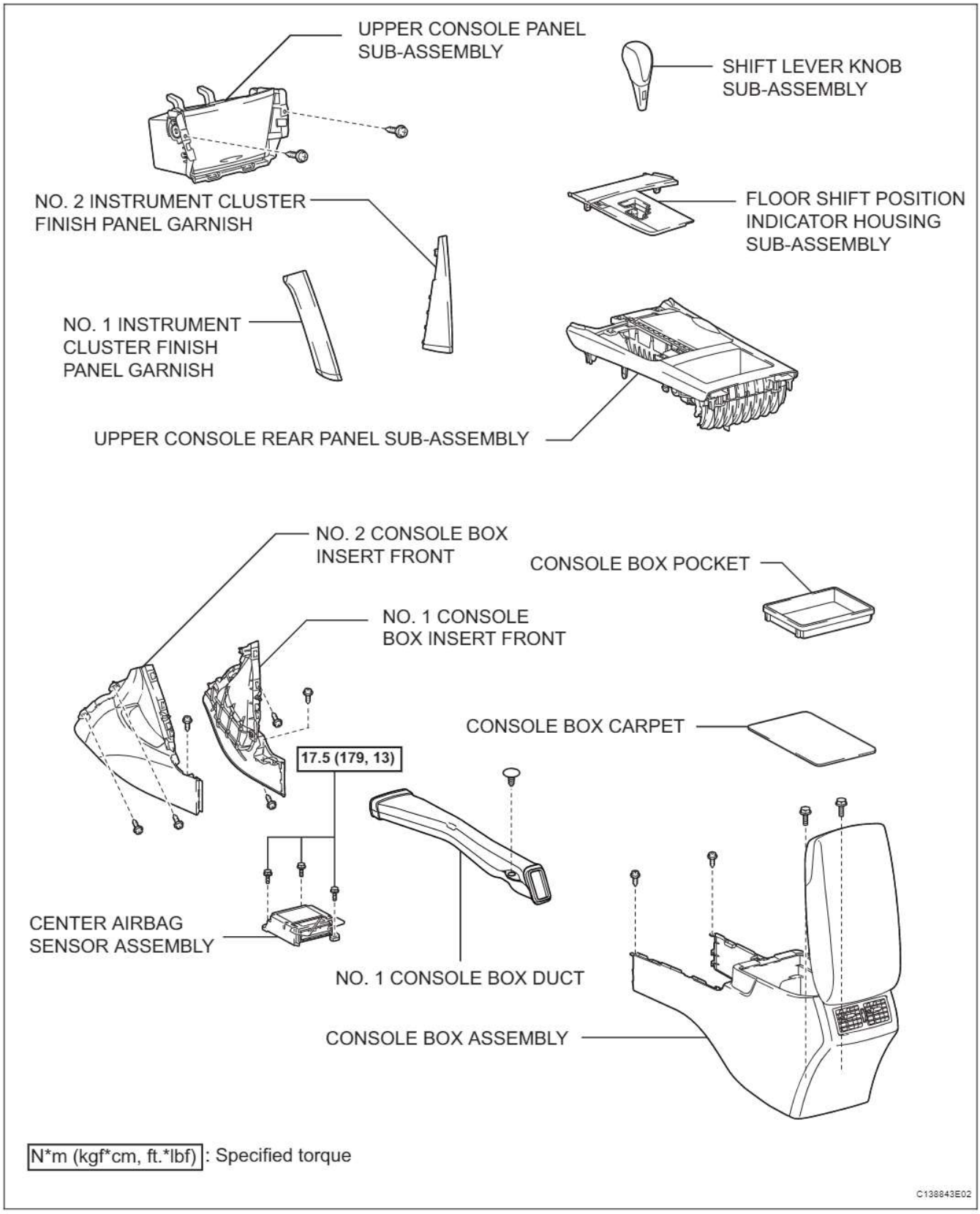
(1) Remove the front seat side airbag assembly from the tire.

RS

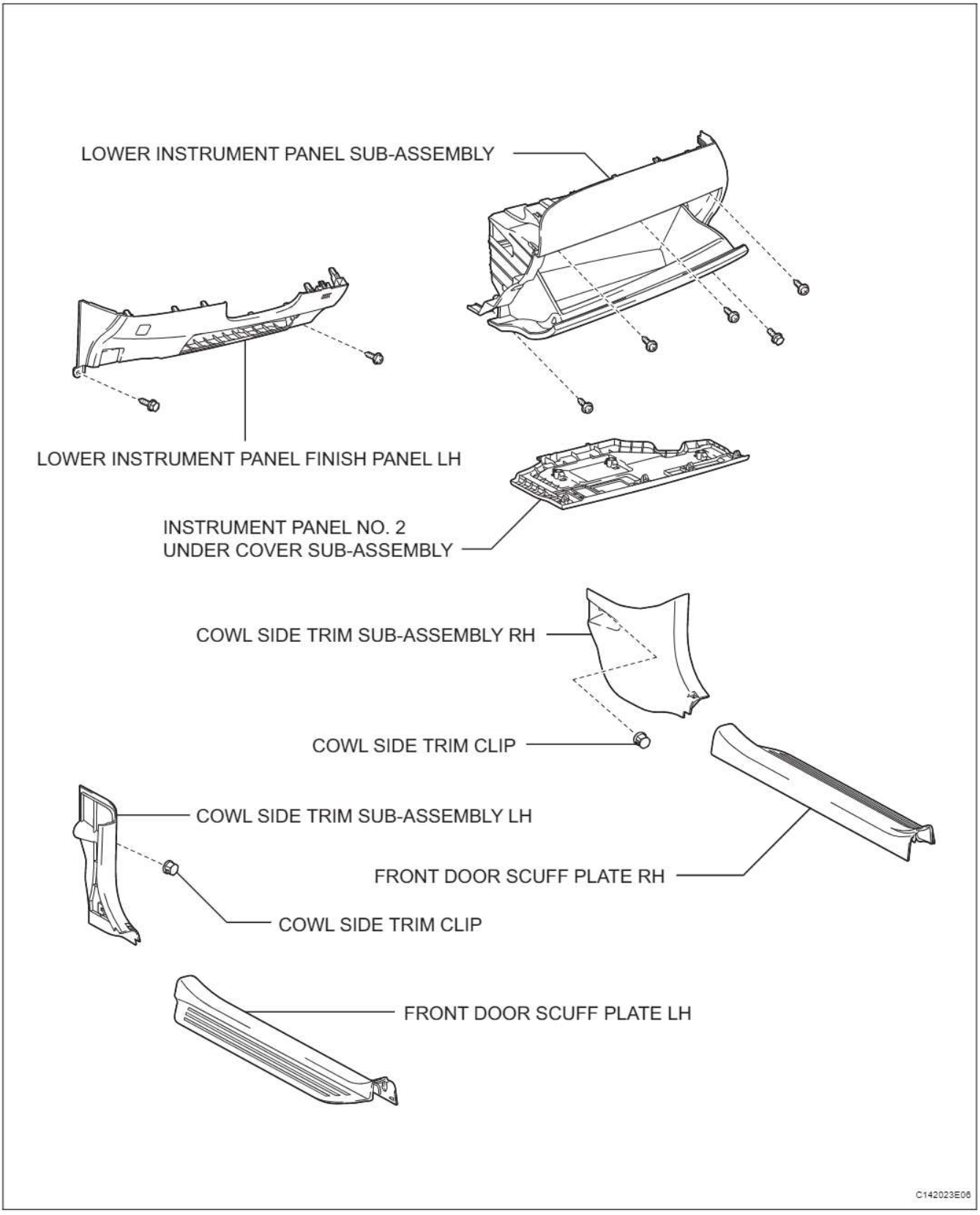
(2) Place the front seat side airbag assembly in a plastic bag, tie it tightly and dispose of it as other general part disposal.

CENTER AIRBAG SENSOR ASSEMBLY

COMPONENTS



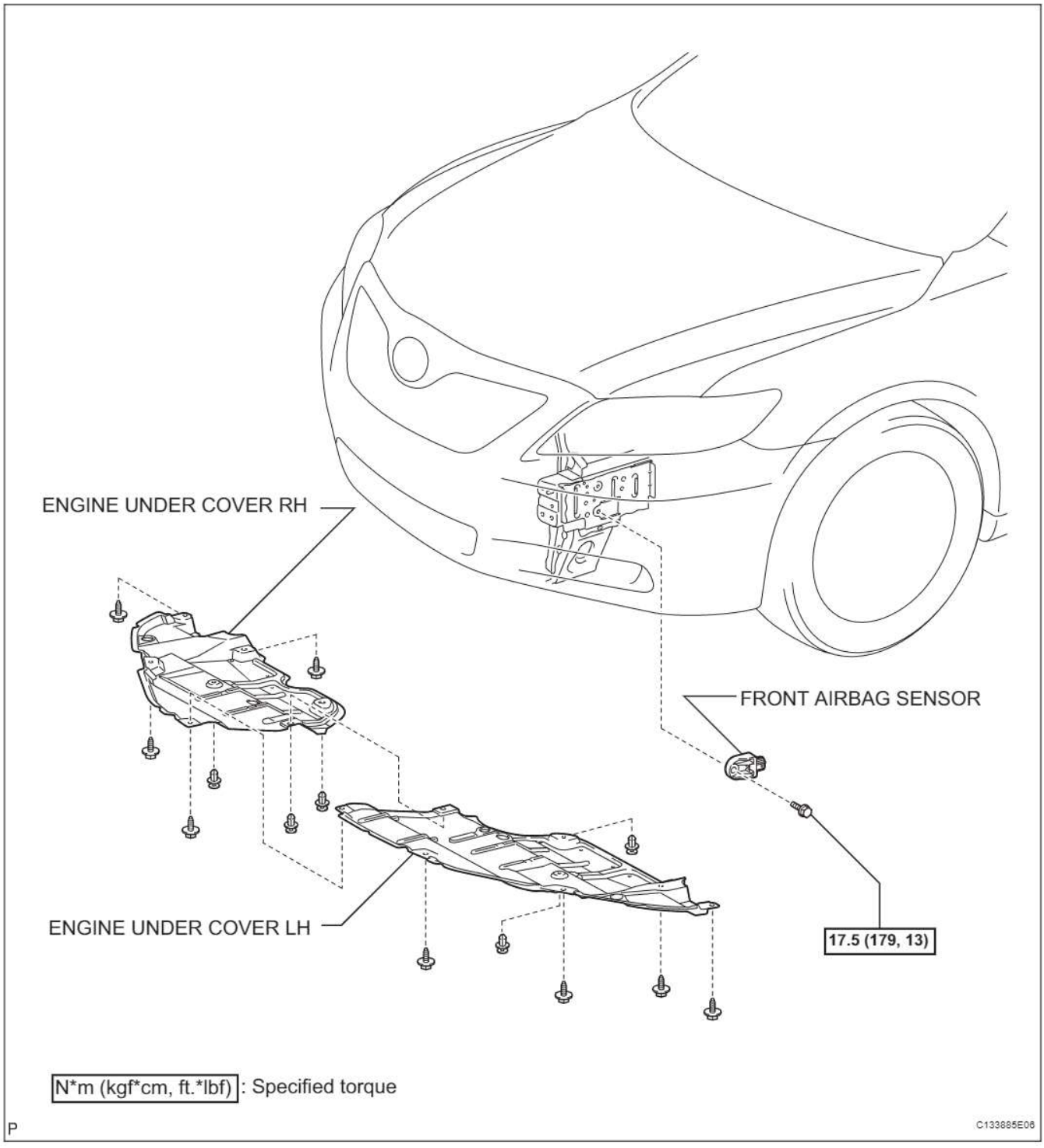
RS


LOWER INSTRUMENT PANEL SUB-ASSEMBLY
LOWER INSTRUMENT PANEL FINISH PANEL LH
INSTRUMENT PANEL NO. 2
UNDER COVER SUB-ASSEMBLY
COWL SIDE TRIM SUB-ASSEMBLY RH
COWL SIDE TRIM CLIP
COWL SIDE TRIM SUB-ASSEMBLY LH
FRONT DOOR SCUFF PLATE RH
COWL SIDE TRIM CLIP
FRONT DOOR SCUFF PLATE LH
C142023E06

RS

FRONT AIRBAG SENSOR

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **INSPECT FRONT AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

2. **INSPECT FRONT AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) When the front bumper of the vehicle or its area is damaged, check if there is any damage to the front airbag sensor. If there are any defects as mentioned below, replace the front airbag sensor with a new one:
   - Cracks, dents or chips on the sensor housing.
   - Cracks or other damage to the connector.
   - Peeling off of the label or damage to the serial number.

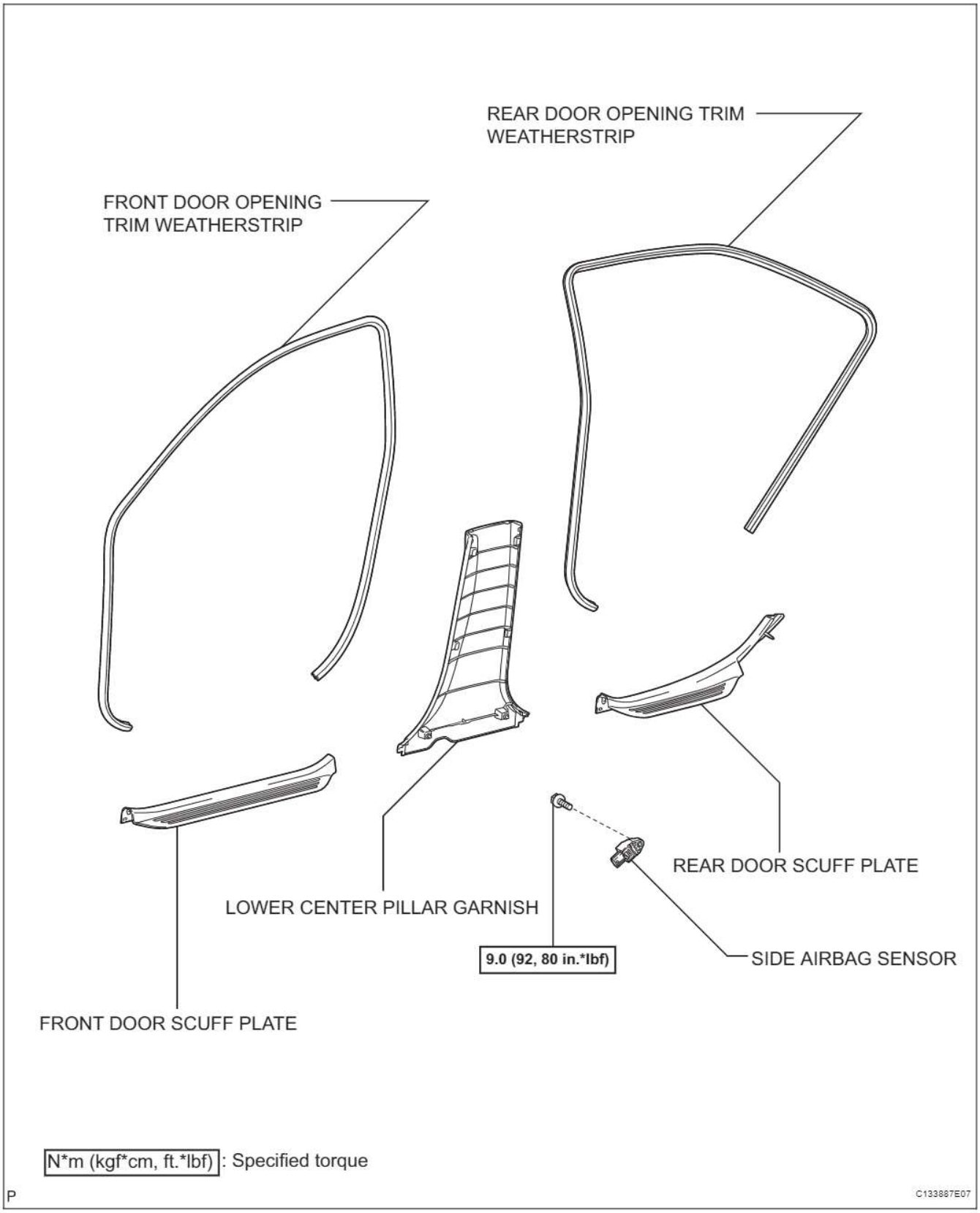
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

3. **INSPECT FRONT AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)**
   (a) Replace the front airbag sensor.
   CAUTION:
   Be sure to follow the correct removal and installation procedures.
   HINT:
   The front airbag sensor on the impacted side should be replaced after the steering pad, front passenger airbag assembly or driver side knee airbag assembly has deployed.

RS

SIDE AIRBAG SENSOR

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **INSPECT SIDE AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

2. **INSPECT SIDE AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) When the center pillar of the vehicle or its area is damaged, check if there is any damage to the side airbag sensor. If there are any defects as mentioned below, replace the side airbag sensor with a new one:
   - Cracks, dents or chips on the sensor housing.
   - Cracks or other damage to the connector.
   - Peeling off of the label or damage to the serial number.

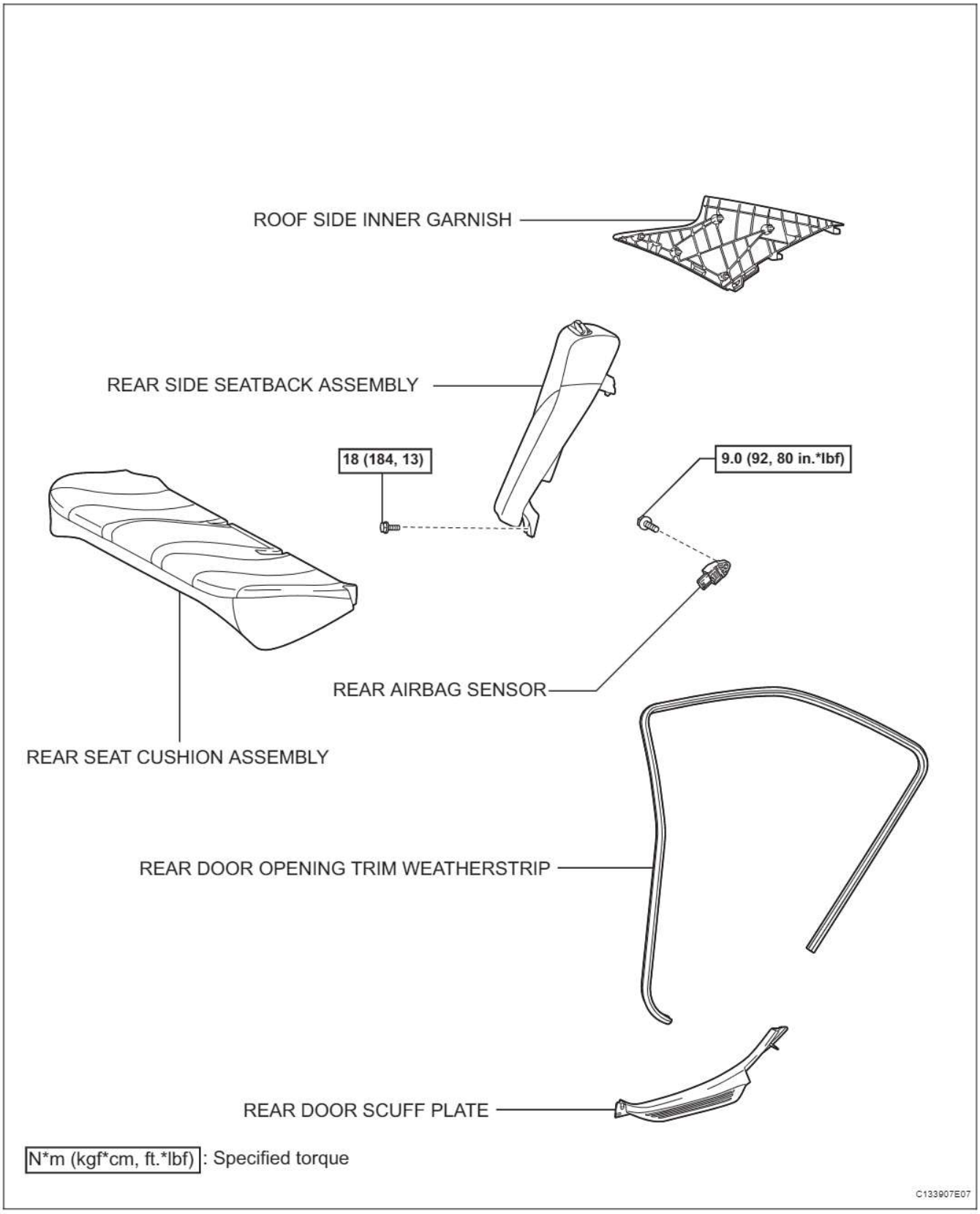
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

3. **INSPECT SIDE AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)**
   (a) Replace the side airbag sensor.
   CAUTION:
   Be sure to follow the correct removal and installation procedures.
   HINT:
   The side airbag sensor on the impacted side should be replaced after the front seat side airbag assembly and curtain shield airbag assembly have deployed.

RS

REAR AIRBAG SENSOR

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **INSPECT REAR AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

2. **INSPECT REAR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) When the quarter panel of the vehicle or its area is damaged, check if there is any damage to the rear airbag sensor. If there are any defects as mentioned below, replace the rear airbag sensor with a new one:
   - Cracks, dents or chips on the sensor housing.
   - Cracks or other damage to the connector.
   - Peeling off of the label or damage to the serial number.

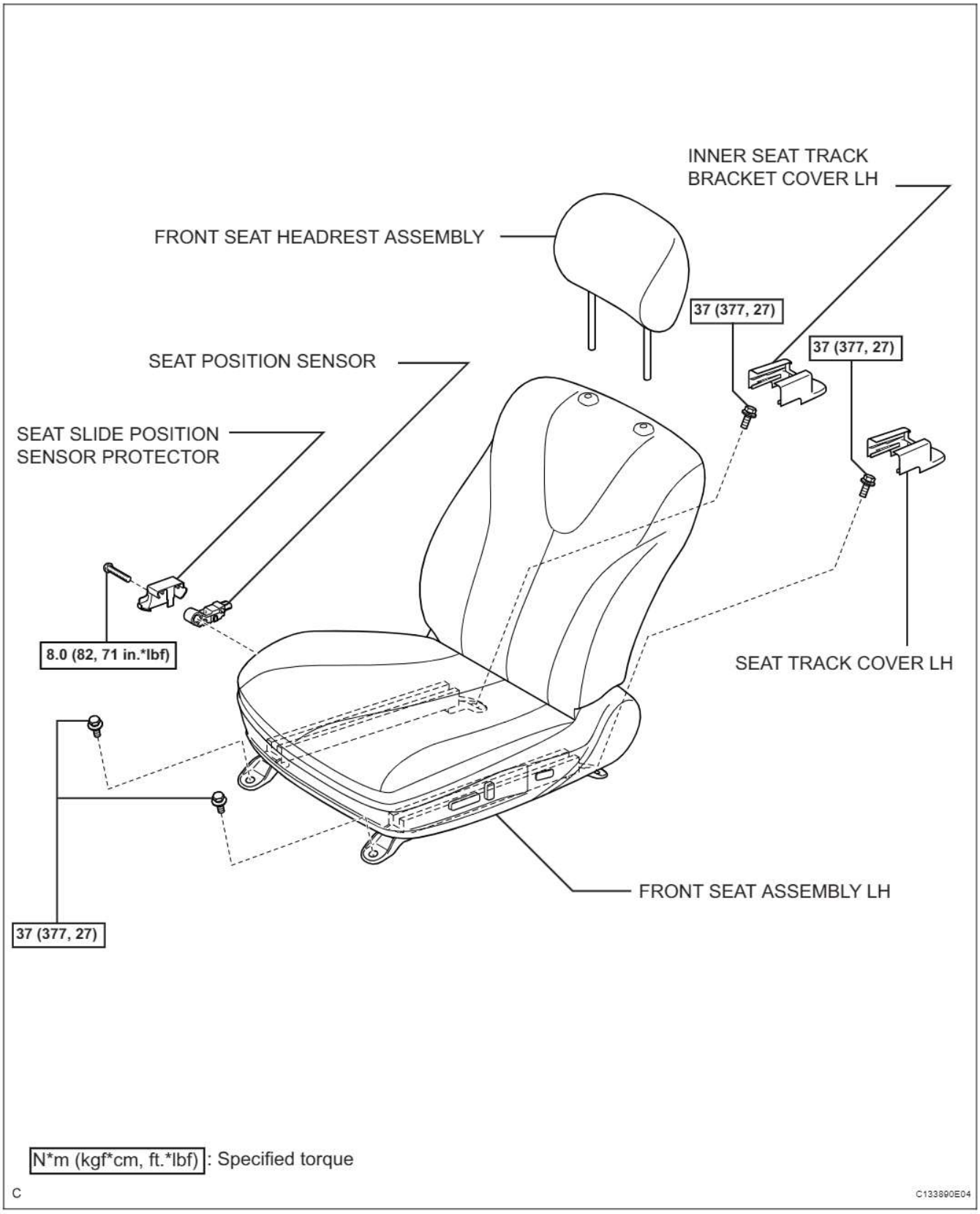
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

3. **INSPECT REAR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)**
   (a) Replace the rear airbag sensor.
   CAUTION:
   Be sure to follow the correct removal and installation procedures.
   HINT:
   The rear airbag sensor on the impacted side should be replaced after the curtain shield airbag assembly has deployed.

RS

SEAT POSITION SENSOR

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **INSPECT SEAT POSITION SENSOR (VEHICLE NOT INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).

2. **INSPECT SEAT POSITION SENSOR (VEHICLE INVOLVED IN COLLISION)**
   (a) Perform a diagnostic system check (See page RS-33).
   (b) Even if the airbag was not deployed, check if there is any damage to the seat position sensor.
   If there are any defects as mentioned below, replace the seat position sensor with a new one:
   - Cracks, dents or chips on the sensor housing.
   - Cracks or other damage to the connector.

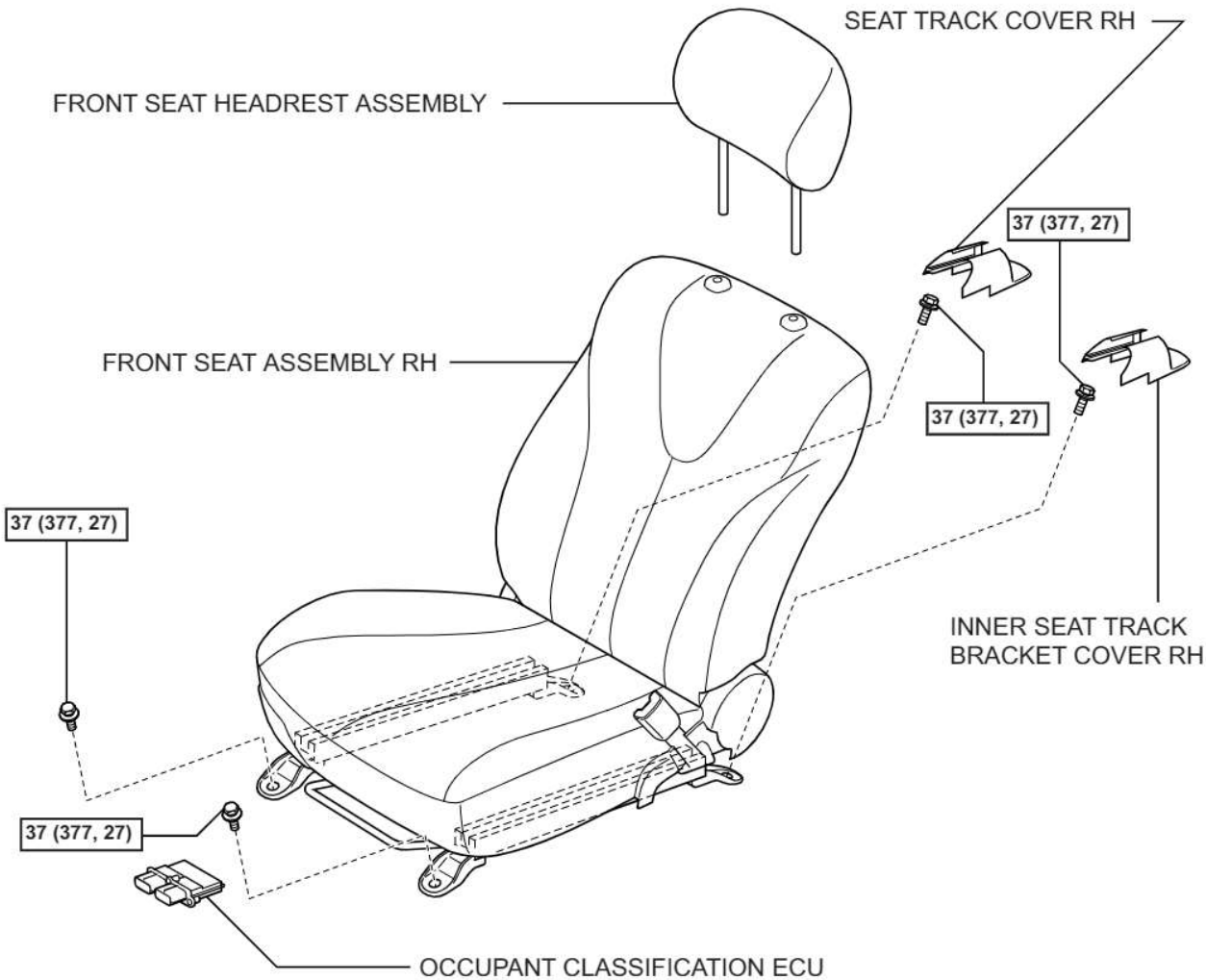
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

RS

OCCUPANT CLASSIFICATION ECU

COMPONENTS

for Manual Seat:



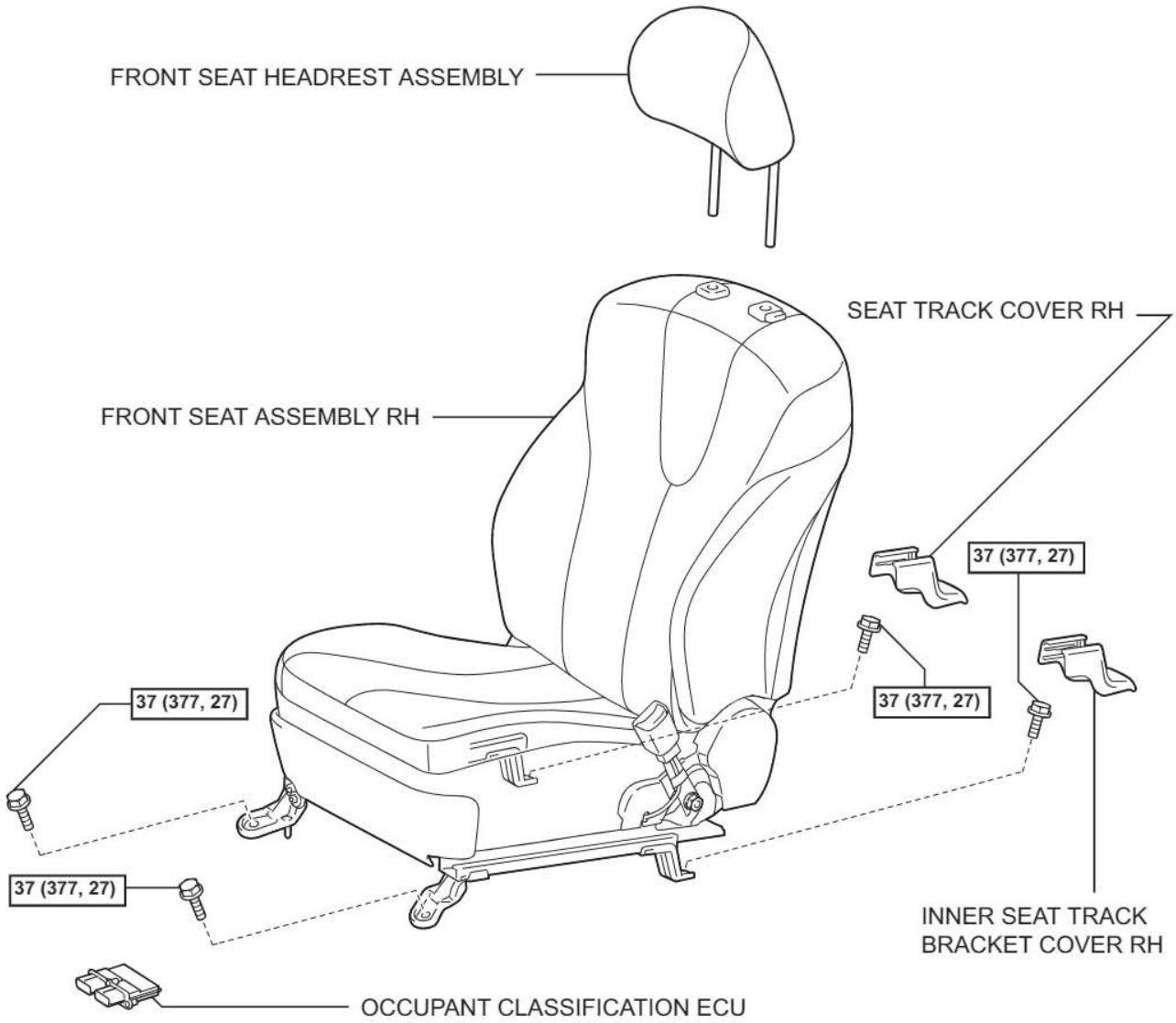
N*m (kgf*cm, ft.*lbf): Specified torque

C

C133894E03

RS

for Power Seat:



N*m (kgf*cm, ft.*lbf) : Specified torque

C138924E04

RS