AIRBAG SYSTEM

PRECAUTION

CAUTION:

- **The vehicle is equipped with SRS, which consists of a driver airbag, front passenger airbag, side airbags and curtain shield airbags. 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 more, 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 ignition switch is turned to the LOCK position and the negative (-) terminal cable is disconnected from the battery. (The SRS is equipped with a back-up power source, so if work is started within 90 seconds after disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed.)**
- **Do not directly expose the Steering pad, front panel passenger airbag assembly, Center airbag sensor assembly, front airbag sensor, front seat side airbag assembly, side airbag sensor, curtain shield airbag assembly, rear airbag sensor, seat position sensor or occupant classification ECU to hot air or flames.**
- **Be sure to perform the initialization of the occupant classification ECU if any of the following conditions occur (See page RS-357 or RS-480). If the initialization is not performed, the SRS may not operate properly.**
  - **The occupant classification ECU is replaced.**
  - **Accessories (seatback tray, seat cover, etc.) are installed onto the vehicle.**
  - **The passenger seat is removed from the vehicle, and then reinstalled or replaced.**
  - **The passenger airbag ON/OFF indicator light (OFF) comes on when the passenger seat is not occupied.**
  - **The vehicle is brought to the workshop for repair due to an accident or collision.**

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, Center airbag sensor assembly, front airbag sensor, front seat side airbag assembly, side airbag sensor, Curtain shield airbag assembly, rear airbag sensor, seat position sensor and occupant classification ECU 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.**
- **Never disassemble or repair the Steering pad, front passenger airbag assembly, Center airbag sensor assembly, front airbag sensor, front seat side airbag assembly, side airbag sensor, Curtain shield airbag assembly, rear airbag sensor, seat position sensor or occupant classification ECU in order to reuse it.**
- **If the Steering pad, front passenger airbag assembly, Center airbag sensor assembly, front airbag sensor, front seat side airbag assembly, side airbag sensor, curtain shield airbag assembly, rear airbag sensor, seat position sensor or occupant classification ECU has been dropped, or if there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting the electrical circuits.**
- **Information labels are attached to the periphery of the SRS components. Follow the instructions in the cautions.**
- **After work on the SRS is completed, perform the SRS warning light check (See page RS-28).**
- **When the negative (-) terminal cable is disconnected from the battery, the memory will be cleared. Thus, be sure to make a record of the contents stored in each system before starting work. When the work is finished, reset each system, as it was before. Never use a back-up power supply from outside the vehicle to avoid erasing the memory in any system.**
- **If the vehicle is equipped with a mobile communication system, refer to the precaution in the INTRODUCTION section.**

1. HANDLING PRECAUTIONS FOR AIRBAG SENSORS

HINT:

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

- Center Airbag Sensor assembly
- Front Airbag Sensor LH
- Front Airbag Sensor RH
- Side Airbag Sensor LH

RS

- Side Airbag Sensor RH
- Rear Airbag Sensor LH
- Rear Airbag Sensor RH

(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).

(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 has been dropped during the operation or transportation.

(d) Do not disassemble the airbag sensors.

(e) If engine is run immediately after reconnecting negative battery terminal cable, keep it at less than 2000rpm for at least 1 minute.

(f) If the engine exceeds 2,000rpm, the clutch is automatically disengaged by the compressor protection control system.

2. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

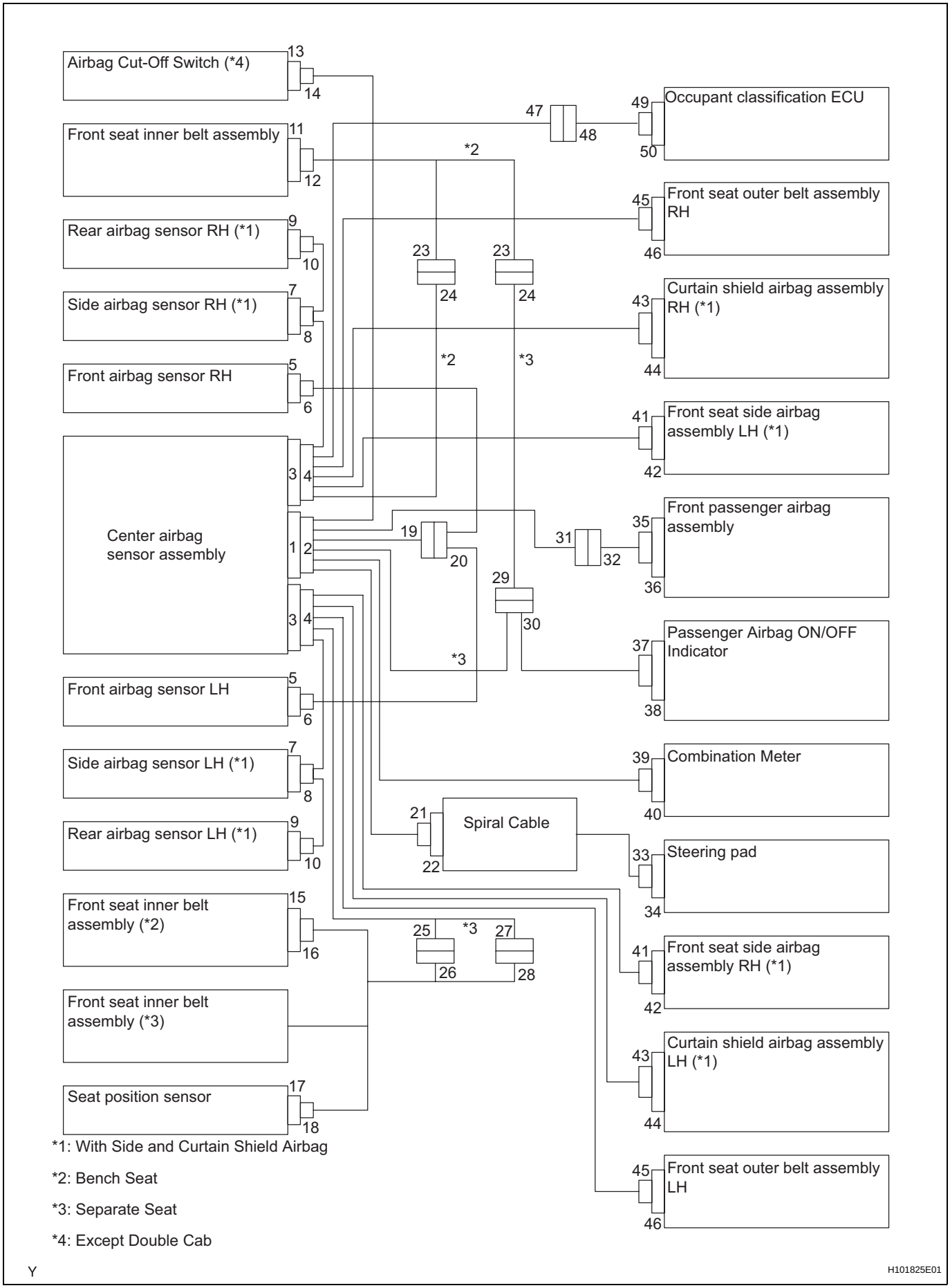
(a) When the airbag has not deployed, check for DTCs by checking the SRS warning light blinking patterns or using a intelligent tester. If any DTCs are present, perform troubleshooting for those DTCs.

(b) When any of the airbags have deployed, replace the airbag sensor and check the installation condition.

3. SRS CONNECTORS

HINT:

SRS connectors are located as shown in the following illustration.


Airbag Cut-Off Switch (*4)
13
14
Front seat inner belt assembly
11
12
Rear airbag sensor RH (*1)
9
10
Side airbag sensor RH (*1)
7
8
Front airbag sensor RH
5
6
Center airbag sensor assembly
3
4
1
2
3
4
Front airbag sensor LH
5
6
Side airbag sensor LH (*1)
7
8
Rear airbag sensor LH (*1)
9
10
Front seat inner belt assembly (*2)
15
16
Front seat inner belt assembly (*3)
Seat position sensor
17
18
47
48
49
50
Occupant classification ECU
*2
45
46
Front seat outer belt assembly RH
23
24
23
24
43
44
Curtain shield airbag assembly RH (*1)
*2
*3
41
42
Front seat side airbag assembly LH (*1)
19
20
31
32
35
36
Front passenger airbag assembly
29
30
*3
37
38
Passenger Airbag ON/OFF Indicator
39
40
Combination Meter
21
22
Spiral Cable
33
34
Steering pad
25
26
*3
27
28
41
42
Front seat side airbag assembly RH (*1)
43
44
Curtain shield airbag assembly LH (*1)
45
46
Front seat outer belt assembly LH
*1: With Side and Curtain Shield Airbag
*2: Bench Seat
*3: Separate Seat
*4: Except Double Cab
Y
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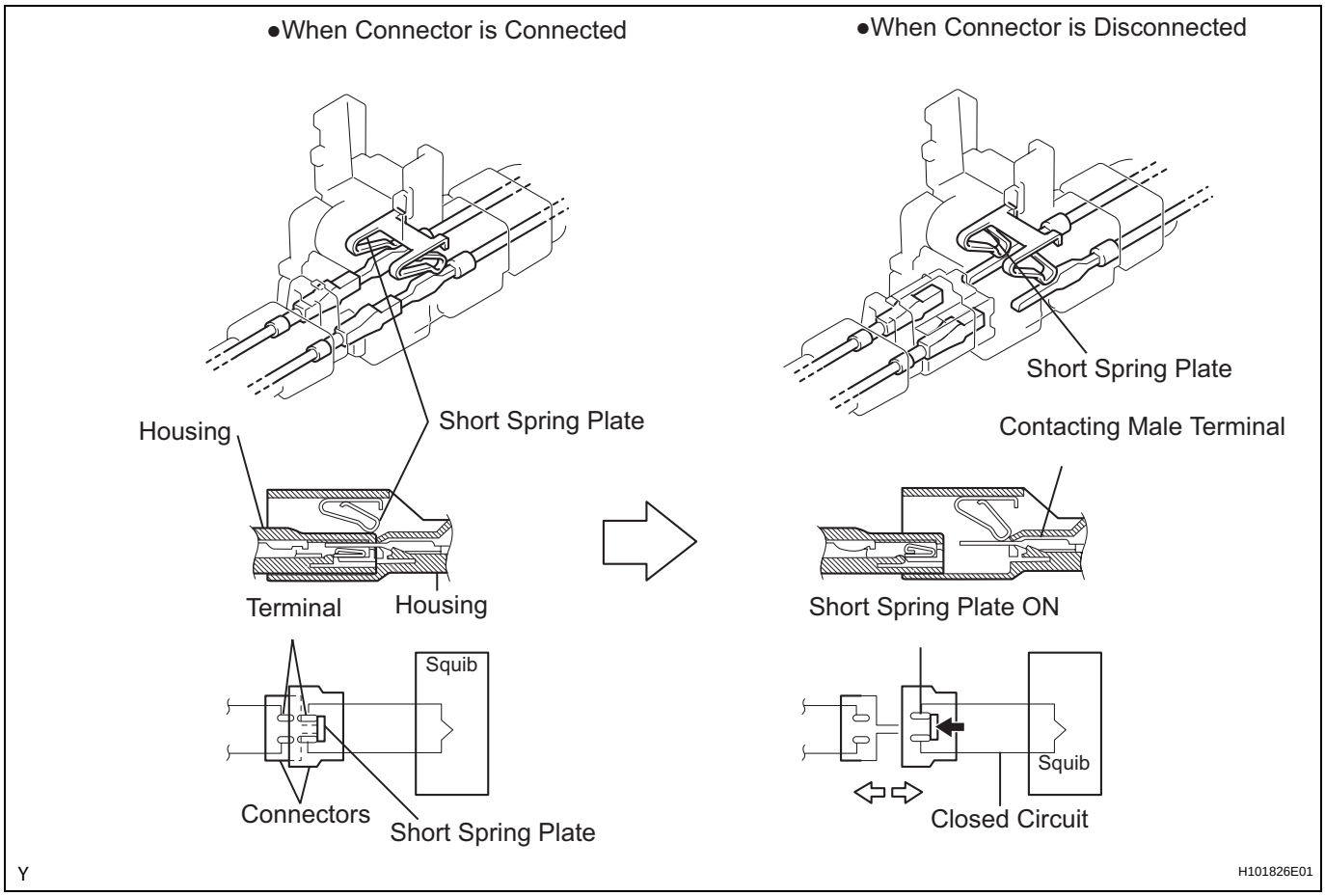
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No.	Connector Type	Application
(1)	Terminal Twin-Lock Mechanism	Connectors 2, 4, 6, 8, 10, 19, 20, 21, 23, 24, 31, 41
(2)	Activation Prevention Mechanism	Connectors 2, 4, 22, 32, 42
(3)	Half Connection Prevention Mechanism	Connectors 6, 8, 10, 20, 21, 41
(4)	Connector Lock Mechanism (1)	Connectors 19, 25, 27, 33, 35, 43, 45
(5)	Connector Lock Mechanism (2)	Connectors 2, 4
(6)	Improper Connection Prevention Lock Mechanism	Connectors 1, 3

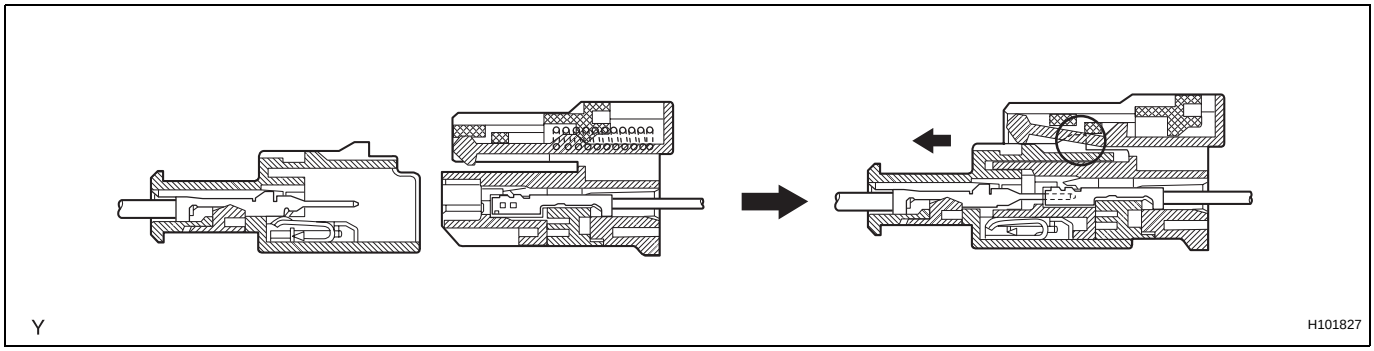
(a) All connectors in the SRS except the seat position sensor connector and the occupant classification ECU connector are colored yellow to distinguish them from other connectors. Some connectors have special functions, and are specially designed for the SRS. These connectors use durable gold-plated terminals, and are placed in the locations shown on the previous page to ensure high reliability.

(1) Terminal twin-lock mechanism:
Each connector has 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 the terminals from becoming disconnected.

(2) Activation prevention mechanism:
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the positive (+) and negative (-) terminals of the squib.

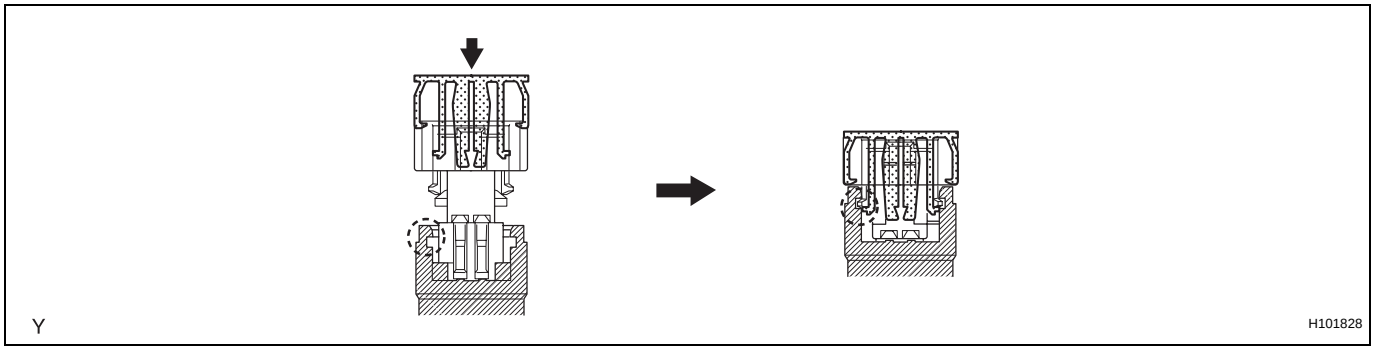


(3) Half connection prevention mechanism:
If the connector is not completely connected, the connector is disconnected due to the spring operation so that no continuity exists.

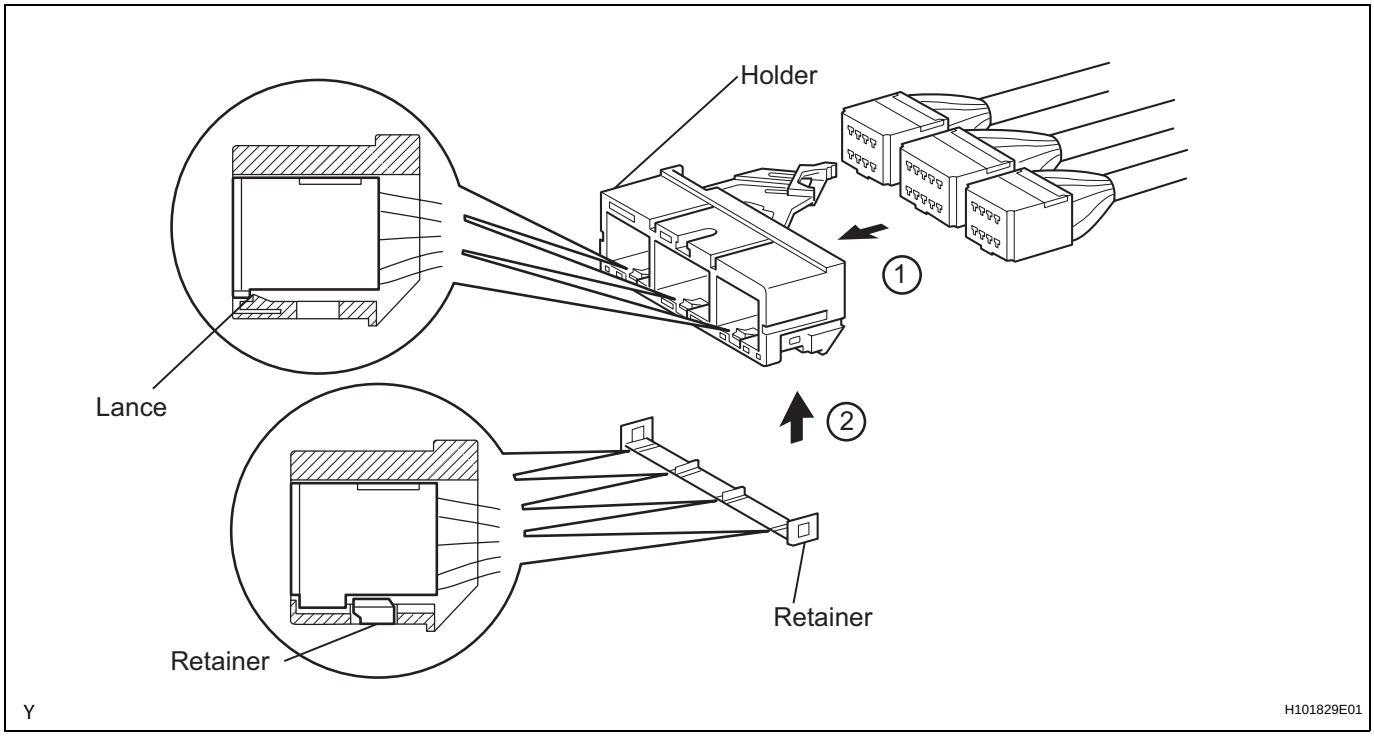


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(4) Connector lock mechanism (1):
Locking the connector lock button connects the connector securely.

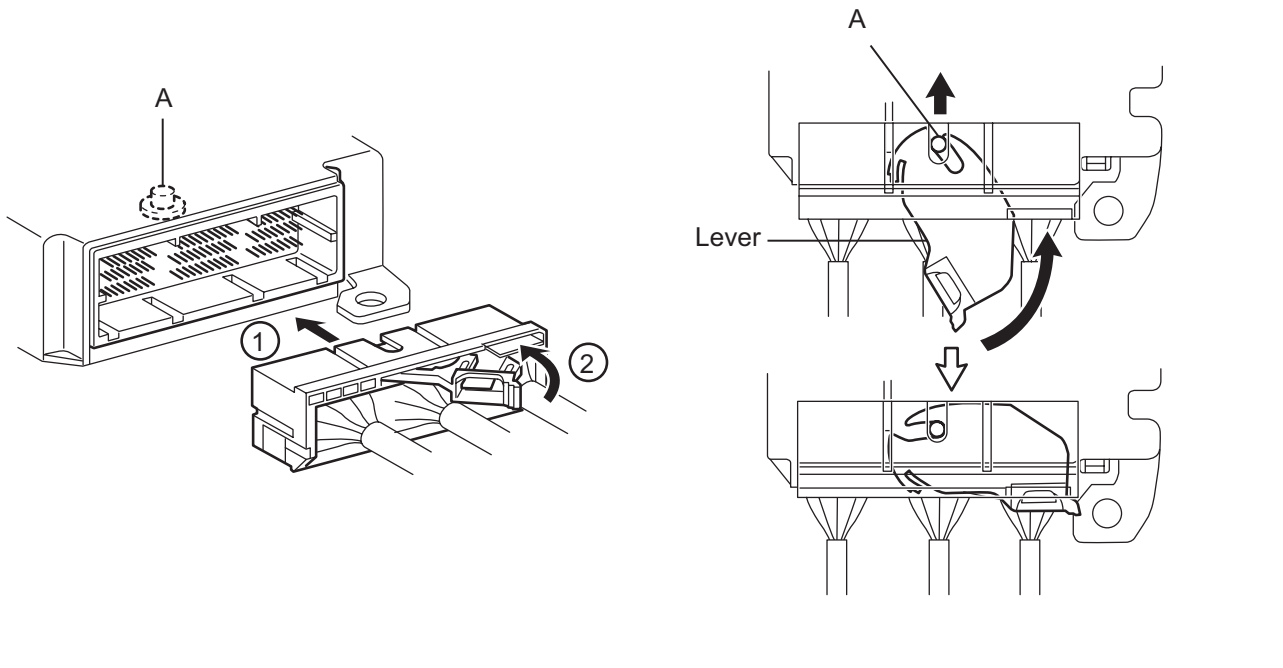


(5) Connector lock mechanism (2):
Both the primary lock with holder lances and the secondary lock with retainer prevent the connectors from becoming disconnected.



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(6) 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.



(b) When the vehicle is involved in a frontal collision in the hatched area (Fig.1) and the shock is larger than the predetermined level, the SRS is activated automatically. The safing sensor is designed to activate at a lower deceleration rate than the airbag sensor. As illustrated in Fig.2, ignition is caused when a current flows to the squib, which happens when the safing sensor and the deceleration sensor go on simultaneously. When a deceleration force acts on the sensors, 2 squibs in the driver airbag and front passenger airbag ignite and generate gas. The gas discharging into the driver airbag and front passenger airbag rapidly increases the pressure inside the bags, breaking the Steering pad and instrument panel. The deployment of the bags then ends, and the bags deflate as the gas is discharged through discharge holes at the rear of the bag.

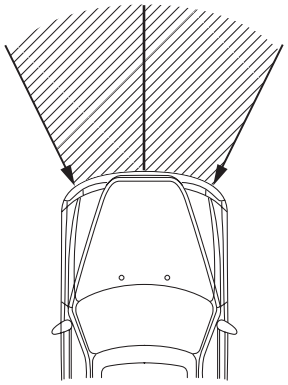


Fig.1

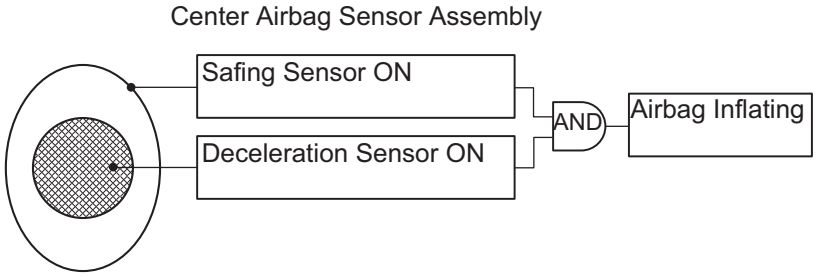


Fig.2

Y

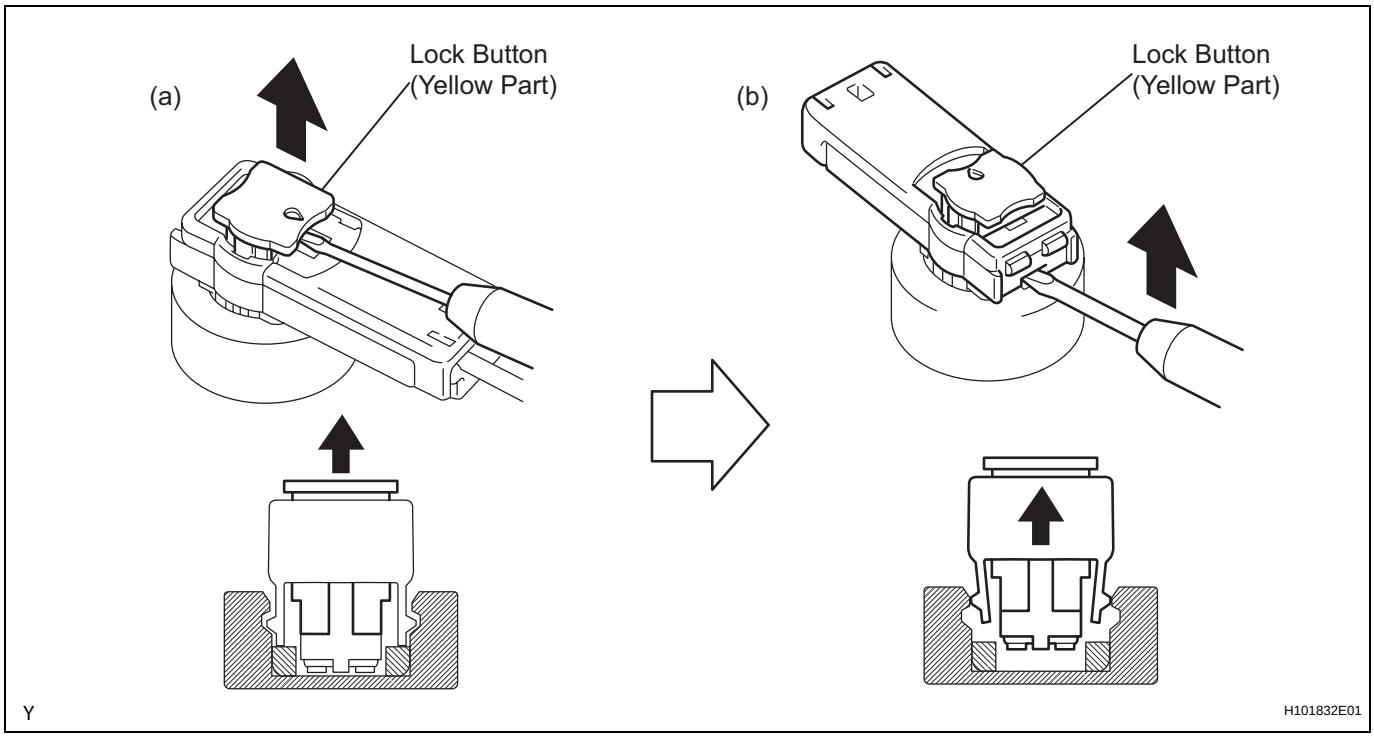
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4. DISCONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY AND CURTAIN SHIELD AIRBAG ASSEMBLY

(a) Release the lock button (yellow part) of the connector using a screwdriver.

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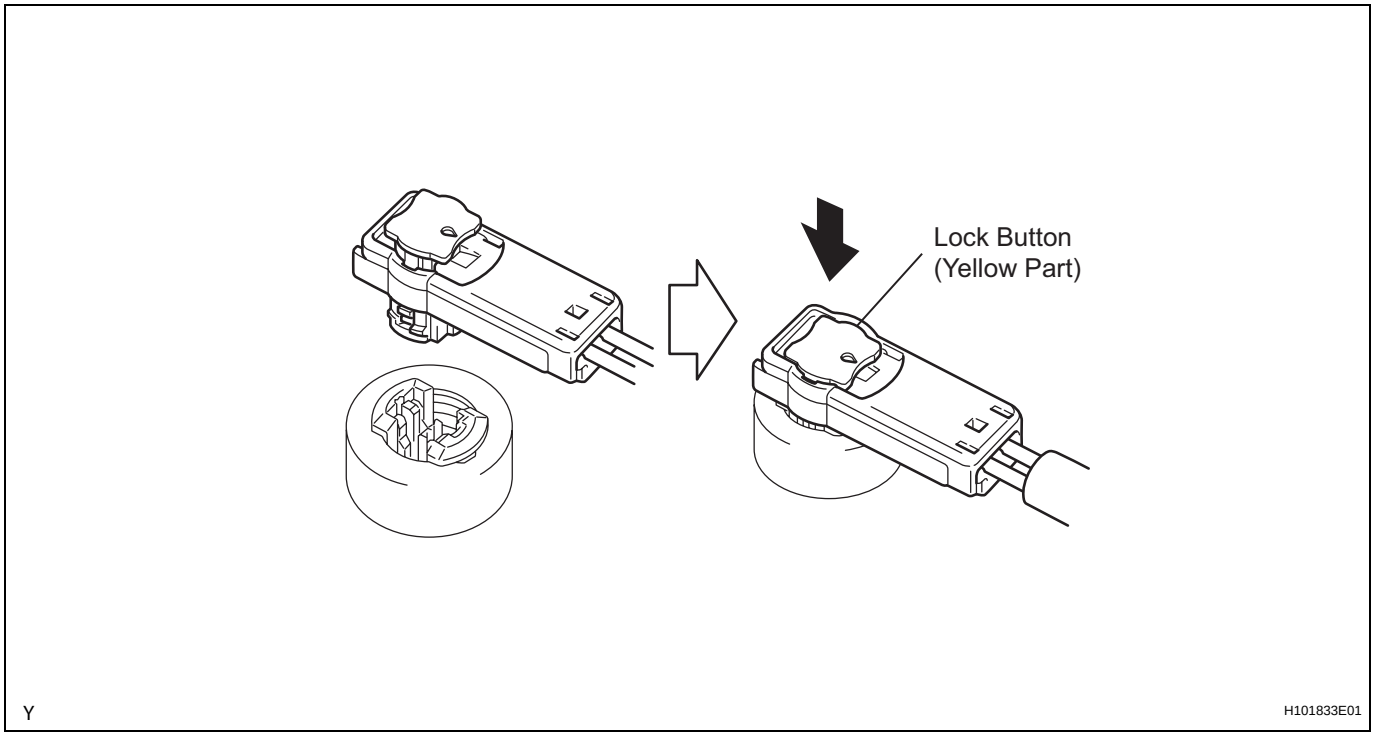
(b) Insert the screwdriver tip between the connector and the base, and then raise the connector.



5. CONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG ASSEMBLY AND CURTAIN SHIELD AIRBAG ASSEMBLY

(a) Connect the connector.

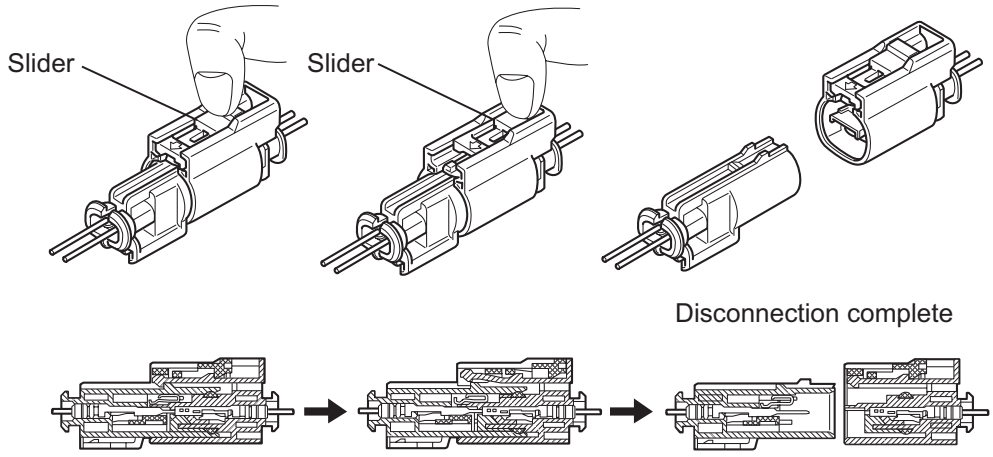
(b) Push down securely on the lock button (yellow part) of the connector. (When locking, a click sound can be heard.)



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6. DISCONNECTION OF CONNECTOR 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.

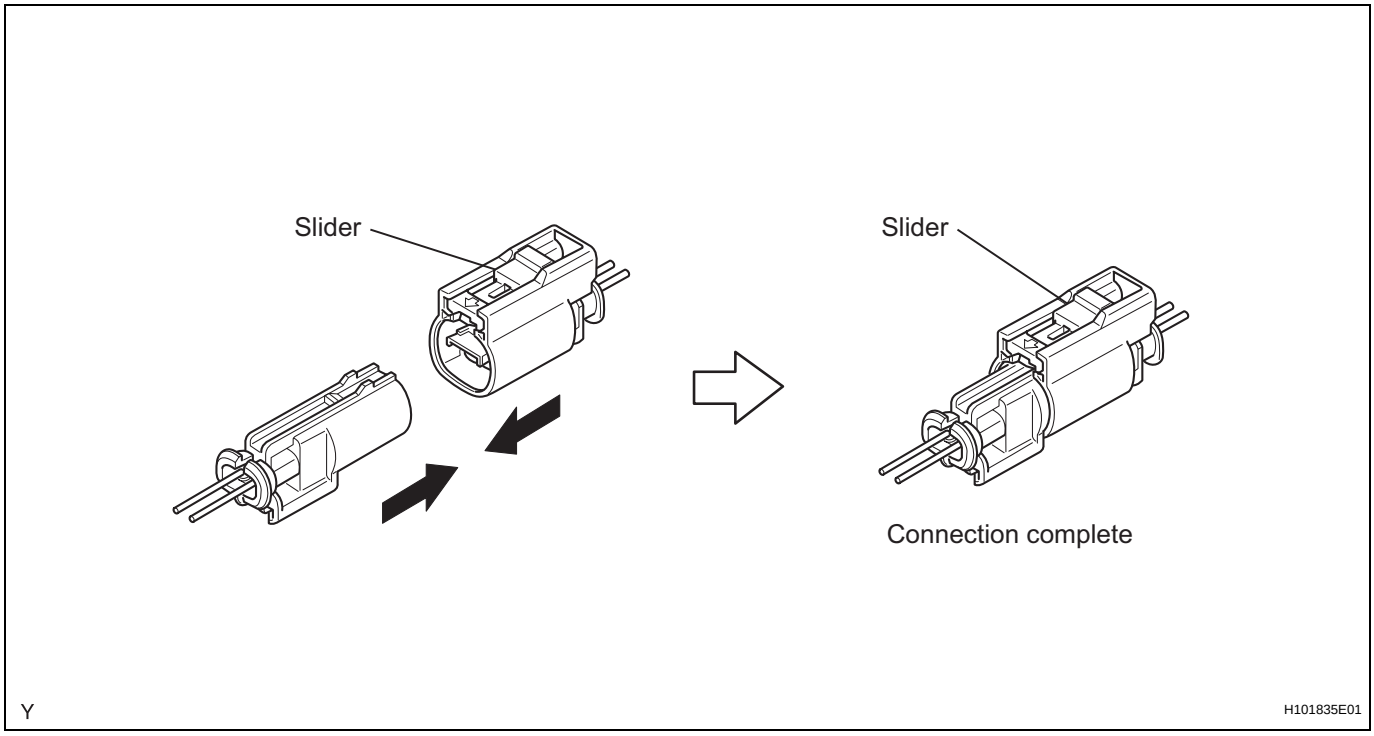


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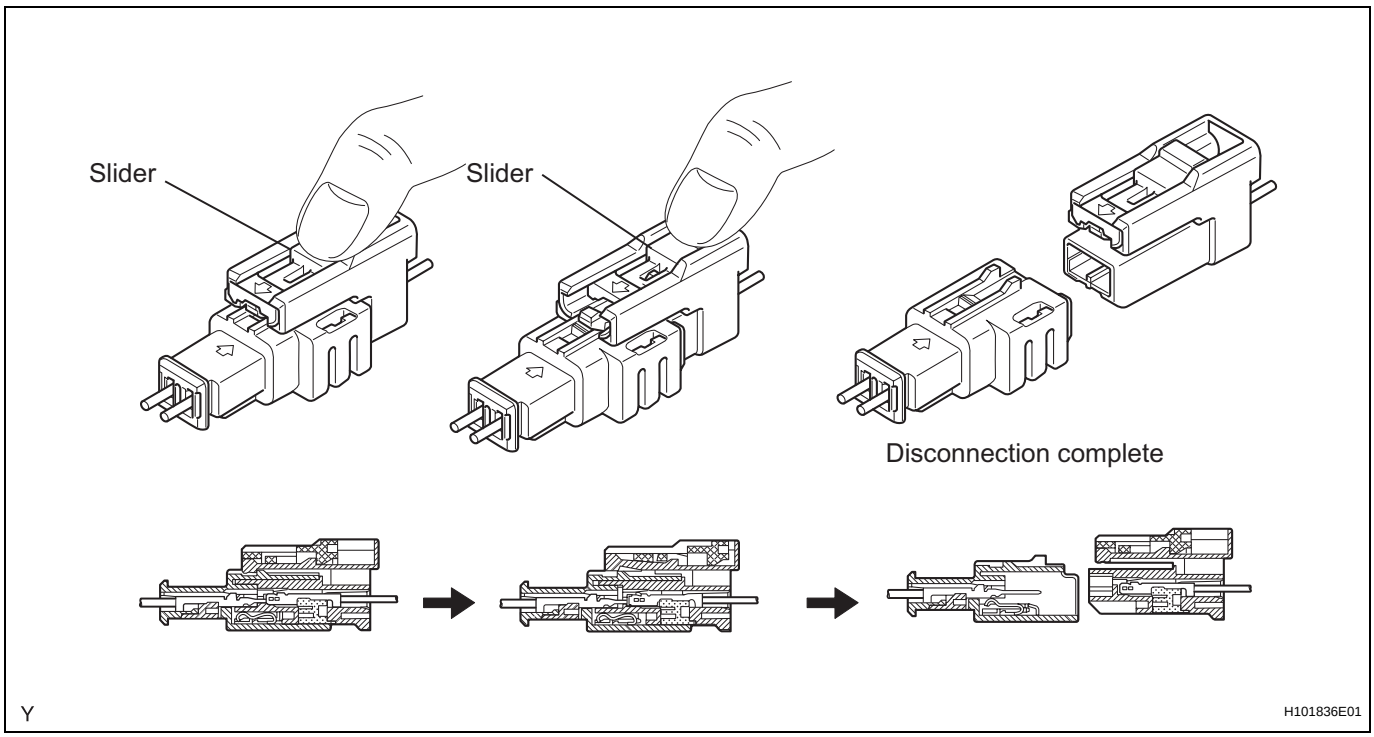
7. CONNECTION OF CONNECTOR FOR SEAT SIDE AIRBAG ASSEMBLY

(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 this may result in an insecure fit.



8. DISCONNECTION OF CONNECTOR FOR FRONT PASSENGER AIRBAG ASSEMBLY

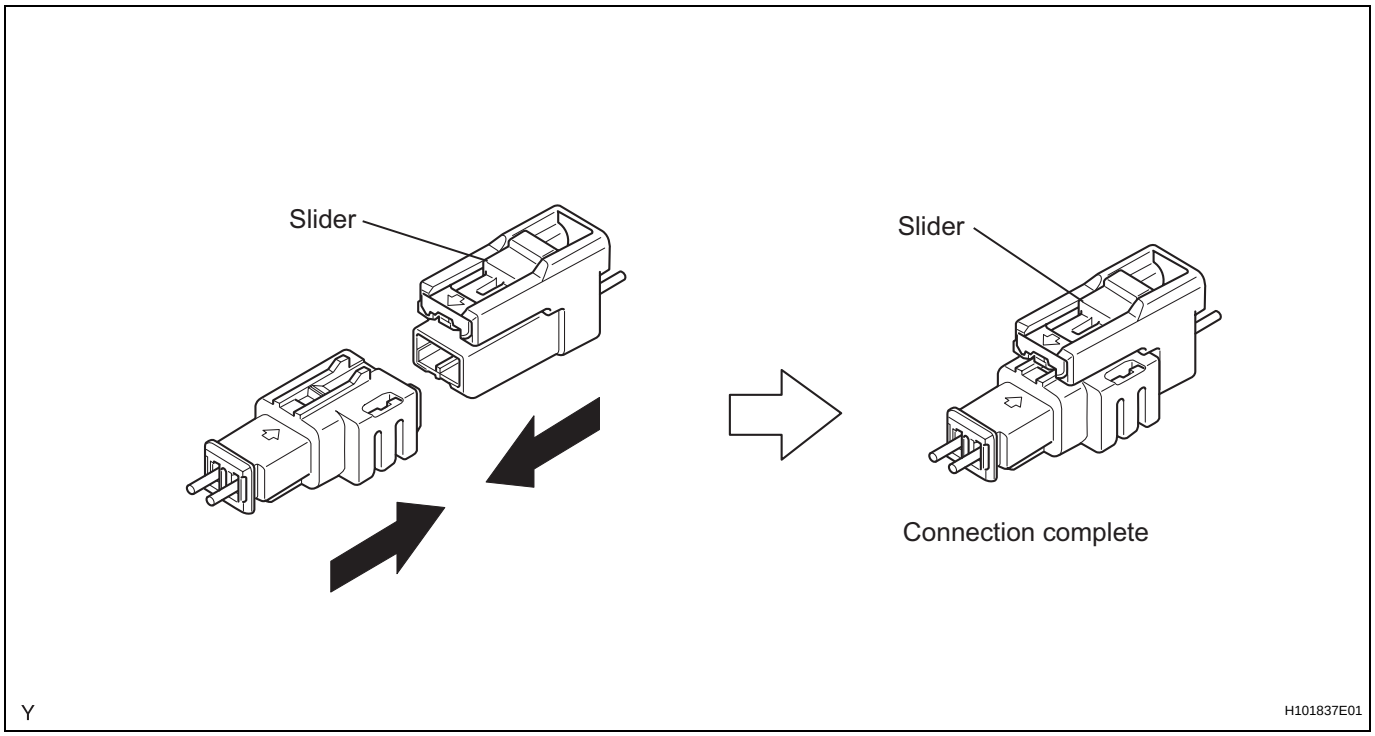
(a) Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.



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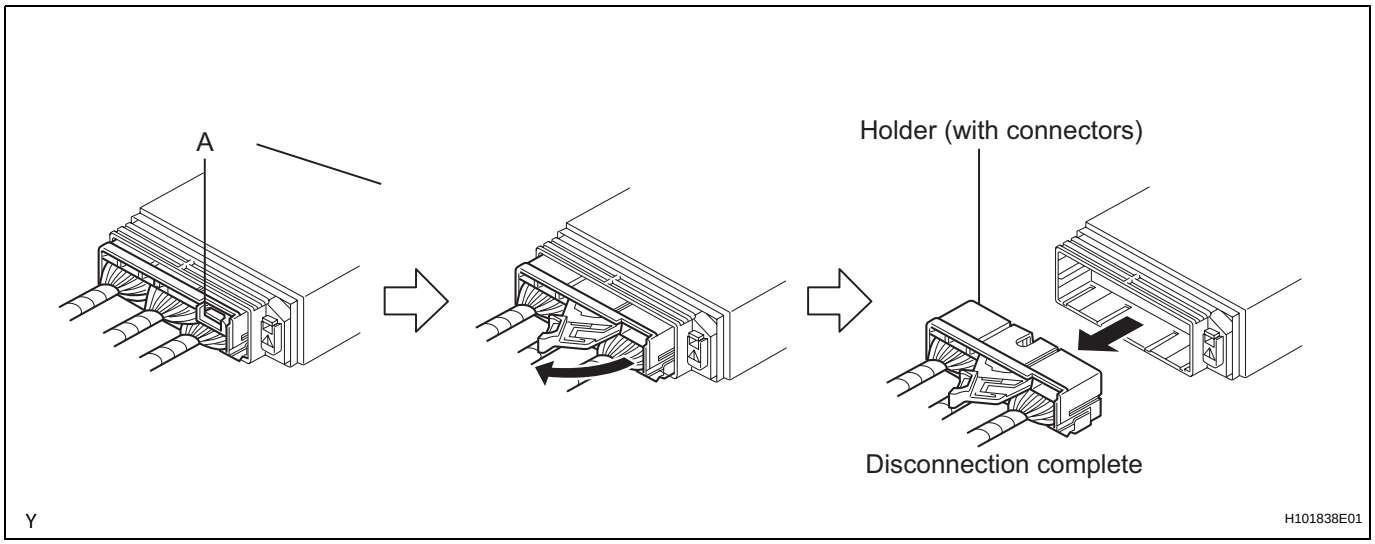
9. CONNECTION OF CONNECTOR FOR FRONT PASSENGER AIRBAG ASSEMBLY

(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 this may result in an insecure fit.



10. DISCONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR ASSEMBLY

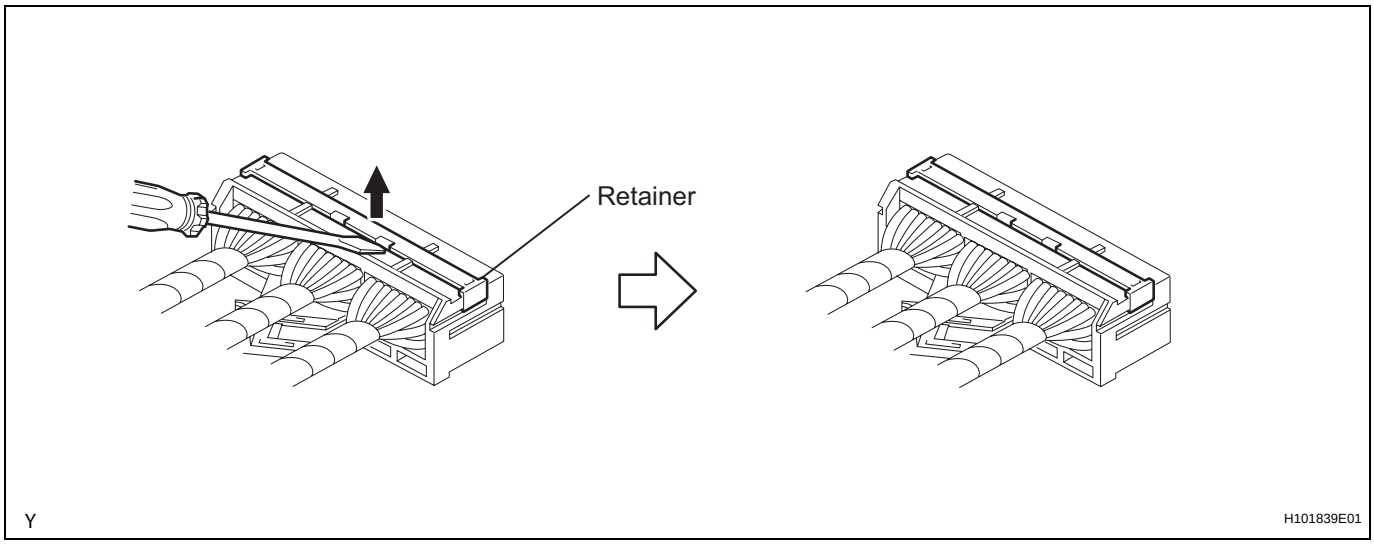
(a) Pull the lever by pushing part A as shown in the illustration and disconnect the holder (with connectors).



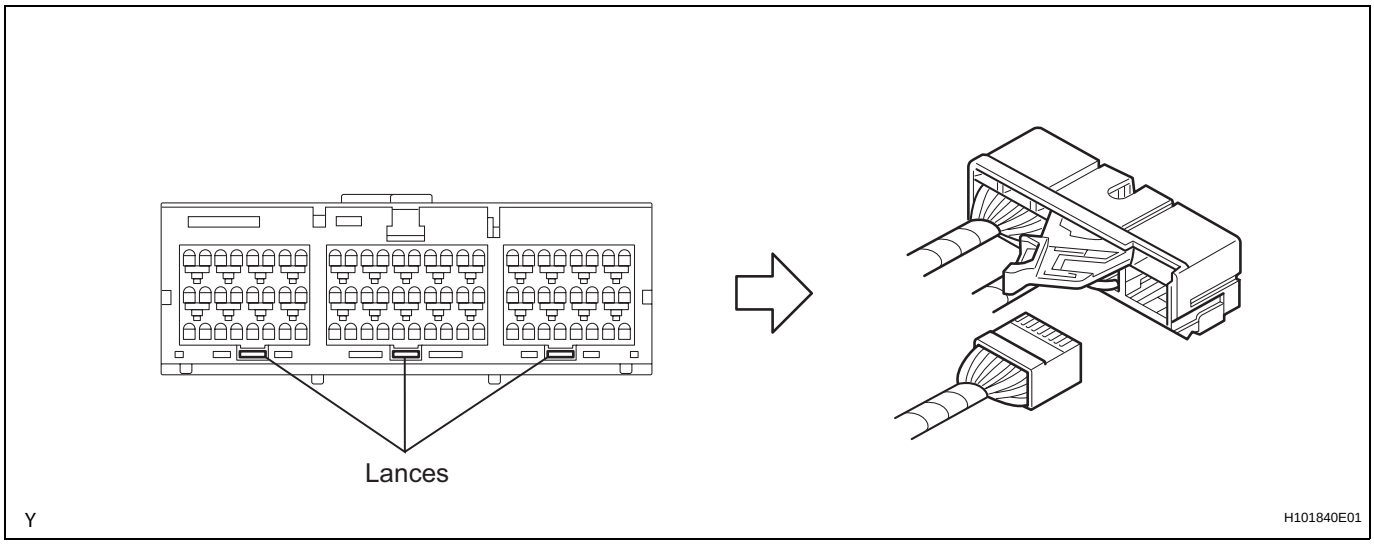
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HINT:
Perform the following procedures when replacing the holder.

(b) Remove the holder.
(1) Using a screwdriver, unlock the retainer.



(2) Release the fitting lances and remove the holder.



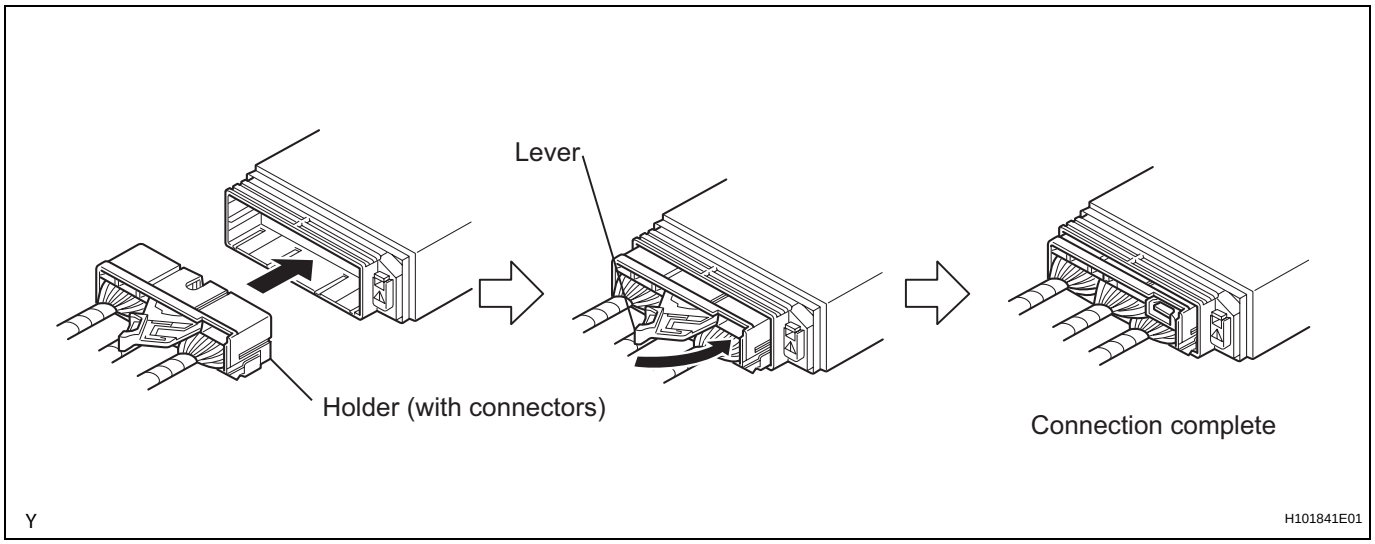
(c) Install the holder.
(1) Install the connectors into the holder. (When locking, a click sound can be heard.)
HINT:
The retainer is locked when the holder is connected.

11. CONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR ASSEMBLY

(a) Firmly insert the holder (with connectors) until it can not be pushed any further.

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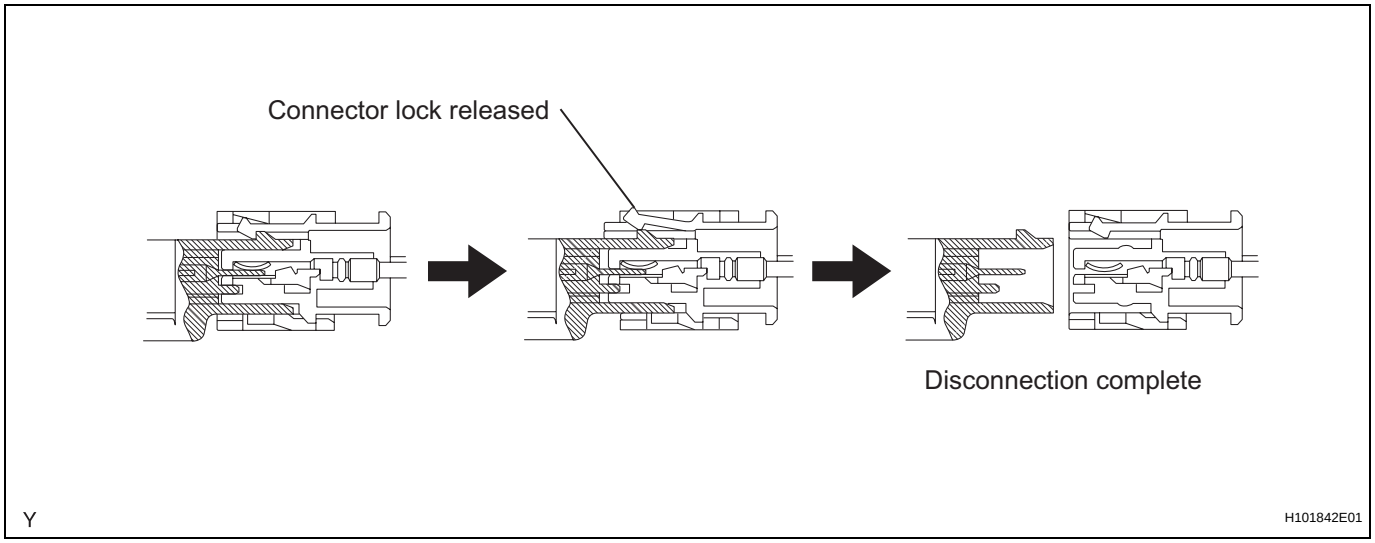
(b) Push the lever to connect the holder (with connectors). (When locking, a click sound can be heard.)
HINT:
The holder slides when connecting. Holding the holder when connecting may result in an insecure connection.



12. DISCONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR, SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR

(a) While holding both outer flank sides, slide the outer in the direction shown by the arrow.

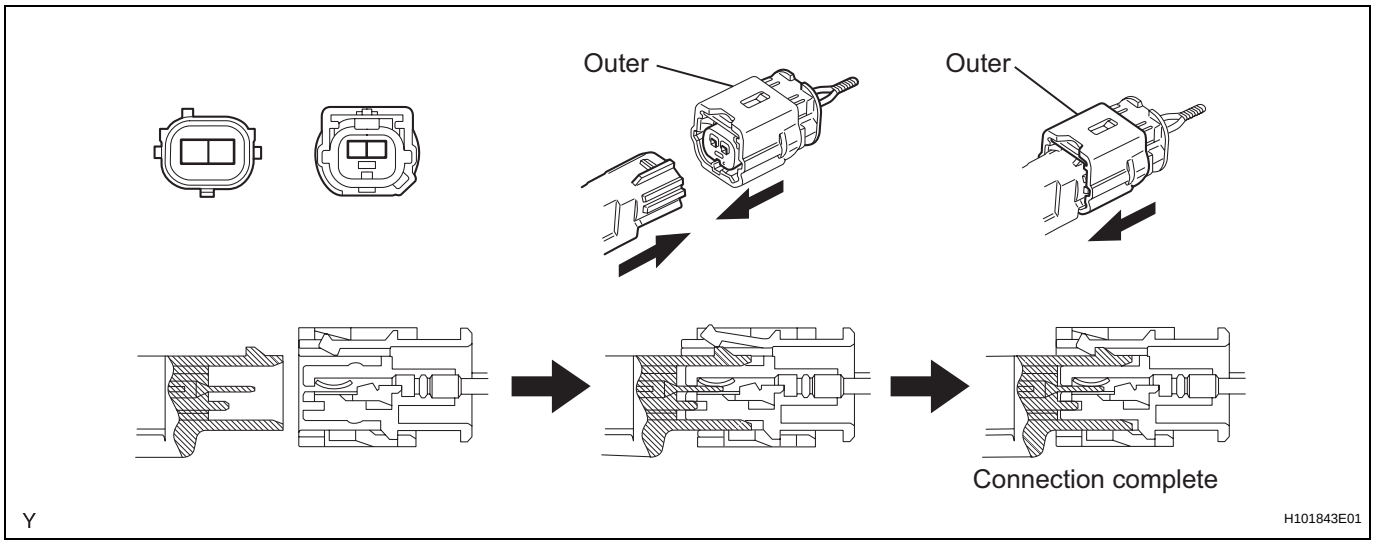
(b) When the connector lock is released, the connectors are disconnected.
HINT:
Be sure to hold both outer flank sides. Holding the top and bottom sides will make disconnection difficult.



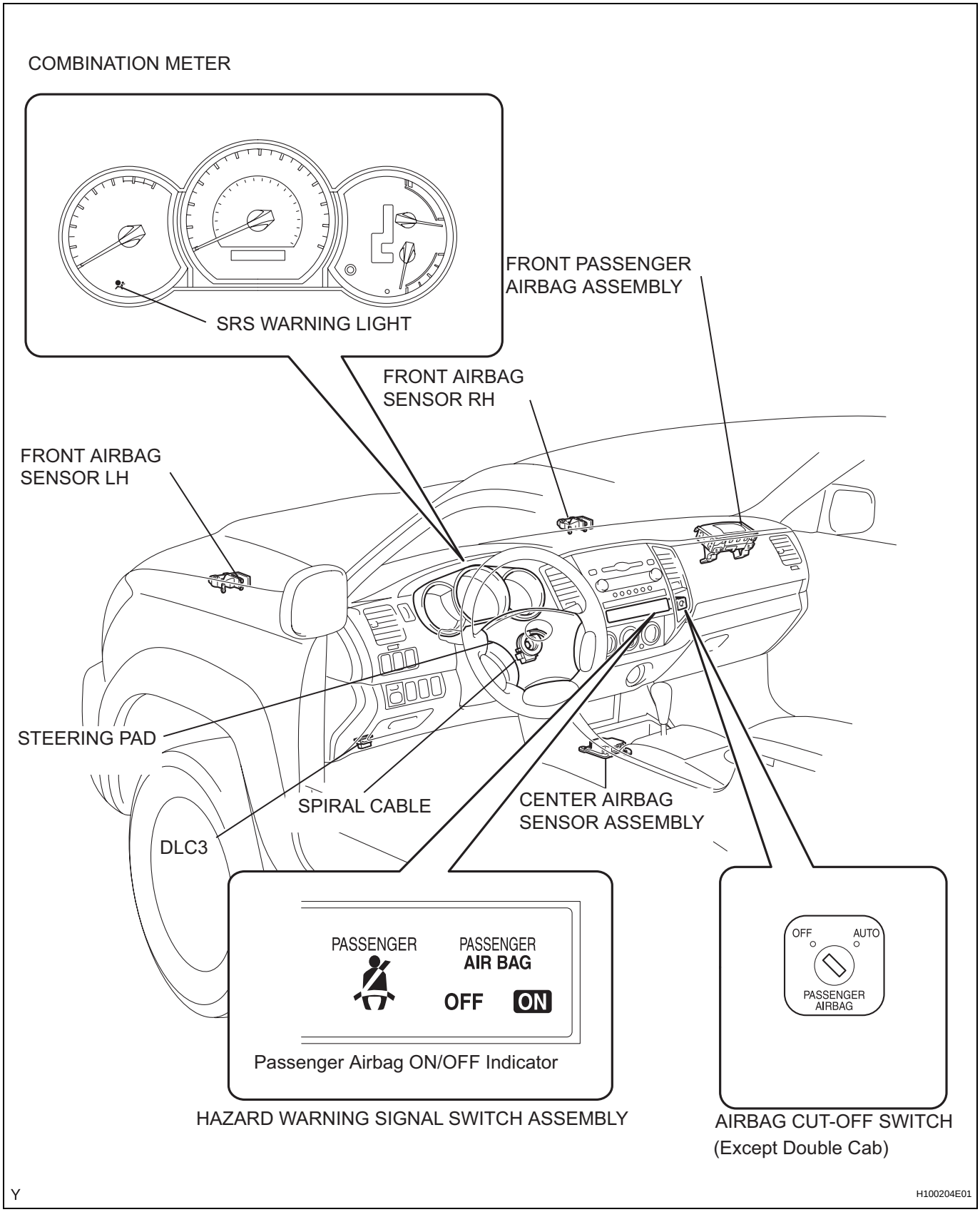
RS

13. CONNECTION OF CONNECTORS FOR FRONT AIRBAG SENSOR, 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.

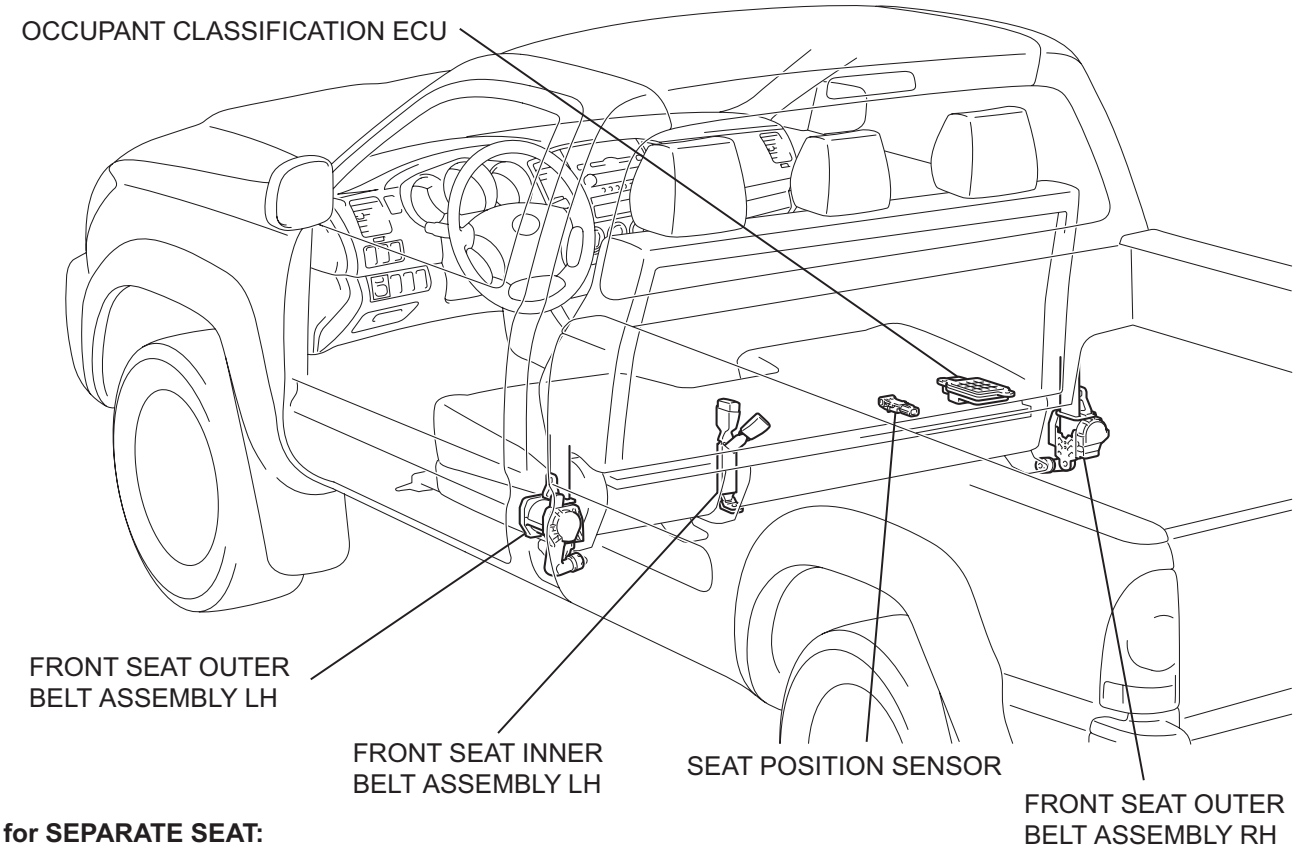


PARTS LOCATION

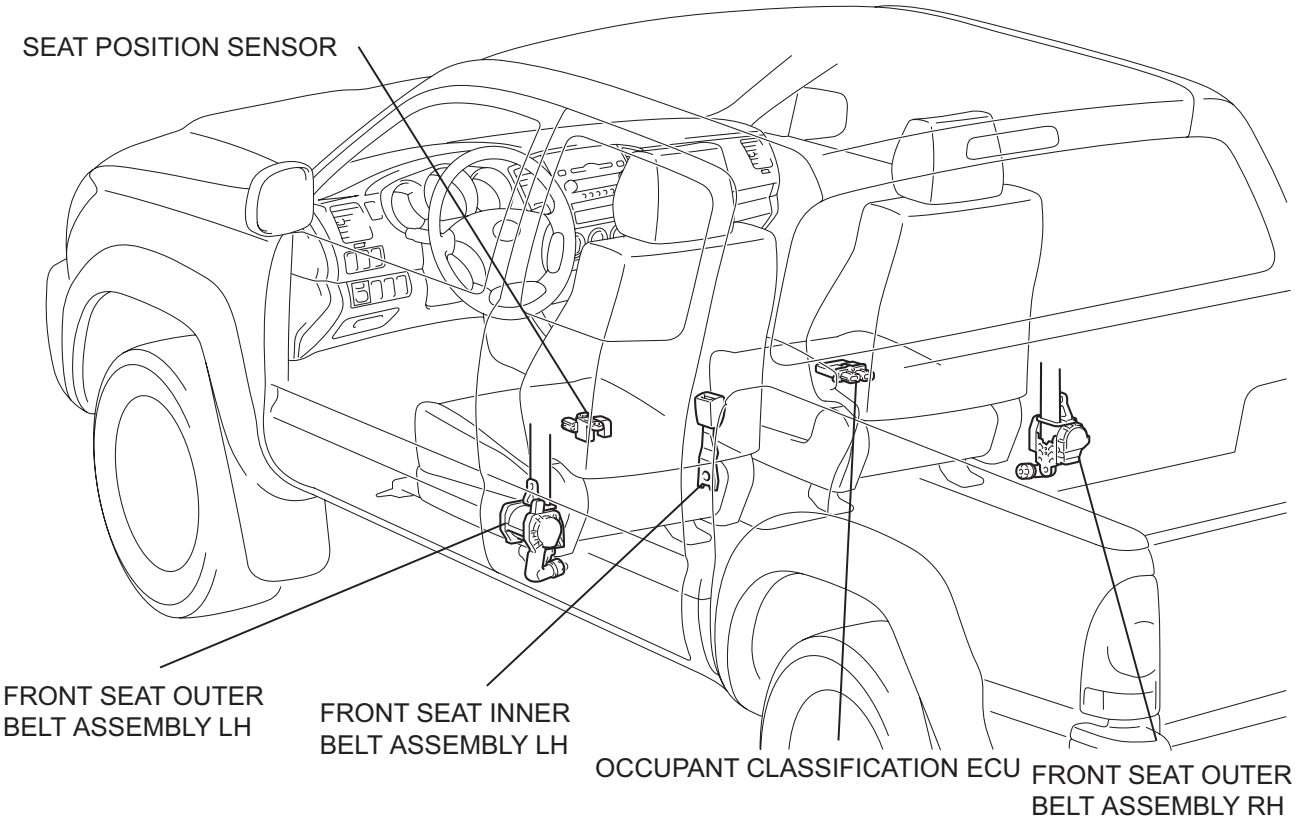


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for BENCH SEAT:



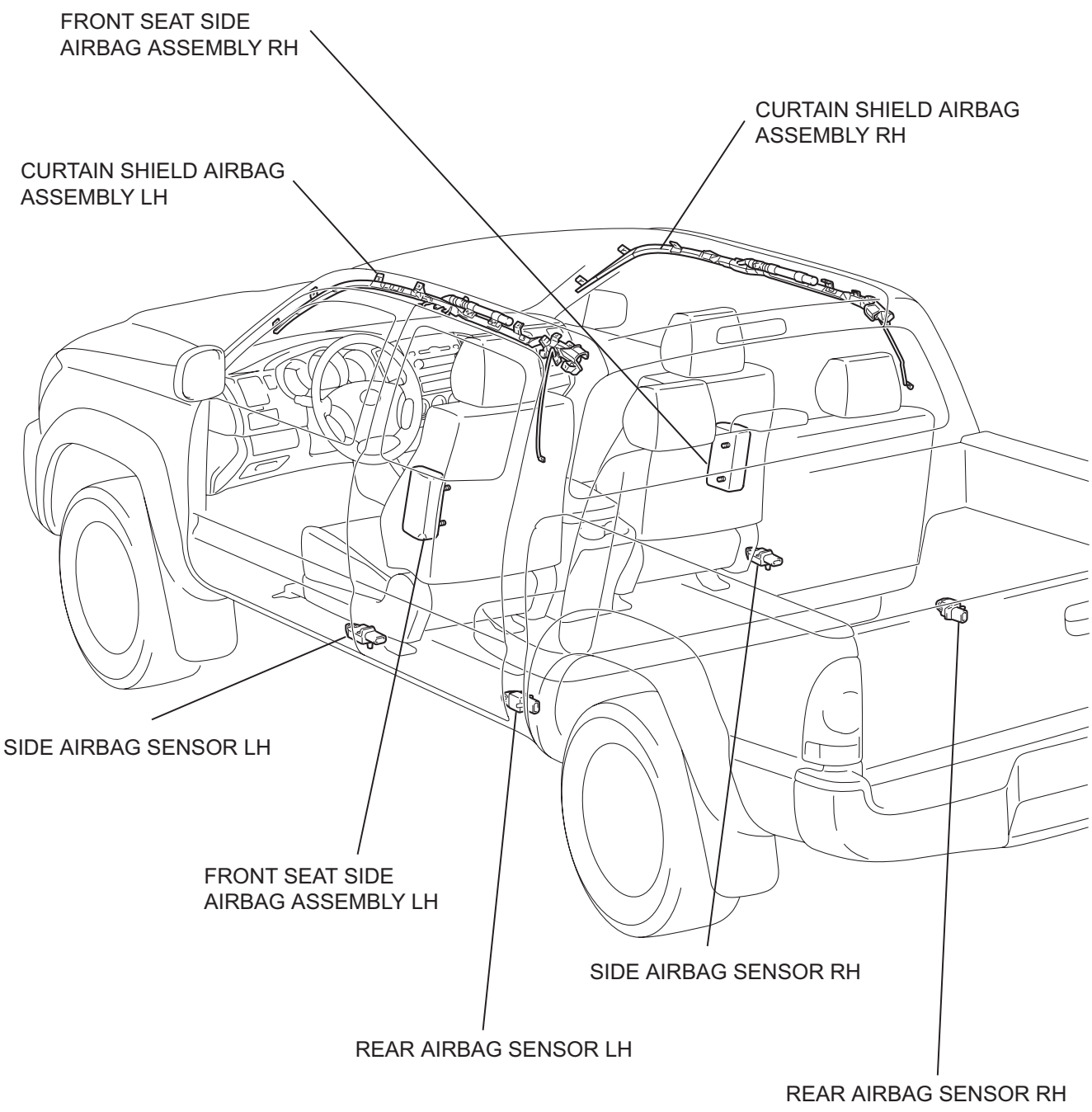
for SEPARATE SEAT:



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w/ FRONT SEAT SIDE AIRBAG and CURTAIN SHELD AIRBAG :

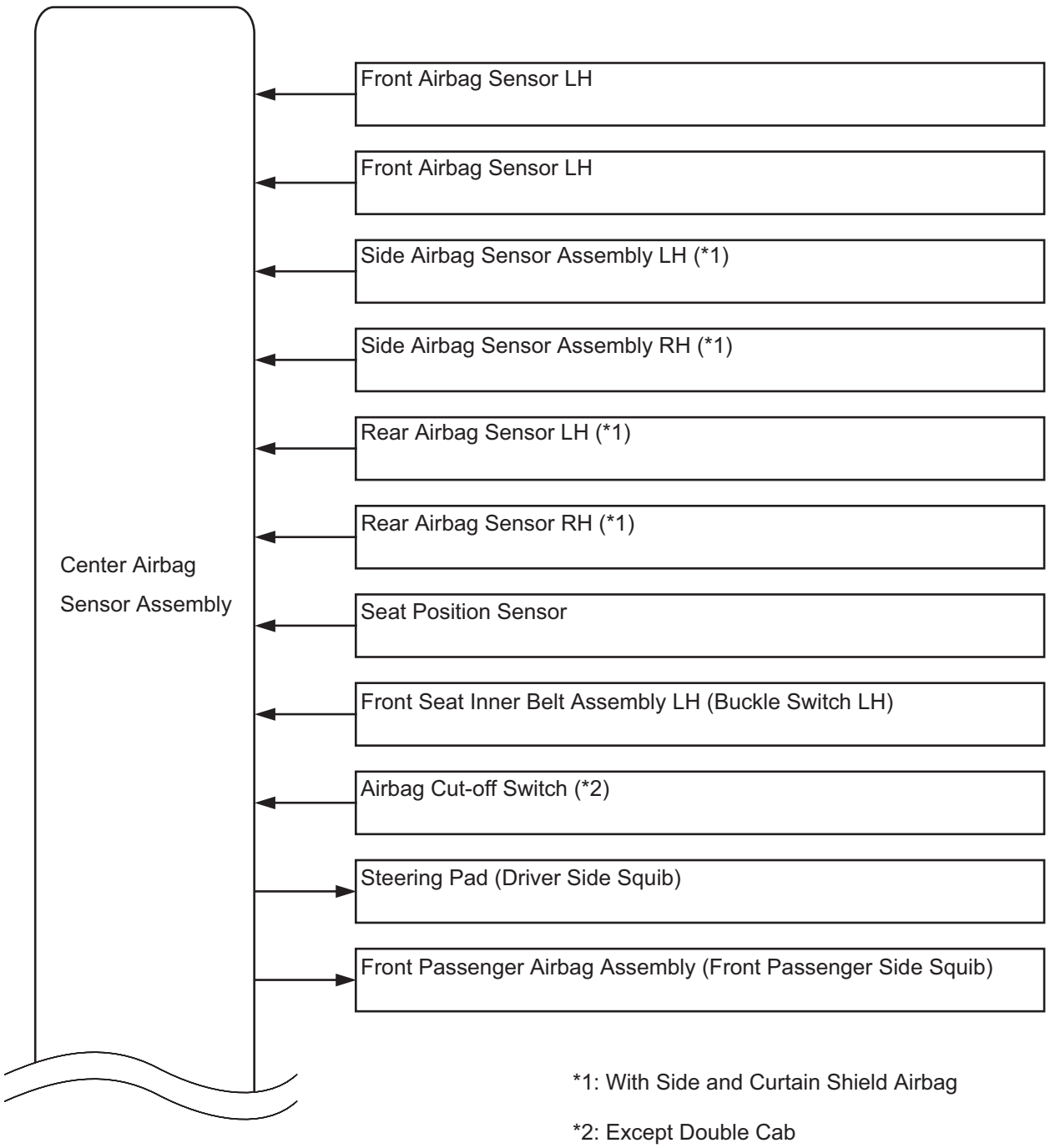


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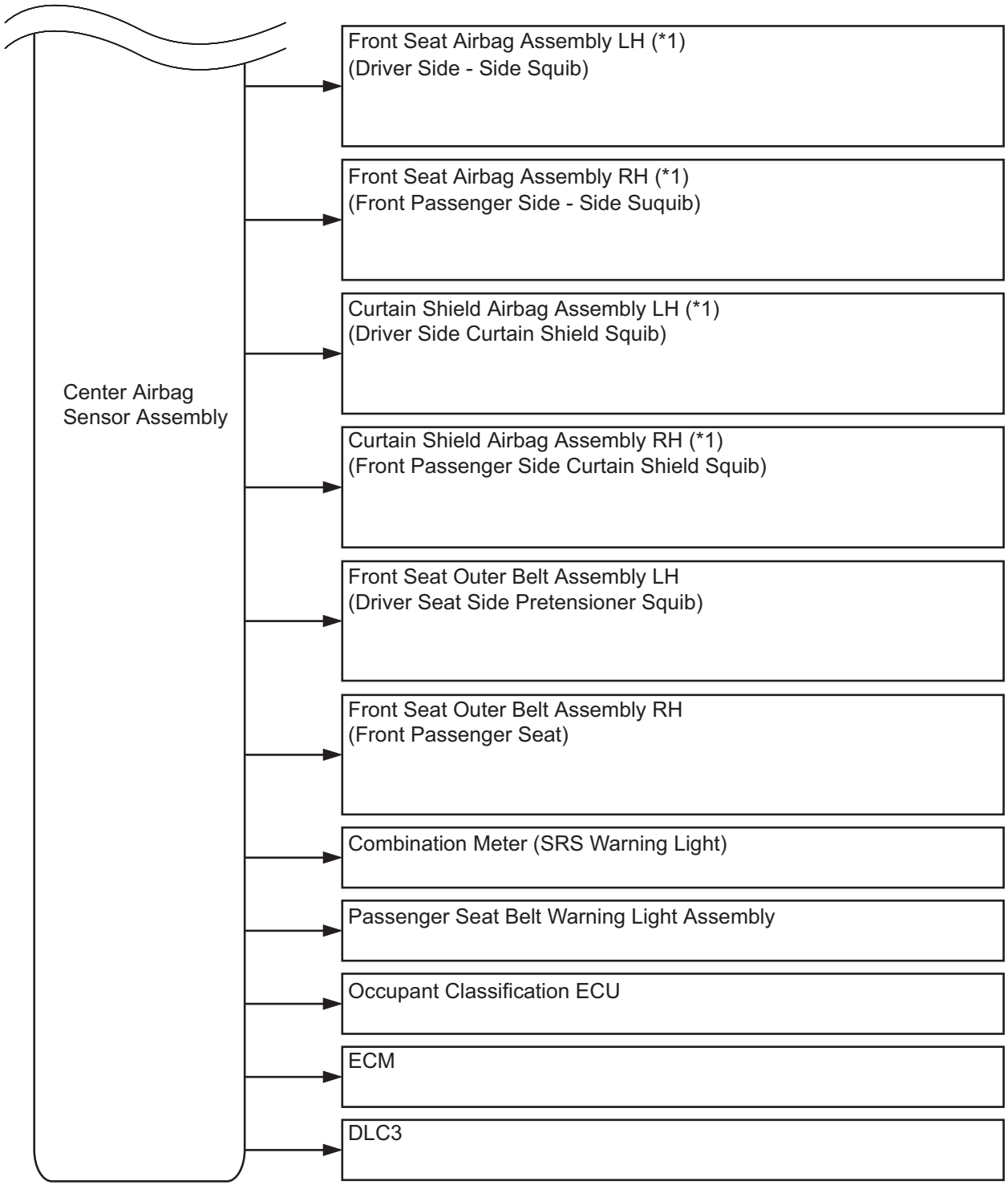
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SYSTEM DIAGRAM



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Center Airbag Sensor Assembly
Front Seat Airbag Assembly LH (*1)
(Driver Side - Side Squib)
Front Seat Airbag Assembly RH (*1)
(Front Passenger Side - Side Suquib)
Curtain Shield Airbag Assembly LH (*1)
(Driver Side Curtain Shield Squib)
Curtain Shield Airbag Assembly RH (*1)
(Front Passenger Side Curtain Shield Squib)
Front Seat Outer Belt Assembly LH
(Driver Seat Side Pretensioner Squib)
Front Seat Outer Belt Assembly RH
(Front Passenger Seat)
Combination Meter (SRS Warning Light)
Passenger Seat Belt Warning Light Assembly
Occupant Classification ECU
ECM
DLC3
*1: With Side and Curtain Shield Airbag
H101931E01

RS

SYSTEM DESCRIPTION

1. SRS (SUPPLEMENTAL RESTRAINT SYSTEM) AIRBAG SYSTEM

(a) General Description

(1) The SRS airbag system consists of the following airbag and main components:

Airbag	Regular Cab Model	Access Cab Model	Double Cab Model
Driver Airbag	Standard	Standard	Standard
Front Passenger Airbag	Standard	Standard	Standard
Side Airbag	-	-	Option
Curtain Shield Airbag	-	-	Option

Main Components	Features
Center Airbag Sensor Assembly	• Controls airbag deployment • Activates dual stage control for driver and front passenger airbags • Detects malfunctions in SRS airbag system
Occupant Classification ECU	Determines front passenger seat occupant conditions through occupant classification sensors
Front Airbag Sensor	Detect intensity of frontal collisions though electrical deceleration sensor
Side Airbag Sensor	Detect intensity of side collision through electrical deceleration sensor
Curtain Shield Airbag Sensors	Detect intensity of side rear collision through electrical deceleration sensor
Occupant Classification Sensors	Detect occupant weight on front passenger seat
Seat Position Sensor	Detects driver seat position
Seat Belt Buckle Switches	Detect whether of not seat belt fastened
Airbag ON/OFF Indicator	Illuminates ON or OFF light to indicate front and side passenger airbag deployment availability
SRS Warning Light	Illuminates to indicate existence of malfunctions in SRS airbag system
Airbag Cut-Off Switch	Prohibits deployment of front passenger airbag when switched to OFF

2. AIRBAG DEPLOYMENT

(a) Front Collisions

(1) The driver and front passenger airbags are in case of frontal collisions. These airbags deploy by dual stage control. In order to activate dual stage control, the center airbag sensor assembly monitors the following information through the components shown in the table below:

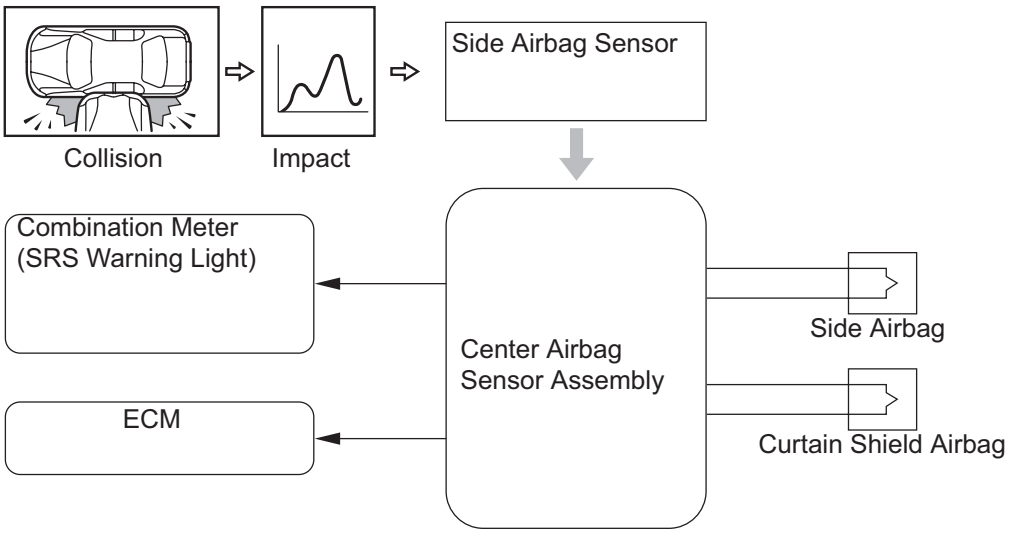
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Seat	Information	Models with Bench Seat	Models with Separate Seat
Driver	Intensity of Impact	Front Airbag Sensor (RH or LH)	Same As Left
Driver	Driver Seat Position	Seat Position Sensor	Same As Left
Driver	Seat Belt Position	Seat Belt Buckle Switches	Same As Left
Front Passenger	Intensity of Impact	Front Airbag Sensor (RH or LH)	Same As Left
Front Passenger	Occupant Weight	Occupant Classification Sensor	Four Occupant Classification Sensors
Front Passenger	Seat Belt Condition	Seat Belt Buckle Switches	Same As Left

(b) Side Collisions

(1) The side and curtain shield airbags are in case of side collisions. The side airbags are installed in the seat backs of the driver seat and the front passenger seat, and the curtain shield airbags are installed in the upper areas of the right and left center pillars. If a side airbag sensor detects an impact, the airbag sensor assembly center causes the side and curtain shield airbags to be deployed simultaneously.

Airbag Deployment for Side Collisions:



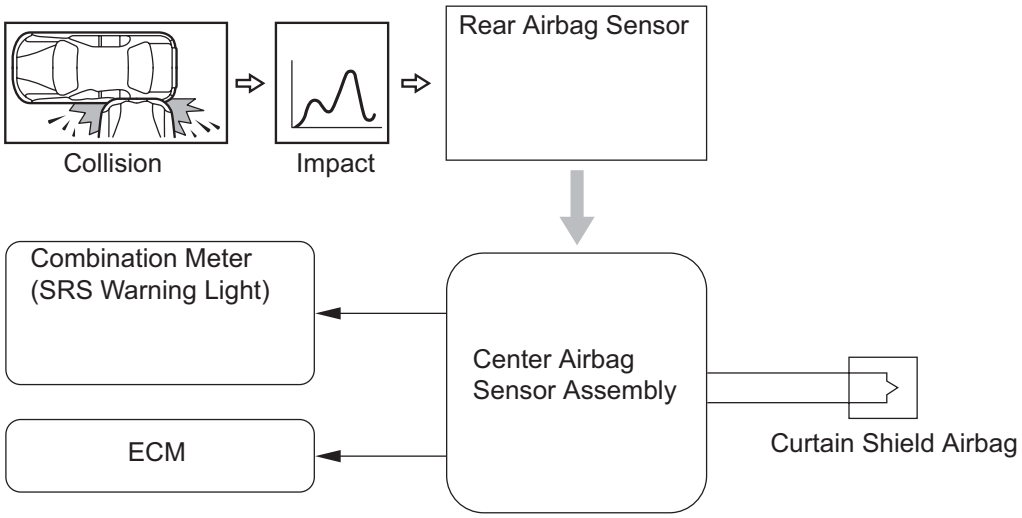
Y H101814E01

(c) Rear Side Collisions

(1) The curtain shield airbags are in case of rear side collisions. The curtain shield airbags are installed in the upper areas of the right and left center pillars. If a curtain shield airbag sensor detects an impact, the airbag sensor assembly center causes a curtain shield airbag to be deployed.

RS

Airbag Deployment for Rear Side Collisions:



Y

H101815E01

HOW TO PROCEED WITH TROUBLESHOOTING

1 VEHICLE BROUGHT TO WORKSHOP

NEXT

2 CUSTOMER PROBLEM ANALYSIS (See page IN-26)

(a) Confirm problem symptoms.

NEXT

3 WARNING LIGHT CHECK (See page RS-28)

NEXT

4 DTC CHECK (Present and Past DTCs) (See page RS-34)

Result	Proceed to
DTCs OUTPUT (INCLUDING NORMAL SYSTEM INDICATION)	A
DTCs NOT OUTPUT (PROBLEM SYMPTOMS TABLE)	B

B → PROBLEM SYMPTOMS TABLE

A

5 DTC CHART (See page RS-38)

NEXT

6 CIRCUIT INSPECTION

NEXT

7 REPAIR OR REPLACEMENT

NEXT

RS

8	DTCs CLEARANCE (Present and Past DTCs) (See page RS-34)

NEXT

9	DTC CHECK (Present and Past DTCs) (See page RS-34)

Result	Proceed to
DTCs NOT OUTPUT	A
DTCs OUTPUT	B

B → Go to step 5

A

10	SYMPTOM SIMULATION

Result	Proceed to
WARNING LIGHT REMAINS OFF	A
WARNING LIGHT ON	B

B → Go to step 5

A

11	CONFIRMATION TEST

NEXT

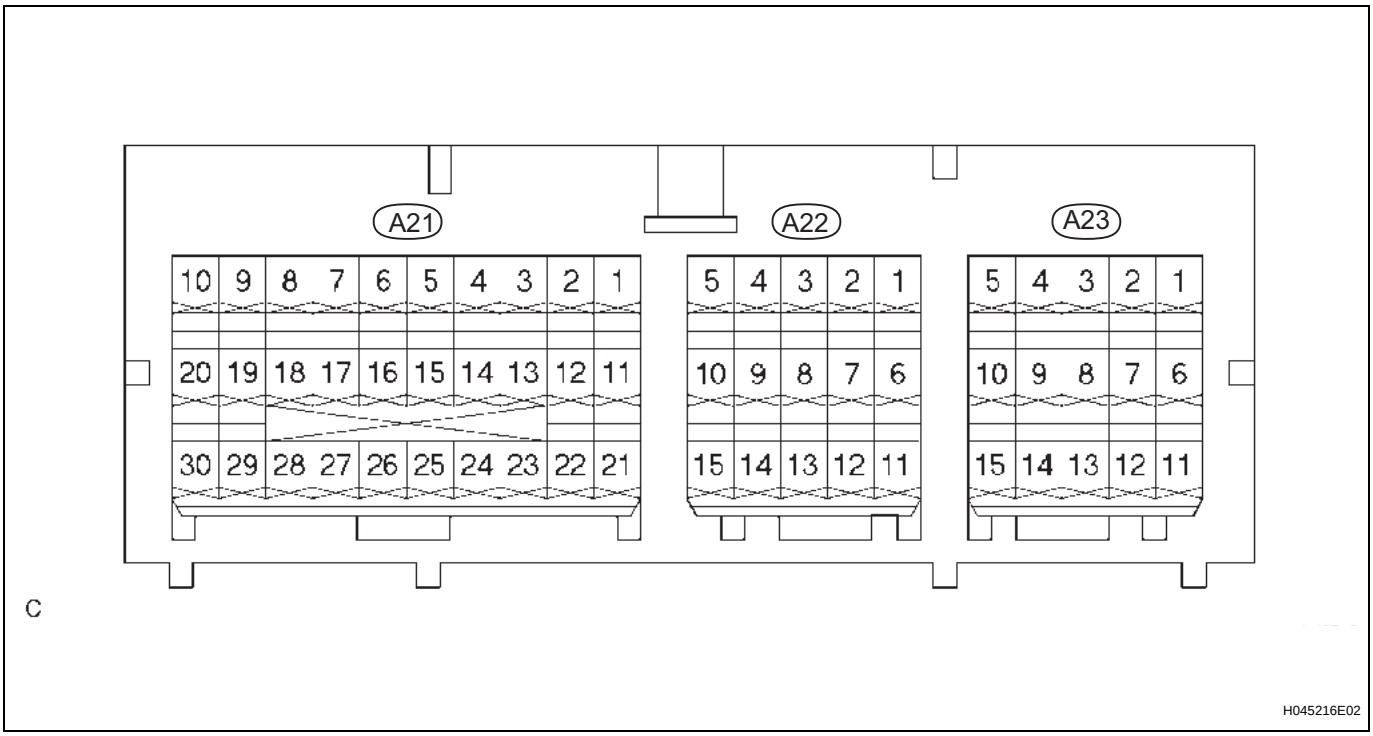
END

PROBLEM SYMPTOMS TABLE

Symptom	Suspected area	See page
When ignition switch in ON position, SRS warning light occasionally comes on approximately 6 seconds after engine start.	SRS warning light circuit malfunction (SRS Warning Light Remains ON).	RS-341
SRS warning light always comes on even when DTC not set.	SRS warning light circuit malfunction (SRS Warning Light Remains ON).	RS-341
With ignition switch in ON position, SRS warning light does not come on.	SRS warning light circuit malfunction (SRS Warning Light does not Come On).	RS-346
Although SRS warning light operates normaly, neither DTCs normal system indication displayed.	TC and CG Terminal Circuit	RS-349
Although terminals TC and CG not connected, DTC or normal system indication displayed.	TC and CG Terminal Circuit	RS-349

TERMINALS OF ECU

1. CENTER AIRBAG SENSOR ASSEMBLY



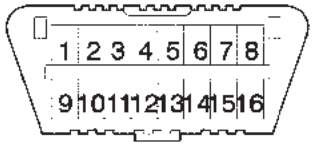
Terminal No.	Terminal Symbol	Destination
A21-1	P2+	Front passenger airbag assembly (Front passenger side squib 2nd step)
A21-2	P2-	Front passenger airbag assembly (Front passenger side squib 2nd step)
A21-3	P-	Front passenger airbag assembly (Front passenger side squib)
A21-4	P+	Front passenger airbag assembly (Front passenger side squib)
A21-5	D+	Steering pad (Driver side squib)
A21-6	D-	Steering pad (Driver side squib)
A21-7	D2-	Steering pad (Driver side squib 2nd step)
A21-8	D2+	Steering pad (Driver side squib 2nd step)
A21-11(*1)	MSW+	Airbag cut-off switch
A21-12(*1)	MSW-	Airbag cut-off switch
A21-13	PBEW	Passenger seat belt warning light assembly
A21-14	LA	Combination meter assembly
A21-15	TC	DLC3
A21-16	SIL	DLC3
A21-17	P-AB	Passenger seat belt warning light assembly
A21-21	IG2	IGN fuse (Power Source)
A21-22	GSW2	ECM
A21-23	PAON	Passenger seat belt warning light assembly
A21-24(*3)	GSW3	Occupant classification ECU
A21-25	E1	Ground
A21-26	E2	Ground
A21-27	-SR	Front airbag sensor RH
A21-28	-SL	Front airbag sensor LH
A21-29	+SR	Front airbag sensor RH
A21-30	+SL	Front airbag sensor LH
A22-1	PD-	Front seat outer belt assembly LH (Front pretensioner squib LH)

Terminal No.	Terminal Symbol	Destination
A22-2	PD+	Front seat outer belt assembly RH (Front pretensioner squib RH)
A22-6(*2)	ICD-	Curtain shield airbag assembly LH (Curtain shield squib LH)
A22-7(*2)	ICD+	Curtain shield airbag assembly LH (Curtain shield squib LH)
A22-8(*2)	BBD+	Side airbag sensor assembly LH
A22-9(*2)	SFD+	Front seat airbag assembly LH (Side squib LH)
A22-10(*2)	SFD-	Front seat airbag assembly LH (Side squib LH)
A22-11	DBE+	Front seat inner belt assembly LH
A22-12	DBE-	Front seat inner belt assembly LH
A22-13	DSP-	Seat position sensor
A22-14	DSP+	Seat position sensor
A22-15 (*2)	BBD-	Side airbag sensor assembly LH
A23-4	PP+	Front seat outer belt assembly RH (Front pretensioner squib RH)
A23-5	PP-	Front seat outer belt assembly RH (Front pretensioner squib RH)
A23-6(*2)	SFP-	Front seat airbag assembly RH (Side squib RH)
A23-7(*2)	SFP+	Front seat airbag assembly RH (Side squib RH)
A23-8(*2)	BBP+	Side airbag sensor assembly RH
A23-9 (*2)	ICP+	Curtain shield airbag assembly RH (Curtain shield squib RH)
A23-10 (*2)	ICP-	Curtain shield airbag assembly RH (Curtain shield squib RH)
A23-11(*2)	BBP-	Side airbag sensor assembly RH
A23-12	FSP+	Occupant classification ECU
A23-13	FSP-	Occupant classification ECU

*1:Except double cab

*2:With side and curtain shield airbag

*3:Bench Seat



DLC3

A004550E10

DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The vehicle's ECU uses the ISO 9141-2 for communication protocol. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

RS

Symbols (Terminals 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
BAT (16) - Body ground	Battery positive	Always	10 to 14 V

HINT:

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

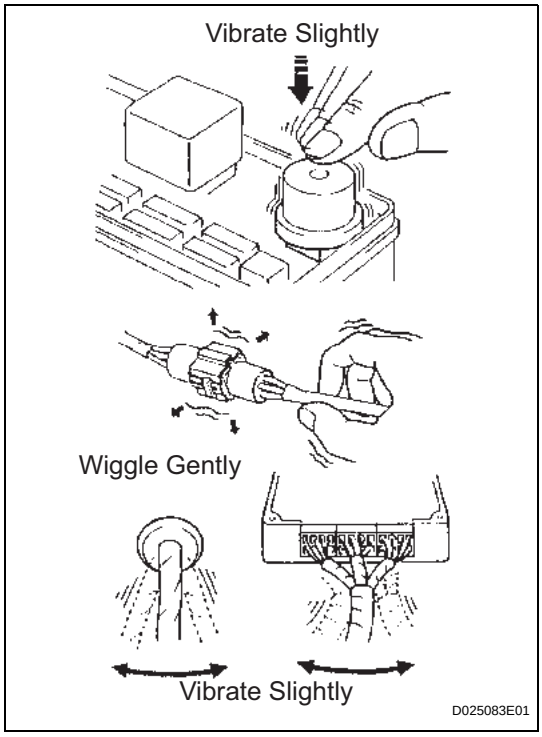
- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tool itself. Consult the Service Department listed in the tool's 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 engine 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 engine switch off. Wait for at least 2 seconds, then turn the engine 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:

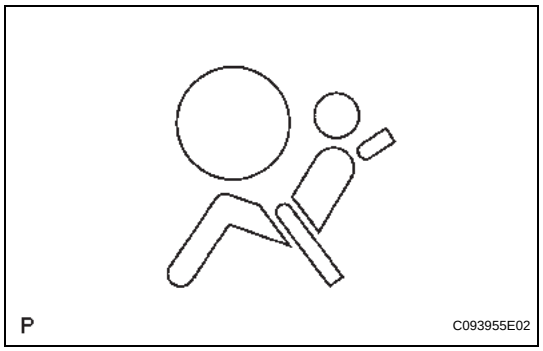
If trouble is detected during the primary check, the SRS warning light remains on even after the primary check period (for approximately 6 seconds) has elapsed.

RS

(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.

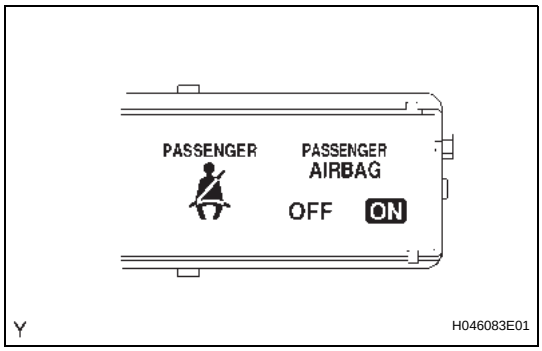
(c) Review.
(1) When the airbag system is normal:
The SRS warning light comes on only during the primary check period (for approximately 6 seconds after the engine switch is turned on (IG)).
(2) When the airbag system has trouble:
- The SRS warning light remains on even after the primary check period has elapsed.
- 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 engine 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 engine 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 engine switch is turned on (IG) (constant check).
HINT:
When any of the following symptoms occur, refer to the "Problem Symptoms Table" (See page RS-26).
- 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 engine switch is turned from off to on (IG), but the SRS warning light does not come on.



5. PASSENGER AIRBAG ON/OFF INDICATOR CHECK

(a) Turn the ignition switch to the ON position.

(b) Check that the passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.

HINT:

Refer to the table in step 4 regarding the passenger airbag ON/ OFF indicator when the ignition switch is turned to the ON position and approximately 6 seconds have passed.

6. RELEASE METHOD OF ACTIVATION PREVENTION MECHANISM

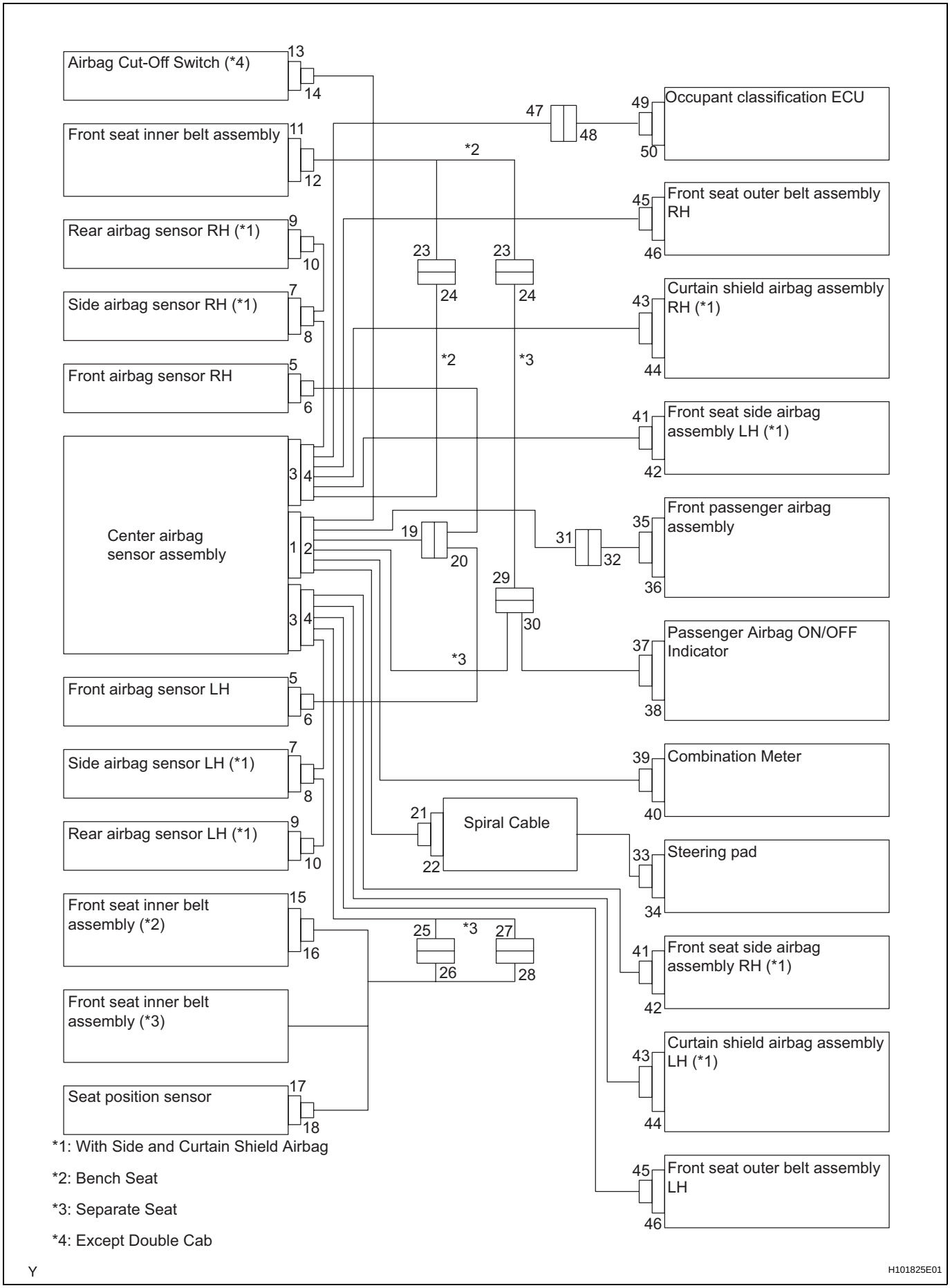
(a) The activation prevention mechanism is built into the connector for the squib circuit of the SRS. As explained in the troubleshooting section, insert a piece of paper that is the same thickness as the male terminal between the terminal and the short spring to release it (refer to the illustrations on the next 3 pages).

CAUTION:

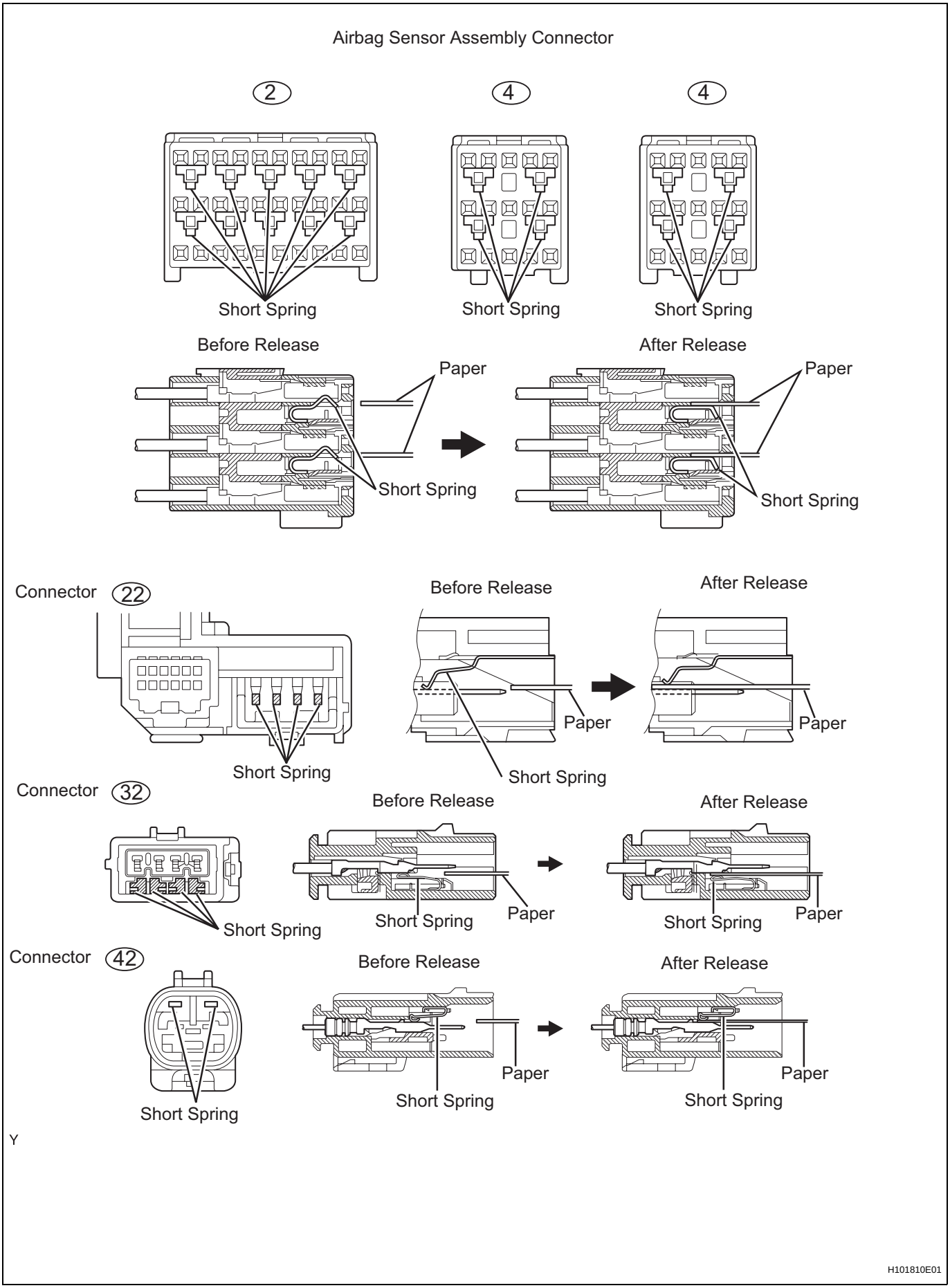
Never release the activation prevention mechanism on the squib connector even when inspecting with the squib disconnected.

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 of the same thickness as the male terminal.**


Airbag Cut-Off Switch (*4)
13
14
Front seat inner belt assembly
11
12
Rear airbag sensor RH (*1)
9
10
Side airbag sensor RH (*1)
7
8
Front airbag sensor RH
5
6
Center airbag sensor assembly
3
4
1
2
3
4
Front airbag sensor LH
5
6
Side airbag sensor LH (*1)
7
8
Rear airbag sensor LH (*1)
9
10
Front seat inner belt assembly (*2)
15
16
Front seat inner belt assembly (*3)
Seat position sensor
17
18
47
48
*2
23
24
23
24
*2
*3
19
20
29
30
*3
21
22
Spiral Cable
25
26
*3
27
28
49
50
Occupant classification ECU
45
46
Front seat outer belt assembly RH
43
44
Curtain shield airbag assembly RH (*1)
41
42
Front seat side airbag assembly LH (*1)
31
32
35
36
Front passenger airbag assembly
37
38
Passenger Airbag ON/OFF Indicator
39
40
Combination Meter
33
34
Steering pad
41
42
Front seat side airbag assembly RH (*1)
43
44
Curtain shield airbag assembly LH (*1)
45
46
Front seat outer belt assembly LH
*1: With Side and Curtain Shield Airbag
*2: Bench Seat
*3: Separate Seat
*4: Except Double Cab
Y
H101825E01

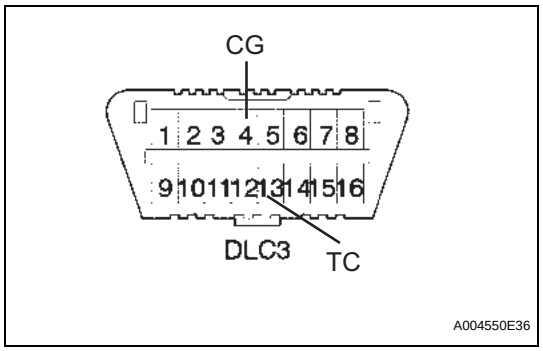
RS



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DTC CHECK / CLEAR

1. SUPPLEMENTAL RESTRAINT SYSTEM DTC CHECK (USING SST CHECK WIRE)

(a) Check the DTCs (Present DTCs).

(1) Turn the ignition switch to the ON position, 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 DTCs).

(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 ignition switch to the ON position, and wait for approximately 60 seconds.

(c) Read the DTCs.

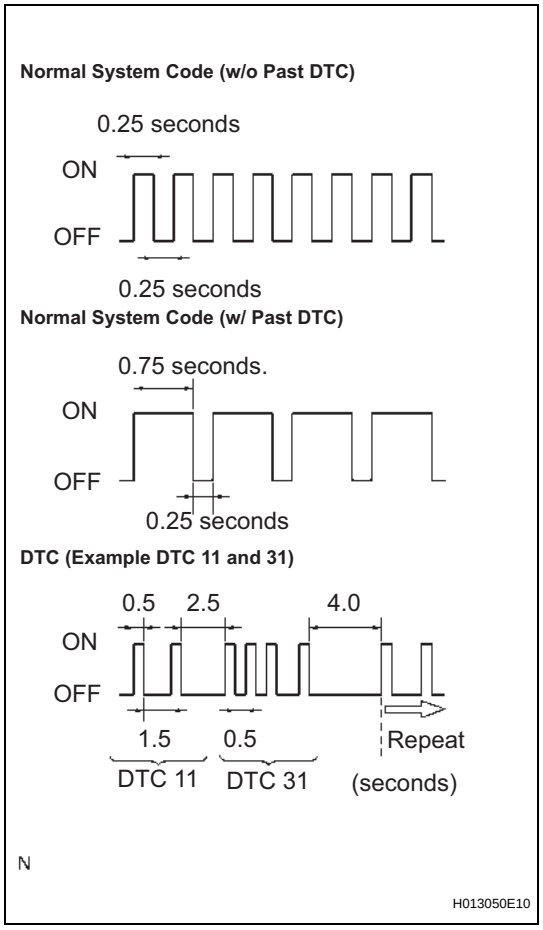
(1) Read the blinking patterns of the DTCs. Examples, the blinking patterns for the normal system indication, the past DTC indication, and the present DTC indication are shown in the illustration.

- Normal system indication
  The SRS warning light blinks twice per second.
- Past DTC indication
  When any past DTCs are stored in the center airbag sensor assembly, the SRS warning light blinks only once per second.
- Present DTC indication
  The first blinking indicates the first digit of a 2-digit DTC. The second blinking occurs after a 1.5-second pause to indicate the second digit.

If there are more than one DTC, there is a 2.5-second pause after each one. After all the DTC are displayed, there is a 4.0-second pause, and they are 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 the "TC and CG Terminal Circuit" (See page RS-349).



RS

2. DTC CLEAR (USING SST CHECK WIRE)

(a) Clear the DTCs.

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

(2) Using SST, connect terminals TC and CG of the DLC3, and then turn the ignition switch to the ON position.
SST 09843-18040

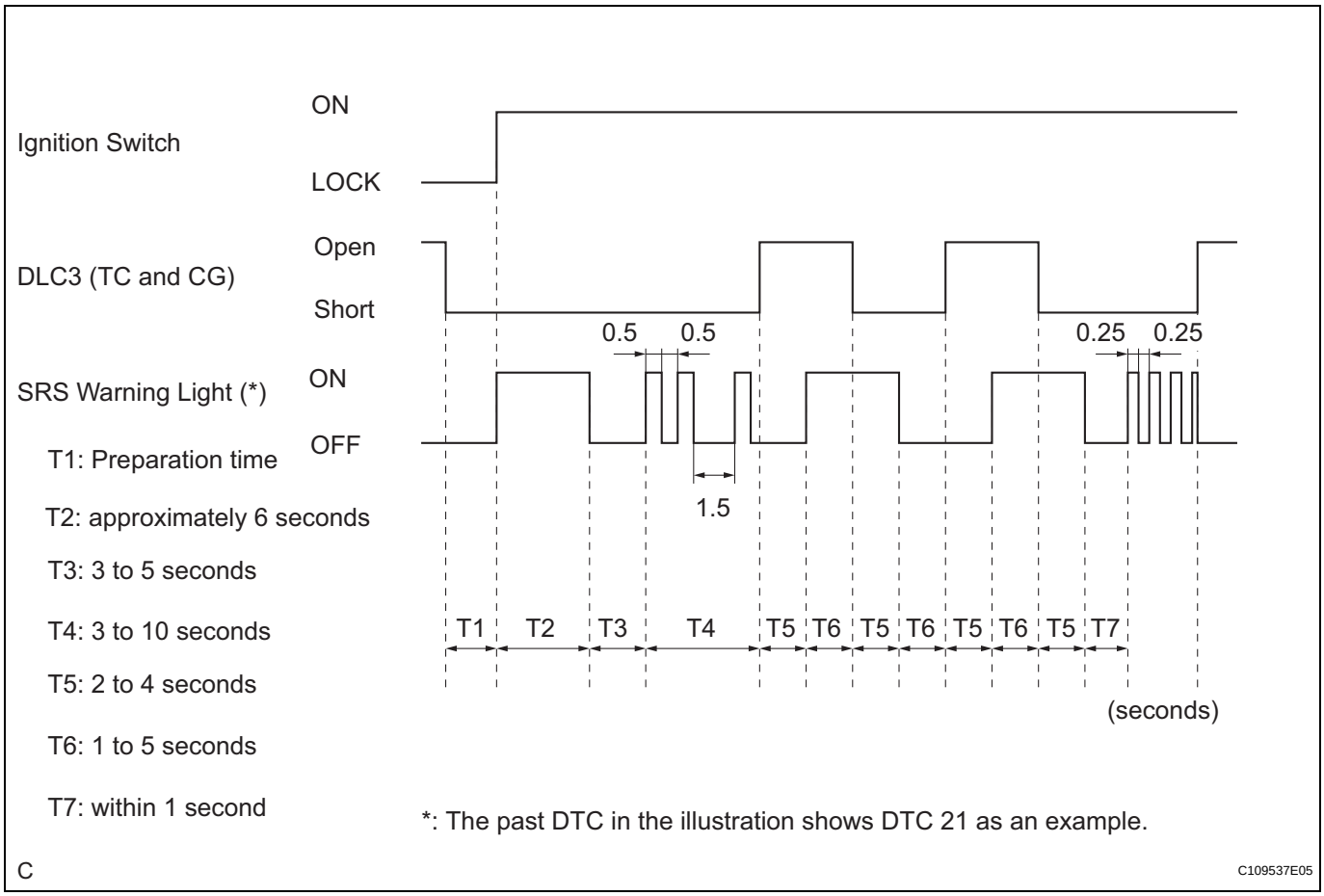
(3) Disconnect terminal TC of the DLC3 within 3 to 10 seconds after the DTCs being output, and check if the SRS warning light comes on within 3 seconds.

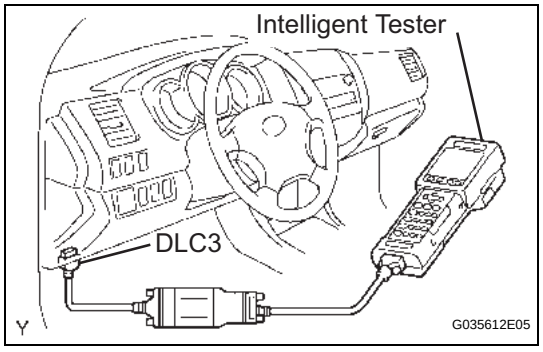
(4) Within 2 to 4 seconds of the SRS warning light coming on, connect terminals TC and CG of the DLC3.

(5) The SRS warning light should turn 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 turning 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 coming on, connect terminals TC and CG of the DLC3.

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



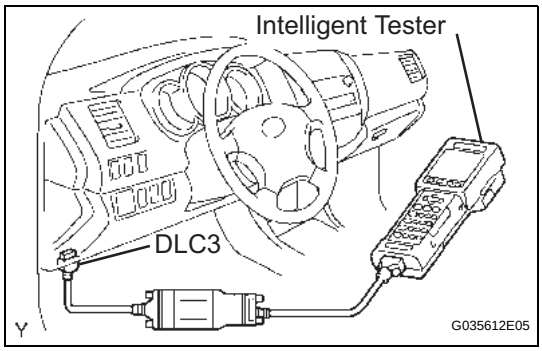


3. SUPPLEMENTAL RESTRAINT SYSTEM DTC CHECK (USING INTELLIGENT TESTER)

(a) Check the DTCs.
(1) Connect the intelligent tester to the DLC3.
(2) Turn the ignition switch to the ON position and turn the tester on.
(3) Check the DTCs by following the prompts on the tester screen.
HINT:
Refer to the intelligent tester operator manual for further details.

(b) Clear the DTCs.
(1) Connect the intelligent tester to the DLC3.
(2) Turn the ignition switch to the ON position and turn the tester on.
(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): (USING INTELLIGENT TESTER)

(a) Connect the intelligent tester to the DLC3.

(b) Turn the ignition switch to the ON position and turn the tester on.

(c) Select the SIGNAL CHECK on the tester, and proceed checking with the tester.

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 of troubleshooting and is one method to shorten labor time.

1. DATA LIST FOR CENTER AIRBAG SENSOR ASSEMBLY

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position and turn the tester on.
(c) Follow the display on the tester screen to enter the "DATA LIST".
(d) Check the condition by referring to the table below.

Item	Measure Item/ Range (Display)	Normal Condition	Diagnostic Note
D SEAT POSITION	Seat position (Driver side)/ FORWARD: Seat position is forward BKWARD: Seat position is rearward FAIL: A failure is detected	FORWARD/BKWARD	-
PASSENGER CLASS(*1)	Passenger classification/ NG: Date is not determined NONE: Vacant CHILD: Child (less than 36 kg (79.37 lb)) is seated SMALL: Adult (36 to 54 kg (79.37 to 119.05 lb)) is seated REGULAR: Adult (More than 54 kg (119.05 lb)) is seated FAIL: A failure is detected	NG/NONE/CHILD/SMALL/ REGULAR	-
D BUCKLE SW	Buckle switch (Driver side)/ UNSET: The seat belt is not fastened SET: The seat belt is fastened NG: Data is not determined	UNSET/SET	-
P BUCKLE SW	Buckle switch (Right side)/ UNSET: The seat belt is not fastened SET: The seat belt is fastened NG: Data is not determined	UNSET/SET	-
DISPLAY TYPE	Display type identification information/ LR: The display is indicated by LH/RH DP: The display is indicated by Driver/Passenger	DP	-

*1: Separate Seat

DIAGNOSTIC TROUBLE CODE CHART

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

HINT:

- When the SRS warning light remains on and the normal system code is output, a decrease in the source voltage is likely to occur. This malfunction is not stored in the memory of 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 DTCs are indicated, the DTC with the lowest number appears first.
- If a DTC is not listed on the DTC chart, the center airbag sensor may have malfunctioned.
- In the case of any malfunctions concerning open circuits, shorts to ground, or shorts to B+ due to squibs, other DTCs may not be set. In this case, repair the malfunction currently indicated and then perform malfunction diagnosis again.
- Mark in the check mode column:
  -: DTC does not correspond to check mode.
  ○: DTC corresponds to check mode.
- When DTC B1650/32 is set as a result of troubleshooting the Supplemental Restraint System (SRS), perform troubleshooting for the occupant classification system.

Center Airbag Sensor

DTC No.	Detection Item	Trouble Area	Check Mode	SRS Warning Light	See page
B1000/31	Center Airbag Sensor Assembly Malfunction	1. Center airbag sensor assembly	-	ON	RS-42
B1610/13	Front Airbag Sensor RH Circuit Malfunction	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor RH 4. Center airbag sensor assembly	-	ON	RS-43
B1615/14	Front Airbag Sensor LH Circuit Malfunction	1. Instrument panel wire 2. Engine room main wire 3. Front airbag sensor LH 4. Center airbag sensor assembly	-	ON	RS-43
B1620/21	Driver Side - Side Airbag Sensor Circuit Malfunction	1. No. 2 floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	-	ON	RS-74
B1625/22	Front Passenger Side - Side Airbag Sensor Circuit Malfunction	1. Floor wire 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	-	ON	RS-74
B1630/23	Driver Side Rear Airbag Sensor Circuit Malfunction	1. No. 2 floor wire 2. Side airbag sensor LH 3. Rear airbag sensor LH 4. Center airbag sensor assembly	-	ON	RS-103
B1635/24	Front Passenger Side Rear Airbag Sensor Circuit Malfunction	1. Floor wire 2. Side airbag sensor RH 3. Rear airbag sensor RH 4. Center airbag sensor assembly	-	ON	RS-103

DTC No.	Detection Item	Trouble Area	Check Mode	SRS Warning Light	See page
B1650/32	Occupant Classification System Malfunction	1. No. 1 seat wire 2. Floor wire 3. Occupant classification system 4. Center airbag sensor assembly	-	ON	RS-123
B1651/33	Manual Cut off Switch Trouble	1. Instrument panel wire 2. Airbag Cut-Off Switch 3. Center airbag sensor assembly	-	ON	RS-135
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	1. No. 1 seat wire (*2) 2. No. 2 seat wire (*2) 3. No. 2 floor wire 4. Front seat inner belt assembly LH (*1) 5. Seat position sensor 6. Center airbag sensor assembly	-	ON	RS-141
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	1. No. 1 seat wire (*2) 2. No. 2 seat wire (*2) 3. No. 2 floor wire 4. Front seat inner belt assembly 5. Center airbag sensor assembly	-	ON	RS-157
B1660/43	Passenger Airbag ON / OFF Indicator Circuit Malfunction	1. Passenger Airbag ON/OFF Indicator (Passenger seat belt warning light assembly 2. Instrument panel wire 3. Center airbag sensor assembly	-	ON	RS-171
B1662/45	Indicator Light Circuit Malfunction	1. Instrument panel wire 2. Combination meter assembly 3. Center airbag sensor assembly	-	ON	RS-182
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	O	ON	RS-187
B1801/51	Open in Driver Side Squib Circuit	Same as DTC No. B1800/51	O	ON	RS-187
B1802/51	Short to GND in Driver Side Squib Circuit	Same as DTC No. B1800/51	O	ON	RS-187
B1803/51	Short to B+ in Driver Side Squib Circuit	Same as DTC No. B1800/51	O	ON	RS-187
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	O	ON	RS-201
B1806/52	Open in Front Passenger Side Squib Circuit	Same as DTC No. B1805/52	O	ON	RS-201
B1807/52	Short to GND in Front Passenger Side Squib Circuit	Same as DTC No. B1805/52	O	ON	RS-201
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	Same as DTC No. B1805/52	O	ON	RS-201
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	O	ON	RS-217
B1811/53	Open in Driver Side Squib 2nd Step Circuit	Same as DTC No. B1810/53	O	ON	RS-217
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	Same as DTC No. B1810/53	O	ON	RS-217
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	Same as DTC No. B1810/53	O	ON	RS-217

DTC No.	Detection Item	Trouble Area	Check Mode	SRS Warning Light	See page
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	O	ON	RS-233
B1816/54	Open in Front Passenger Side Squib 2nd Step Circuit	Same as DTC No. B1815/54	O	ON	RS-233
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	Same as DTC No. B1815/54	O	ON	RS-233
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	Same as DTC No. B1815/54	O	ON	RS-233
B1820/55	Short in Driver Side - Side Squib Circuit	1. No. 2 floor wire 2. Front seat with adjuster frame assembly LH (Driver side-side squib) 3. Center airbag sensor	O	ON	RS-249
B1821/55	Open in Driver Side - Side Squib Circuit	Same as DTC No. B1820/55	O	ON	RS-249
B1822/55	Short to GND in Driver Side - Side Squib Circuit	Same as DTC No. B1820/55	O	ON	RS-249
B1823/55	Short to B+ in Driver Side - Side Squib Circuit	Same as DTC No. B1820/55	O	ON	RS-249
B1825/56	Short in Front Passenger Side - Side Squib Circuit	1. Floor wire 2. Front seat with adjuster frame assembly RH (Front passenger side-side squib) 3. Center airbag sensor assembly	O	ON	RS-260
B1826/56	Open in Front Passenger Side - Side Squib Circuit	Same as DTC No. B1825/56	O	ON	RS-260
B1827/56	Short to GND in Front Passenger Side - Side Squib Circuit	Same as DTC No. B1825/56	O	ON	RS-260
B1828/56	Short to B+ in Front Passenger Side - Side Squib Circuit	Same as DTC No. B1825/56	O	ON	RS-260
B1830/57	Short in Driver Side Curtain Shield Squib Circuit	1. No. 2 floor wire 2. Curtain shield airbag assembly (Driver side curtain shield squib) 3. Center airbag sensor assembly	O	ON	RS-271
B1831/57	Open in Driver Side Curtain Shield Squib Circuit	Same as DTC No. B1830/57	O	ON	RS-271
B1832/57	Short to GND in Driver Side Curtain Shield Squib Circuit	Same as DTC No. B1830/57	O	ON	RS-271
B1833/57	Short to B+ in Driver Side Curtain Shield Squib Circuit	Same as DTC No. B1830/57	O	ON	RS-271
B1835/58	Short in Front Passenger Side Curtain Shield Squib Circuit	1. Floor wire 2. Curtain shield airbag assembly (Front passenger side curtain shield squib) 3. Center airbag sensor assembly	O	ON	RS-282
B1836/58	Open in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC No. B1835/58	O	ON	RS-282

DTC No.	Detection Item	Trouble Area	Check Mode	SRS Warning Light	See page
B1837/58	Short to GND in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC No. B1835/58	O	ON	RS-282
B1838/58	Short to B+ in Front Passenger Side Curtain Shield Squib Circuit	Same as DTC No. B1835/58	O	ON	RS-282
B1900/73	Short in Driver Side Front Pretensioner Squib Circuit	1. No. 2 floor wire 2. No. 2 rear door wire (*3) 3. Front seat outer belt assembly LH (Driver side front pretensioner squib) 4. Center airbag sensor assembly	O	ON	RS-293
B1901/73	Open in Driver Side Front Pretensioner Squib Circuit	Same as DTC No. B1900/73	O	ON	RS-293
B1902/73	Short to GND in Driver Side Front Pretensioner Squib Circuit	Same as DTC No. B1900/73	O	ON	RS-293
B1903/73	Short to B+ in Driver Side Front Pretensioner Squib Circuit	Same as DTC No. B1900/73	O	ON	RS-293
B1905/74	Short in Front Passenger Side Front Pretensioner Squib Circuit	1. Floor wire 2. No. 1 rear door wire (*3) 3. Front seat outer belt assembly RH (Front passenger side front pretensioner squib) 4. Center airbag sensor assembly	O	ON	RS-317
B1906/74	Open in Front Passenger Side Front Pretensioner Squib Circuit	Same as DTC No. B1905/74	O	ON	RS-317
B1907/74	Short to GND in Front Passenger Side Front Pretensioner Squib Circuit	Same as DTC No. B1905/74	O	ON	RS-317
B1908/74	Short to B+ in Front Passenger Side Front Pretensioner Squib Circuit	Same as DTC No. B1905/74	O	ON	RS-317

*1: For separate seat
*2: For bench seat
*3: For access cab

DTC	B1000/31	Center Airbag Sensor Assembly Malfunction

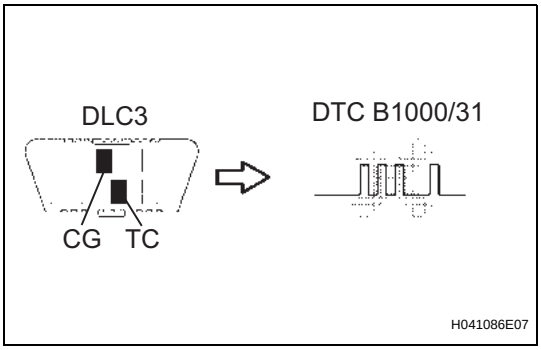
DESCRIPTION

The center airbag sensor assembly consists of parts such as the airbag sensor, the safing sensor, the drive circuit, the diagnostic circuit and the ignition control.
When the center airbag sensor assembly receives signals from the airbag sensor, it determines whether or not the SRS should be activated.
B1000/31 is set 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 any other DTCs are set simultaneously with B1000/31, repair the malfunctions indicated by those DTCs first.

1	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).
OK:
DTC B1000/31 is not output.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

RS

DTC	B1610/13	Front Airbag Sensor RH Circuit Malfunction

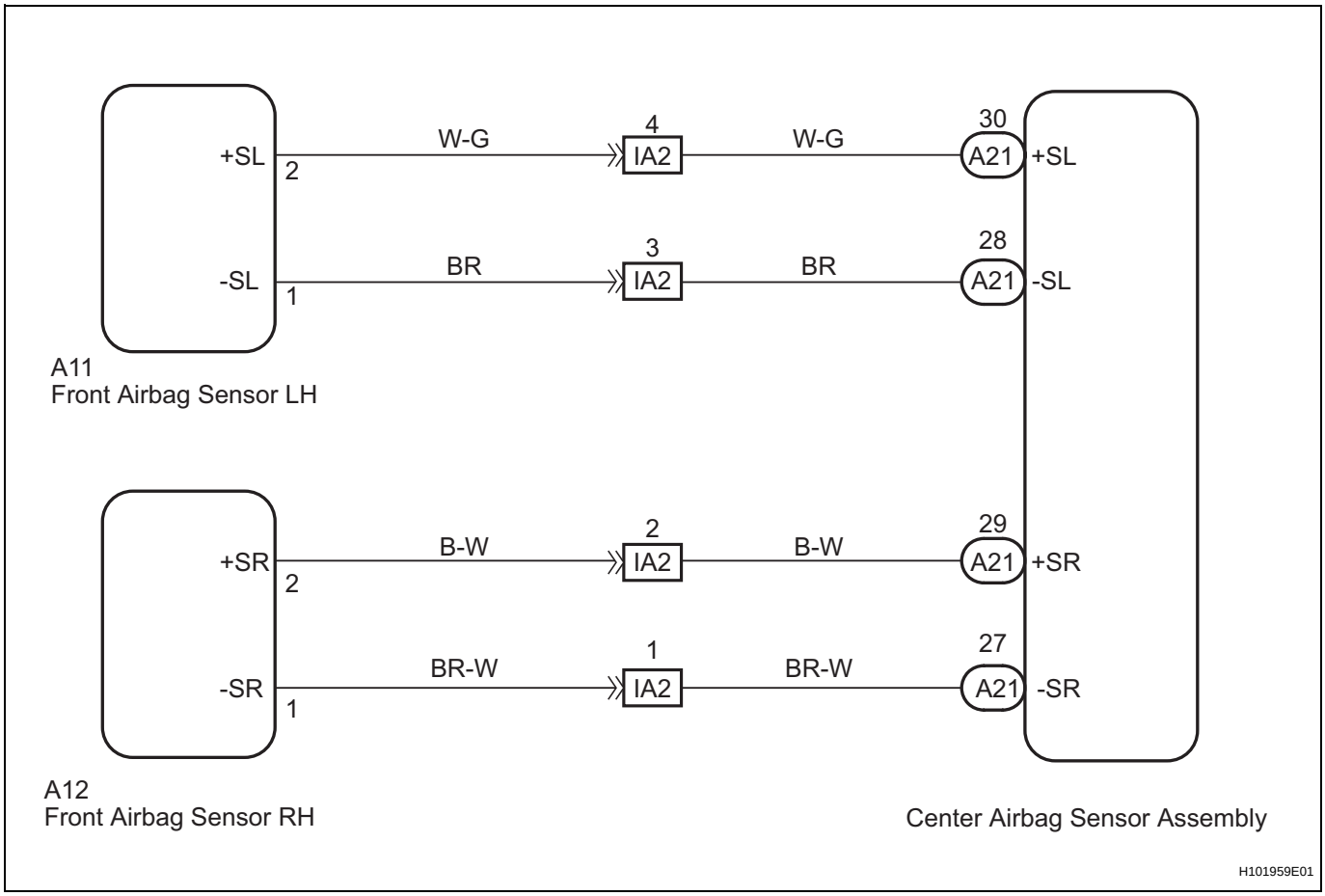
DTC	B1615/14	Front Airbag Sensor LH Circuit Malfunction

DESCRIPTION

The front airbag sensor RH consists of parts such as the diagnostic circuit and the frontal detection sensor.
The configuration of the front airbag sensor LH is the same as that of the RH.
When the center airbag sensor assembly receives signals from the frontal deceleration sensor, it determines whether or not the SRS should be activated.
DTC B1610/13 is set when a malfunction is detected in the front airbag sensor RH circuit.
DTC B1615/14 is set when a malfunction is detected in the front airbag sensor LH circuit.

DTC No.	DTC Detecting Condition	Trouble Areas
B1610/13	• The center airbag sensor assembly receives a line short signal, an open signal, a short to ground signal or a short to B+ signal in the front airbag sensor RH circuit for 2 seconds • Front airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Front airbag sensor RH • Center airbag sensor assembly • Instrument panel wire • Engine room main wire
B1615/14	• The center airbag sensor assembly receives a line short signal, an open signal, a short to ground signal or a short to B+ signal in the front airbag sensor LH circuit for 2 seconds • Front airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Front airbag sensor LH • Center airbag sensor assembly • Instrument panel wire • Engine room main wire

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.
(g) Disconnect the connector from the front seat outer belt assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the front seat airbag assembly LH.
(i) Disconnect the connector from the front seat airbag assembly RH.
(j) Disconnect the connector from the curtain shield airbag assembly LH.
(k) Disconnect the connector from the curtain shield airbag assembly RH.

1 CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.
(1) Check the DTC (See page RS-34).
Result

Result	Proceed to
DTC B1610/13 is output.	A
DTC B1615/14 is output.	B
DTC B1610/13 and B1615/14 are output.	C
Neither DTC B1610/13 nor B1615/14 is output.	D

B → **Go to step 14**

C → **Go to step 26**

D → **USE SIMULATION METHOD TO CHECK**

A

RS

2 CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

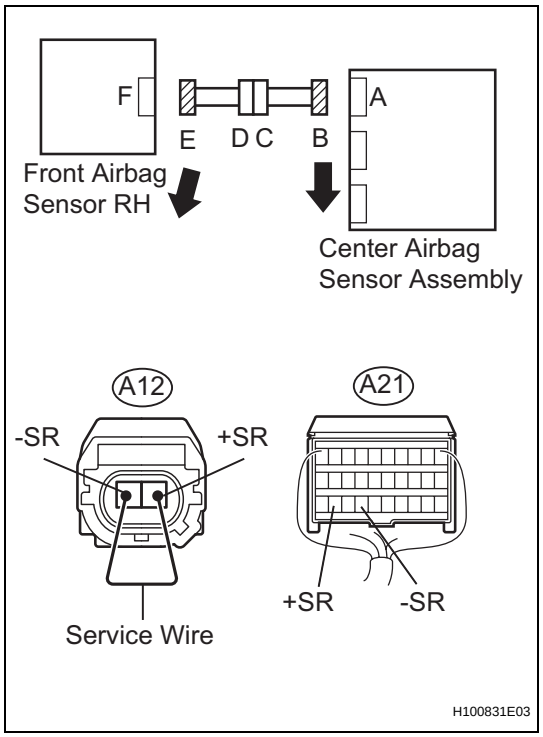
3	CHECK CONNECTOR

(a) Check that the connectors (on the center airbag sensor assembly side and airbag sensor front RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4	CHECK FRONT AIRBAG SENSOR RH CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the front airbag sensor RH.
(b) Using a service wire, connect A12-2 (+SR) and A12-1 (-SR) of connector E.
NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.
(c) Measure the resistance.
Standard resistance

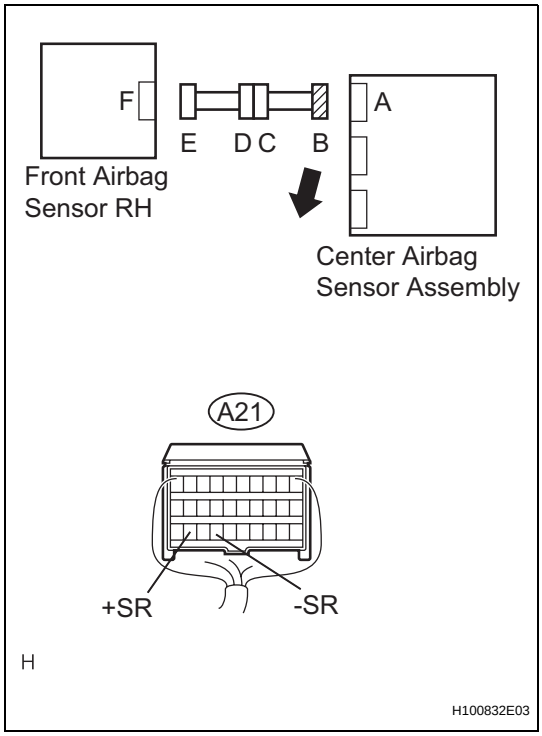
Tester connection	Condition	Specified Condition
A21-29 (+SR) - A21-27 (-SR)	Always	Below 1 Ω

NG → **Go to step 10**

OK

RS

5 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (FOR SHORT)



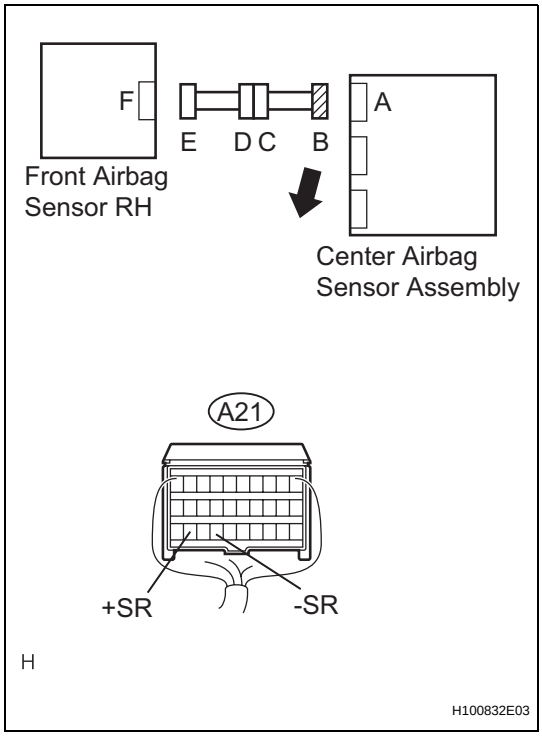
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

Tester connection	Condition	Specified Condition
A21-29 (+SR) - A21-27 (-SR)	Always	1 MΩ or higher

NG → **Go to step 11**

OK

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



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

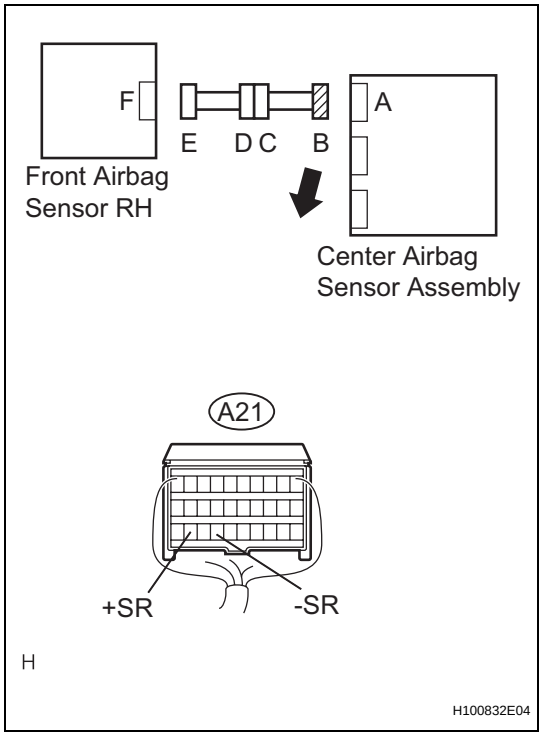
Tester connection	Condition	Specified Condition
A21-29 (+SR) - Body ground	Ignition switch ON	Below 1 V
A21-27 (-SR) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 12**

OK

RS

7 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (TO GROUND)



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

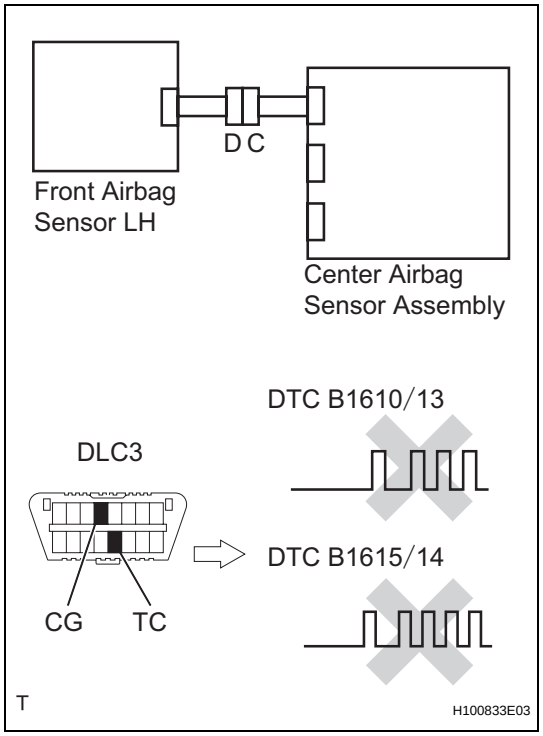
Standard resistance

Tester connection	Condition	Specified Condition
A21-29 (+SR) - Body ground	Always	1 MΩ or higher
A21-27 (-SR) - Body ground	Always	1 MΩ or higher

NG → **Go to step 13**

OK

8 CHECK FRONT AIRBAG SENSOR RH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the airbag sensor front RH with the front airbag sensor 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1610/13 is output.	A
DTC B1615/14 is output.	B
Neither DTC B1610/13 nor B1615/14 is output.	C

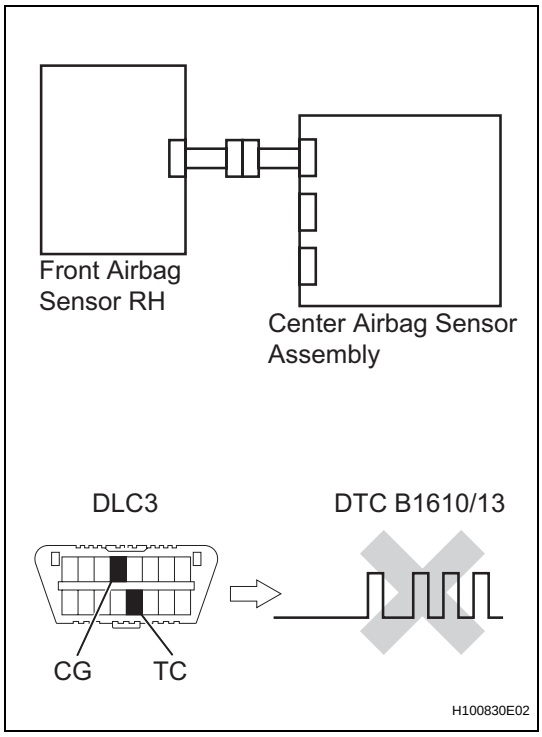
B → **REPLACE FRONT AIRBAG SENSOR RH**

C → **USE SIMULATION METHOD TO CHECK**

RS

A

9	REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

OK:
DTC B1610/13 is not output.

HINT:
DTCs other than B1610/13 may be output at this time, but they are not related to this check.

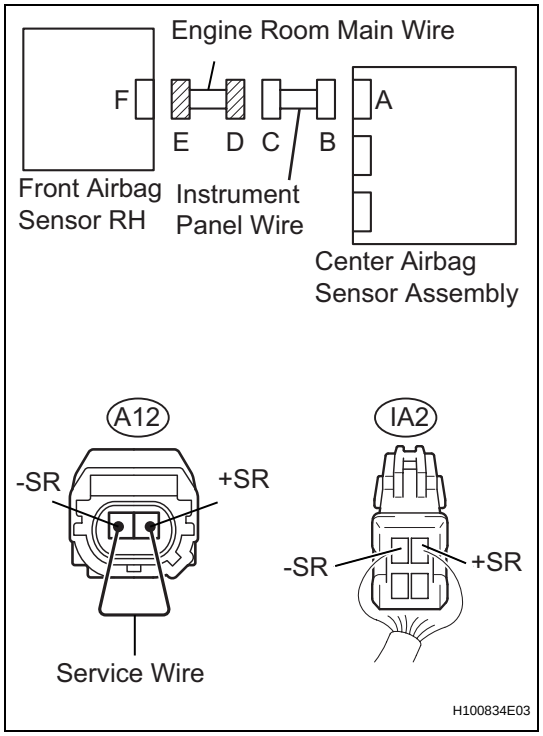
NG → **REPLACE FRONT AIRBAG SENSOR RH**

OK

END

RS

10	CHECK ENGINE ROOM MAIN WIRE (FOR OPEN)



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

HINT:

The service wire has already been inserted into connector E.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
IA2 -1 (-SR) - IA2-2 (+SR)	Always	Below 1 Ω

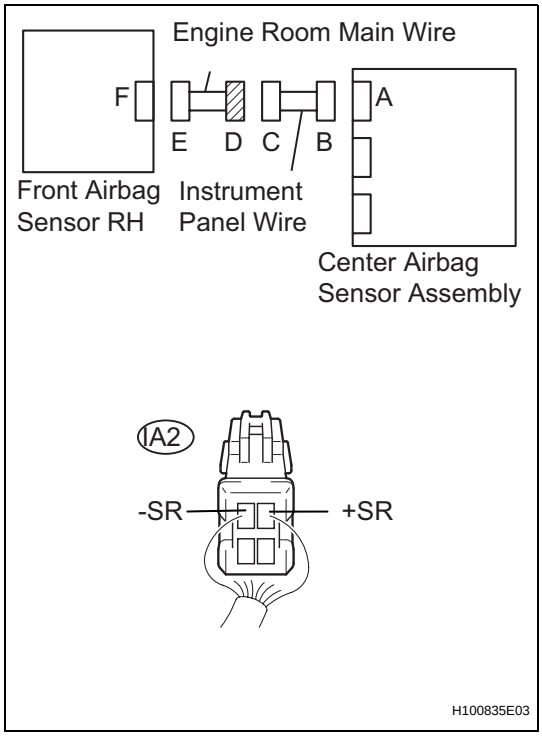
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

11	CHECK ENGINE ROOM MAIN WIRE (FOR SHORT)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

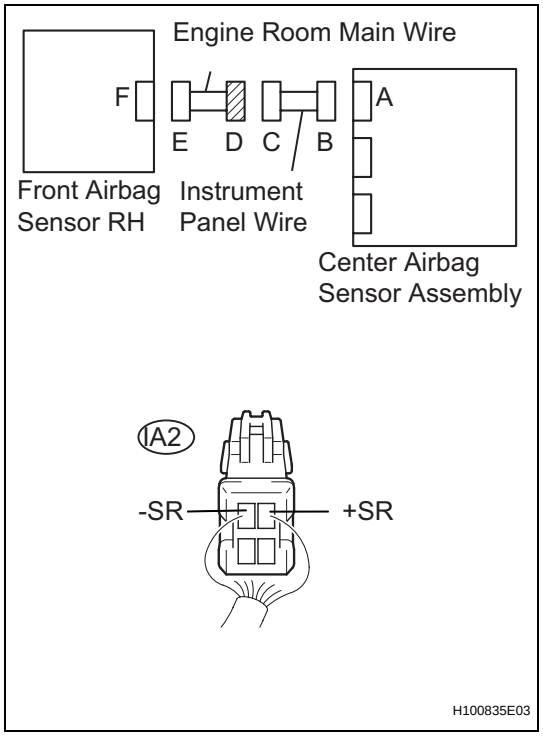
Tester Connection	Condition	Specified Condition
IA2 -1 (-SR) - IA2-2 (+SR)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

12	CHECK ENGINE ROOM MAIN WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the engine room main wire connector from the instrument panel wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
IA2 -1 (-SR) - Body ground	Ignition switch ON	Below 1 V
IA2-2 (+SR) - Body ground	Ignition switch ON	Below 1 V

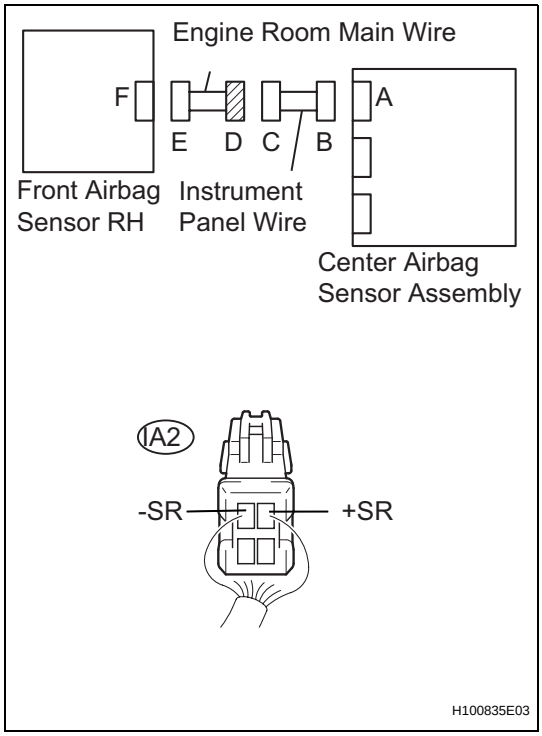
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

13	CHECK ENGINE ROOM MAIN WIRE (TO GROUND)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IA2 -1 (-SR) - Body ground	Always	1 MΩ or higher
IA2-2 (+SR) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

14	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

15	CHECK CONNECTOR

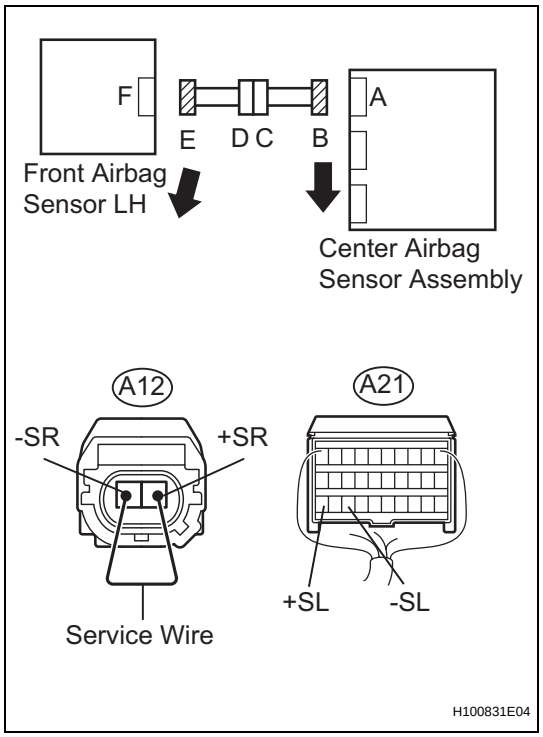
(a) Check that the connectors (on the center airbag sensor assembly side and front airbag sensor LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

RS

NG → REPAIR OR REPLACE WIRE HARNESS

OK

16 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (FOR OPEN)



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

(b) Using a service wire, connect A11-2 (+SL) and A11-1 (-SL) of connector E.

NOTICE:

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

(c) Measure the resistance.

Standard resistance

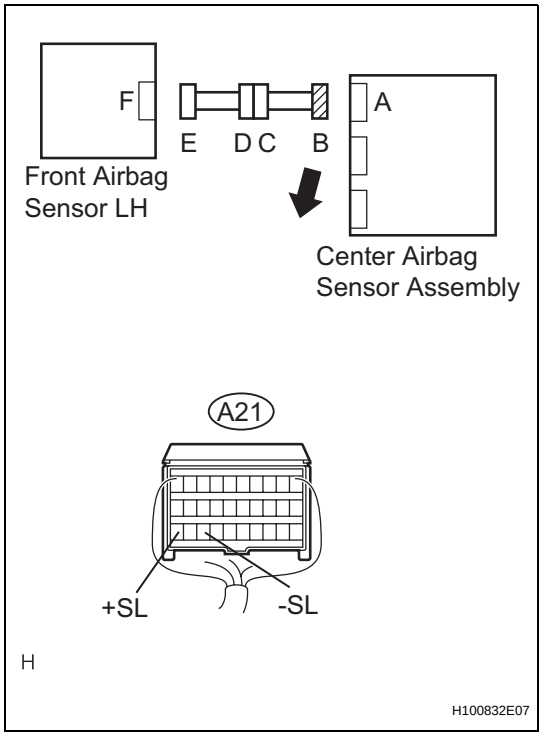
Tester Connection	Condition	Specified Condition
A21 -30 (+SL) - A21-28 (-SL)	Always	Below 1 Ω

NG → Go to step 22

OK

RS

17 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (FOR SHORT)



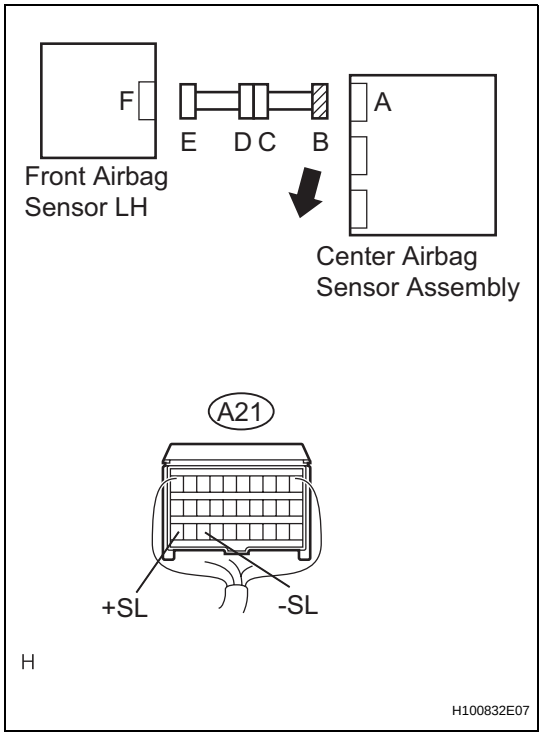
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21 -30 (+SL) - A21-28 (-SL)	Always	1 MΩ or Higher

NG → **Go to step 23**

OK

18 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO B+)



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

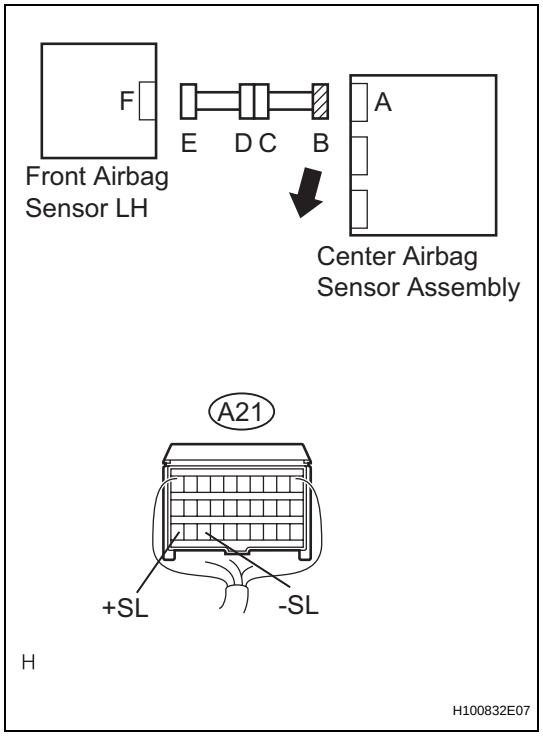
Tester Connection	Condition	Specified Condition
A21 -30 (+SL) - Body ground	Ignition switch ON	Below 1V
A21-28 (-SL) - Body ground	Ignition switch ON	Below 1V

NG → **Go to step 24**

OK

RS

19 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO GROUND)



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

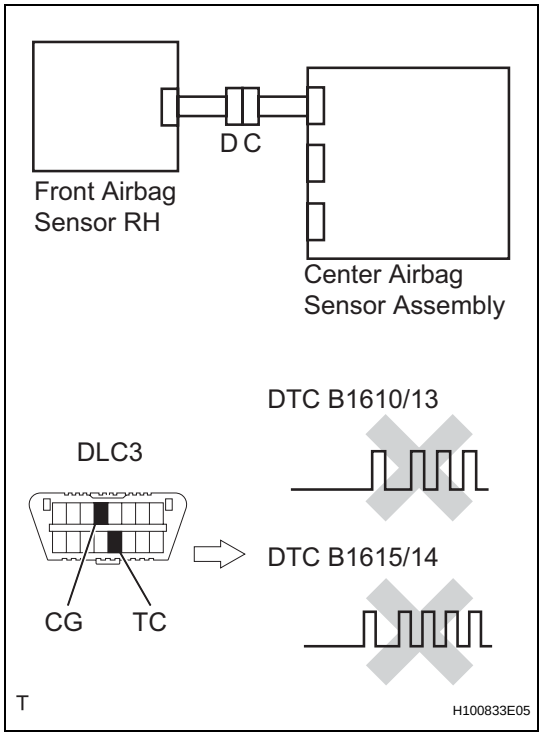
Standard resistance

Tester Connection	Condition	Specified Condition
A21 -30 (+SL) - Body ground	Always	1 MΩ or Higher
A21-28 (-SL) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 25**

OK

20 CHECK FRONT AIRBAG SENSOR LH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the front airbag sensor RH with the front airbag sensor 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1615/14 is output.	A
DTC B1610/13 is output.	B
Neither DTC B1610/13 nor B1615/14 is output.	C

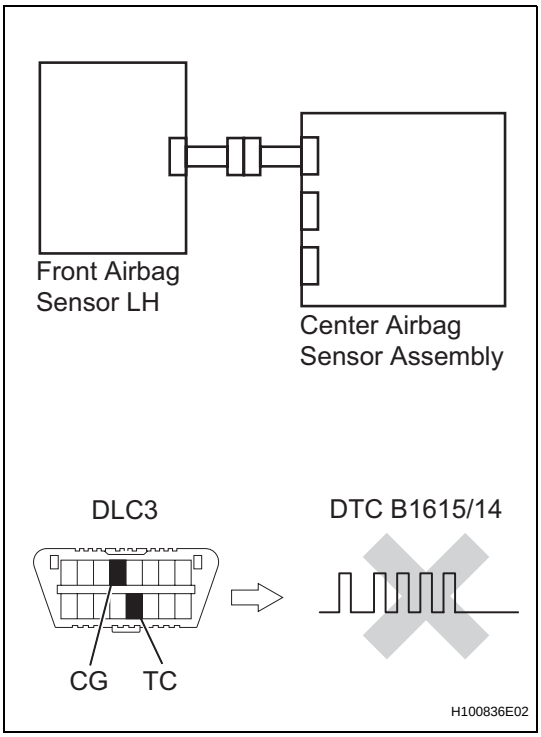
B → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

RS

C → USE SIMULATION METHOD TO CHECK

A

21 REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

OK:
DTC B1615/14 is not output.

HINT:
DTCs other than B1615/14 may be output at this time, but they are not related to this check.

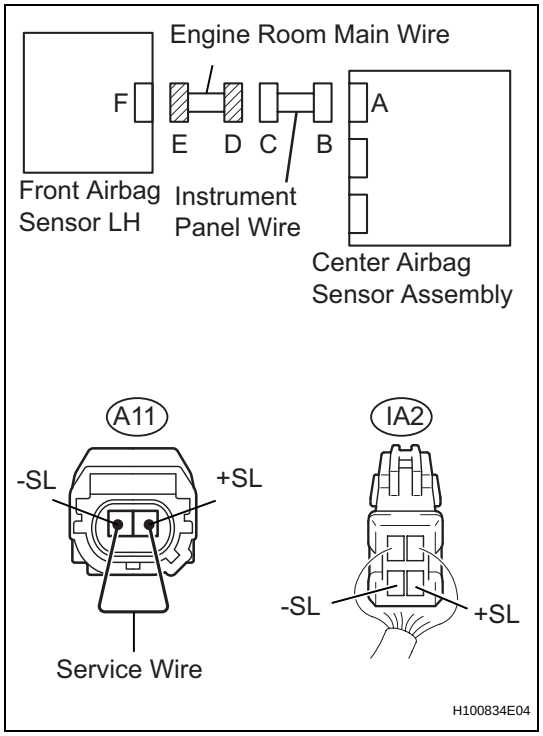
NG → **REPLACE FRONT AIRBAG SENSOR LH (LH)**

OK

END

RS

22 CHECK ENGINE ROOM MAIN WIRE (FOR OPEN)



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

(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - IA2-4 (+SL)	Always	Below 1 Ω

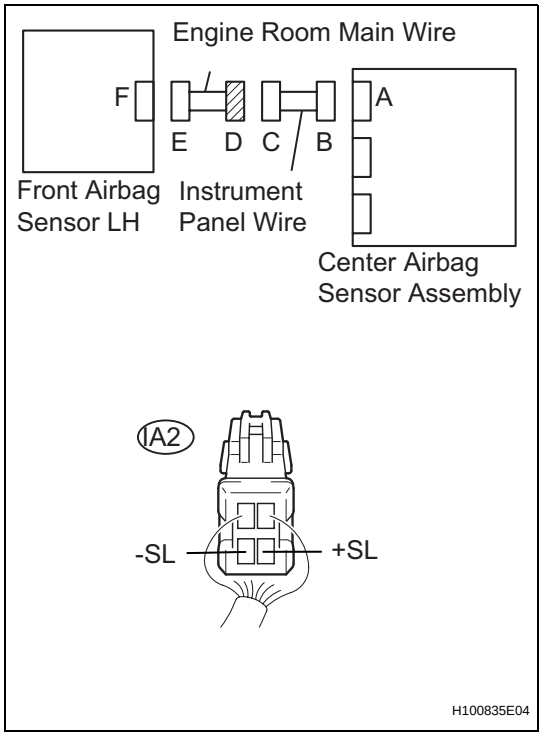
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

23	CHECK ENGINE ROOM MAIN WIRE (FOR SHORT)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

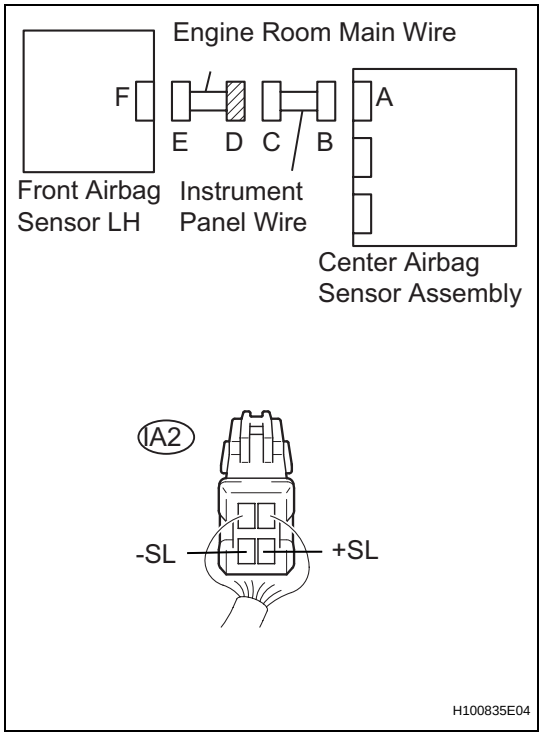
Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - IA2-4 (+SL)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

24	CHECK ENGINE ROOM MAIN WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the engine room main wire connector from the instrument panel wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - Body ground	Ignition switch ON	Below 1 V
IA2-4 (+SL) - Body ground	Ignition switch ON	Below 1 V

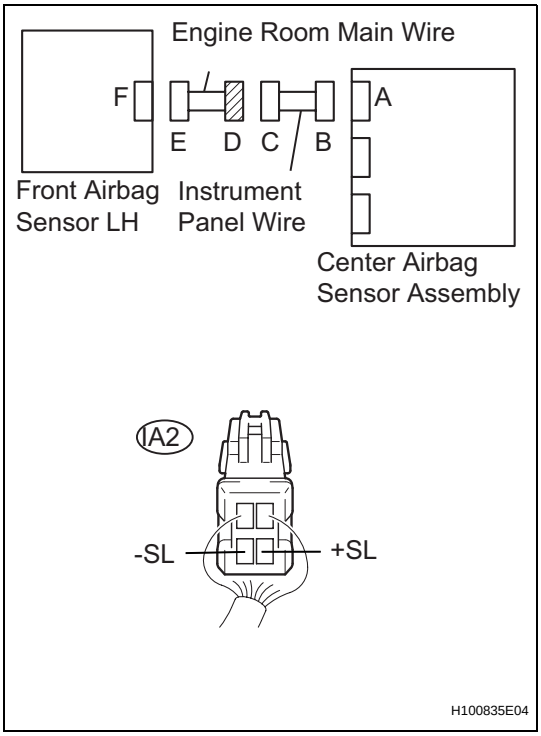
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

25	CHECK ENGINE ROOM MAIN WIRE (TO GROUND)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - Body ground	Always	1 MΩ or Higher
IA2-4 (+SL) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

26	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

27	CHECK CONNECTOR

(a) Check that the connectors (on the center airbag sensor assembly side, front airbag sensor LH side and front airbag sensor RH side) are not damaged (See page IN-34).

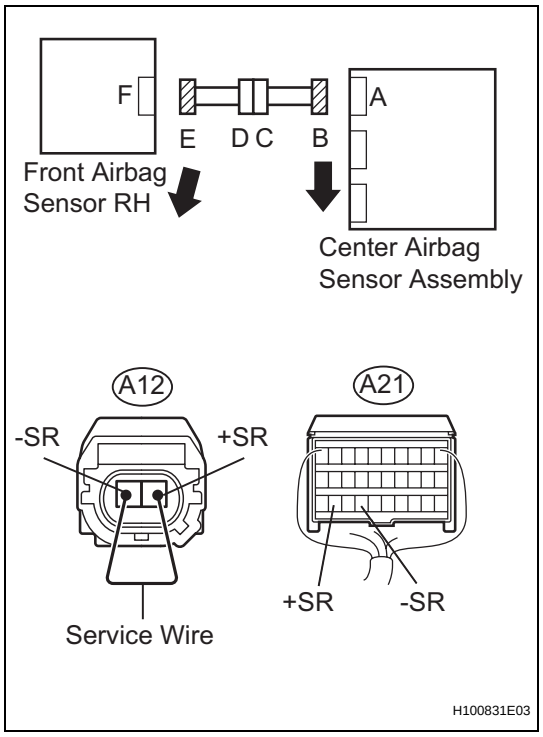
RS

OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

28 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the front airbag sensor RH.
(b) Using a service wire, connect A12-2 (+SR) and A12-1 (-SR) of connector E.

NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.

(c) Measure the resistance.
Standard resistance

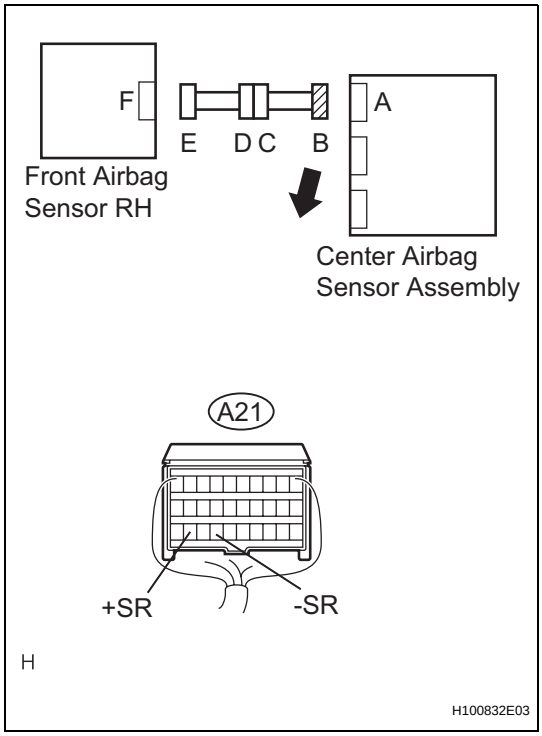
Tester Connection	Condition	Specified Condition
A21-29 (+SR) - A21-27 (-SR)	Always	Below 1 Ω

NG → **Go to step 32**

OK

RS

29 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (FOR SHORT)



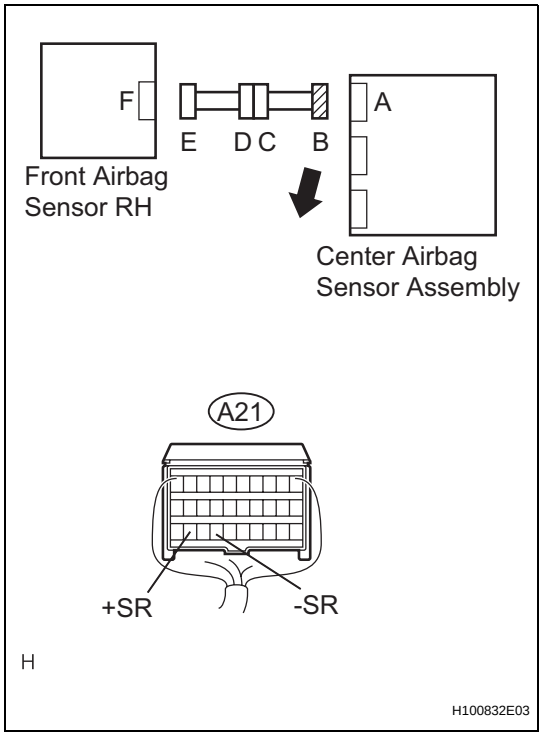
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-29 (+SR) - A21-27 (-SR)	Always	1 MΩ or Higher

NG → **Go to step 33**

OK

30 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (TO B+)



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

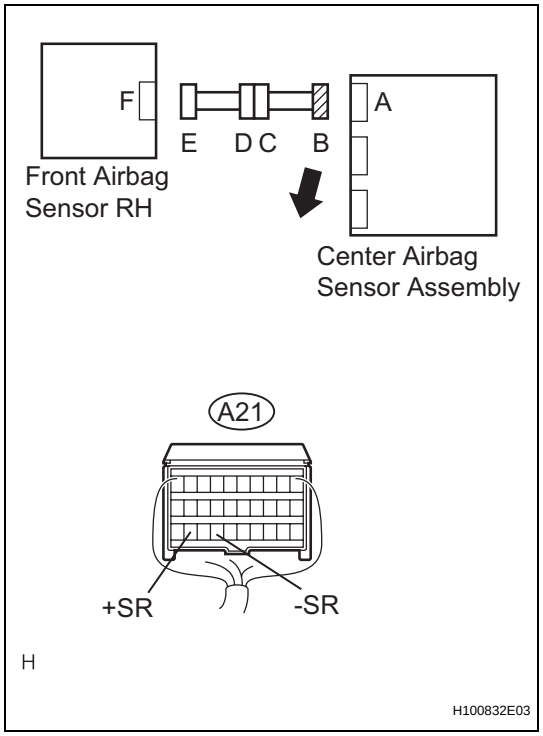
Tester Connection	Condition	Specified Condition
A21-29 (+SR) - Body ground	Ignition switch ON	Below 1 V
A21-27 (-SR) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 34**

OK

RS

31 CHECK FRONT AIRBAG SENSOR RH CIRCUIT (TO GROUND)



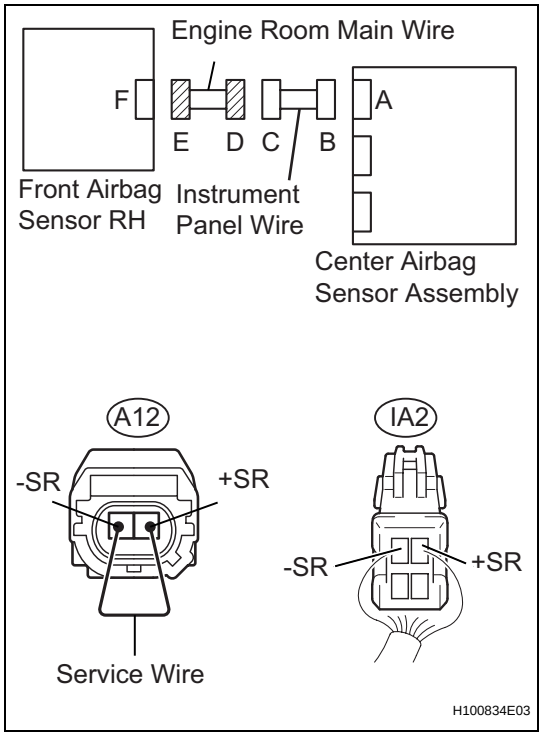
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
A21-29 (+SR) - Body ground	Always	1 MΩ or Higher
A21-27 (+SR) - Body ground	Always	1 MΩ or Higher

NG	Go to step 35
OK	Go to step 36

32 CHECK ENGINE ROOM MAIN WIRE (FOR OPEN)



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

HINT:
The service wire has already been inserted into connector E.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
IA2-1 (-SR) - IA2-2 (+SR)	Always	Below 1 Ω

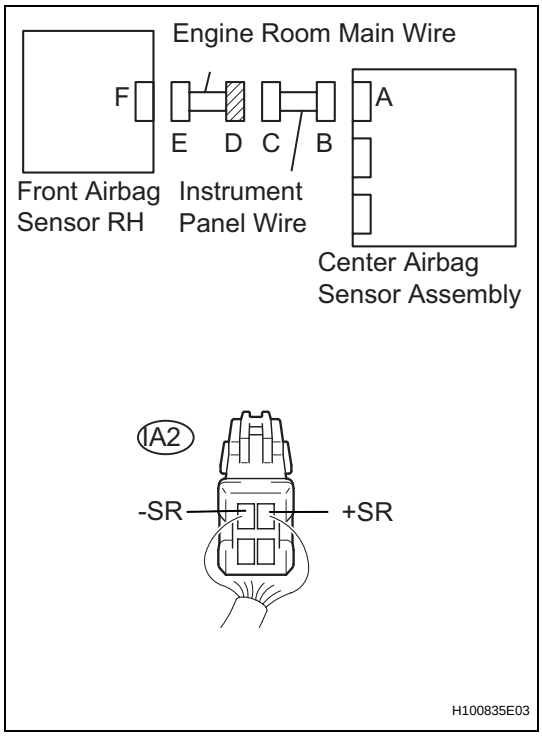
NG	REPAIR OR REPLACE ENGINE ROOM MAIN WIRE

RS

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

33 CHECK ENGINE ROOM MAIN WIRE (FOR SHORT)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IA2-1 (-SR) - IA2-2 (+SR)	Always	1 MΩ or Higher

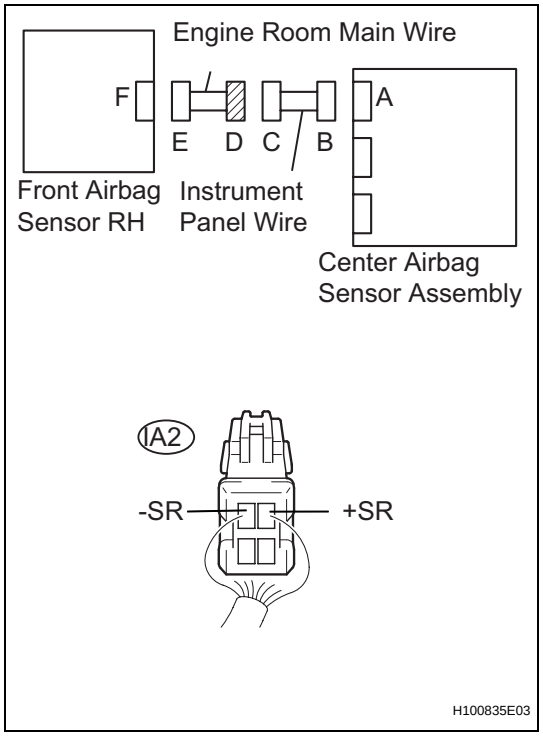
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

34	CHECK ENGINE ROOM MAIN WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the engine room main wire connector from the instrument panel wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
IA2-1 (-SR) - Body ground	Ignition switch ON	Below 1 V
IA2-2 (+SR) - Body ground	Ignition switch ON	Below 1 V

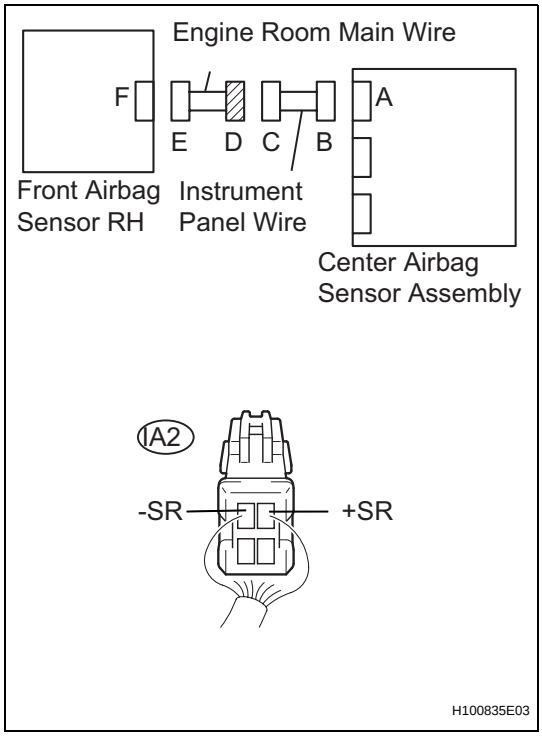
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

35	CHECK ENGINE ROOM MAIN WIRE (TO GROUND)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

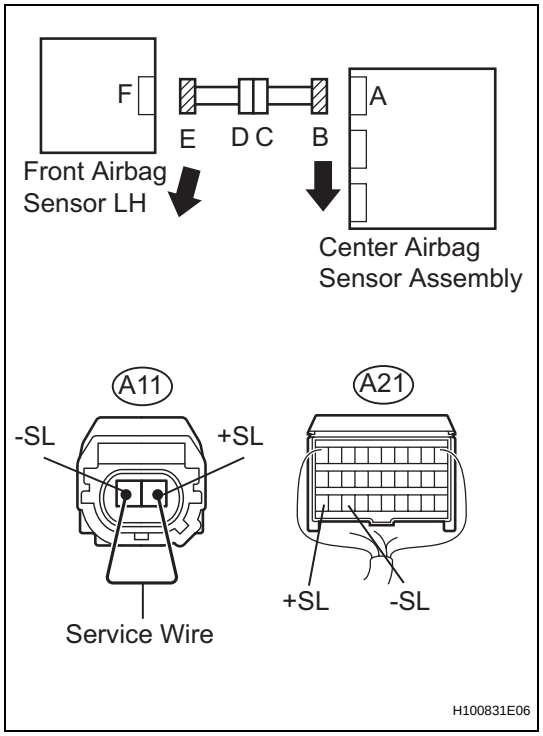
Tester Connection	Condition	Specified Condition
IA2-1 (-SR) - Body ground	Always	1 MΩ or Higher
IA2-2 (+SR) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

36 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the front airbag sensor LH.
(b) Using a service wire, connect A11-2 (+SL) and A11-1 (-SL) of connector E.

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

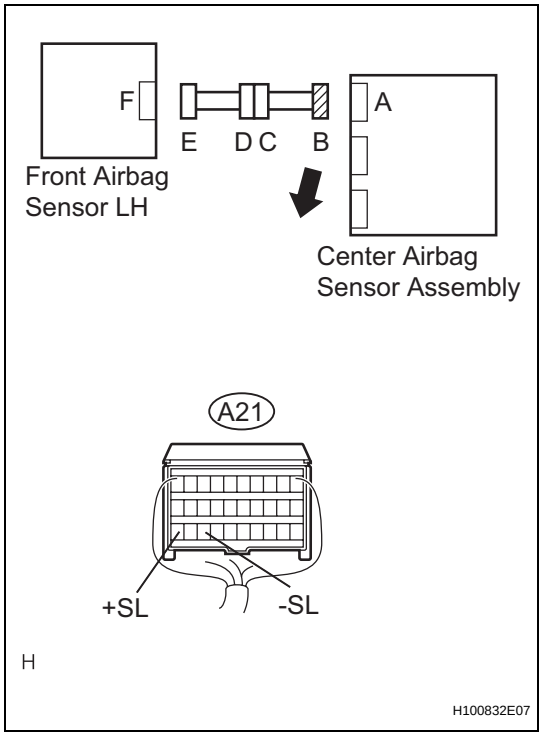
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-30 (+SR) - A21-28 (-SR)	Always	Below 1 Ω

NG → **Go to step 40**

OK

37 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (FOR SHORT)



(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

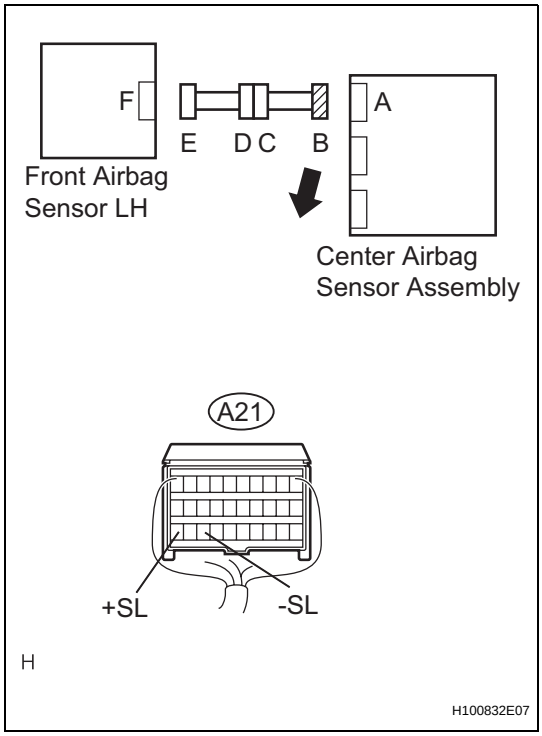
Tester Connection	Condition	Specified Condition
A21-30 (+SL) - A21-28 (-SL)	Always	1 MΩ or Higher

NG → **Go to step 41**

OK

RS

38 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO B+)



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

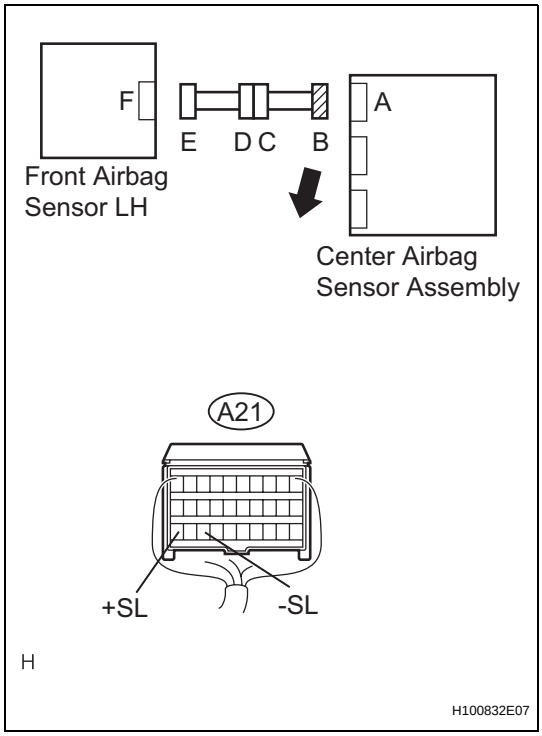
Standard voltage

Tester Connection	Condition	Specified Condition
A21-30 (+SL) - Body ground	Ignition switch ON	Below 1 V
A21-28 (-SL) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 42**

OK

39 CHECK FRONT AIRBAG SENSOR LH CIRCUIT (TO GROUND)



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

Standard resistance

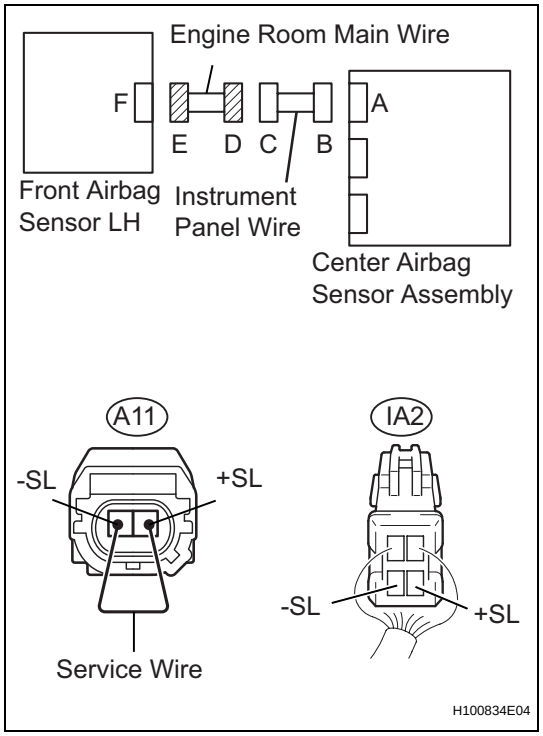
Tester Connection	Condition	Specified Condition
A21-30 (+SL) - Body ground	Always	1 MΩ or Higher
A21-28 (-SL) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 43**

OK → **Go to step 44**

RS

40	CHECK ENGINE ROOM MAIN WIRE (FOR OPEN)



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

(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - IA2-4 (+SL)	Always	Below 1 Ω

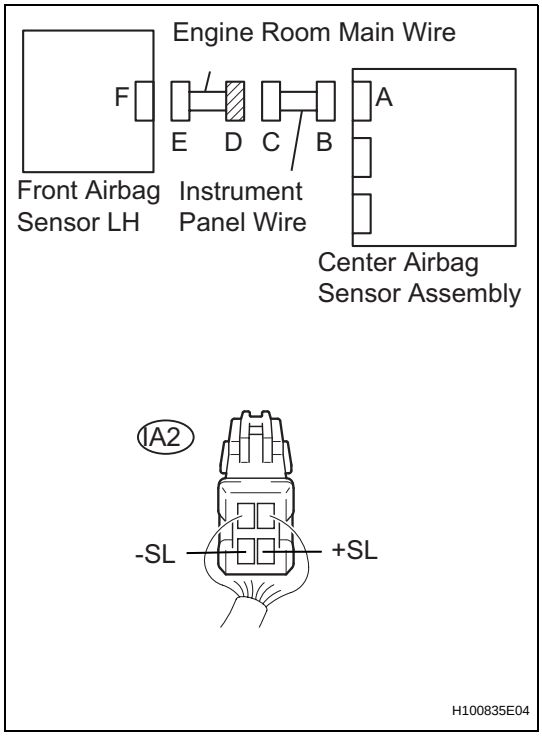
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

41	CHECK ENGINE ROOM MAIN WIRE (FOR SHORT)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

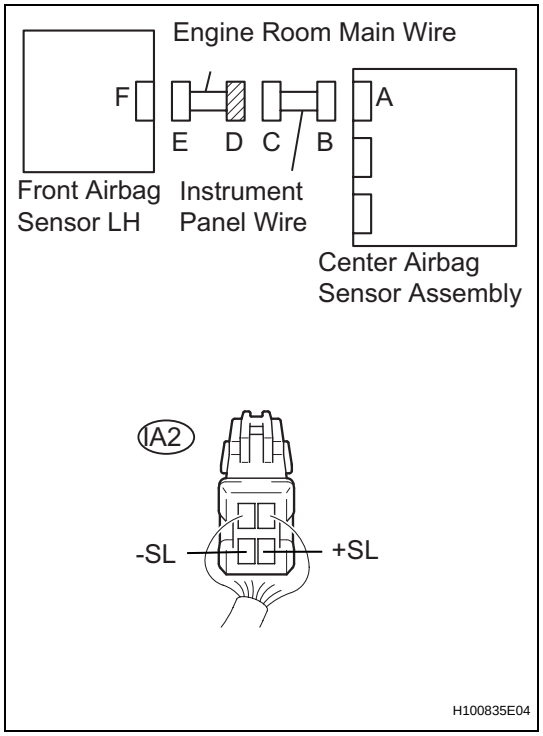
Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - IA2-4 (+SL)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

42	CHECK ENGINE ROOM MAIN WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the engine room main wire connector from the instrument panel wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - Body ground	Ignition switch ON	Below 1 V
IA2-4 (+SL) - Body ground	Ignition switch ON	Below 1 V

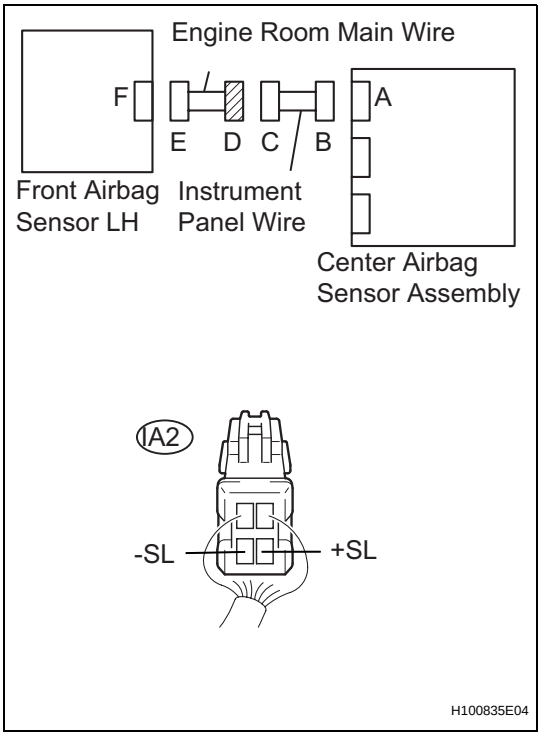
NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

43 CHECK ENGINE ROOM MAIN WIRE (TO GROUND)



(a) Disconnect the engine room main wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

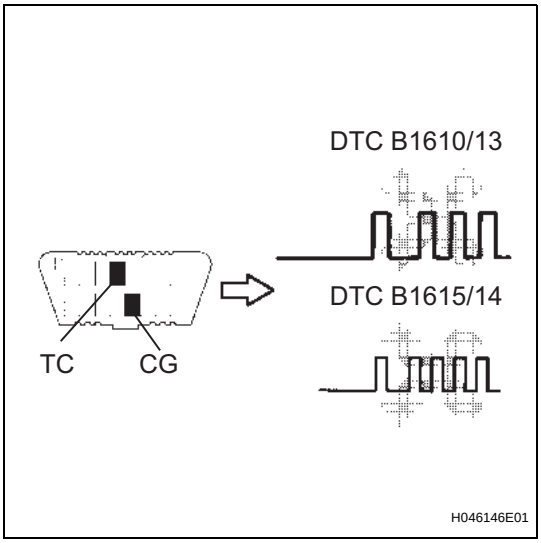
Tester Connection	Condition	Specified Condition
IA2-3 (-SL) - Body ground	Always	1 MΩ or Higher
IA2-4 (+SL) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE ENGINE ROOM MAIN WIRE**

OK

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

44 REPAIR OR REPLACE INSTRUMENT PANEL WIRE



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

RS

OK:

DTC B1610/13 and B1615/14 are not output.

HINT:

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

NG → **REPLACE FRONT AIRBAG SENSOR RH AND LH**

OK

END

DTC	B1620/21	Driver Side - Side Airbag Sensor Circuit Malfunction

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

DESCRIPTION

The side airbag sensor assembly LH consists of parts such as the safing sensor, the diagnostic circuit and the lateral deceleration sensor. The configuration of the side airbag sensor assembly RH is the same as that of the LH.

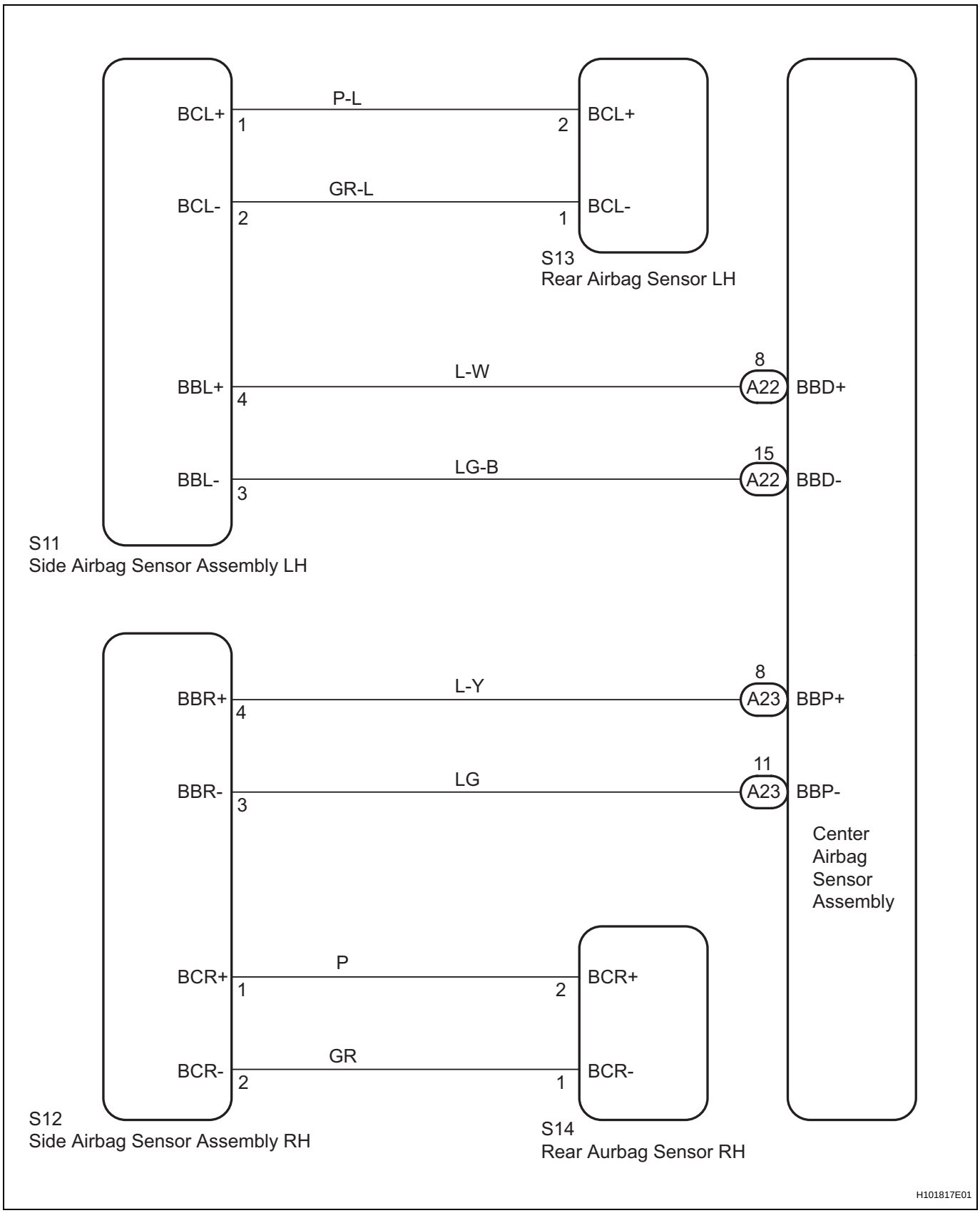
When the airbag sensor assembly center receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.

DTC B1620/21 is set when a malfunction is detected in the side airbag sensor assembly (driver seat side) circuit.

DTC B1625/22 is set when a malfunction is detected in the side airbag sensor assembly (front passenger seat side) circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1620/21	• 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 side airbag sensor assembly (Driver seat side) circuit for 2 seconds • Side airbag sensor assembly LH malfunction • Rear airbag sensor LH malfunction • Center airbag sensor assembly malfunction	• Side airbag sensor assembly LH • Rear airbag sensor LH • Center airbag sensor assembly • No. 2 floor wire
B1625/22	• 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 side airbag sensor assembly (Front passenger seat side) circuit for 2 seconds • Side airbag sensor assembly RH malfunction • Rear airbag sensor RH malfunction • Center airbag sensor assembly malfunction	• Side airbag sensor assembly RH • Rear airbag sensor RH • Center airbag sensor assembly • Floor wire

WIRING DIAGRAM



RS

NOTICE:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1 CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.
(1) Check the DTC (See page RS-34.
Result

Result	Proceed to
DTC B1620/21 is output.	A
DTC B1625/22 is output.	B
DTC B1620/21 and B1625/22 are output.	C
Neither DTC B1620/21 nor B1625/22 is output.	D

B	Go to step 17
C	Go to step 32
D	USE SIMULATION METHOD TO CHECK

A

RS

2 CHECK CONNECTION OF CONNECTORS

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

NG	CONNECT CONNECTORS

OK

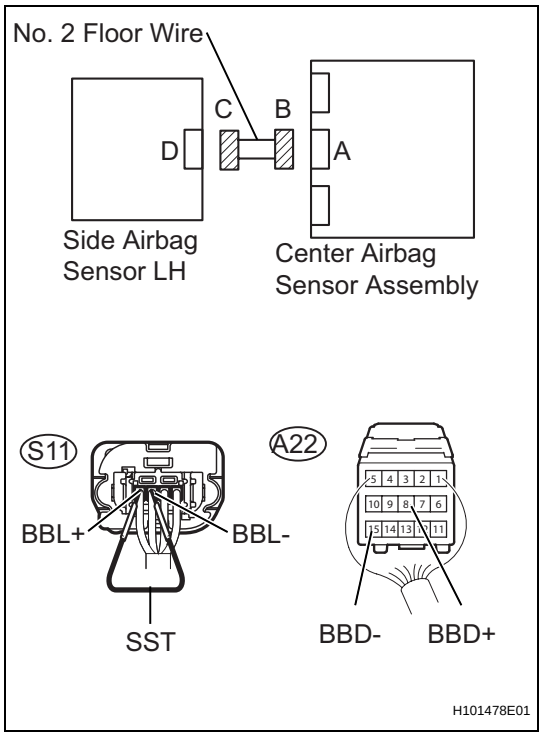
3	CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor assembly LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4	CHECK NO. 2 FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the center airbag sensor assembly and the side airbag sensor assembly LH.
(b) Using SST, connect S11-4 (BBL+) and S11-3 (BBL-) of connector C.
(c) Measure the resistance.
Standard resistance

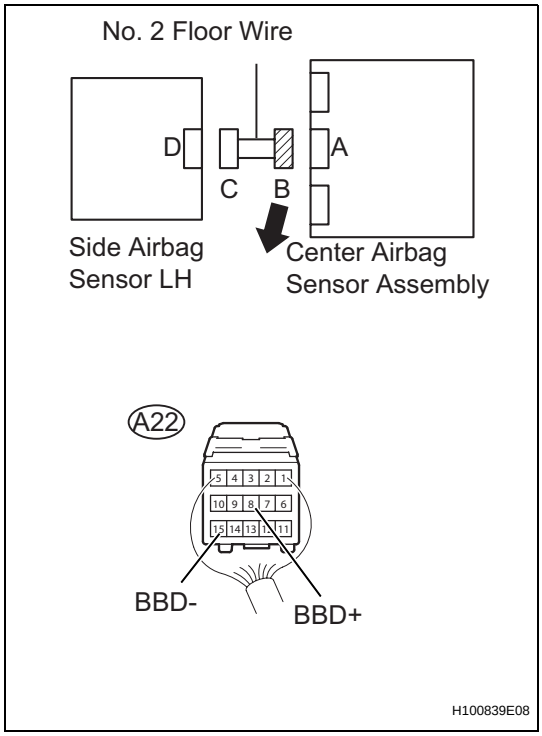
Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - A22-15 (BBD-)	Always	Below 1 Ω

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

OK

RS

5 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



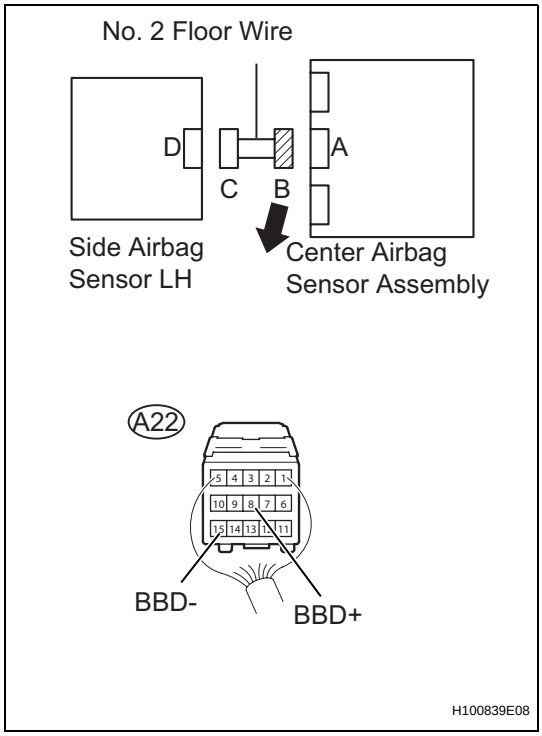
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - A22-15 (BBD-)	Always	1 MΩ or Higher

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

OK

6 CHECK NO. 2 FLOOR WIRE (TO B+)



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

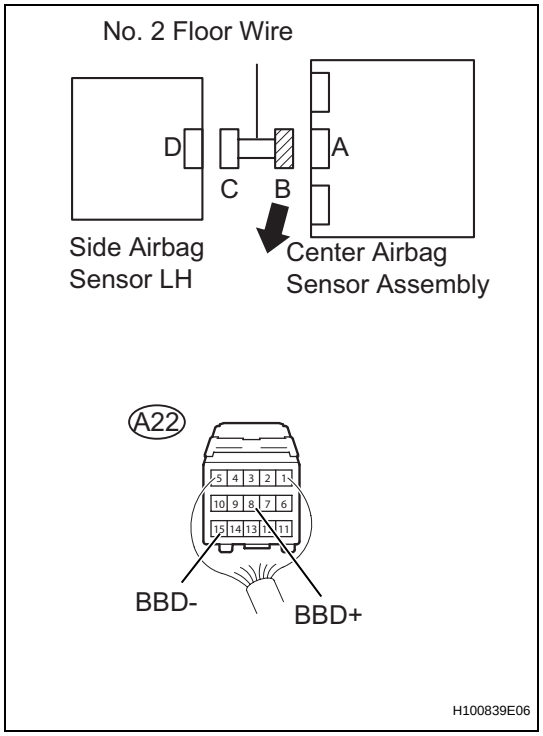
Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - Body ground	Ignition switch ON	Below 1 V
A22-15 (BBD-) - Body ground	Ignition switch ON	Below 1 V

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

OK

RS

7 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

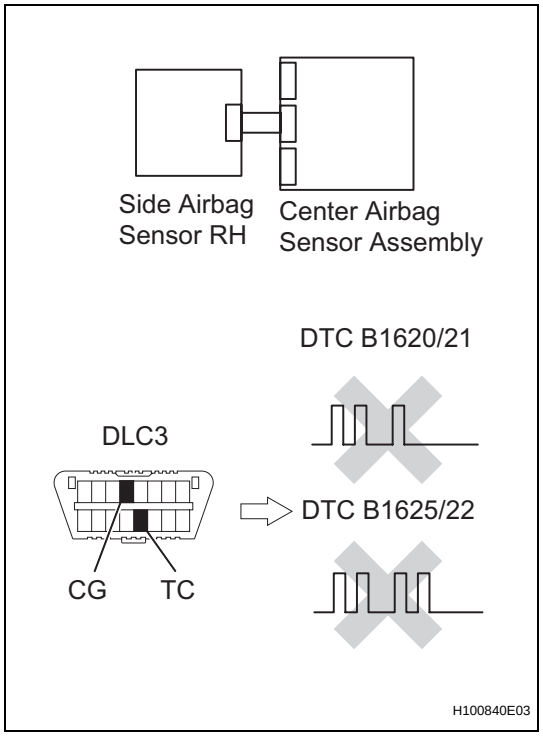
Standard resistance

Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - Body ground	Always	1 MΩ or Higher
A22-15 (BBD-) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

8 CHECK SIDE AIRBAG SENSOR ASSEMBLY LH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the side airbag sensor assembly RH with the side airbag sensor assembly 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear the DTCs stored in the memory (See page RS-34).
(f) Turn any ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1620/21 is output.	A
DTC B1625/22 is output.	B
Neither DTC B1620/21 nor B1625/22 is output.	C

B → REPLACE REAR AIRBAG SENSOR LH

C → USE SIMULATION METHOD TO CHECK

RS

A

9 CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

10 CHECK CONNECTORS

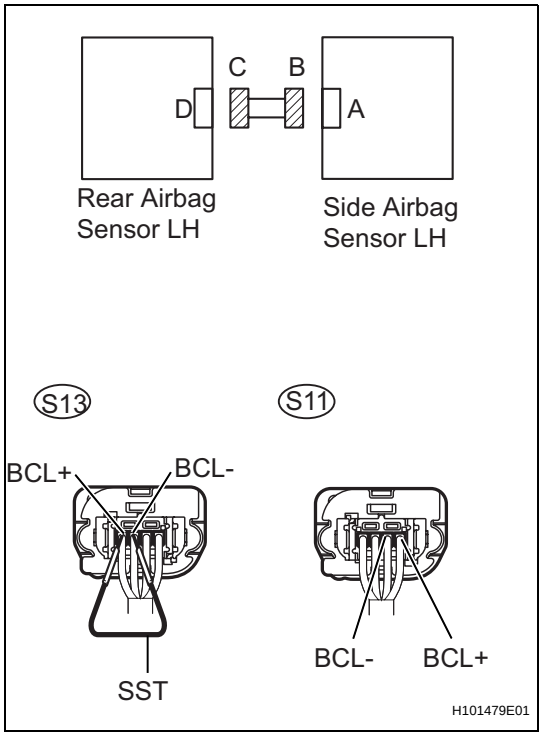
(a) Check that the connectors (on the side airbag sensor assembly LH side and rear airbag sensor LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

11 CHECK NO. 2 FLOOR WIRE (FOR OPEN)

SST 09843-18040



(a) Disconnect the connectors from the side airbag sensor assembly LH and the rear airbag sensor LH.
(b) Using SST, connect S13-1 (BCL-) and S13-2 (BCL+) of connector C.
(c) Measure the resistance.
Standard resistance

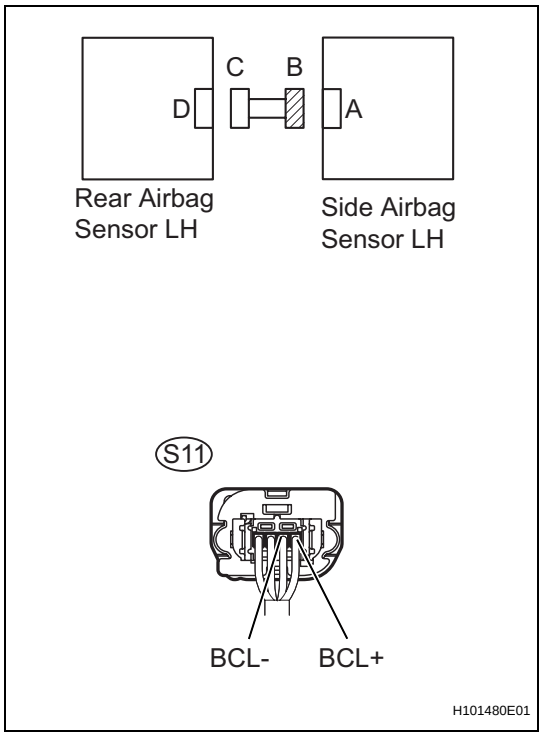
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	Below 1 Ω

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

RS

OK

12 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



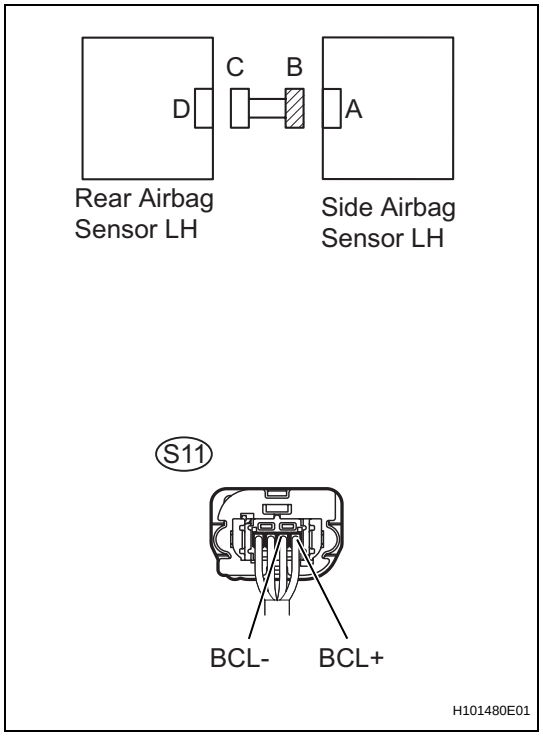
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

13 CHECK NO. 2 FLOOR WIRE (TO B+)



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

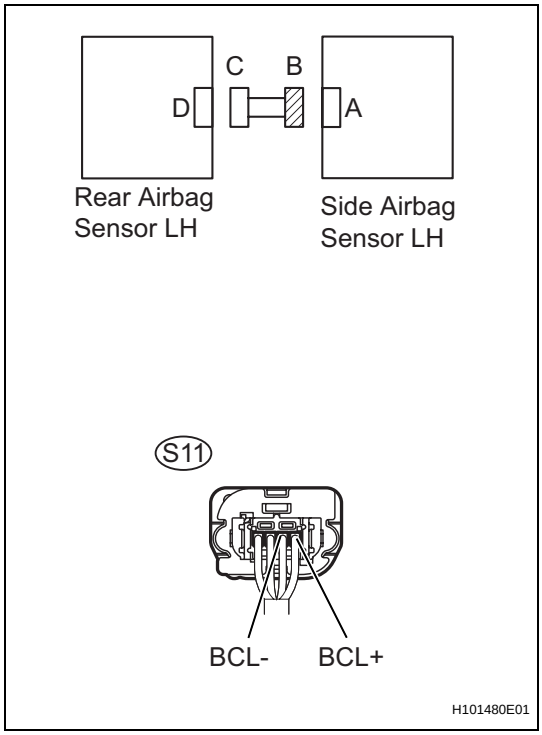
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Ignition switch ON	Below 1 V
S11-2 (BCL-) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

OK

14 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

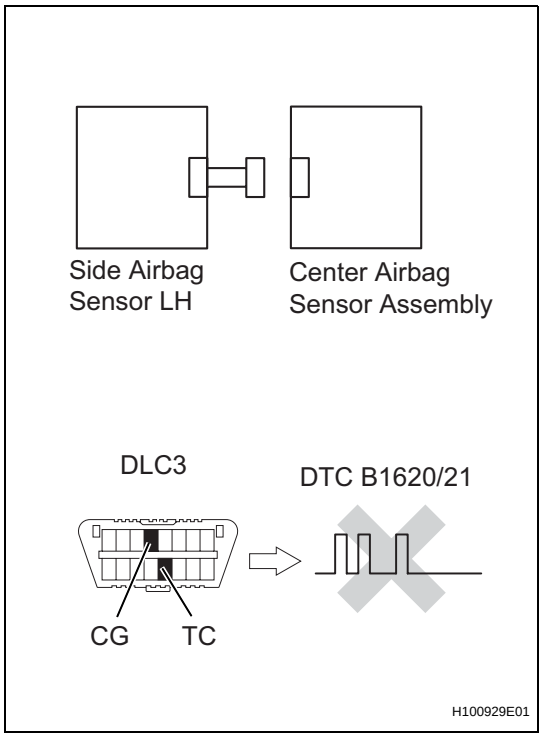
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Always	1 MΩ or Higher
S11-2 (BCL-) - Body ground	Always	1 MΩ or Higher

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

OK

15 CHECK DTC



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

OK:

DTC B1620/21 is not output.

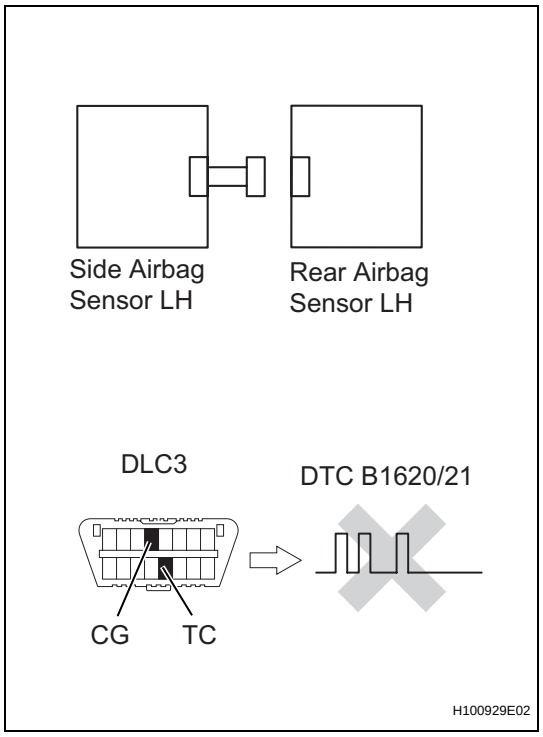
HINT:
DTCs other than B1620/21 may be output at this time, but they are not related to this check.

OK → **REPLACE REAR AIRBAG SENSOR LH**

RS

NG

16	REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

OK:
B1620/21 is not output.

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

NG → **REPLACE SIDE AIRBAG SENSOR ASSEMBLY LH**

OK

END

RS

17	CHECK CONNECTION OF CONNECTORS

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

OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

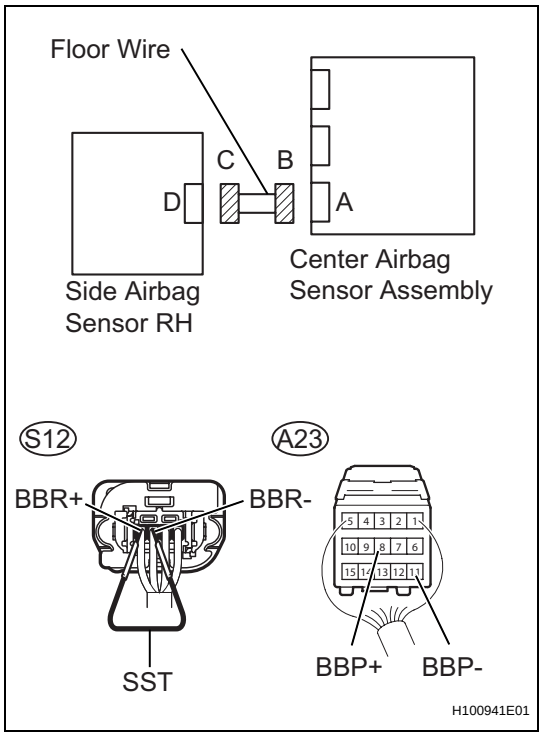
18	CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor assembly RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

19	CHECK FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the center airbag sensor assembly and the side airbag sensor assembly RH.
(b) Using SST, connect S12-4 (BBR+) and S12-3 (BBR-) of connector C.
(c) Measure the resistance.
Standard resistance

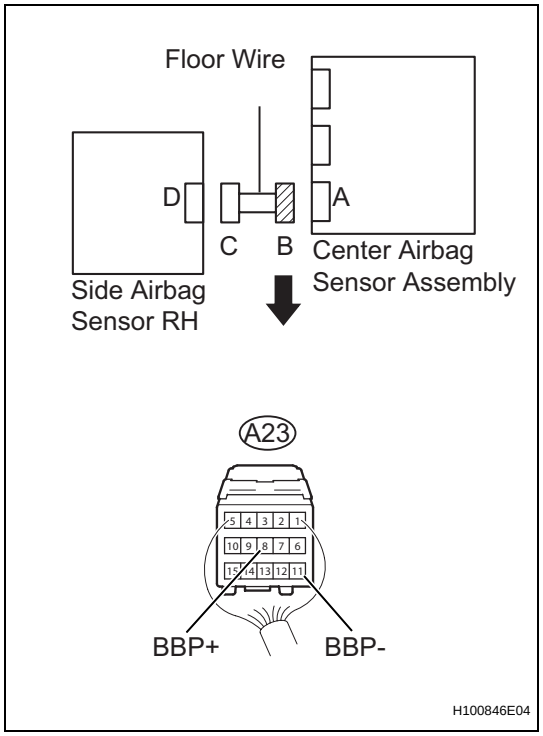
Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - A23-11 (BBP-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

RS

OK

20 CHECK FLOOR WIRE (FOR SHORT)



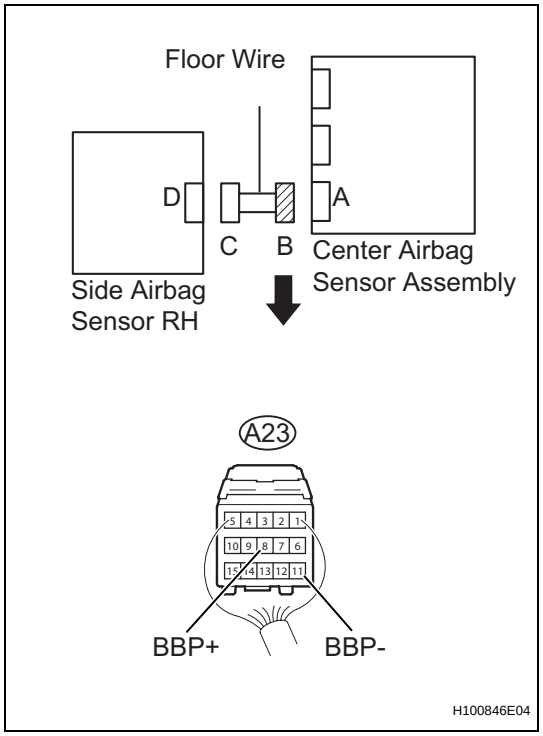
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - A23-11 (BBP-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

21 CHECK FLOOR WIRE (TO B+)



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

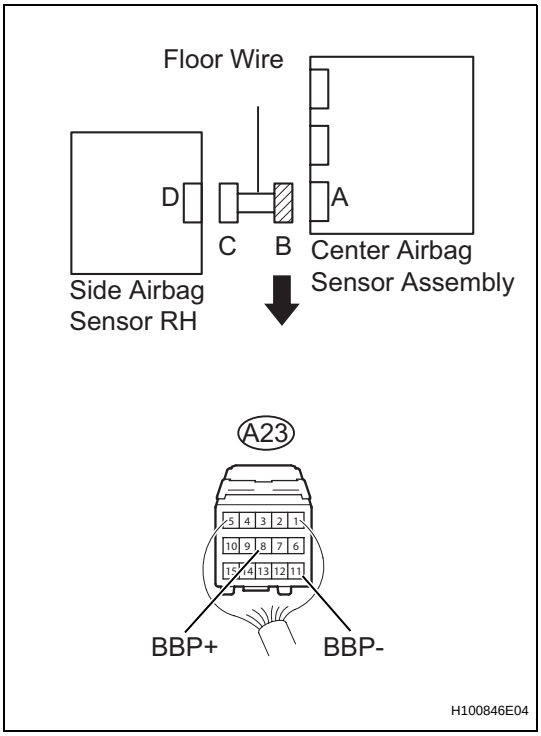
Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - Body ground	Ignition switch	Below 1 V
A23-11 (BBP-) - Body ground	Ignition switch	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

22 CHECK FLOOR WIRE (TO GROUND)



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

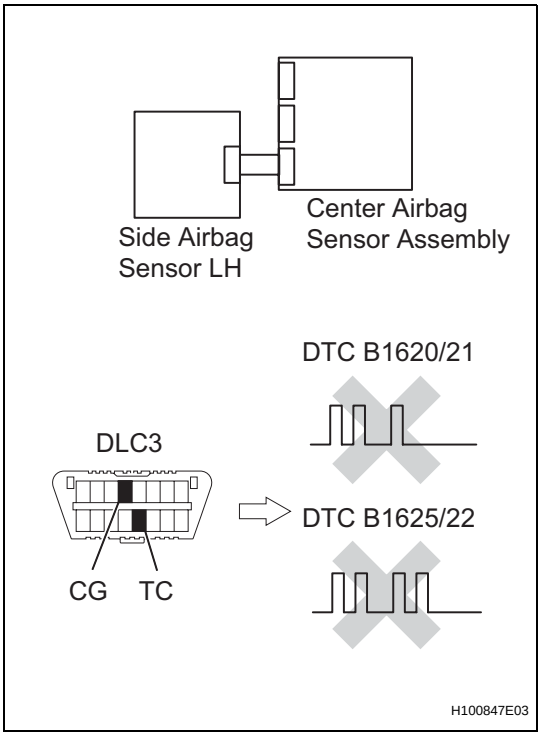
Standard resistance

Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - Body ground	Always	1 MΩ or Higher
A23-11 (BBP-) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

23 CHECK SIDE AIRBAG SENSOR ASSEMBLY RH



(a) Connect the connectors to the center airbag sensor assembly.
(b) Interchange the side airbag sensor assembly RH with the side airbag sensor assembly 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1625/22 is output.	A
DTC B1620/21 is output.	B
Neither DTC B1620/21 nor B1625/22 is output.	C

B → REPLACE REAR AIRBAG SENSOR RH

RS

C → USE SIMULATION METHOD TO CHECK

A

24 CHECK CONNECTION OF CONNECTORS

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

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

25 CHECK CONNECTORS

(a) Check that the connectors (on the side airbag sensor assembly RH side and rear airbag sensor RH side) are not damaged (See page IN-34).

OK:

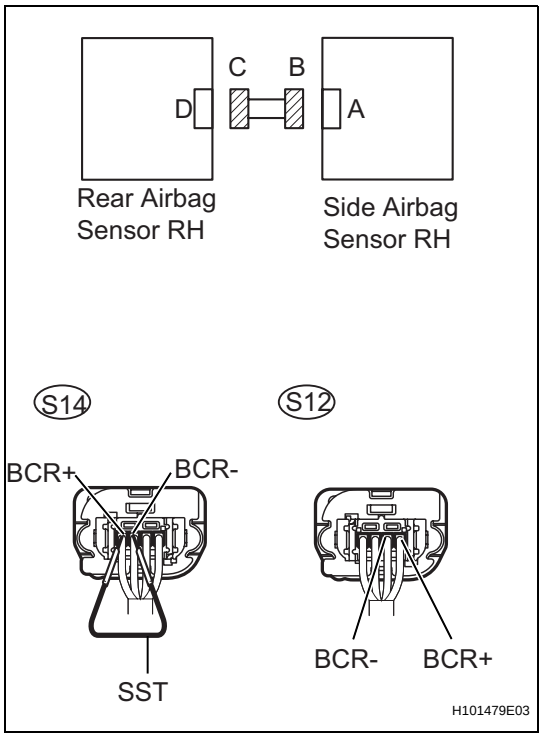
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

26 CHECK FLOOR WIRE (FOR OPEN)

SST 09843-18040



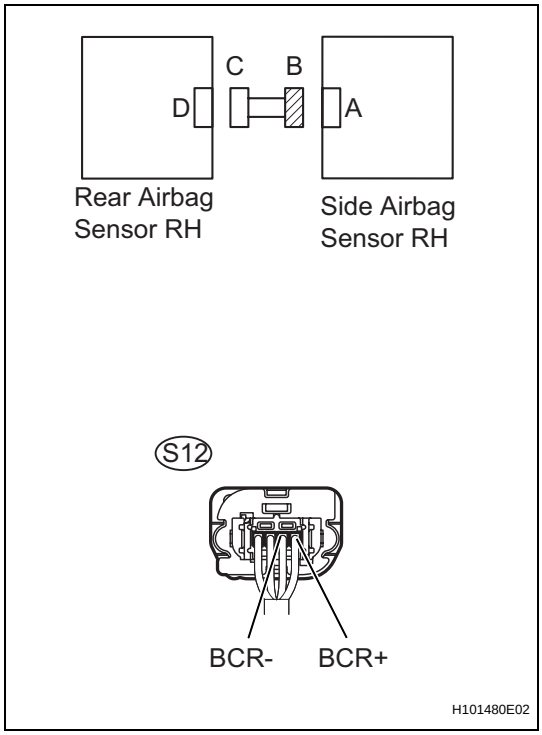
(a) Disconnect the connectors from the side airbag sensor assembly RH and the rear airbag sensor RH.
(b) Using SST, connect S14-1 (BCR-) and S14-2 (BCR+) of connector C.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

27 CHECK FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

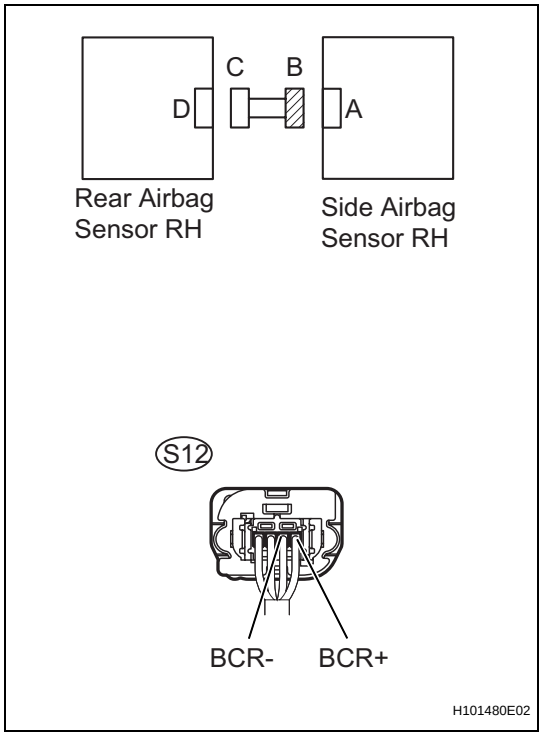
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

28 CHECK FLOOR WIRE (TO B+)



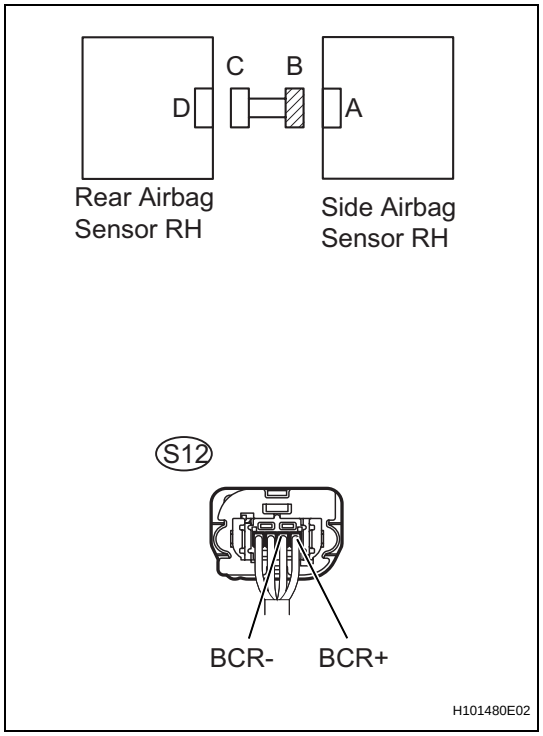
(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Ignition switch ON	Below 1 V
S12-2 (BCR-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

29 CHECK FLOOR WIRE (TO GROUND)



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

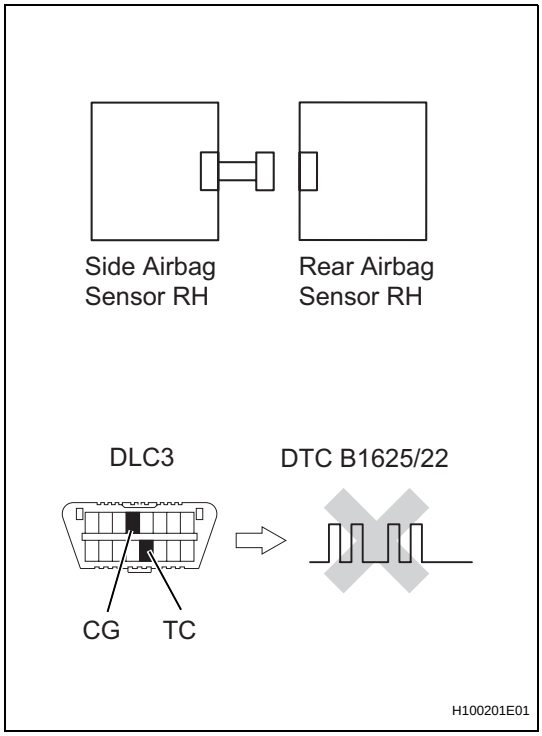
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Always	1 MΩ or Higher
S12-2 (BCR-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

30	CHECK DTC



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

OK:

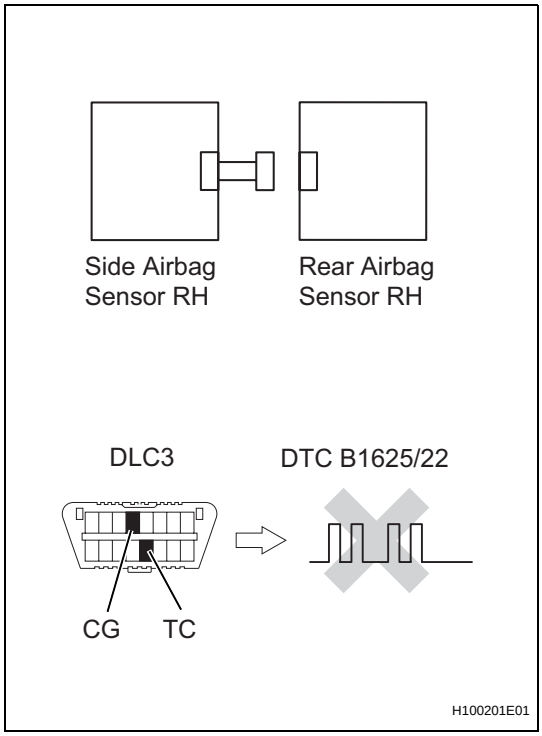
DTC B1625/22 is not output.

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

OK → **REPLACE REAR AIRBAG SENSOR RH**

NG

31	CHECK SIDE AIRBAG SENSOR ASSEMBLY RH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Clear any DTCs stored in the memory (See page RS-34).
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(i) Check for DTCs (See page RS-34).

OK:

DTC B1625/22 is not output.

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

RS

NG → REPLACE SIDE AIRBAG SENSOR ASSEMBLY RH

OK

END

32 CHECK CONNECTION OF CONNECTORS

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

NG → CONNECT CONNECTORS

OK

33 CHECK CONNECTORS

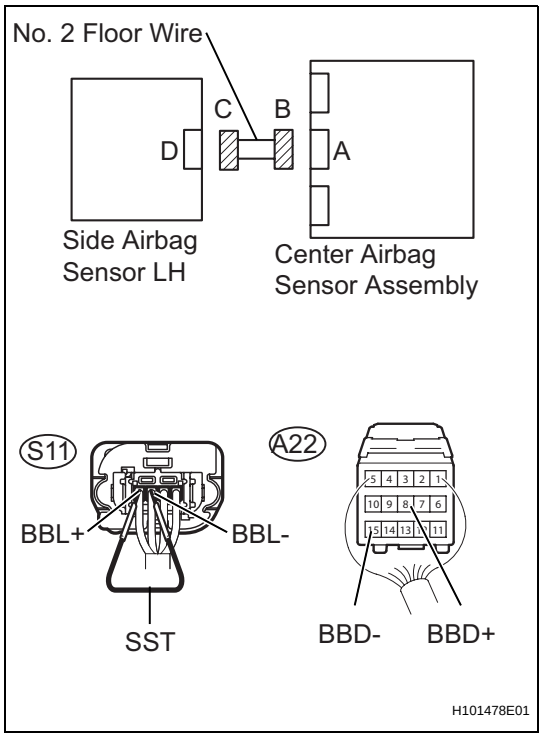
(a) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor assembly LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE WIRE HARNESS

OK

34 CHECK NO. 2 FLOOR WIRE (FOR OPEN)

SST 09843-18040



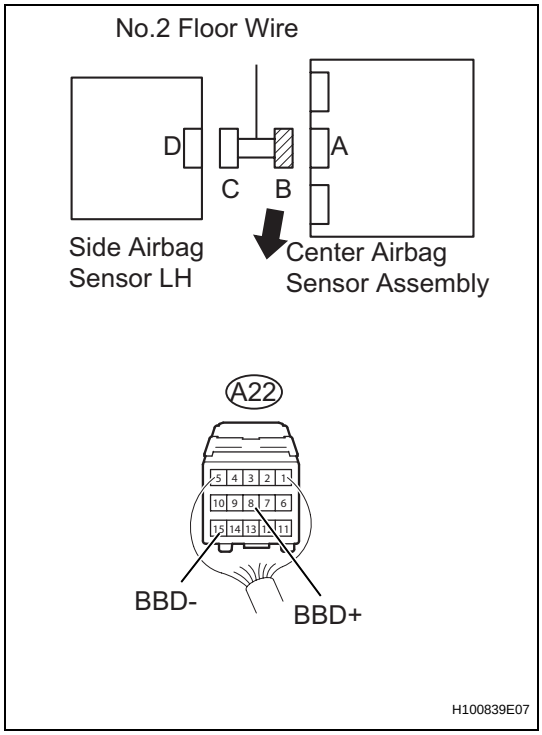
(a) Disconnect the connectors from the center airbag sensor assembly and the side airbag sensor assembly LH.
(b) Using SST, connect S11-4 (BBL+) and S11-3 (BBL-) of connector C.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - A22-15 (BBD-)	Always	Below 1 Ω

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

OK

35 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

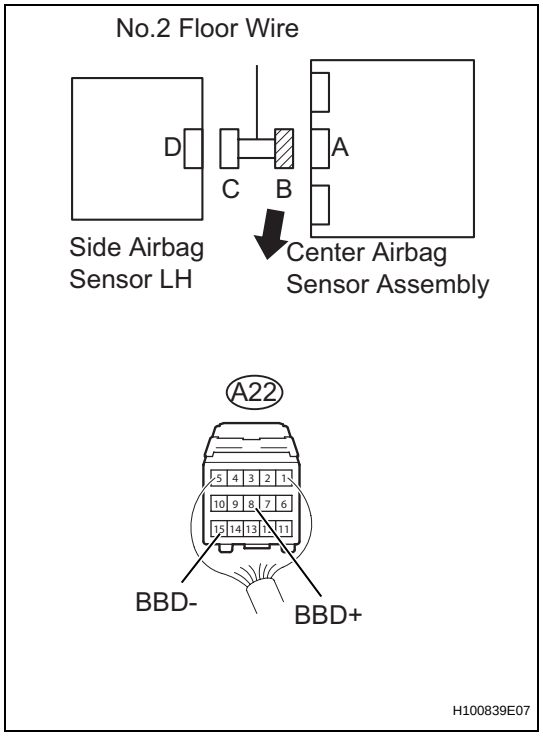
Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - A22-15 (BBD-)	Always	1 MΩ or Higher

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

OK

RS

36 CHECK NO. 2 FLOOR WIRE (TO B+)



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

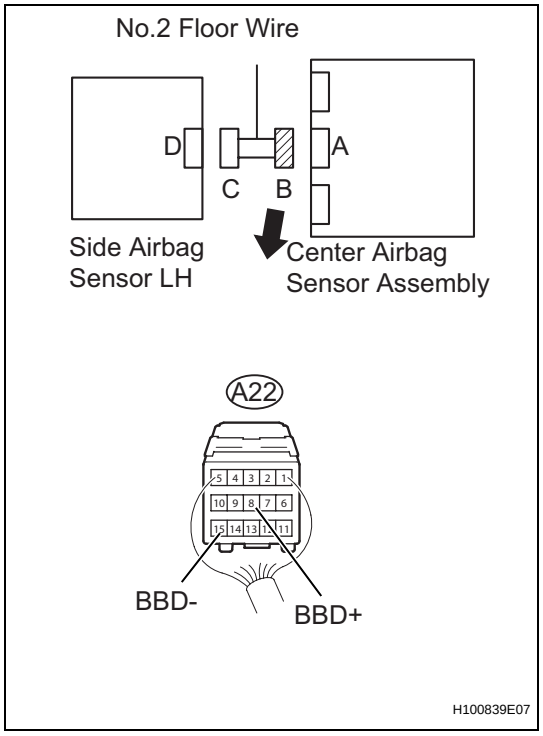
Standard voltage

Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - Body ground	Ignition switch ON	Below 1 Ω
A22-15 (BBD-) - Body ground	Ignition switch ON	Below 1 Ω

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

OK

37 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

Standard resistance

Tester Connection	Condition	Specified Condition
A22-8 (BBD+) - Body ground	Always	1 MΩ or Higher
A22-15 (BBD-) - Body ground	Always	1 MΩ or Higher

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

RS

OK

38 CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

39 CHECK CONNECTORS

(a) Check that the connectors (on the side airbag sensor assembly LH side and rear airbag sensor LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

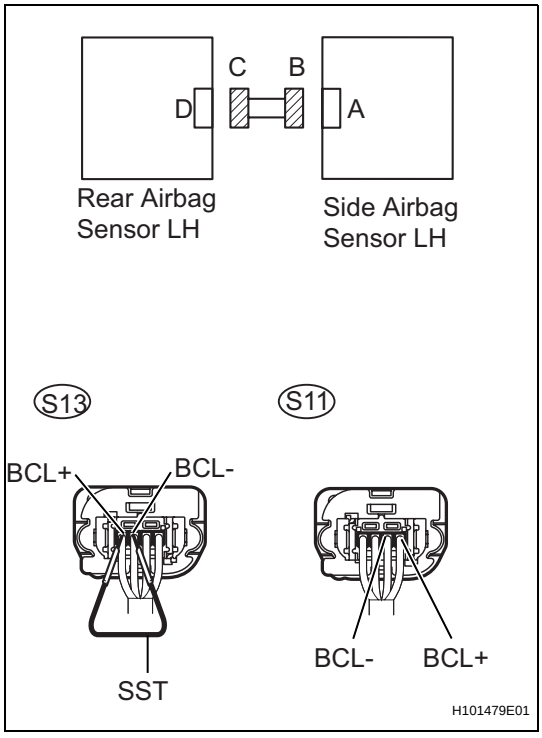
40 CHECK NO. 2 FLOOR WIRE (FOR OPEN)

SST 09843-18040

(a) Disconnect the connectors from the side airbag sensor assembly LH and the rear airbag sensor LH.
(b) Using SST, connect S13-1 (BCL-) and S13-2 (BCL+) of connector C.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	Below 1 Ω

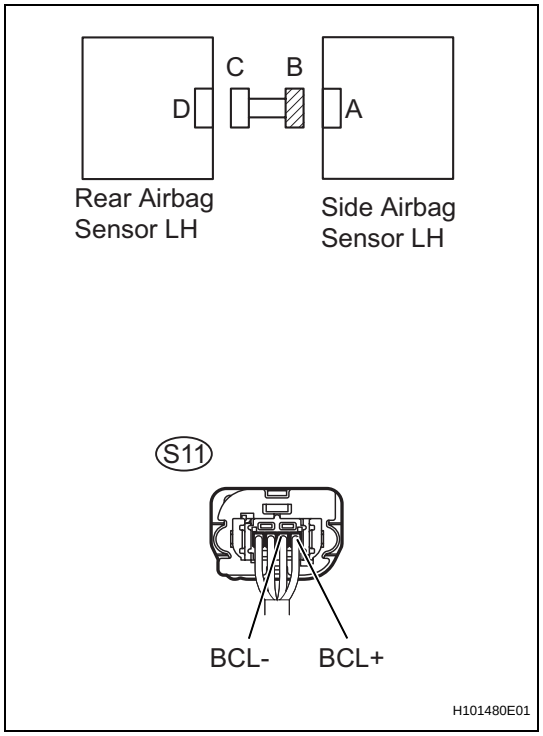
NG → **REPAIR OR REPLACE NO. 2 FLOOR WIRE**



OK

RS

41 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



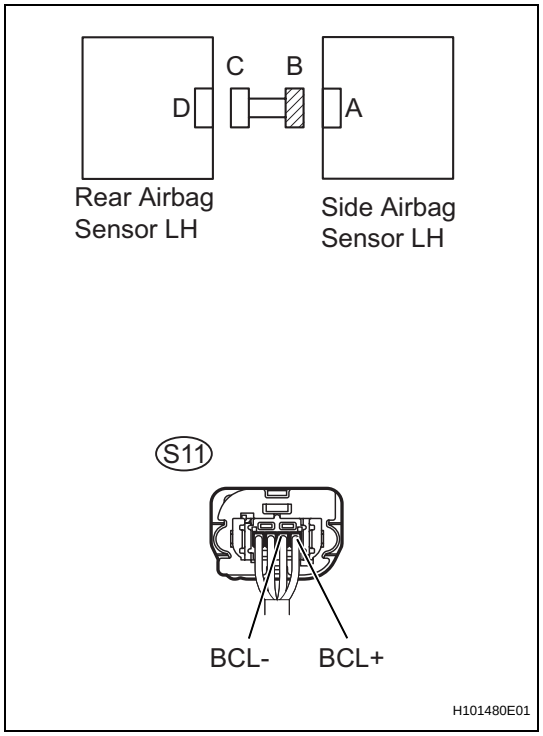
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	1 MΩ or Higher

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

OK

42 CHECK NO. 2 FLOOR WIRE (TO B+)



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

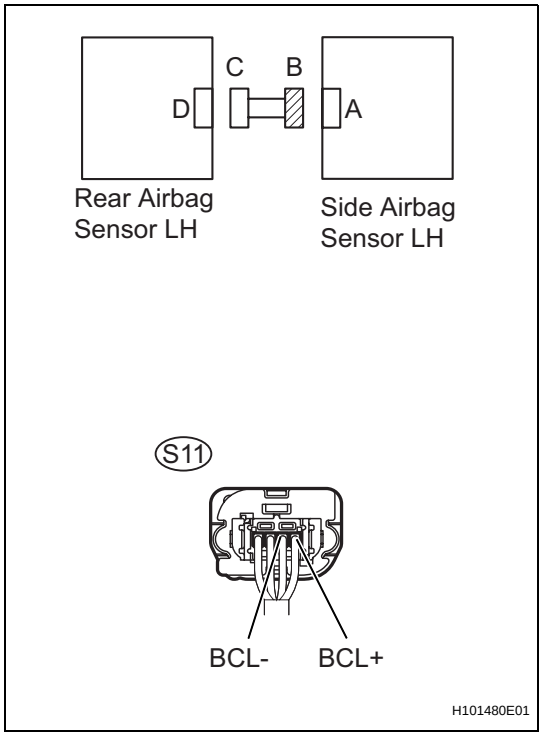
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Ignition switch ON	Below 1 Ω
S11-2 (BCL-) - Body ground	Ignition switch ON	Below 1 Ω

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

OK

RS

43 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Always	1 MΩ or Higher
S11-2 (BCL-) - Body ground	Always	1 MΩ or Higher

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

OK

44 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the side airbag sensor assembly RH.

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

45 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and side airbag sensor assembly RH side) are not damaged (See page IN-34).

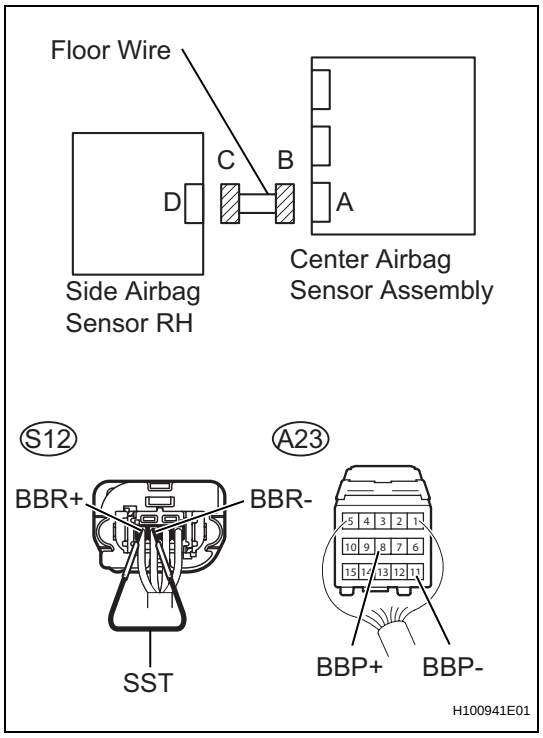
OK:

The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

46 CHECK FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the center airbag sensor assembly and the side airbag sensor assembly RH.
(b) Using SST, connect S12-4 (BBR+) and S12-3 (BBR-) of connector C.
(c) Measure the resistance.

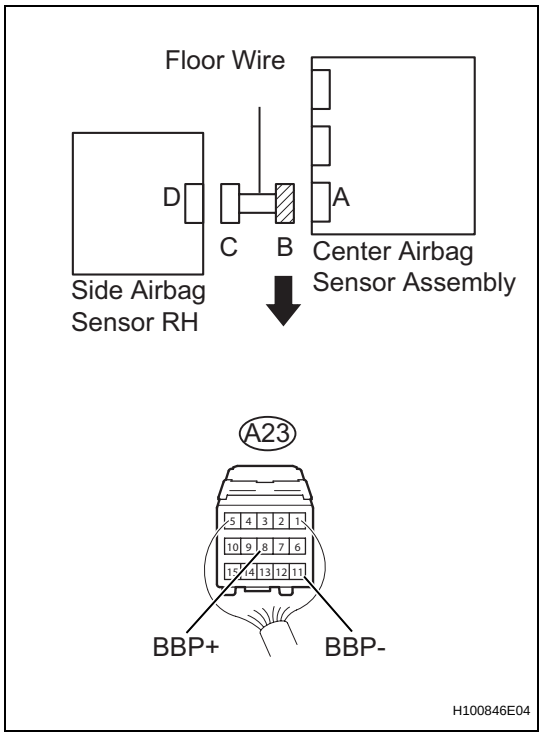
Standard resistance

Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - A23-11 (BBP-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

47 CHECK FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Measure the resistance.

Standard resistance

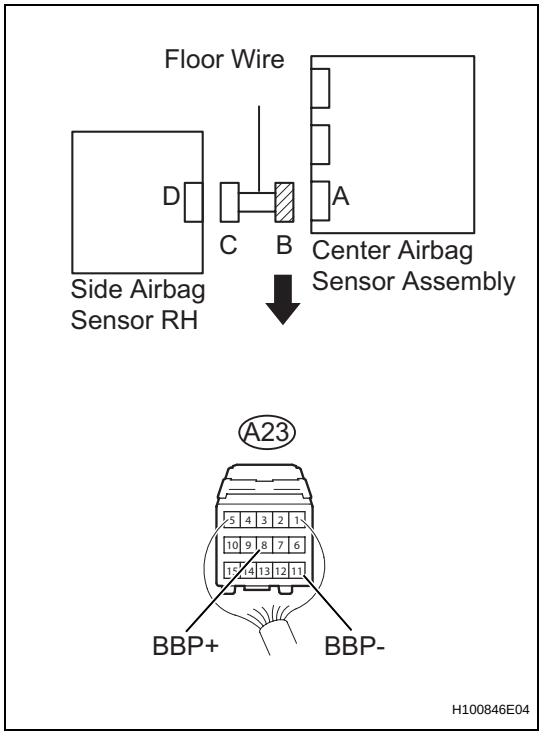
Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - A23-11 (BBP-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

RS

OK

48 CHECK FLOOR WIRE (TO B+)



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

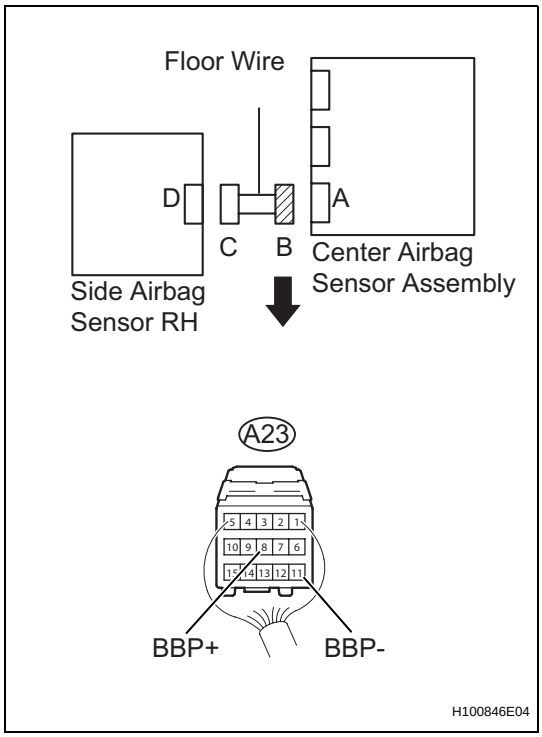
Standard voltage

Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - Body ground	Ignition switch ON	Below 1 V
A23-11 (BBP-) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

OK

49 CHECK FLOOR WIRE (TO GROUND)



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

Standard resistance

Tester Connection	Condition	Specified Condition
A23-8 (BBP+) - Body ground	Always	1 MΩ or Higher
A23-11 (BBP-) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FLOOR WIRE

RS

OK

50	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

51	CHECK CONNECTORS

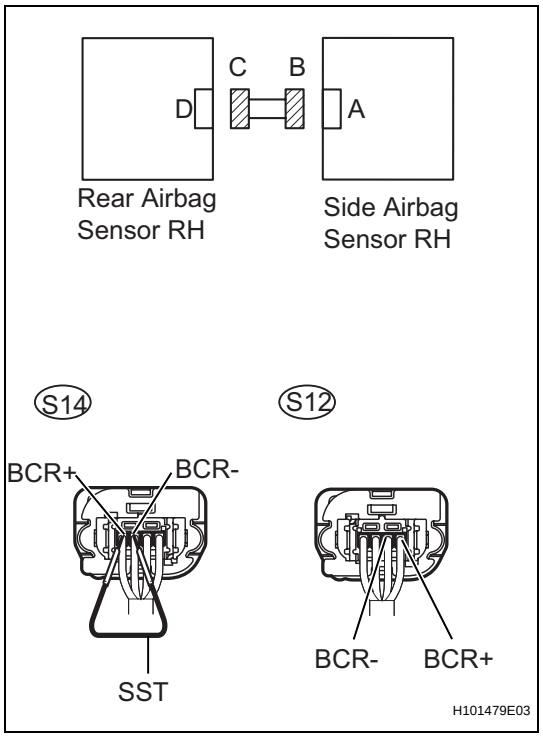
(a) Check that the connectors (on the side airbag sensor assembly RH side and rear airbag sensor RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

52	CHECK FLOOR WIRE (FOR OPEN)

SST 09843-18040



(a) Disconnect the connectors from the side airbag sensor assembly RH and the rear airbag sensor RH.
(b) Using SST, connect S14-1 (BCR-) and S14-2 (BCR+) of connector C.
(c) Measure the resistance.
Standard resistance

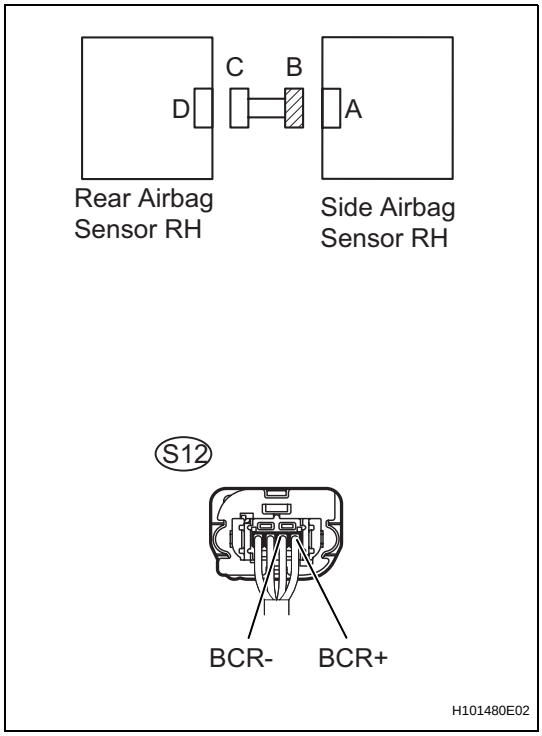
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

53 CHECK FLOOR WIRE (FOR SHORT)



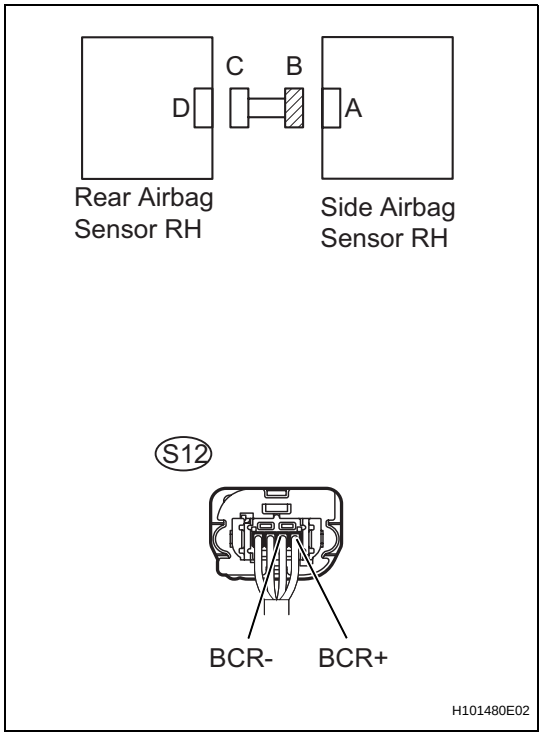
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

54 CHECK FLOOR WIRE (TO B+)



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

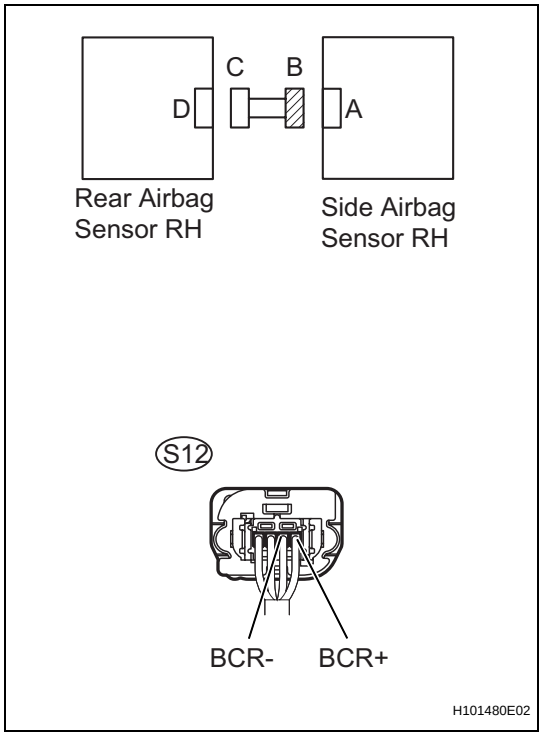
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Ignition switch ON	Below 1 V
S12-2 (BCR-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

55 CHECK FLOOR WIRE (TO GROUND)



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

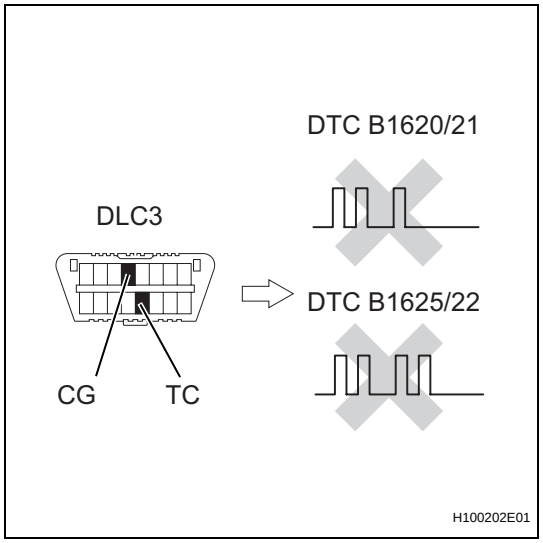
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Always	1 MΩ or Higher
S12-2 (BCR-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

56 CHECK DTC



(a) Connect the connectors to the center airbag sensor assembly and side airbag sensor assembly.

NOTICE:
Do not connect the rear airbag sensor LH and the rear airbag sensor RH connector.

(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).

OK:
DTC B1620/21 and B1625/22 are not output.

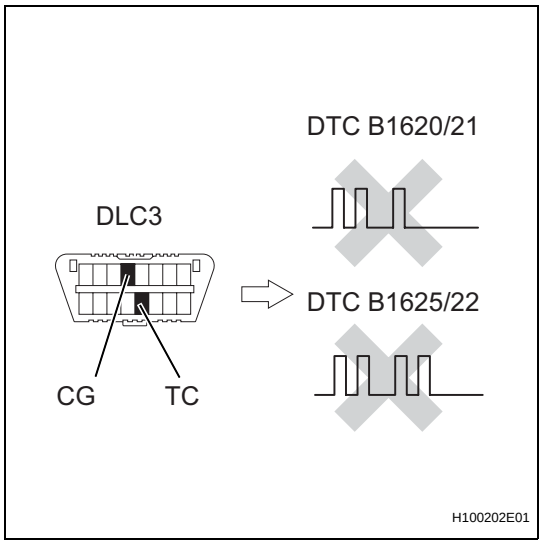
HINT:
DTCs other than B1620/21 and B1625/22 may be output at this time, but they are not related to this check.

NG → **REPLACE REAR AIRBAG SENSOR LH AND REAR AIRBAG SENSOR RH**

RS

OK

57	CHECK SIDE AIRBAG SENSOR ASSEMBLY RH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the rear airbag sensor LH and the rear airbag sensor RH.
(d) Replace the center airbag sensor assembly (See page RS-602).

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1620/21 and B1625/22 are not output.

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

NG → **REPLACE REAR AIRBAG SENSOR LH AND REAR AIRBAG SENSOR RH**

OK

END

DTC	B1630/23	Driver Side Rear Airbag Sensor Circuit Malfunction

DTC	B1635/24	Front Passenger Side Rear Airbag Sensor Circuit Malfunction

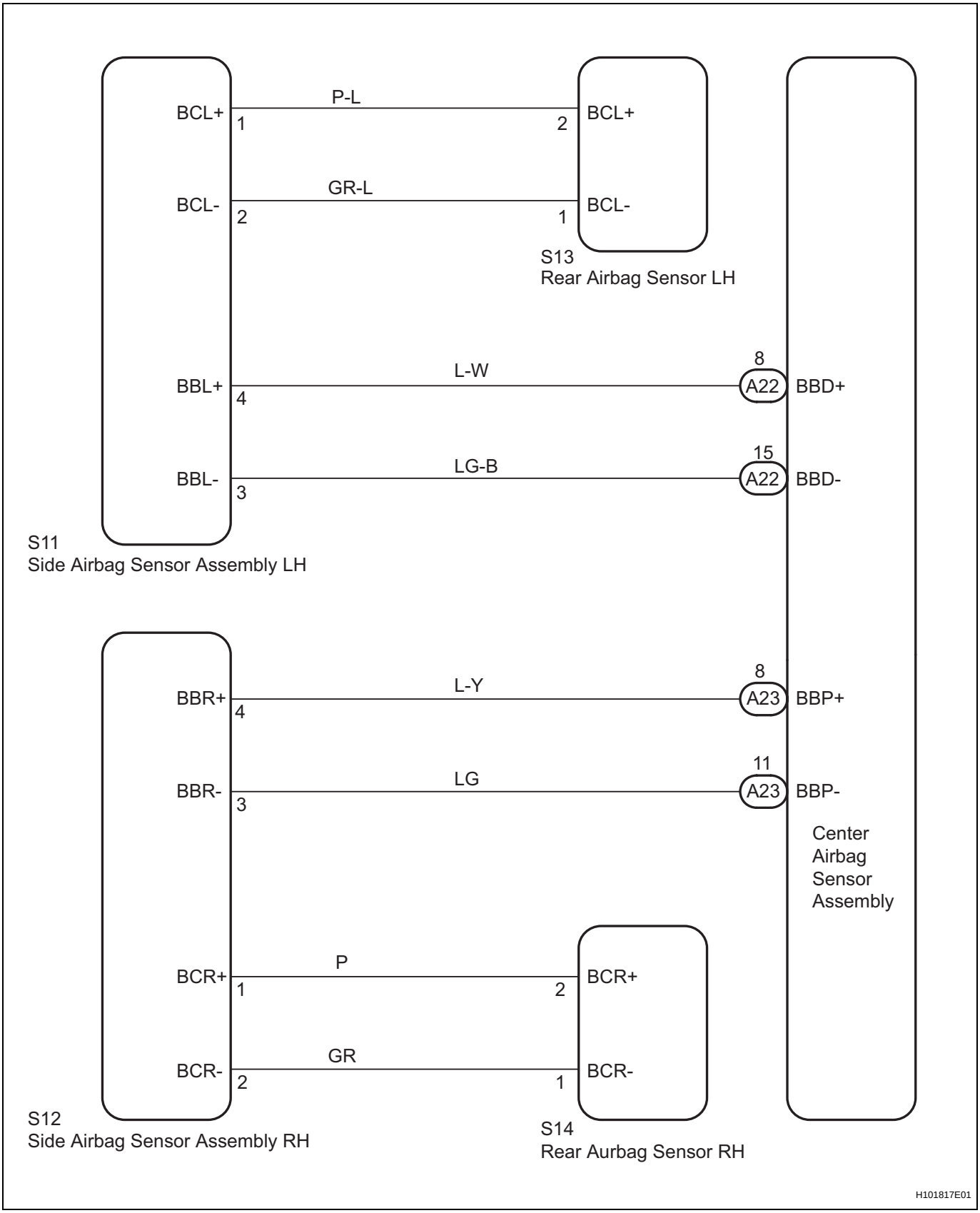
DESCRIPTION

The airbag sensor LH consists of parts such as the safing sensor, the diagnostic circuit and the lateral deceleration sensor. The configuration of the rear airbag sensor RH is the same as that of the LH.
When the center airbag sensor assembly receives signals from the lateral deceleration sensor, it determines whether or not the SRS should be activated.
DTC B1630/23 is set when a malfunction is detected in the curtain shield airbag sensor (driver seat side) circuit.
DTC B1635/24 is set when a malfunction is detected in the curtain shield airbag sensor (front passenger seat side) circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
B1630/23	• The center airbag sensor assembly receives an open circuit signal in the curtain shield airbag sensor (Driver seat side) circuit for 2 seconds • Rear airbag sensor LH malfunction • Side airbag sensor assembly LH malfunction • Center airbag sensor assembly center malfunction	• Rear airbag sensor LH • Side airbag sensor assembly LH • Center center airbag sensor assembly • No. 2 floor wire
B1635/24	• The center airbag sensor assembly receives an open circuit signal in the curtain shield airbag sensor (Front passenger seat side) circuit for 2 seconds • Rear airbag sensor RH malfunction • Side airbag sensor assembly RH malfunction • Center airbag sensor assembly center malfunction	• Rear airbag sensor RH • Side airbag sensor assembly RH • Center center airbag sensor assembly • Floor wire

HINT:
Troubleshoot DTC B1620/21 first when the DTC B1620/21 and B1630/23 are output simultaneously.

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1 CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.
(1) Check the DTC (See page RS-34).
Result

Result	Proceed to
DTC B1630/23 is output.	A
DTC B1635/24 is output.	B
DTC B1630/23 and B1635/24 are output.	C
Neither DTC B1630/23 nor B1635/24 is output.	D

B → **Go to step 12**
C → **Go to step 22**
D → **USE SIMULATION METHOD TO CHECK**

A

2 CHECK CONNECTOR OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

RS

3	CHECK CONNECTORS

(a) Check that the connectors (on the side airbag sensor assembly LH side and rear airbag sensor LH side) are not damaged (See page IN-34).

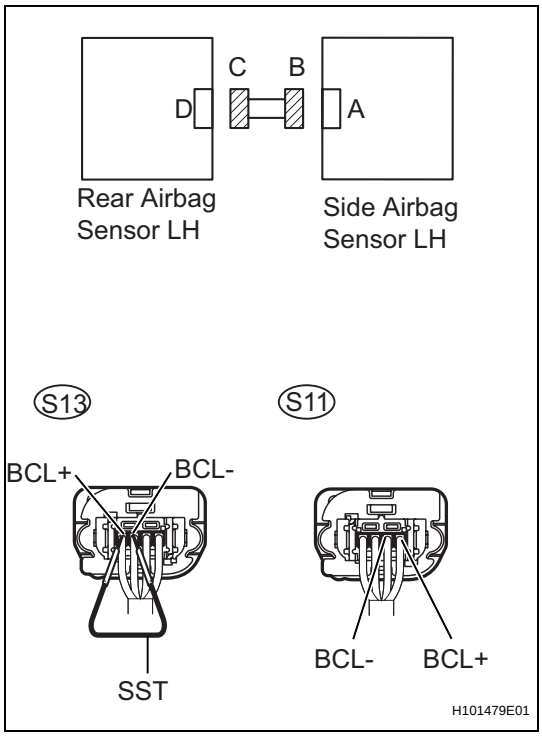
OK:

The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4	CHECK NO. 2 FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the side airbag sensor assembly LH and the rear airbag sensor LH.

(b) Using SST, connect S13-2 (BCL+) and S13-1 (BCL-) of connector C.

(c) Measure the resistance.

Standard resistance

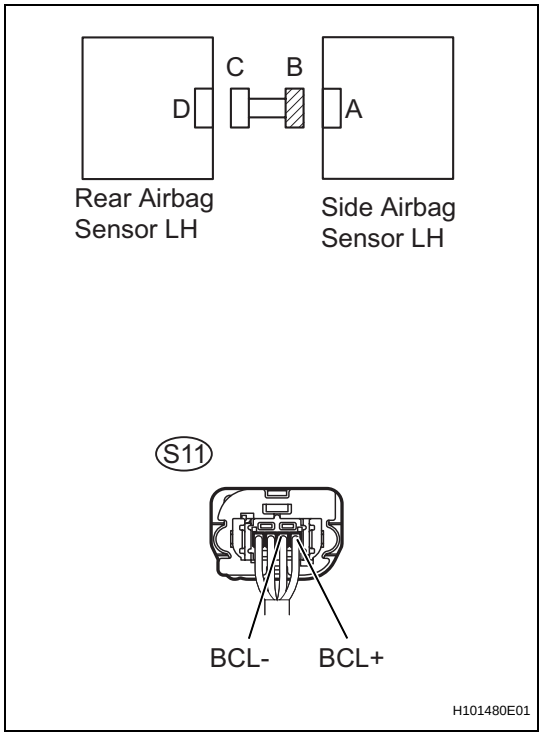
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	Below 1 Ω

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

RS

OK

5 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Disconnect the connectors from the side airbag sensor assembly LH and rear airbag sensor LH.
(c) Measure the resistance.

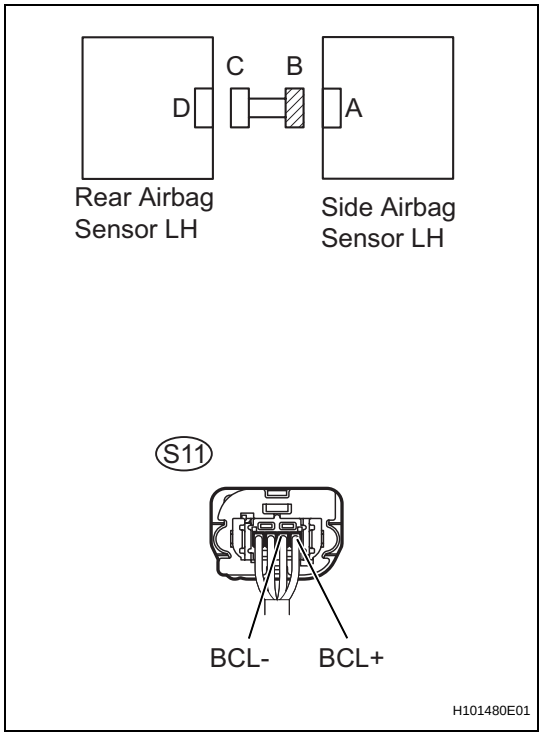
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

6 CHECK NO. 2 FLOOR WIRE (TO B+)



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

Standard voltage

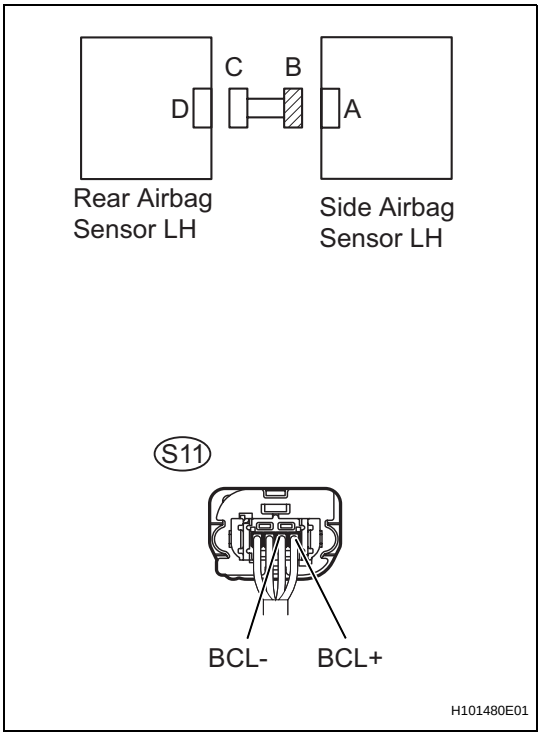
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Ignition switch ON	Below 1 V
S11-2 (BCL-) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

RS

7 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

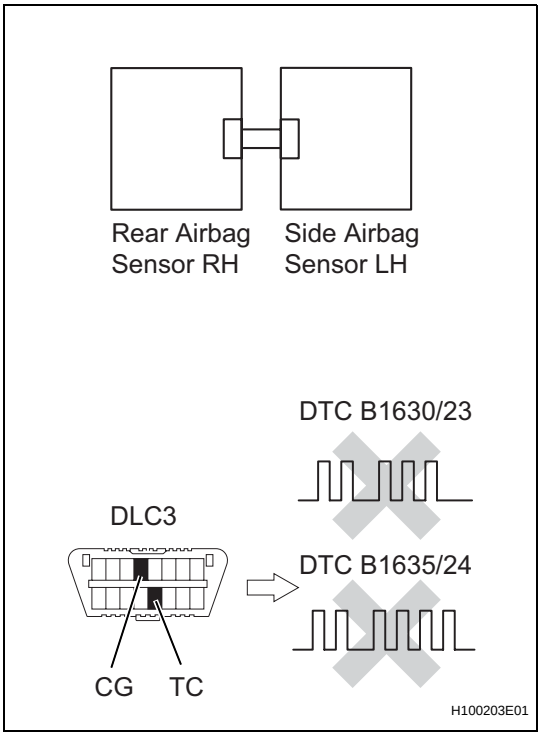
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Always	1 MΩ or Higher
S11-2 (BCL-) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

8 CHECK REAR AIRBAG SENSOR LH



(a) Connect the connector to the side airbag sensor assembly LH.
(b) Interchange the rear airbag sensor LH with the rear airbag sensor 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1630/23 is output.	A
DTC B1635/24 is output.	B
Neither DTC B1630/23 nor B1635/24 is output.	C

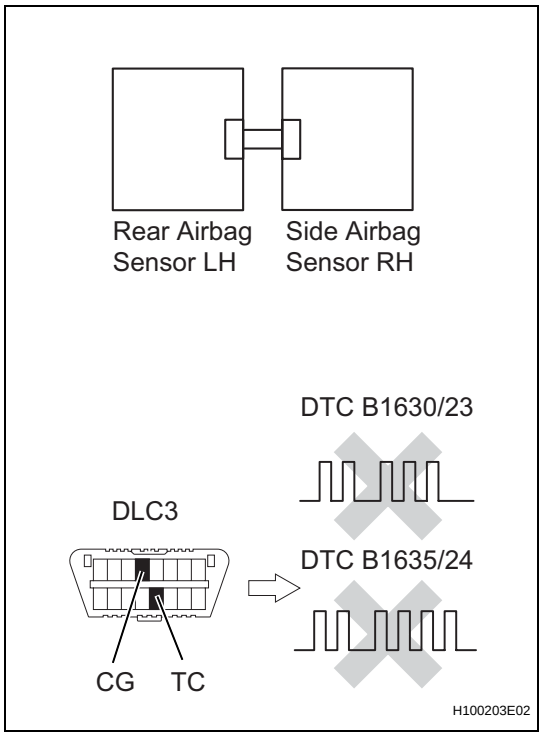
B → REPLACE REAR AIRBAG SENSOR LH

C → USE SIMULATION METHOD TO CHECK

RS

A

9 CHECK SIDE AIRBAG SENSOR ASSEMBLY LH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Return the rear airbag sensor LH and RH to their original positions and connect the connectors to them.
(d) Interchange the side airbag sensor assembly LH with the side airbag sensor assembly RH and connect the connectors to them.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1630/23 is output.	A
DTC B1635/24 is output.	B
Neither DTC B1630/23 nor B1635/24 is output.	C

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

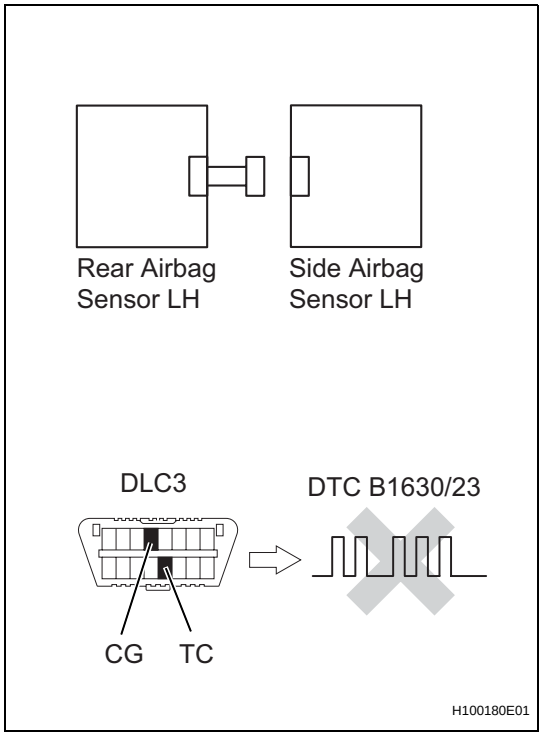
B → **REPLACE SIDE AIRBAG SENSOR ASSEMBLY LH**

C → **USE SIMULATION METHOD TO CHECK**

A

RS

10	REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

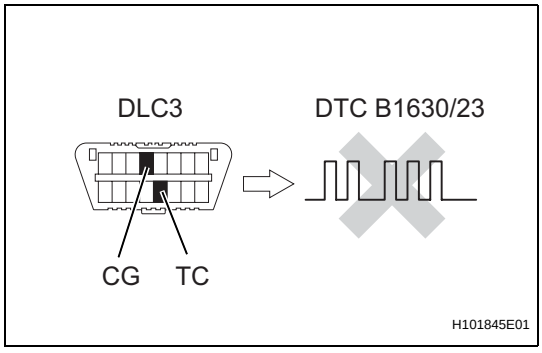
OK:
DTC B1630/23 is not output.

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

OK → **END**

NG

11	CHECK REAR AIRBAG SENSOR LH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the rear airbag sensor LH (See page RS-613).
(d) Connect the connectors to the center airbag sensor assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1630/23 is not output.

RS

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

NG → **REPLACE SIDE AIRBAG SENSOR ASSEMBLY LH**

OK ↓

END

12	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK ↓

13	CHECK CONNECTORS

(a) Check that the connectors (on the side airbag sensor assembly RH side and airbag sensor rear RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

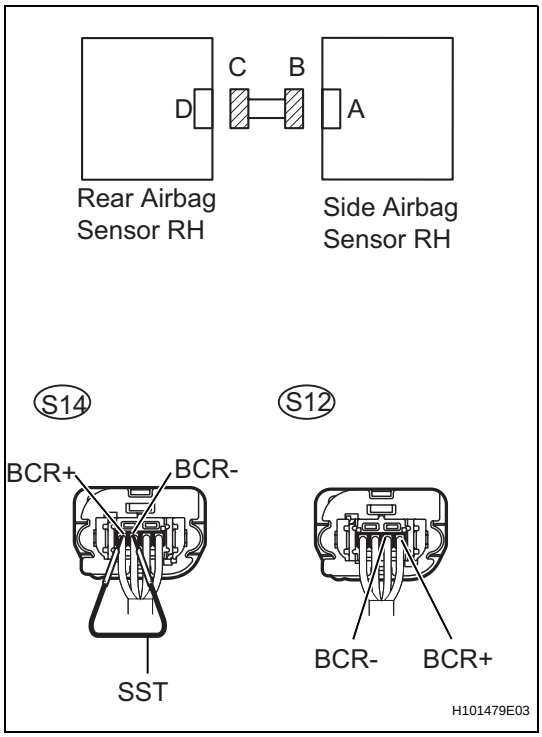
NG → **REPAIR OR REPLACE WIRE HARNESS**

OK ↓

14	CHECK FLOOR WIRE (FOR OPEN)

SST 09843-18040

RS



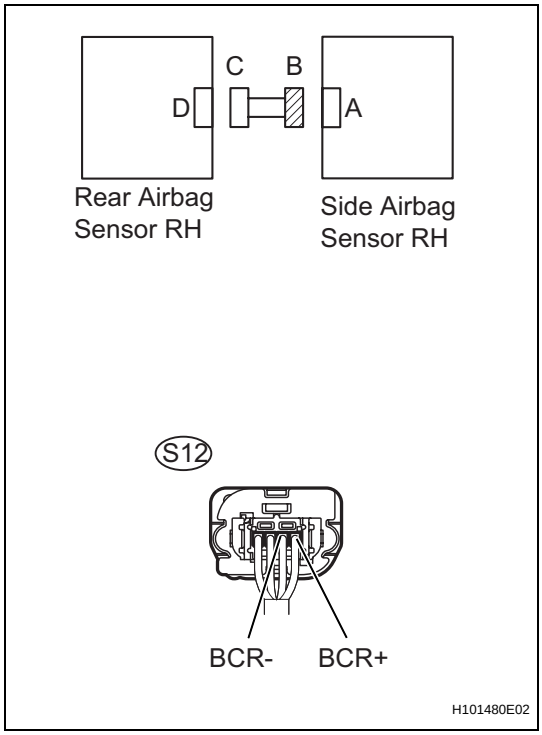
(a) Disconnect the connectors from the side airbag sensor assembly RH and the rear airbag sensor RH.
(b) Using SST, connect S14-2 (BCR+) and S14-1 (BCR-) of connector C.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

15 CHECK FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

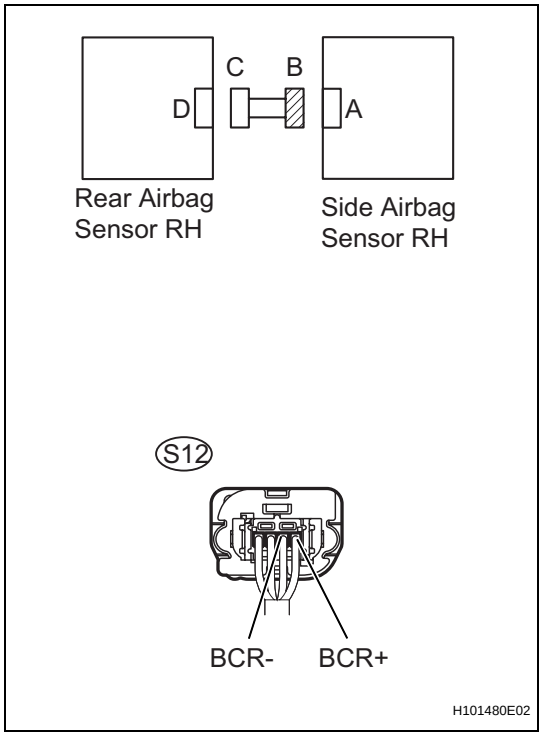
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

16 CHECK FLOOR WIRE (TO B+)



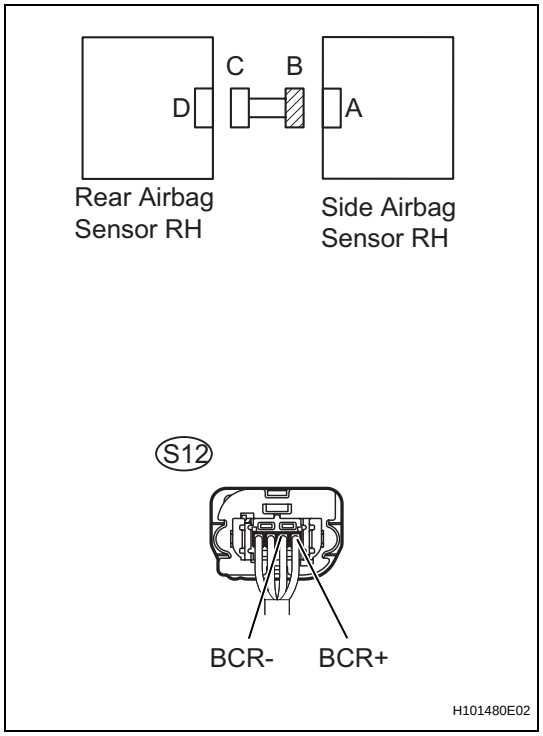
(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Ignition switch ON	Below 1 V
S12-2 (BCR-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

17 CHECK FLOOR WIRE (TO GROUND)



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

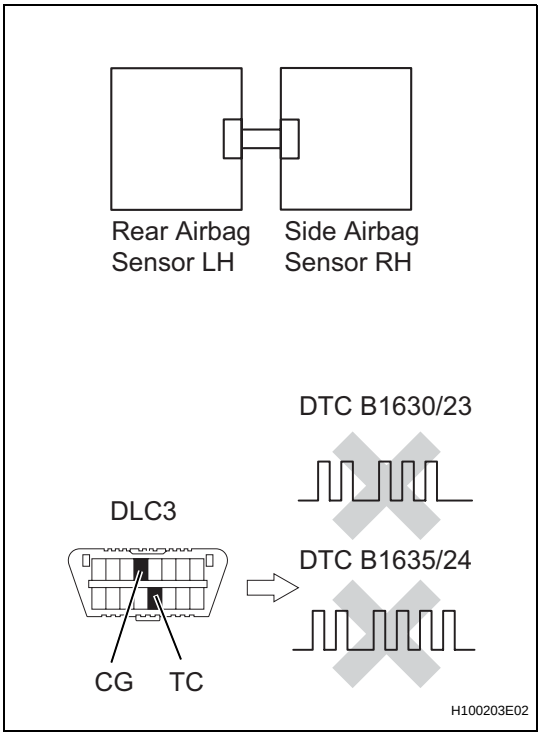
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Always	1 MΩ or Higher
S12-2 (BCR-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

18 CHECK REAR AIRBAG SENSOR RH



(a) Connect the connector to the side airbag sensor assembly RH.
(b) Interchange the rear airbag sensor RH with the rear airbag sensor 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 ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

Result

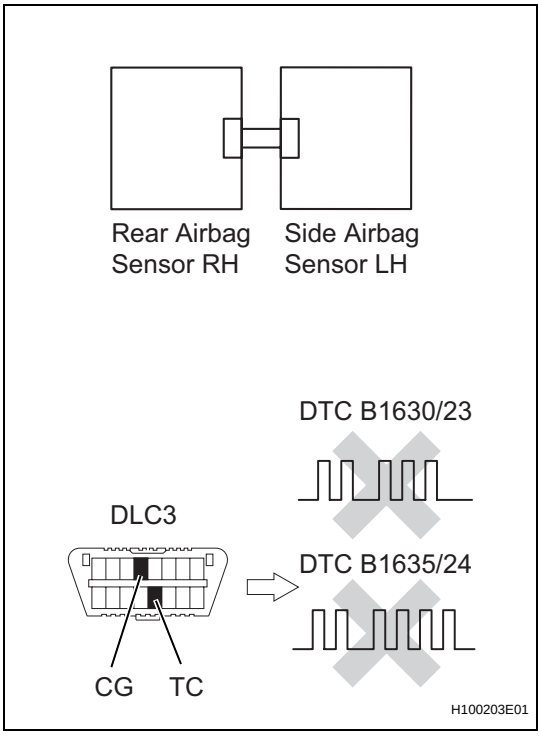
Result	Proceed to
DTC B1635/24 is output.	A
DTC B1630/23 is output.	B
Neither DTC B1630/23 nor B1635/24 is output.	C

B → REPLACE REAR AIRBAG SENSOR RH

C → USE SIMULATION METHOD TO CHECK

A

19 CHECK SIDE AIRBAG SENSOR ASSEMBLY RH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Return the rear airbag sensor LH and RH to their original positions and connect the connectors to them.
(d) Interchange the side airbag sensor assembly RH with the side airbag sensor assembly LH and connect the connectors to them.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1635/24 is output.	A

RS

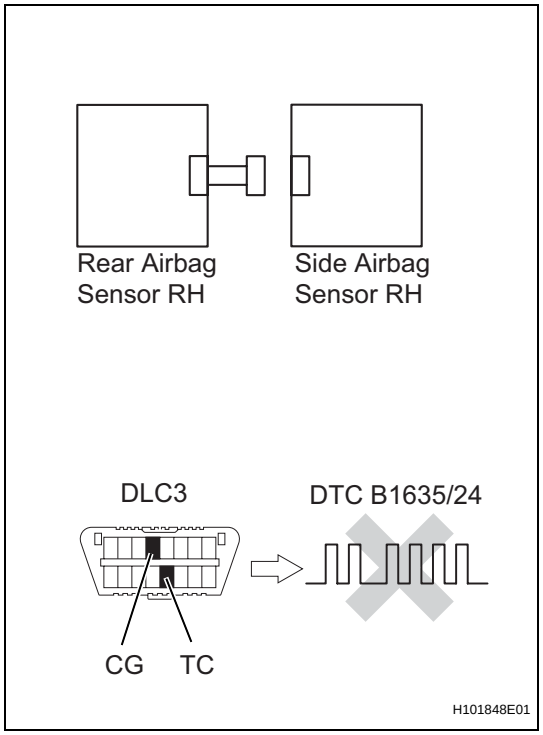
Result	Proceed to
DTC B1630/23 is output.	B
Neither DTC B1630/23 nor B1635/24 is output.	C

B → REPLACE SIDE AIRBAG SENSOR ASSEMBLY RH

C → USE SIMULATION METHOD TO CHECK

A

20 REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

OK:
DTC B1635/24 is not output.

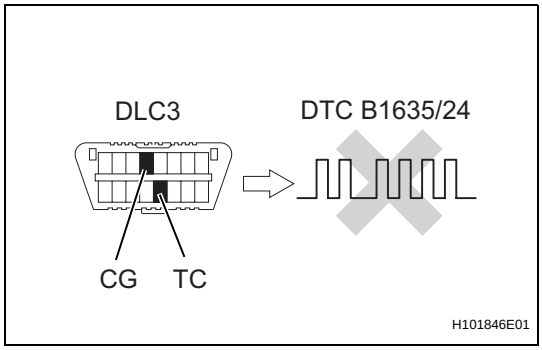
HINT:
DTCs other than B1635/24 may be output at this time, but they are not related to this check.

OK → END

NG

RS

21	REPLACE REAR AIRBAG SENSOR RH



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the rear airbag sensor RH (See page RS-613).
(d) Connect the connectors to the center airbag sensor assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1635/24 is not output.

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

NG → **REPLACE SIDE AIRBAG SENSOR ASSEMBLY RH**

OK

END

22	CHECK CONNECTION OF CONNECTORS

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

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

RS

23 CHECK CONNECTORS

(a) Check that the connectors (on the side airbag sensor assembly LH side and airbag sensor rear LH side) are not damaged (See page IN-34).
(b) Check that the connectors (on the side airbag sensor assembly RH side and airbag sensor rear RH side) are not damaged (See page IN-34).

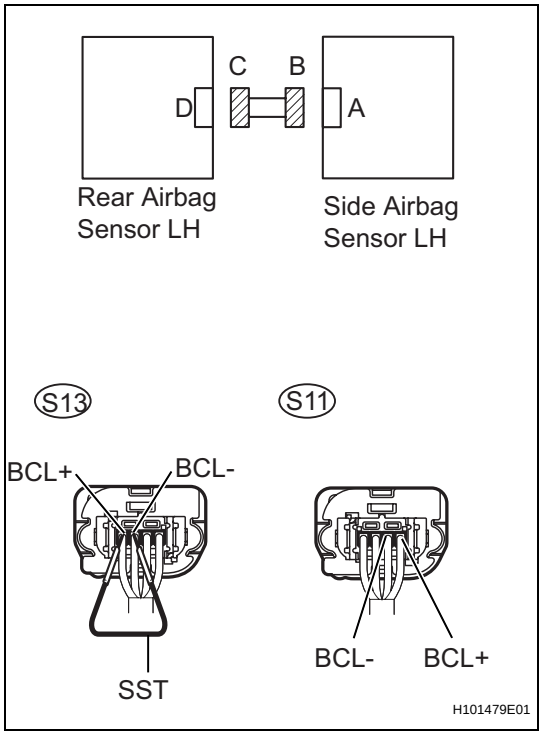
OK:

The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

24 CHECK NO. 2 FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the side airbag sensor assembly LH and the rear airbag sensor LH.
(b) Using SST, connect S13-2 (BCL+) and S13-1 (BCL-) of connector C.
(c) Measure the resistance.

Standard resistance

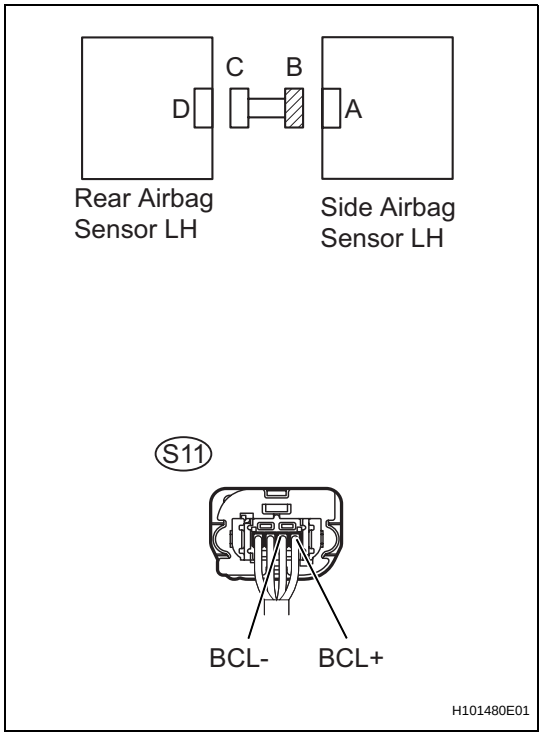
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	Below 1 Ω

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

OK

RS

25 CHECK NO. 2 FLOOR WIRE (FOR SHORT)



(a) Disconnect the SST from connector C.
(b) Disconnect the connectors from the side airbag sensor assembly LH and rear airbag sensor LH.
(c) Measure the resistance.

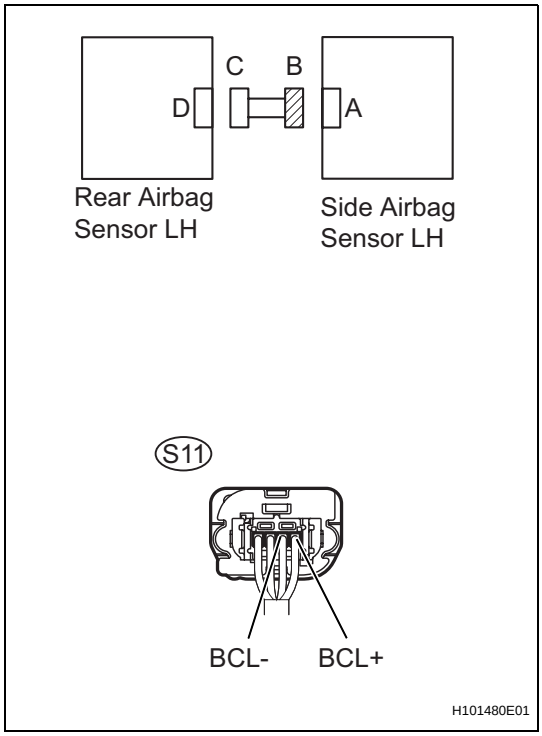
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - S11-2 (BCL-)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

26 CHECK NO. 2 FLOOR WIRE (TO B+)



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

Standard voltage

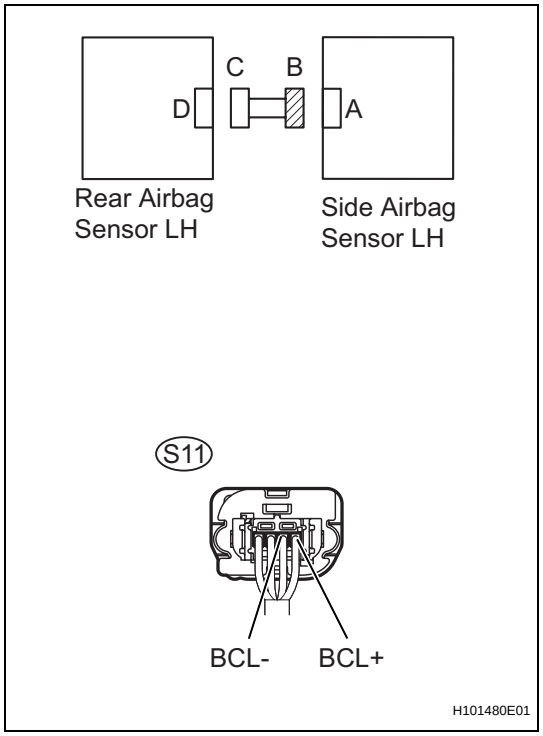
Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Ignition switch ON	Below 1 V
S11-2 (BCL-) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

RS

27 CHECK NO. 2 FLOOR WIRE (TO GROUND)



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

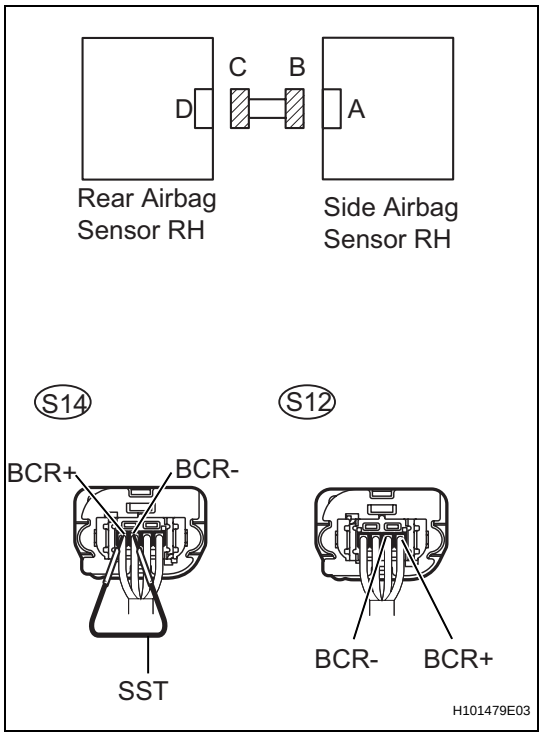
Standard resistance

Tester Connection	Condition	Specified Condition
S11-1 (BCL+) - Body ground	Always	1 MΩ or Higher
S11-2 (BCL-) - Body ground	Always	1 MΩ or Higher

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

OK

28 CHECK FLOOR WIRE (FOR OPEN)



SST 09843-18040

(a) Disconnect the connectors from the side airbag sensor assembly RH and the rear airbag sensor RH.
(b) Using SST, connect S14-2 (BCR+) and S14-1 (BCR-) of connector C.
(c) Measure the resistance.

Standard resistance

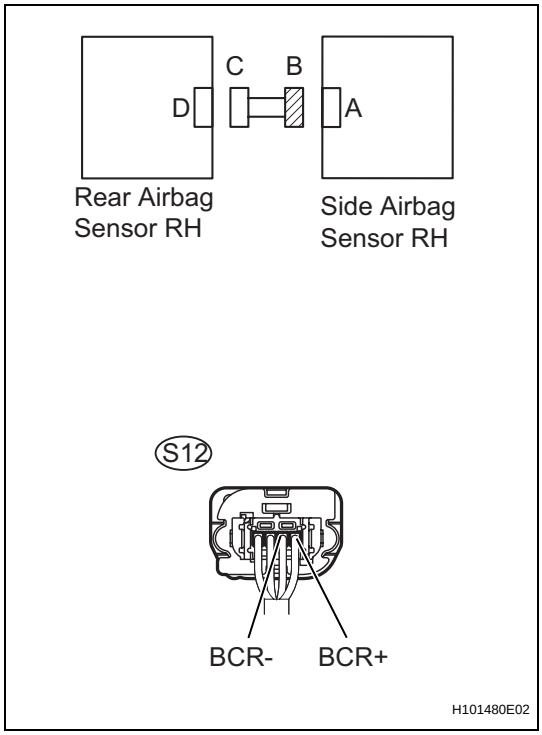
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FLOOR WIRE**

RS

OK

29 CHECK FLOOR WIRE (FOR SHORT)



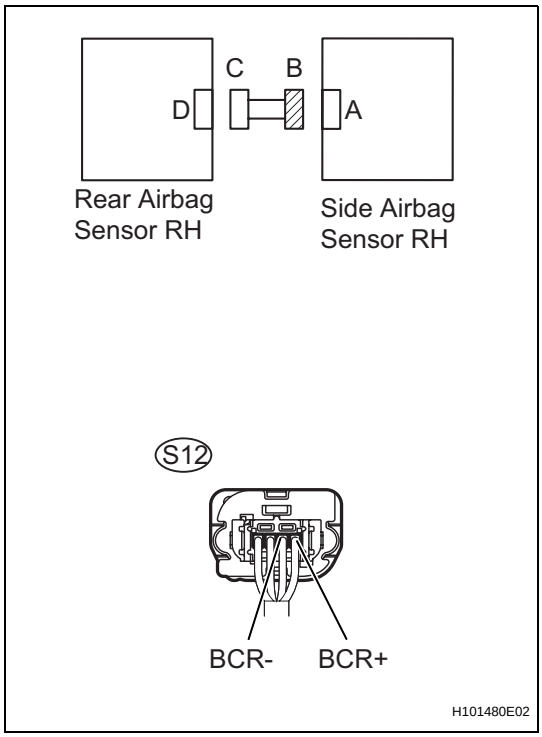
(a) Disconnect the SST from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - S12-2 (BCR-)	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

30 CHECK FLOOR WIRE (TO B+)



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

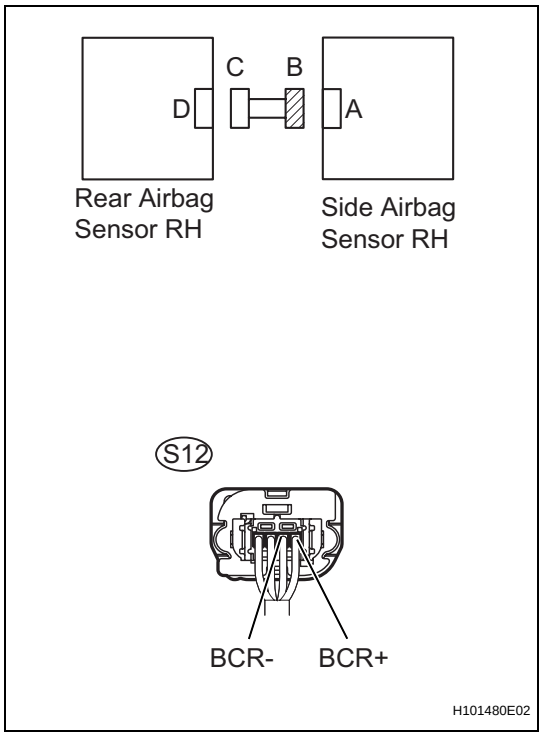
Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Ignition switch ON	Below 1 V
S12-2 (BCR-) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE FLOOR WIRE

RS

OK

31 CHECK FLOOR WIRE (TO GROUND)



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

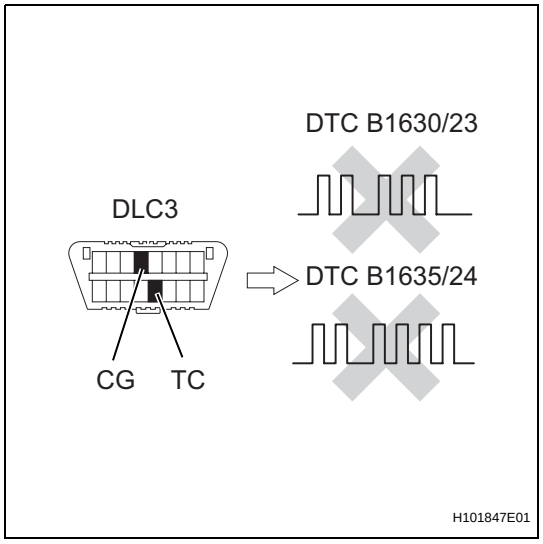
Standard resistance

Tester Connection	Condition	Specified Condition
S12-1 (BCR+) - Body ground	Always	1 MΩ or Higher
S12-2 (BCR-) - Body ground	Always	1 MΩ or Higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

32 REPLACE CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Clear any DTCs stored in the memory (See page RS-34).
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(i) Check for DTCs (See page RS-34).

OK:

DTC B1630/23 and B1635/24 are not output.

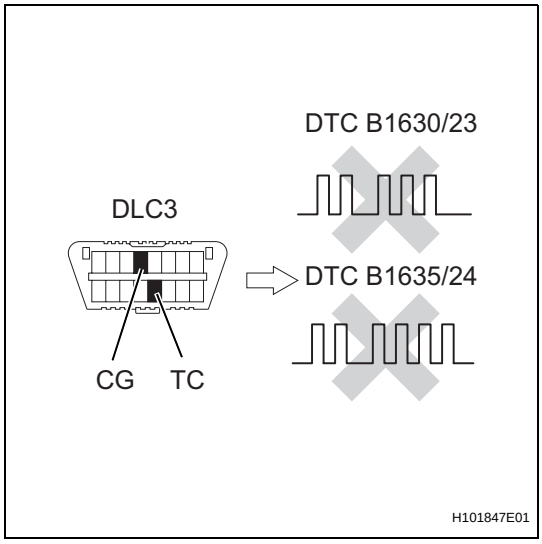
RS

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

OK	END

NG

33	REPLACE REAR AIRBAG SENSOR RH



(a) Connect the connectors to the side airbag sensor assembly RH, the side airbag sensor assembly LH and center airbag sensor assembly.
(b) Replace the rear airbag sensor RH and the rear airbag sensor LH (See page RS-613).

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

(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Clear any DTCs stored in the memory (See page RS-34).
(f) Turn the ignition switch to the LOCK position.
(g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(h) Check for DTCs (See page RS-34).

OK:
DTC B1630/23 and B1635/24 are not output.

NG	REPLACE SIDE AIRBAG SENSOR ASSEMBLY LH AND SIDE AIRBAG SENSOR ASSEMBLY RH

OK

END

RS

DTC	B1650/32	Occupant Classification System Malfunction

DESCRIPTION

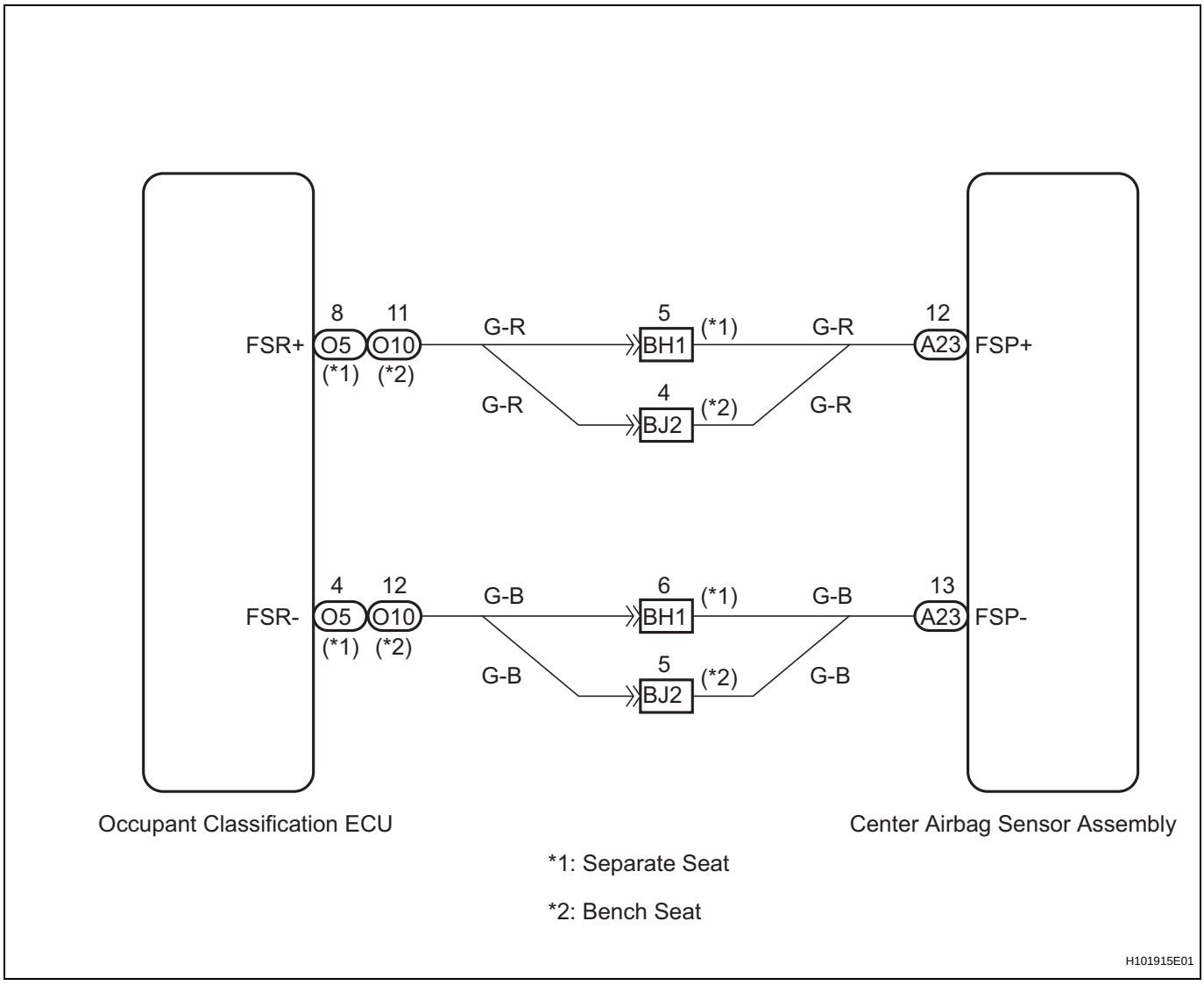
The occupant classification system circuit consists of the center airbag sensor assembly and the occupant classification system.

When the center airbag sensor assembly receives signals from the occupant classification ECU, it determines whether or not the front passenger airbag assembly, front seat airbag assembly RH and seat belt pretensioner RH should be operated.

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

DTC No.	DTC Detecting Conditions	Trouble Areas
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	• Occupant classification system • Center airbag sensor assembly • Floor wire • No. 1 seat wire

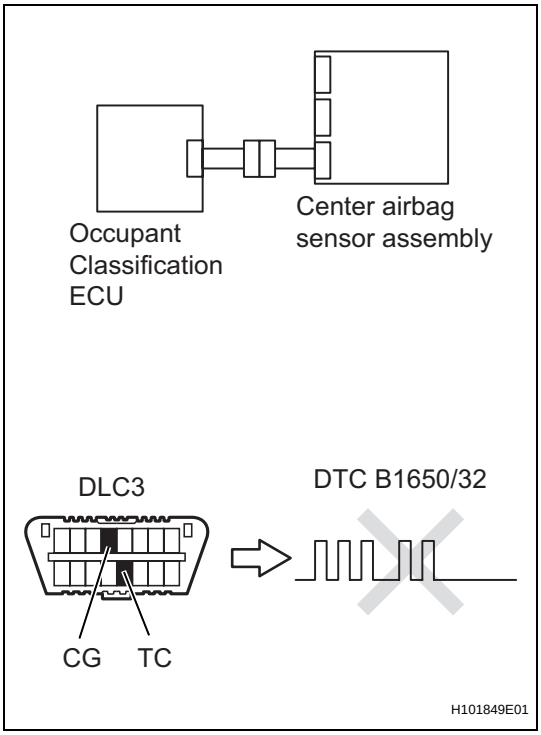
WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC (CENTER AIRBAG SENSOR ASSEMBLY)



(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(e) Check for DTCs (See page RS-34).
OK:
DTC B1650/32 is not output.
HINT:
DTCs other than B1650/32 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK DTC (OCCUPANT CLASSIFICATION ECU)

(a) Turn the ignition switch to the ON position, and wait for at least 10 seconds.
(b) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-362).
OK:
DTC is not output.

RS

NG → GO TO DTC CHART

OK

3	CHECK CONNECTION OF CONNECTORS

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

NG → CONNECT CONNECTORS

OK

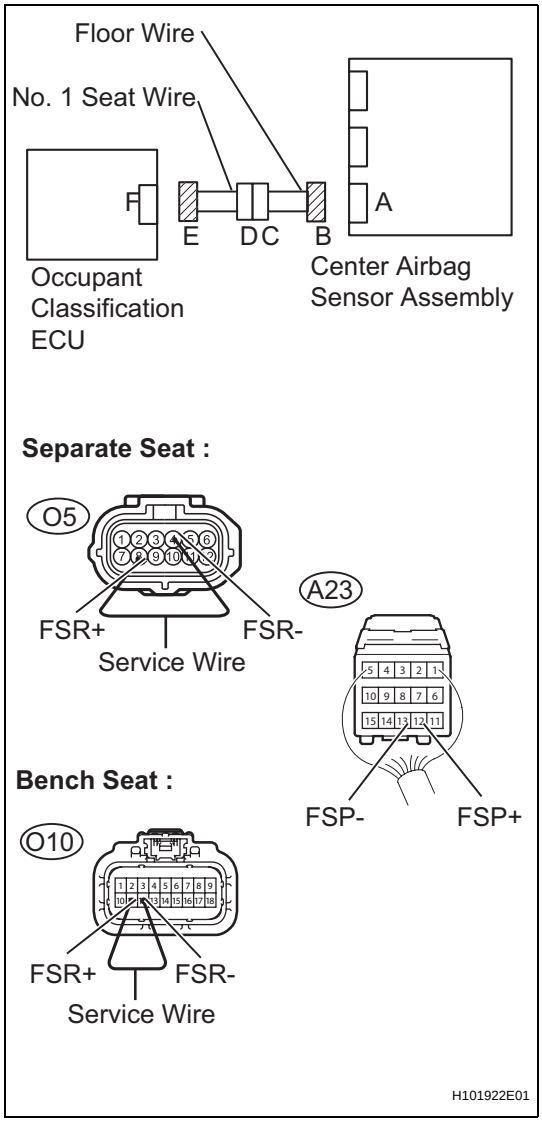
4	CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and occupant classification ECU side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE WIRE HARNESS

OK

5	CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the occupant classification ECU.

(b) Separate Seat :
Using a service wire, connect O5-8 (FSR+) and O5-4 (FSR-) of connector E.

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

(c) Bench Seat :
Using a service wire, connect O10-11 (FSR+) and O10-12 (FSR-) of connector E.

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

(d) Measure the resistance.
Standard resistance

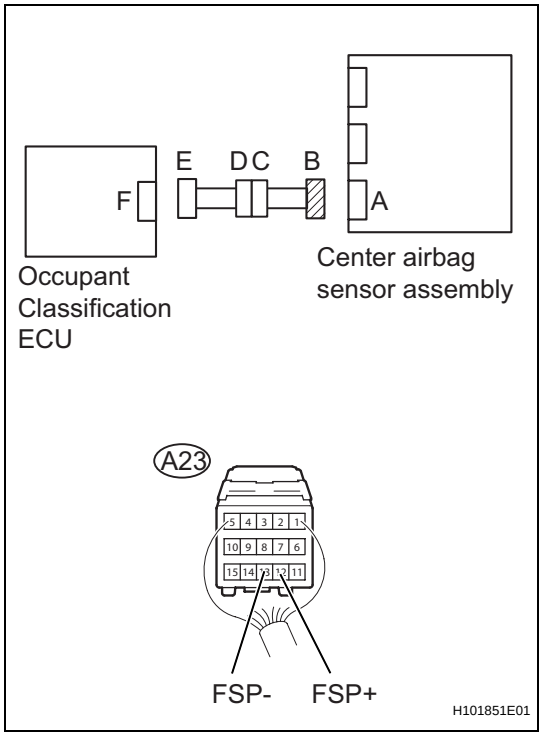
Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	Below 1 Ω

NG → **Go to step 13**

OK

RS

6 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (FOR SHORT)



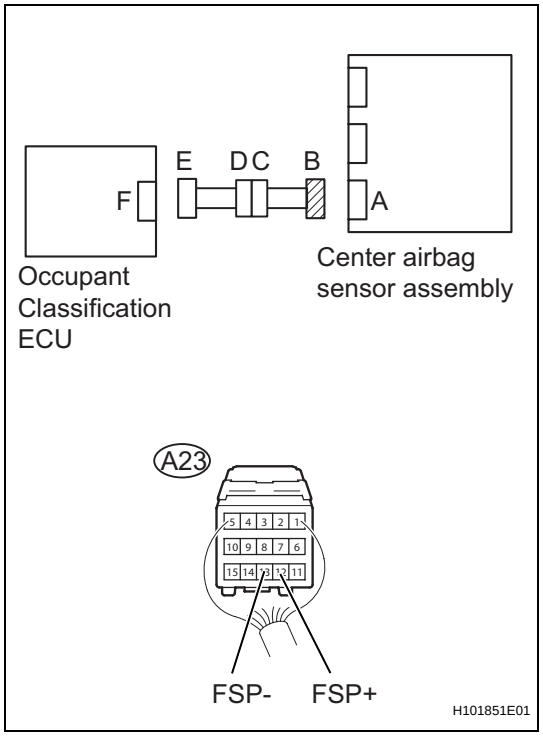
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	1 MΩ or Higher

NG → **Go to step 14**

OK

7 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (TO B+)



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

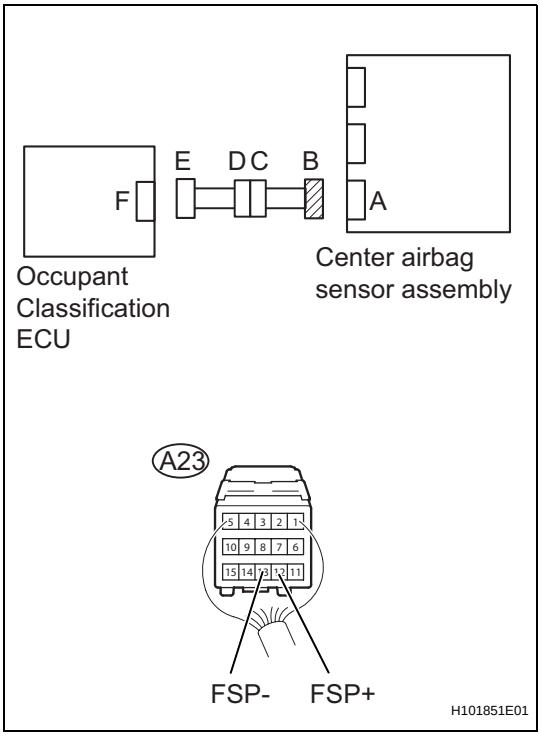
Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Ignition switch ON	Below 1 V
A23-13 (FSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 15**

OK

RS

8 CHECK OCCUPANT CLASSIFICATION SYSTEM CIRCUIT (TO GROUND)



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

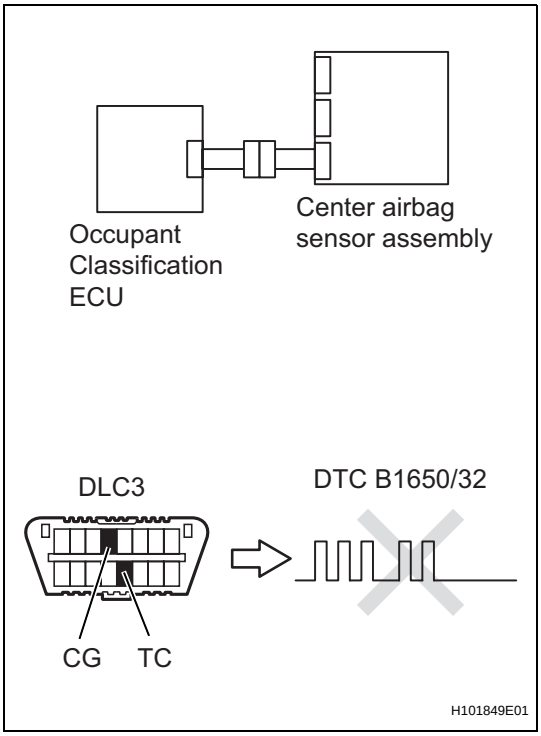
Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Always	1 MΩ or Higher
A23-13 (FSP-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 16**

OK

9 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

Result

Result	Proceed to
DTC B1650/32 is output (for separate seat)	A

RS

Result	Proceed to
DTC B1650/32 is not output (for bench seat)	B
DTC B1650/32 is not output	C

HINT:
DTCs other than B1650/32 may be output at this time, but they are not related to this check.

B	Go to step 17
C	END

A

10 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

NEXT

11 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

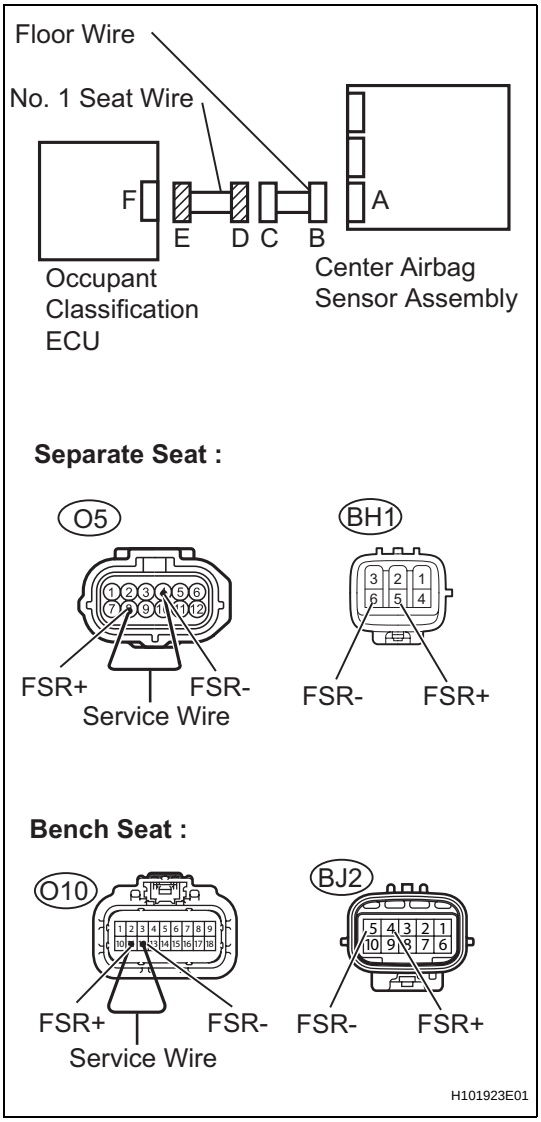
12 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard Value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

13	CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Disconnect the No. 1 seat wire connector from the instrument panel wire.

HINT:

The service wire has already been inserted into connector E.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BH1-5 (FSR+) - BH1-6 (FSR-) *1	Always	Below 1 Ω
BJ2-4 (FSR+) - BJ2-5 (FSR-) *2	Always	Below 1 Ω

*1 : Separate Seat

*2 : Bench Seat

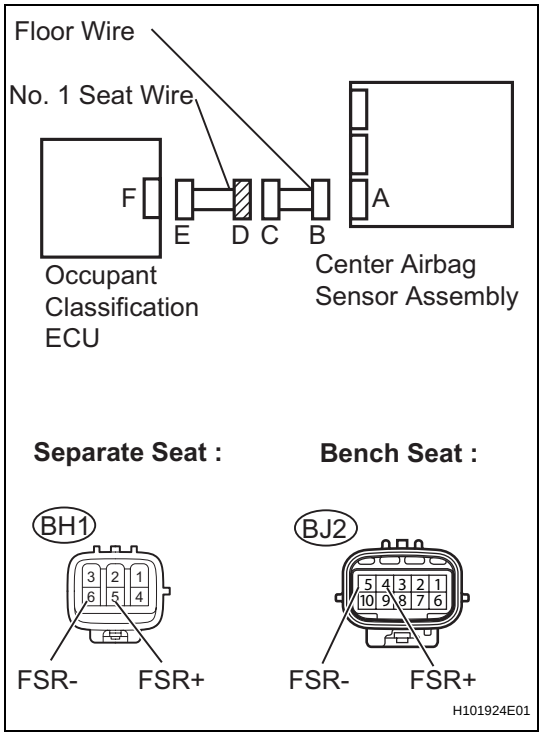
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

REPAIR OR REPLACE FLOOR WIRE

14 **CHECK NO. 1 SEAT WIRE (FOR SHORT)**



(a) Disconnect the No. 1 seat wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BH1-5 (FSR+) - BH1-6 (FSR-) *1	Always	1 MΩ or Higher
BJ2-4 (FSR+) - BJ2-5 (FSR-) *2	Always	1 MΩ or Higher

*1 : Separate Seat
*2 : Bench Seat

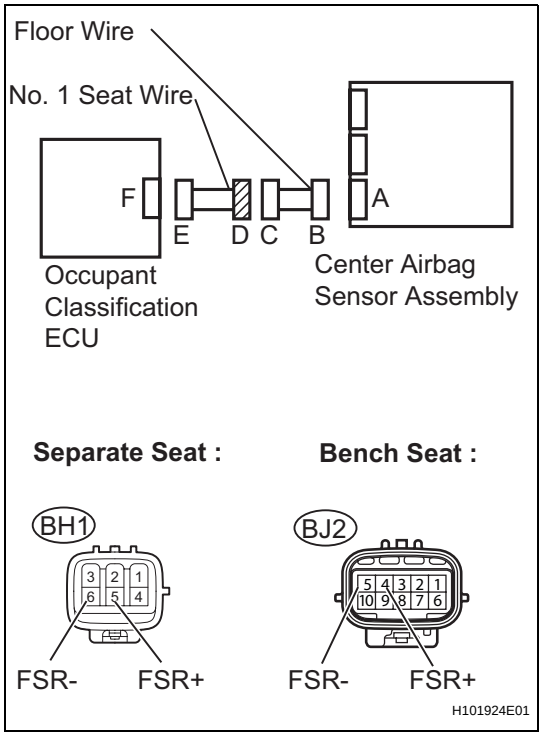
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

15	CHECK NO. 1 SEAT WIRE (TO B+)



(a) Disconnect the No. 1 seat wire connector from the instrument panel wire.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
BH1-5 (FSR+) - Body ground *1	Ignition switch ON	Below 1 V
BH1-6 (FSR-) - Body ground *1	Ignition switch ON	Below 1 V
BJ2-4 (FSR+) - Body ground *2	Ignition switch ON	Below 1 V
BJ2-5 (FSR-) - Body ground *2	Ignition switch ON	Below 1 V

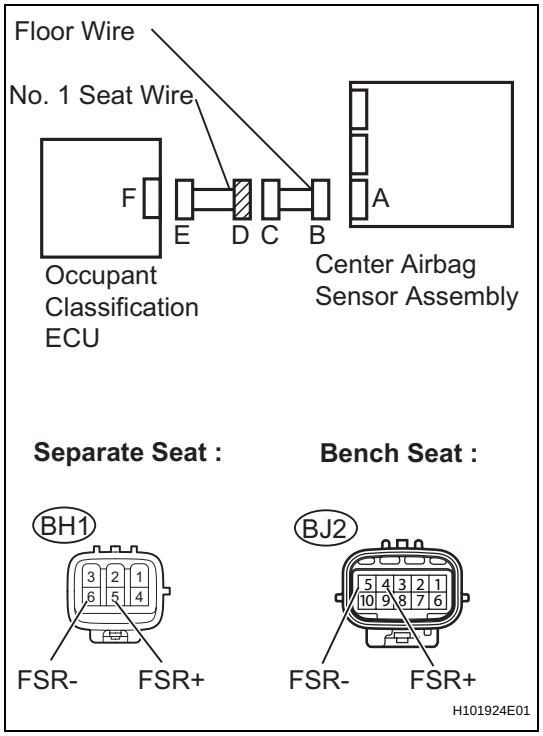
*1 : Separate Seat
*2 : Bench Seat

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

16 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Disconnect the No. 1 seat wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BH1-5 (FSR+) - Body ground *1	Always	1 MΩ or Higher
BH1-6 (FSR-) - Body ground *1	Always	1 MΩ or Higher
BJ2-4 (FSR+) - Body ground *2	Always	1 MΩ or Higher
BJ2-5 (FSR-) - Body ground *2	Always	1 MΩ or Higher

*1 : Separate Seat
*2 : Bench Seat

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

17 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the ON position.
(b) Using the intelligent tester, read the current setting data stored in the occupant classification ECU (See page RS-476).
HINT:
If the previous ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU, occupant classification sensor).
(c) Turn the ignition switch to the LOCK position.
(d) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(e) Replace the occupant classification ECU (See page RS-634).
(f) Connect the negative (-) terminal cable to the battery.
(g) Turn the ignition switch to the ON position.
(h) Using an intelligent tester, write the setting data read from the previously installed occupant classification ECU into the newly installed occupant classification ECU (See page RS-476).

RS

NEXT

18	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

DTC	B1651/33	Manual Cut off Switch Trouble

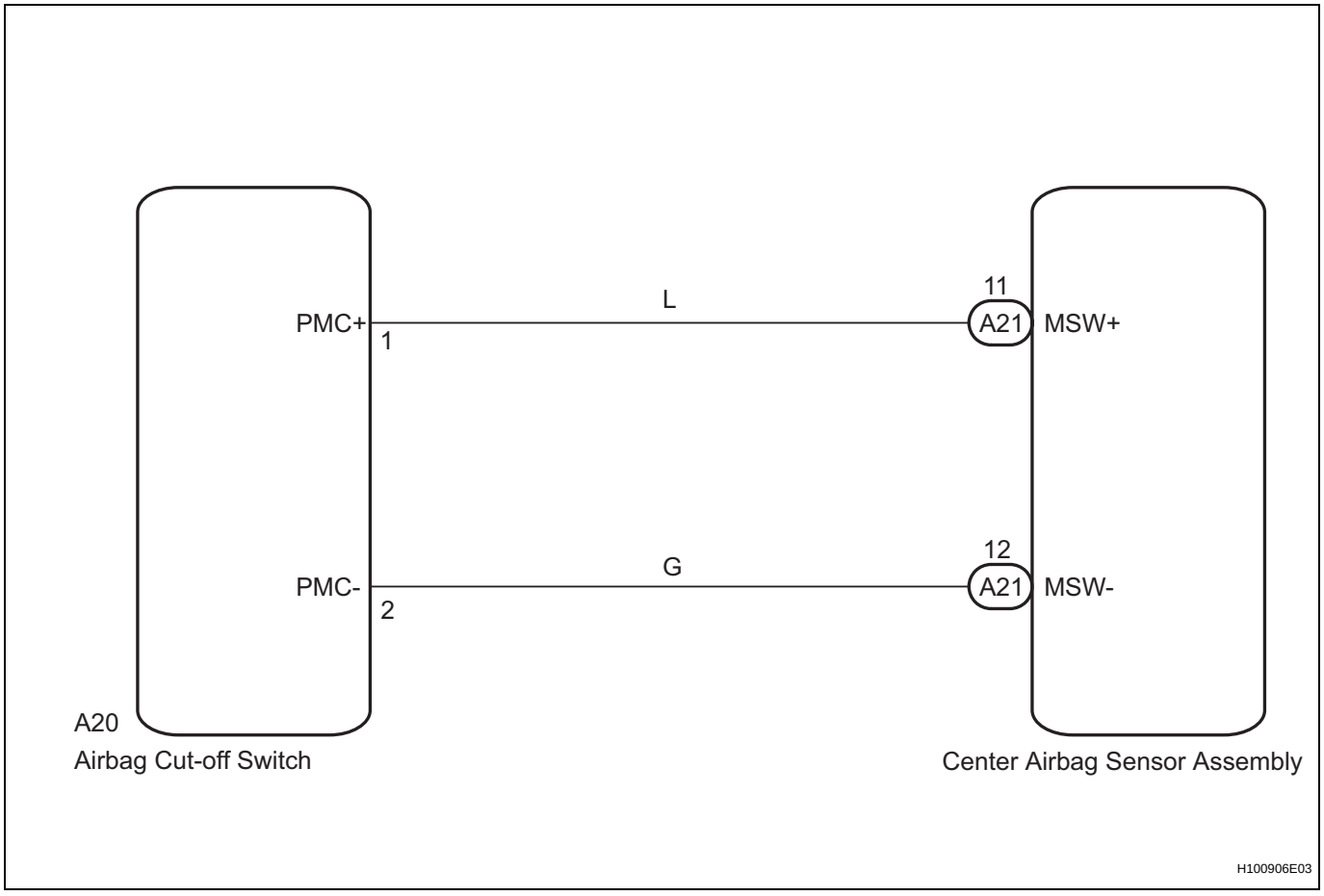
DESCRIPTION

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

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

DTC No.	DTC Detecting Conditions	Trouble Areas
B1651/31	• The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the airbag cut off switch circuit for 2 seconds • Airbag cut off switch malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Airbag cut-off switch • Center airbag sensor assembly

WIRING DIAGRAM



CAUTION:

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

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

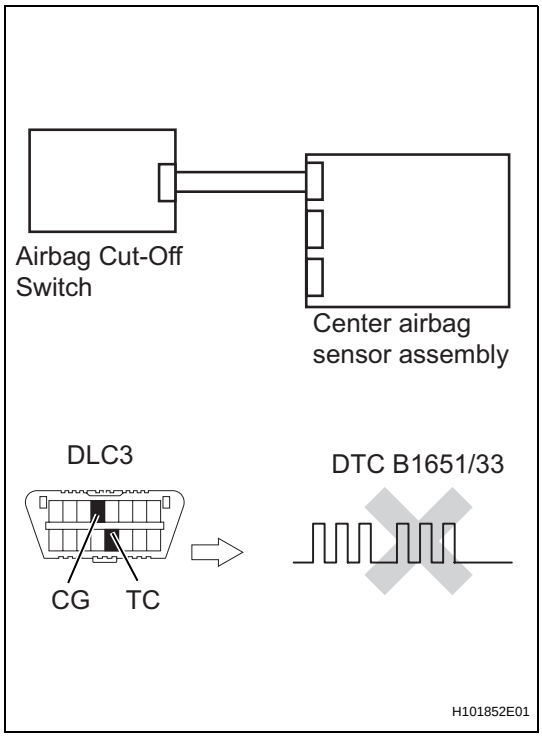
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

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

(d) Disconnect the connectors from the steering pad.

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

1	CHECK DTC



(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
(e) Check for DTCs (See page RS-34).
OK:
DTC B1651/33 is not output.
HINT:
DTCs other than B1651/33 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECTION OF CONNECTORS**

OK

RS

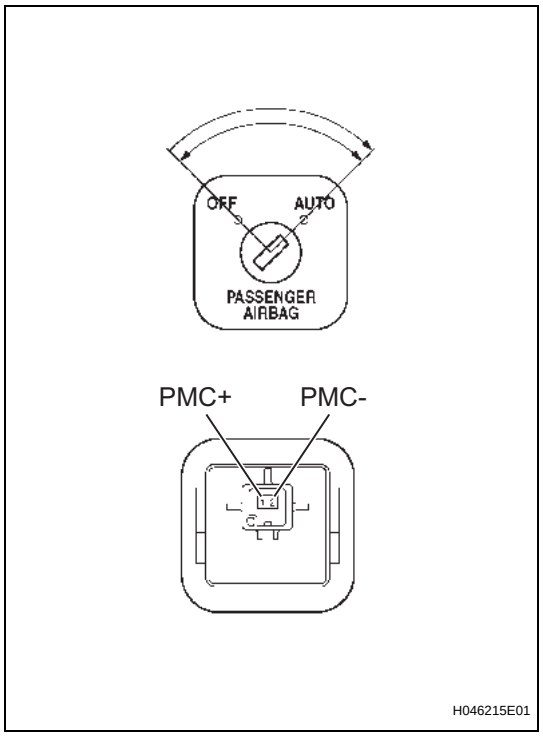
3	CHECK CONNECTORS

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

NG → REPAIR OR REPLACE WIRE HARNESS

OK

4	INSPECT AIRBAG CUT-OFF SWITCH



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

Standard resistance

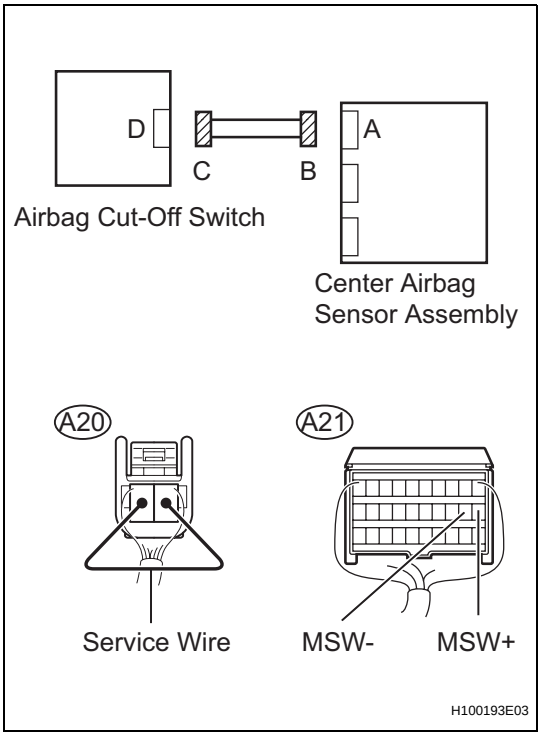
Switch Condition	Tester Condition	Specified Condition
OFF	1(PMC+) - 2(PMC-)	80 to 120 Ω
AUTO	1(PMC+) - 2(PMC-)	320 to 480 Ω

NG → REPLACE AIRBAG CUT-OFF SWITCH

OK

RS

5 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



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

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

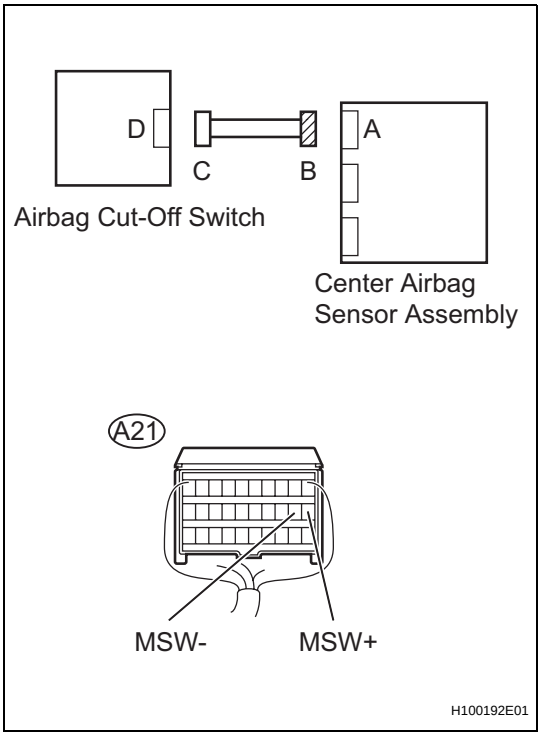
(c) Measure the resistance.
Standard resistance

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

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

OK

6 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



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

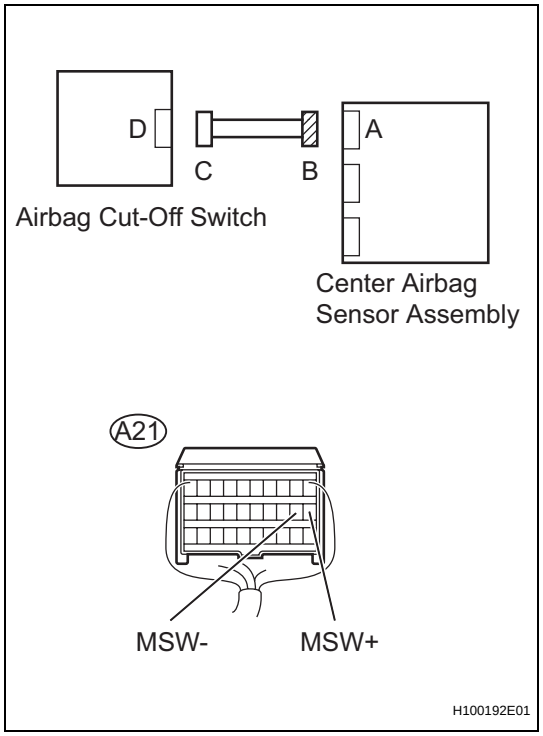
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - A21-12 (MSW-)	Always	1 MΩ or Higher

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

OK

RS

7 CHECK INSTRUMENT PANEL WIRE (TO B+)



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

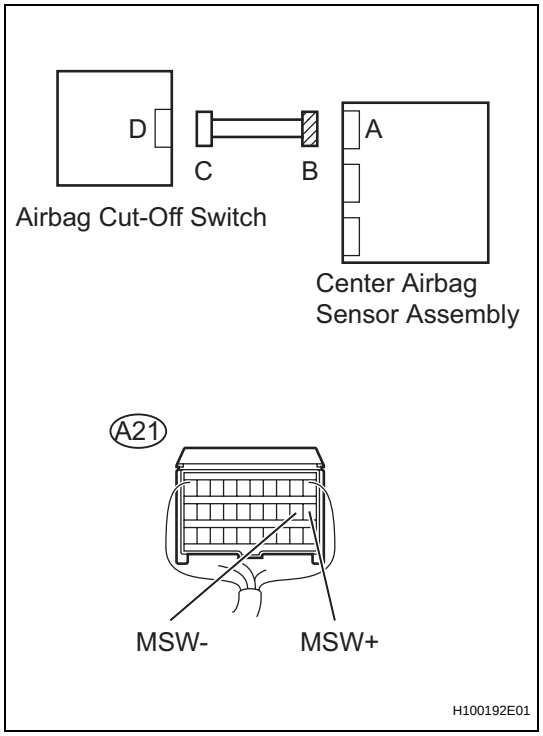
Standard voltage

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

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

OK

8 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

Standard resistance

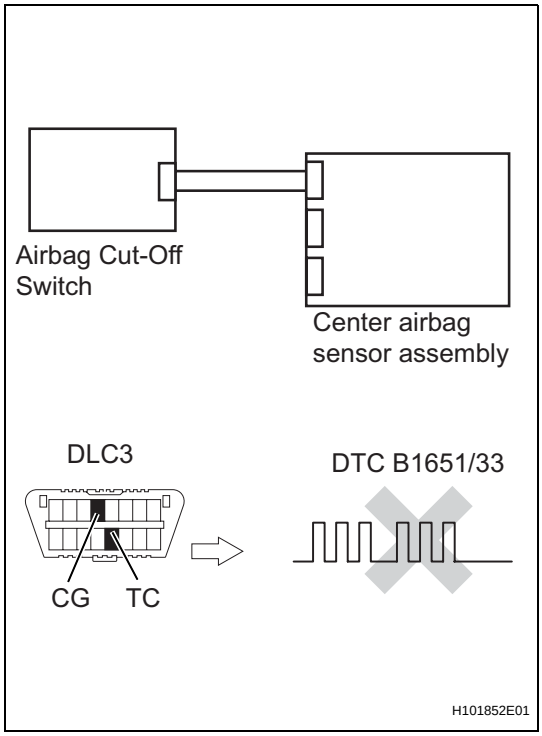
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - Body ground	Always	1 MΩ or Higher
A21-12 (MSW-) - Body ground	Always	1 MΩ or Higher

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

OK

RS

9	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1651/33 is not output.

HINT:

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

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

DTC	B1653/35	Seat Position Airbag Sensor Circuit Malfunction

DESCRIPTION

The seat position sensor circuit consists of the center airbag sensor assembly and the seat position sensor.

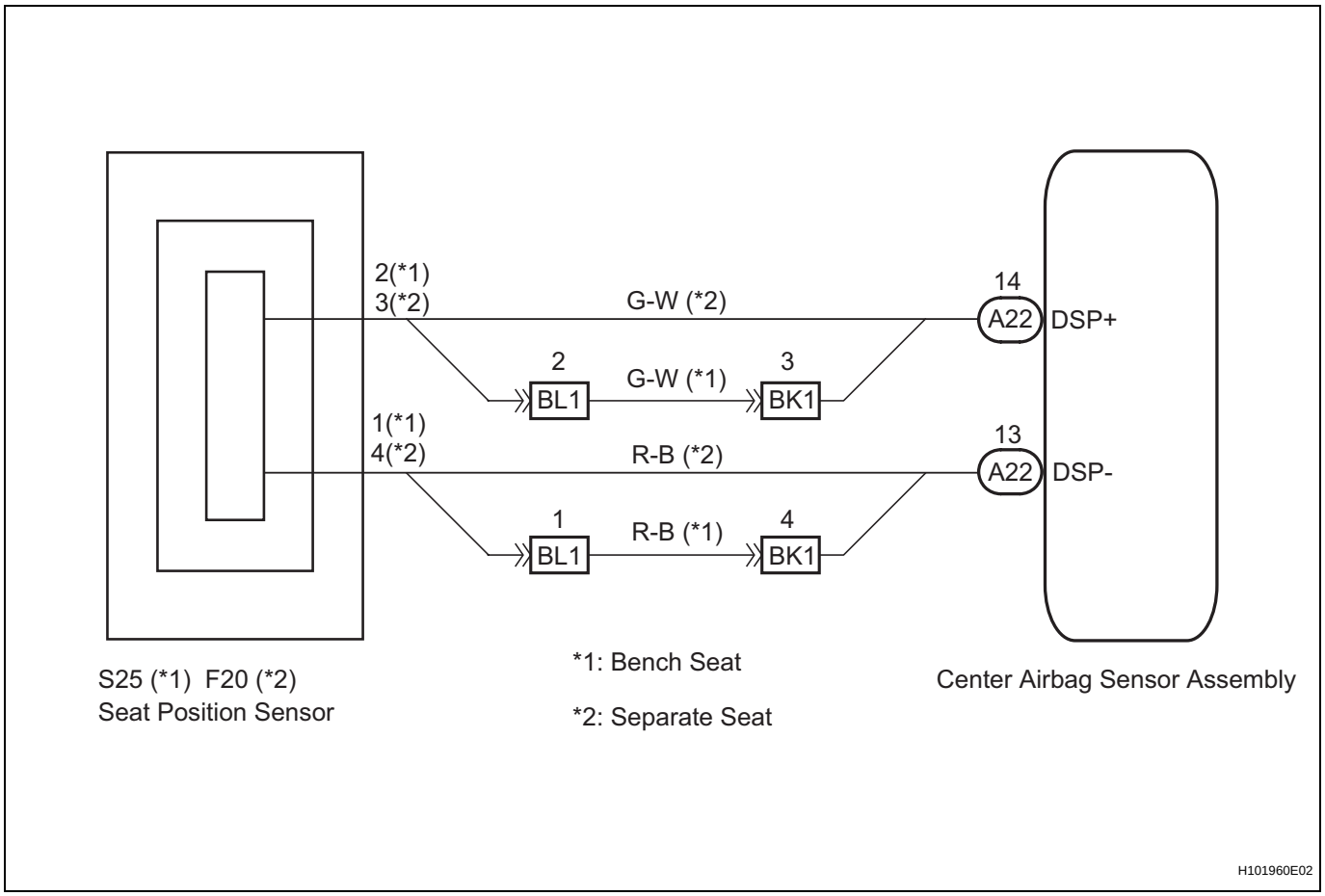
DTC B1653/35 is set when a malfunction is detected in the seat position sensor assembly circuit.

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 sensor assembly circuit for 2 seconds. • Seat position sensor malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • No. 1 seat wire (*1) • No. 2 seat wire (*1) • Front seat belt inner assembly LH (*2) • Seat position sensor • Center airbag sensor assembly

*1: Bench seat

*2: Separate seat

WIRING DIAGRAM



RS

CAUTION:

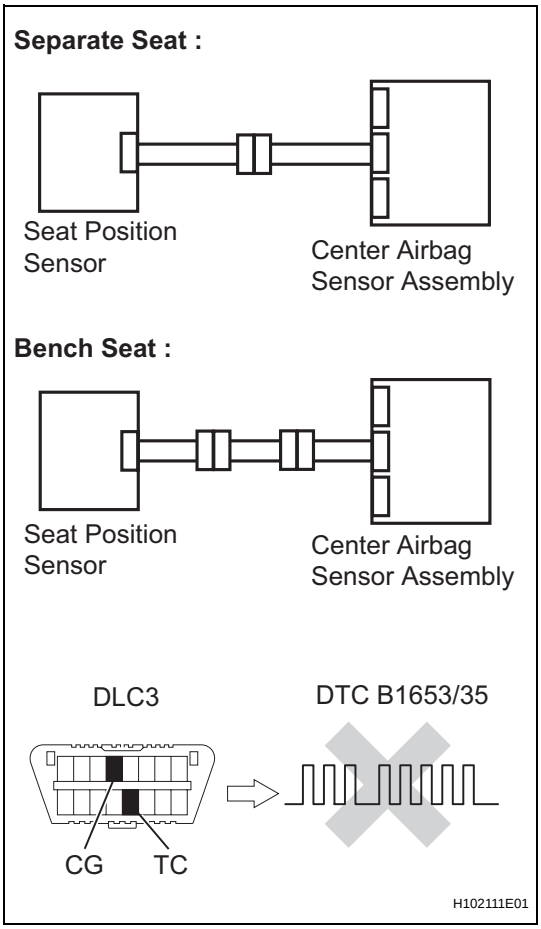
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.

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

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

(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.
(g) Disconnect the connector from the front seat outer belt assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the front seat airbag assembly LH.
(i) Disconnect the connector from the front seat airbag assembly RH.
(j) Disconnect the connector from the curtain shield airbag assembly LH.
(k) Disconnect the connector from the curtain shield airbag assembly RH.

1	CHECK DTC



(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
(e) Check for DTCs (See page RS-34).
OK:
DTC B1653/35 is not output.
HINT:
DTCs other than B1653/35 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTION OF CONNECTORS

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

RS

OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

3 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and seat position sensor side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

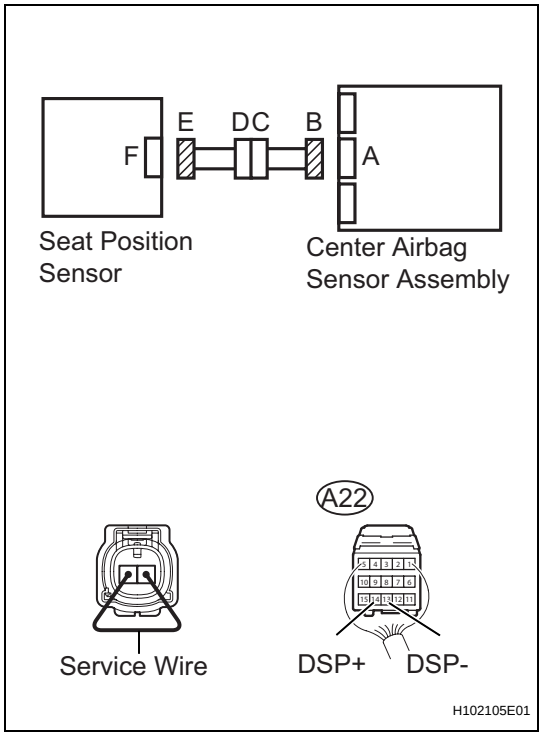
Condition	Proceed to
Normal (separate seat)	A
Normal (bench seat)	B
Abnormal	C

B → **Go to step 13**

C → **REPAIR OR REPLACE WIRE HARNESS**

A

4 CHECK SEAT POSITION SENSOR CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the seat position sensor.
(b) Using a service wire, connect 1 and 2 of connector E.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
HINT:
The connector is not allocated an ID number due to being part of the front seat inner belt assembly LH wire harness.
(c) Measure the resistance.
Standard resistance

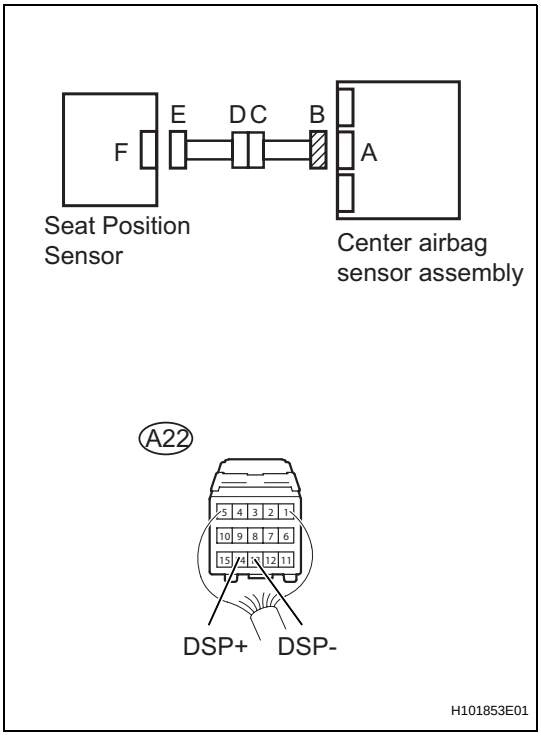
Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - A22-13 (DSP-)	Always	Below 1 Ω

NG → **Go to step 9**

OK

RS

5 CHECK SEAT POSITION SENSOR CIRCUIT (FOR SHORT)



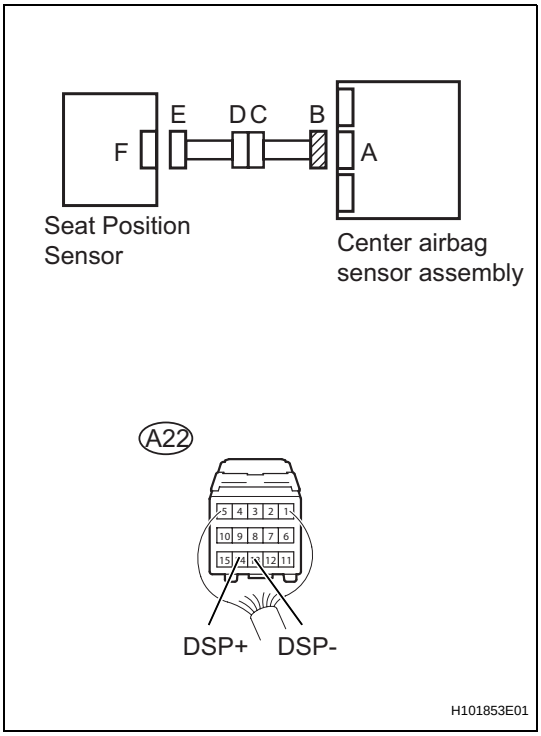
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - A22-13 (DSP-)	Always	1 MΩ or Higher

NG → **Go to step 10**

OK

6 CHECK SEAT POSITION SENSOR CIRCUIT (TO B+)



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

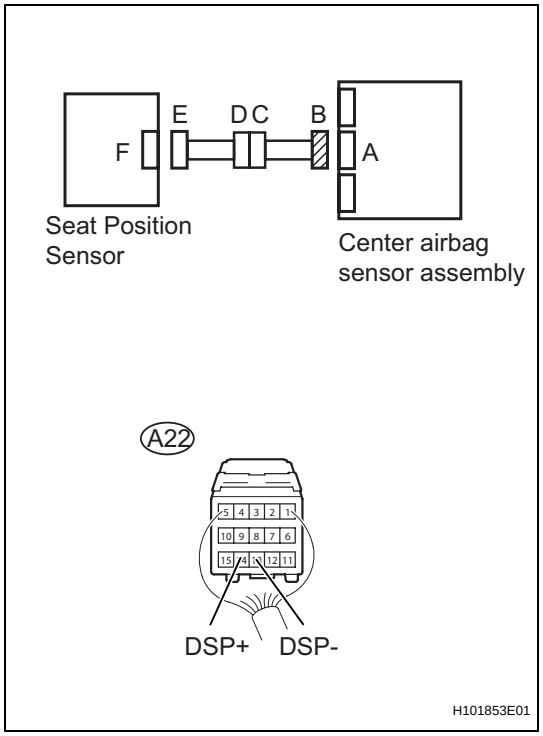
Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - Body ground	Ignition switch ON	Below 1 V
A22-13 (DSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 11**

OK

RS

7 CHECK SEAT POSITION SENSOR CIRCUIT (TO GROUND)



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

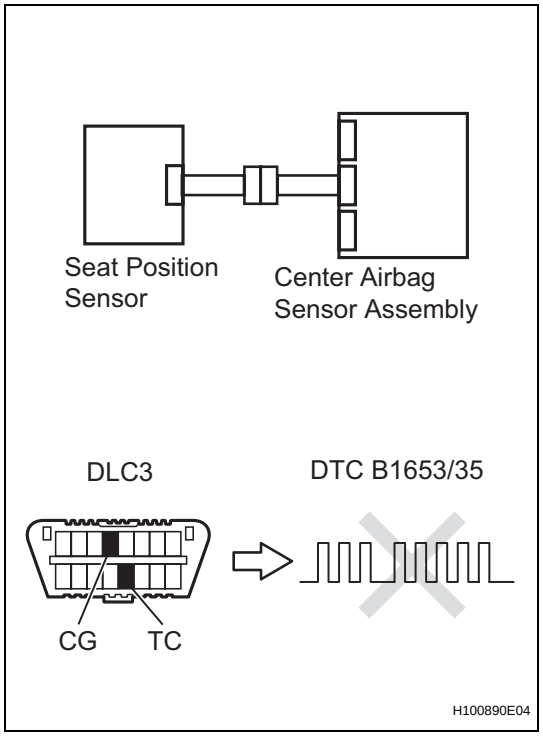
Standard resistance

Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - Body ground	Always	1 MΩ or Higher
A22-13 (DSP-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 12**

OK

8 CHECK SEAT POSITION SENSOR



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

OK:

DTC B1653/35 is not output.

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

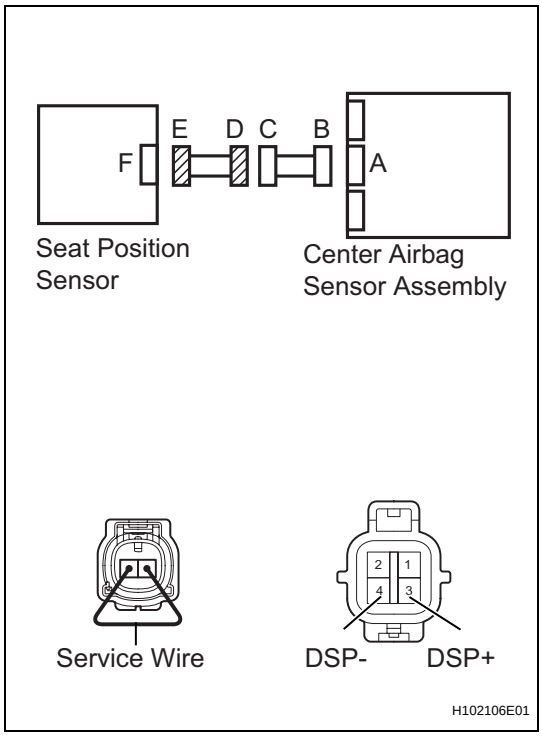
NG → **Go to step 26**

RS

OK

USE SIMULATION METHOD TO CHECK

9	CHECK SEAT POSITION SENSOR CIRCUIT (FOR OPEN)



(a) Disconnect the front seat inner belt assembly connector from the instrument panel wire.

HINT:

- The service wire has already been inserted into connector E.
- The connector is not allocated an ID number due to being part of the front seat inner belt assembly LH wire harness.

(b) Measure the resistance.

Standard resistance

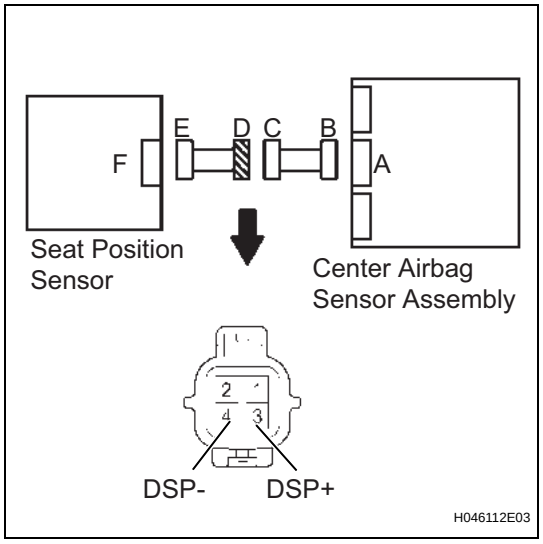
Tester Connection	Condition	Specified Condition
3 (DSP+) - 4 (DSP-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

10 CHECK SEAT POSITION SENSOR CIRCUIT (FOR SHORT)



(a) Disconnect the front seat inner belt assembly connector from the instrument panel wire.

HINT:
The connector is not allocated an ID number due to being part of the front seat inner belt assembly LH wire harness.

(b) Disconnect the service wire from connector E.
(c) Measure the resistance.

Standard resistance

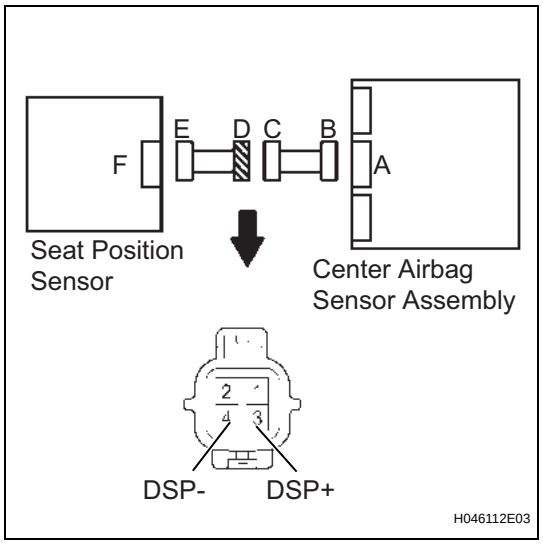
Tester Connection	Condition	Specified Condition
3 (DSP+) - 4 (DSP-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

11 CHECK SEAT POSITION SENSOR CIRCUIT (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the seat inner belt assembly LH connector from the instrument panel wire.

HINT:
The connector is not allocated an ID number due to being part of the front seat inner belt assembly LH wire harness.

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

Standard Voltage

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

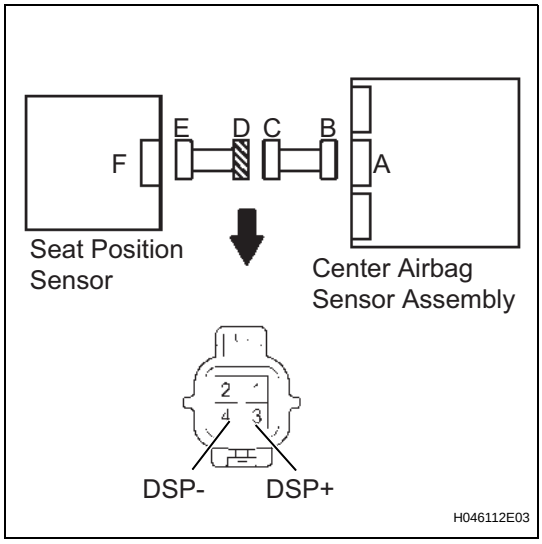
NG → **REPAIR OR REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

12 CHECK SEAT POSITION SENSOR CIRCUIT (TO GROUND)



(a) Disconnect the front seat inner belt assembly connector from the instrument panel wire.

HINT:
The connector is not allocated an ID number due to being part of the front seat inner belt assembly LH wire harness.

(b) Measure the resistance.

Standard resistance

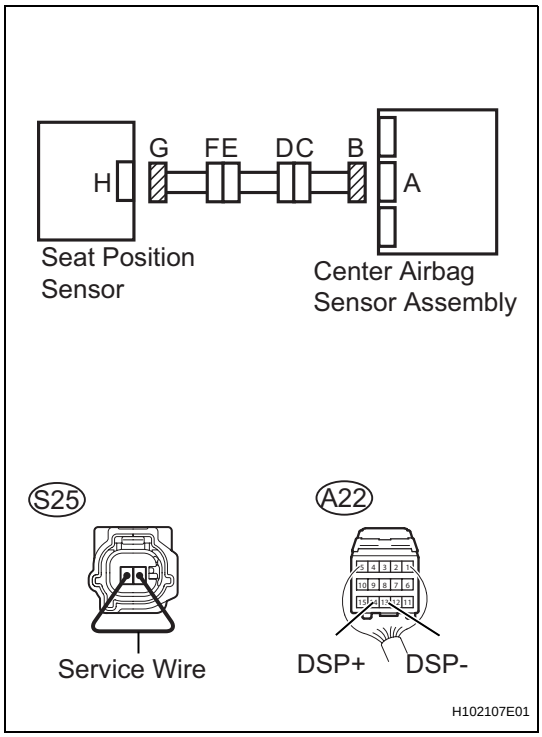
Tester Connection	Condition	Specified Condition
3 (DSP+) - Body ground	Always	1 MΩ or Higher
4 (DSP-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FRONT SEAT INNER BELT ASSEMBLY LH**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

13 CHECK SEAT POSITION SENSOR CIRCUIT (FOR OPEN)



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

(b) Using a service wire, connect S25-1 and S25-2 of connector G.

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

(c) Measure the resistance.

Standard resistance

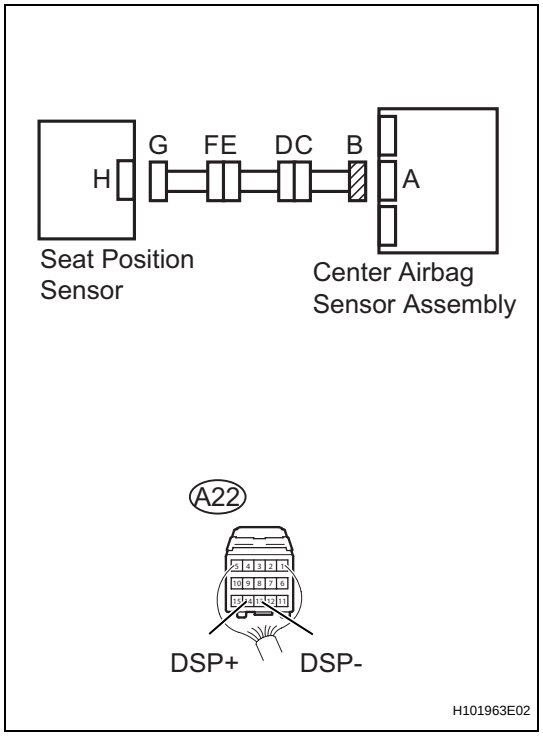
Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - A22-13 (DSP-)	Always	Below 1 Ω

NG → **Go to step 18**

OK

RS

14 CHECK SEAT POSITION SENSOR CIRCUIT (FOR SHORT)



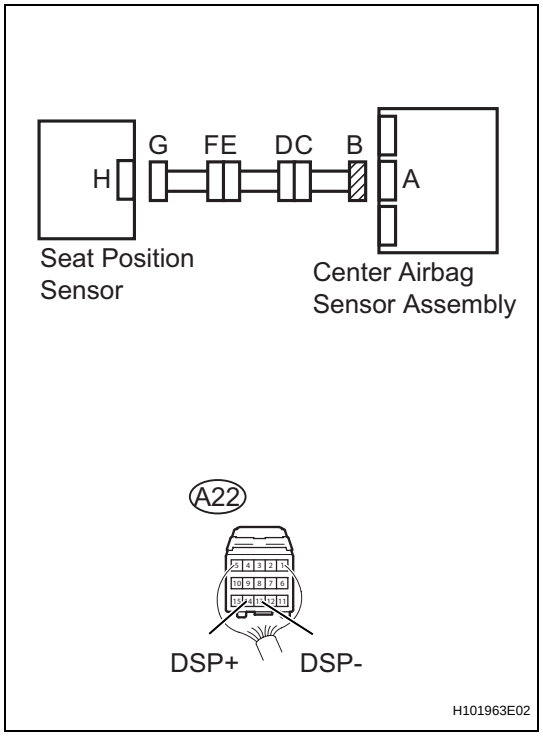
(a) Disconnect the service wire from connector G.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - A22-13 (DSP-)	Always	1 MΩ or Higher

NG → **Go to step 19**

OK

15 CHECK SEAT POSITION SENSOR CIRCUIT (TO B+)



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

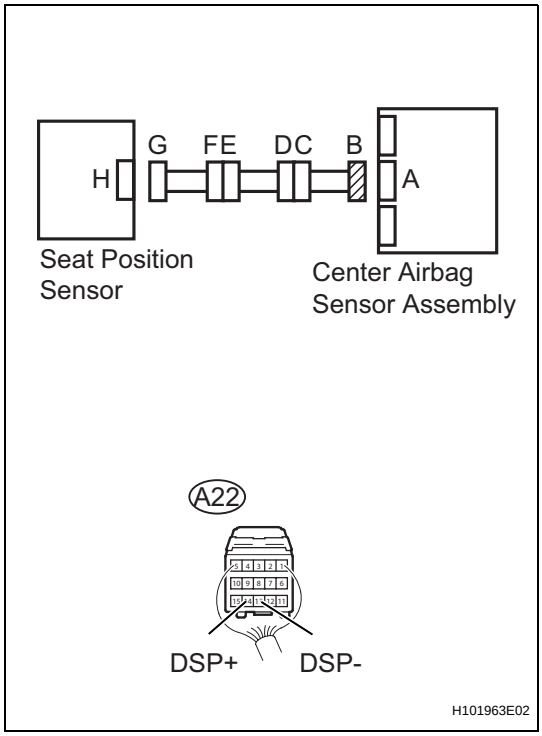
Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - Body ground	Ignition switch ON	Below 1 V
A22-13 (DSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 20**

OK

RS

16 CHECK SEAT POSITION SENSOR CIRCUIT (TO GROUND)



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

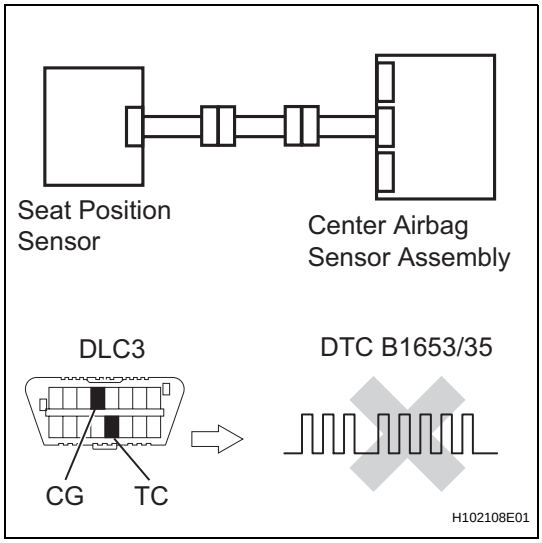
Standard resistance

Tester Connection	Condition	Specified Condition
A22-14 (DSP+) - Body ground	Always	1 MΩ or Higher
A22-13 (DSP-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 21**

OK

17 CHECK SEAT POSITION SENSOR



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

OK:

DTC B1653/35 is not output.

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

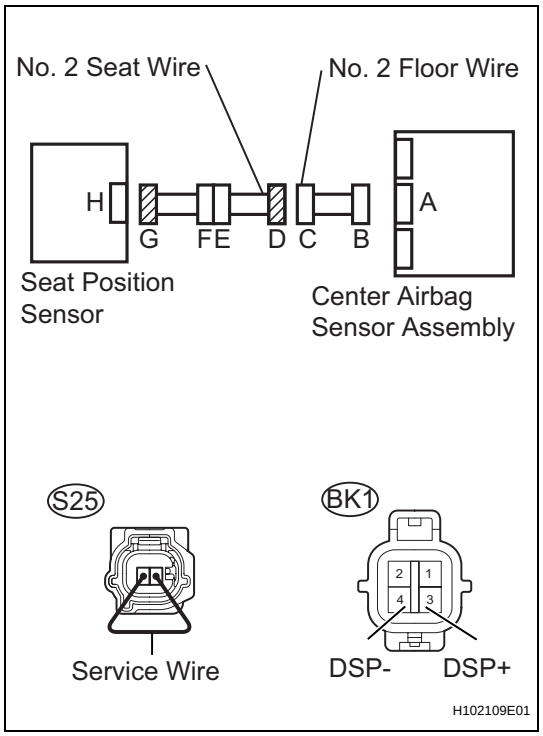
NG → **Go to step 26**

RS

OK

USE SIMULATION METHOD TO CHECK

18 CHECK SEAT POSITION SENSOR CIRCUIT (FOR OPEN)



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

HINT:

The service wire has already been inserted into connector G.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BK1-3 (DSP+) - BK1-4 (DSP-)	Always	Below 1 Ω

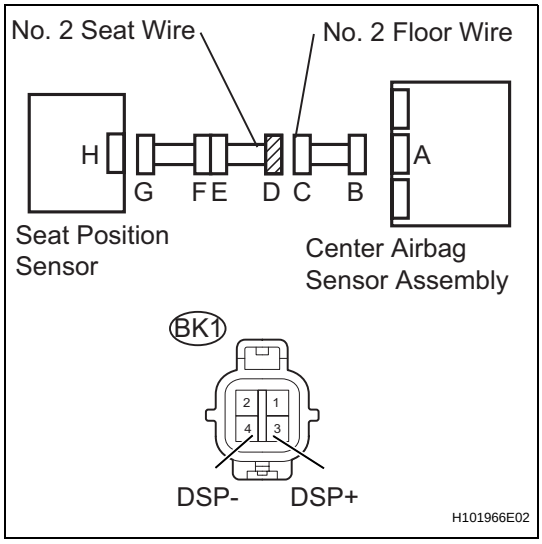
NG → **Go to step 22**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

19 CHECK SEAT POSITION SENSOR CIRCUIT (FOR SHORT)



(a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(b) Measure the resistance.
Standard resistance

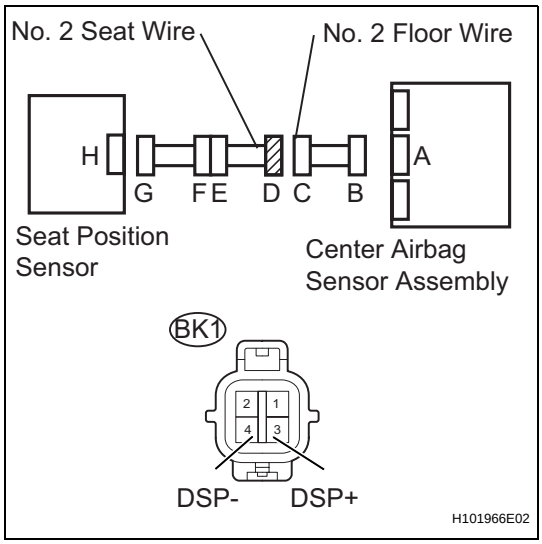
Tester Connection	Condition	Specified Condition
BK1-3 (DSP+) - BK1-4 (DSP-)	Always	1 MΩ or Higher

NG → **Go to step 23**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

20 CHECK SEAT POSITION SENSOR CIRCUIT (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.
Standard Voltage

Tester Connection	Condition	Specified Condition
BK1-3 (DSP+) - Body ground	Ignition switch ON	Below 1 V
BK1-4 (DSP-) - Body ground	Ignition switch ON	Below 1 V

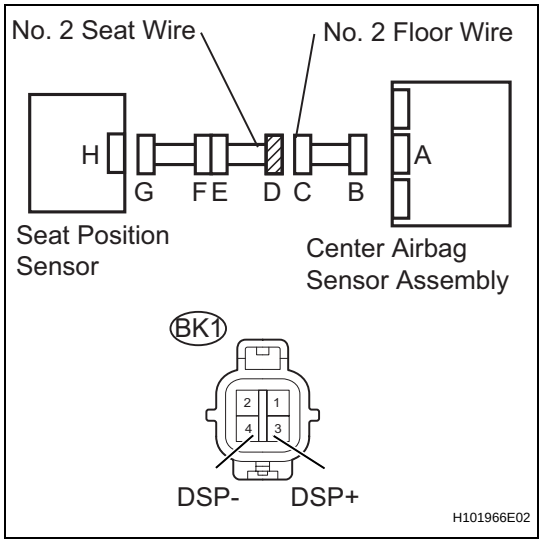
NG → **Go to step 24**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

21 CHECK SEAT POSITION SENSOR CIRCUIT (TO GROUND)



(a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(b) Measure the resistance.
Standard resistance

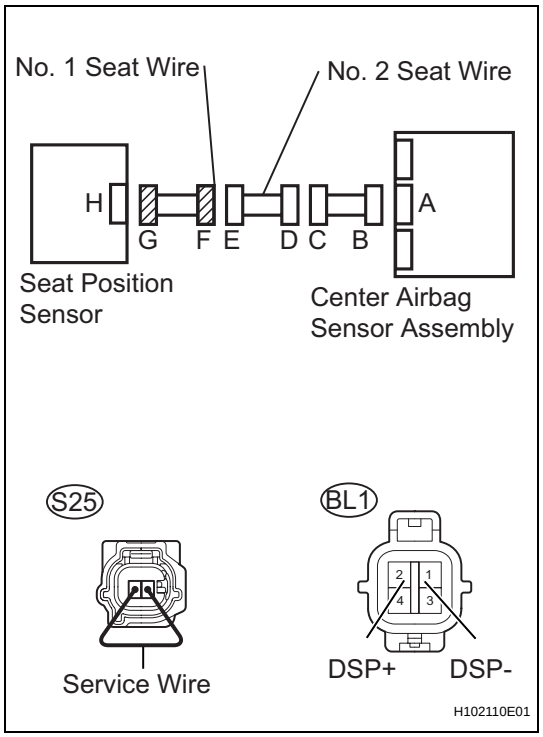
Tester Connection	Condition	Specified Condition
BK1-3 (DSP+) - Body ground	Always	1 MΩ or Higher
BK1-4 (DSP-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 25**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

22 CHECK NO.1 SEAT WIRE (FOR OPEN)



(a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
HINT:
The service wire has already been inserted into connector G.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BL1-2 (DSP+) - BL1-1 (DSP-)	Always	Below 1 Ω

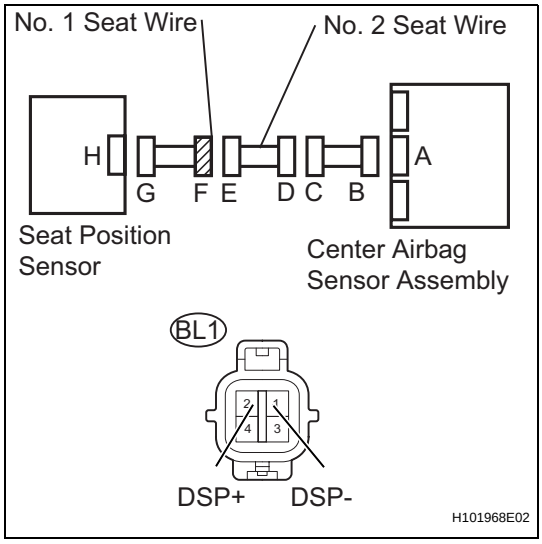
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

RS

23 CHECK NO.1 SEAT WIRE (FOR SHORT)



(a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(b) Measure the resistance.
Standard resistance

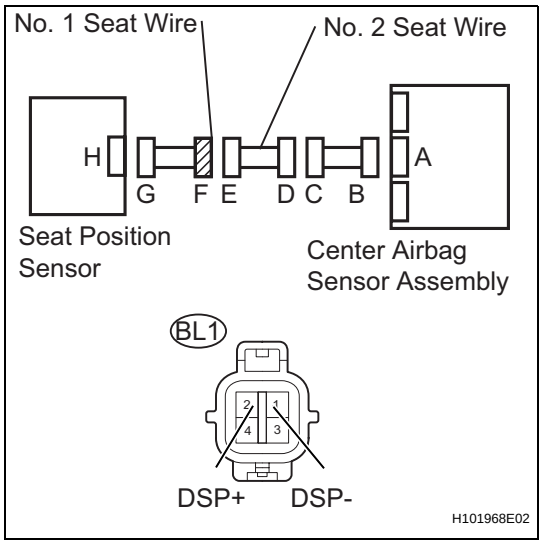
Tester Connection	Condition	Specified Condition
BL1-2 (DSP+) - BL1-1 (DSP-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

24 CHECK NO.1 SEAT WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.
Standard Voltage

Tester Connection	Condition	Specified Condition
BL1-2 (DSP+) - Body ground	Ignition switch ON	Below 1 V
BL1-1 (DSP-) - Body ground	Ignition switch ON	Below 1 V

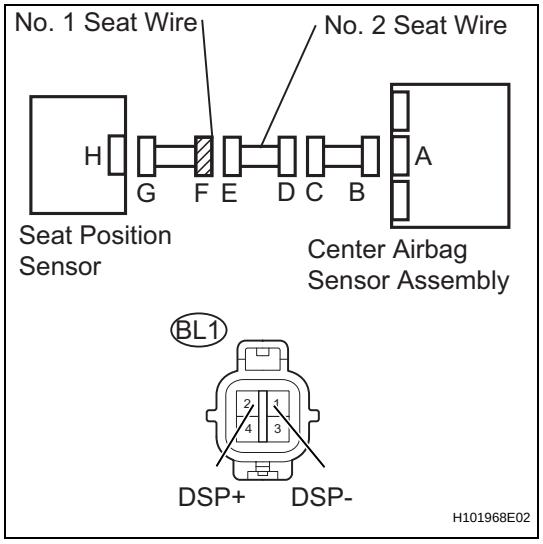
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

RS

25 CHECK NO.1 SEAT WIRE (TO GROUND)



(a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BL1-2 (DSP+) - Body ground	Always	1 MΩ or Higher
BL1-1 (DSP-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

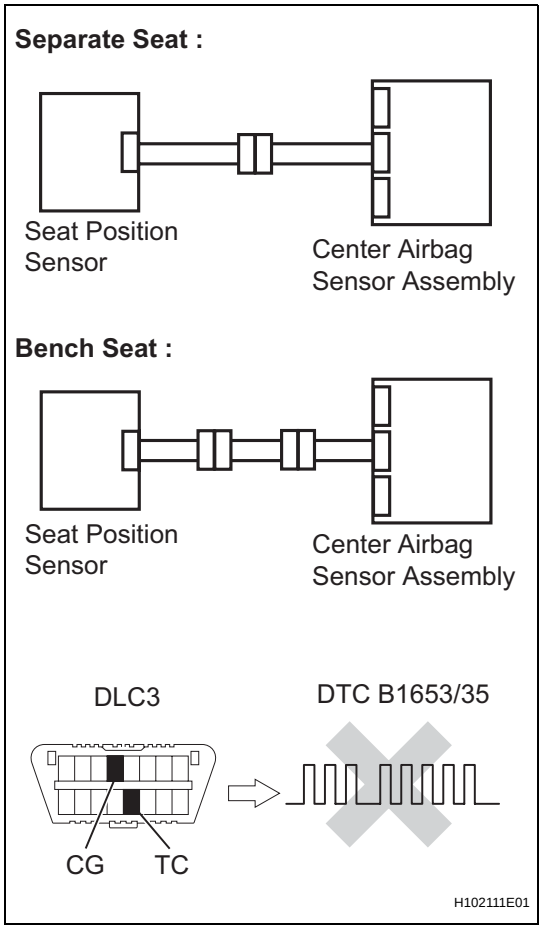
26 REPLACE SEAT POSITION SENSOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the seat position sensor (See page RS-620 or RS-617).

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

NEXT

27	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(c) Clear any DTCs stored in the memory (See page RS-34).
(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Check for DTCs (See page RS-34).

OK:

DTC B1653/35 is not output.

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

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

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

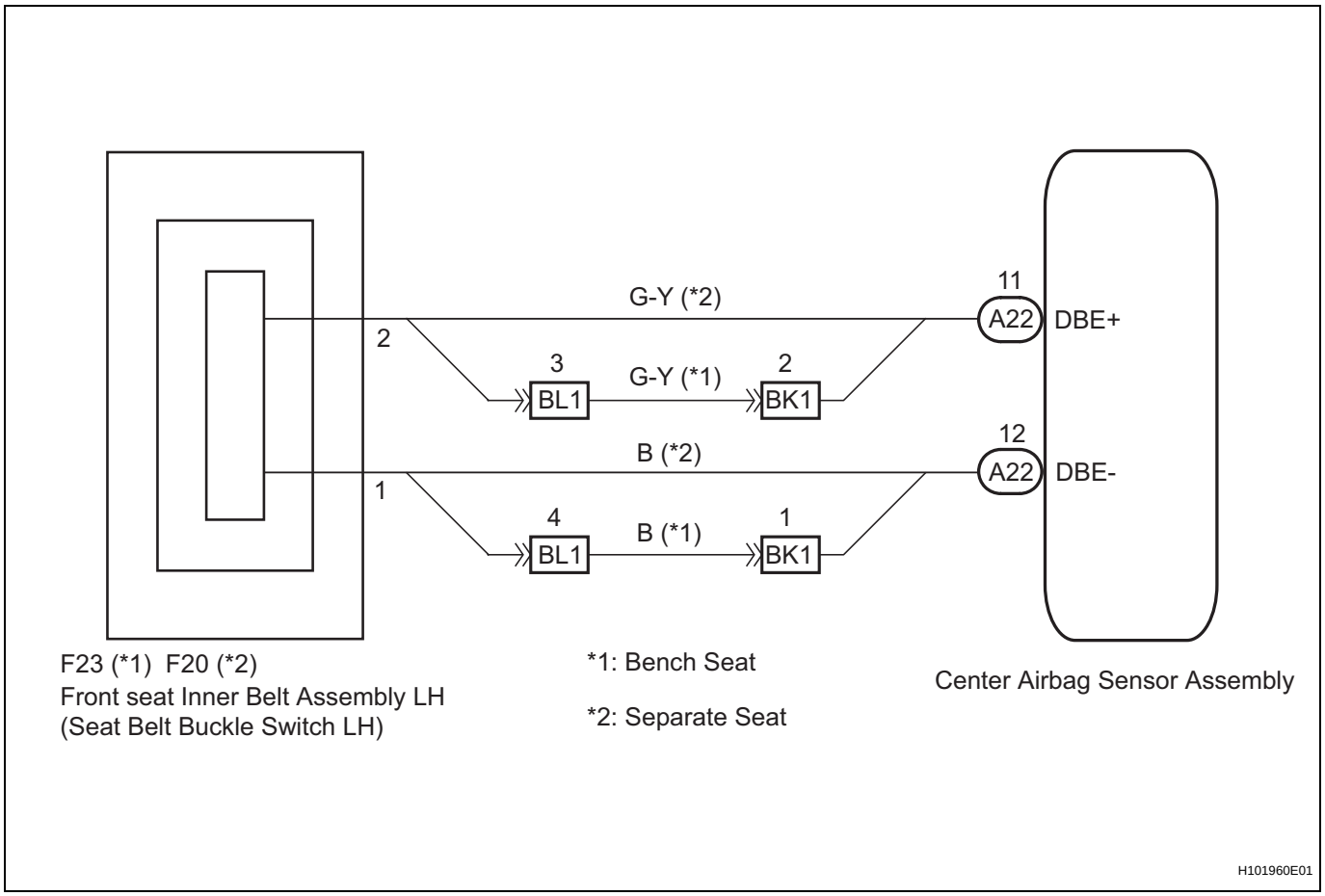
DESCRIPTION

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

DTC No.	DTC Detections Conditions	Trouble Areas
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 seat belt buckle switch (Driver seat side) circuit for 2 seconds • Front seat inner belt assembly LH malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • No. 1 seat wire (*1) • No. 2 seat wire (*1) • Front seat inner belt assembly LH (Seat belt buckle switch LH) • Center airbag sensor assembly

*1: Bench seat

WIRING DIAGRAM

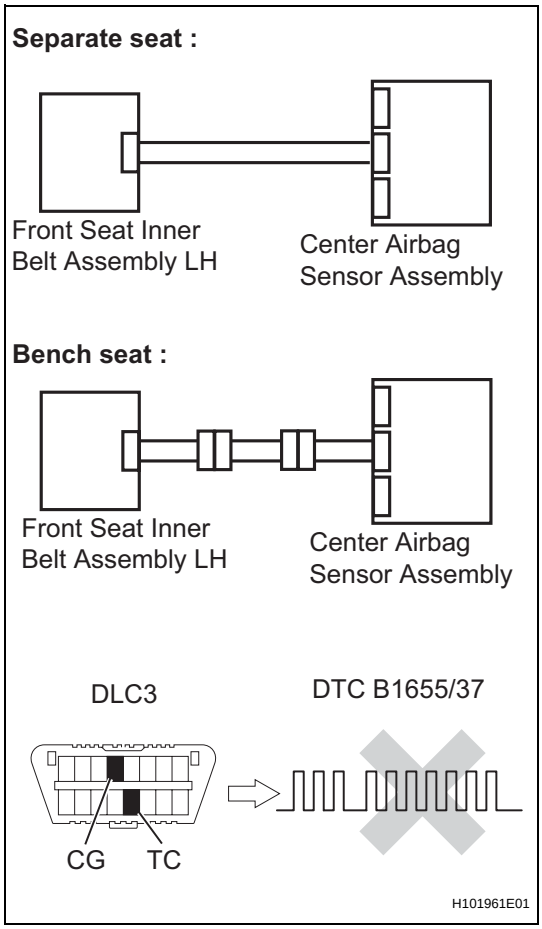


RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC



(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
(e) Check for DTCs (See page RS-34).
OK:
DTC B1655/37 is not output.
HINT:
DTCs other than B1655/37 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTION OF CONNECTORS

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

RS

NG → CONNECT CONNECTORS

OK

3 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and front seat inner belt assembly LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

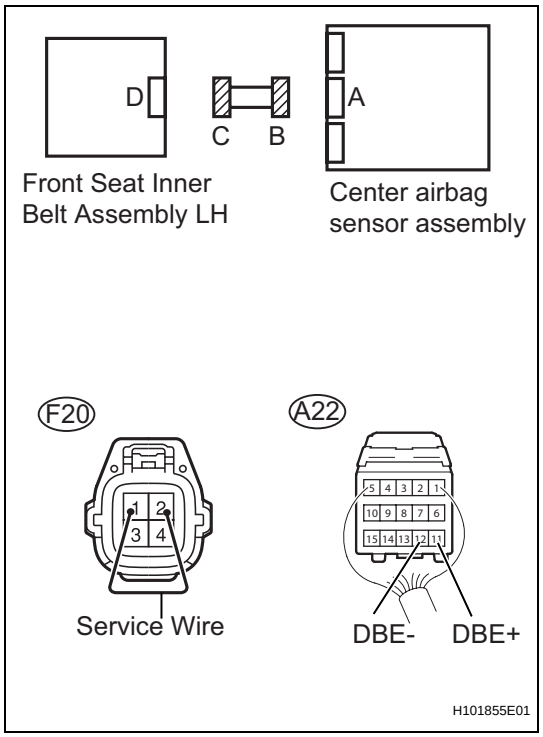
Condition	Proceed to
Normal (separate seat)	A
Normal (bench seat)	B
Abnormal	C

B → Go to step 9

C → REPAIR OR REPLACE WIRE HARNESS

A

4 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the front seat inner belt assembly LH.
(b) Using a service wire, connect F20-2 and F20-1 of connector C.

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

(c) Measure the resistance.
Standard resistance

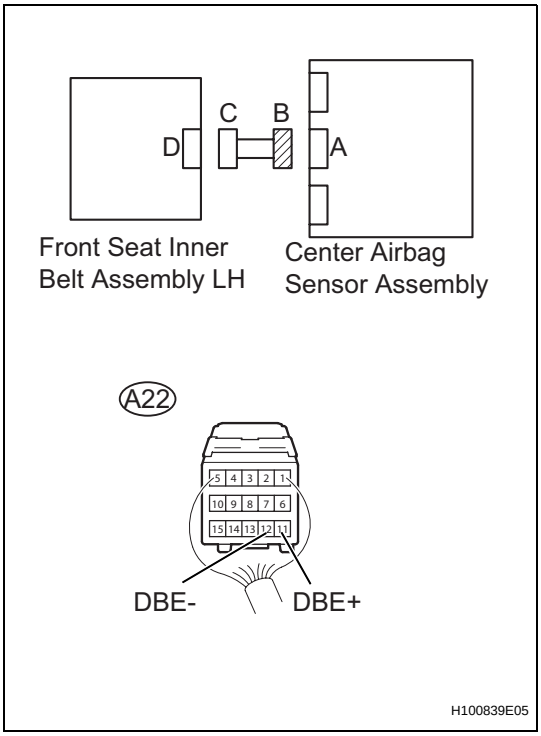
Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - A22-12 (DBE-)	Always	Below 1 Ω

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

RS

5 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)



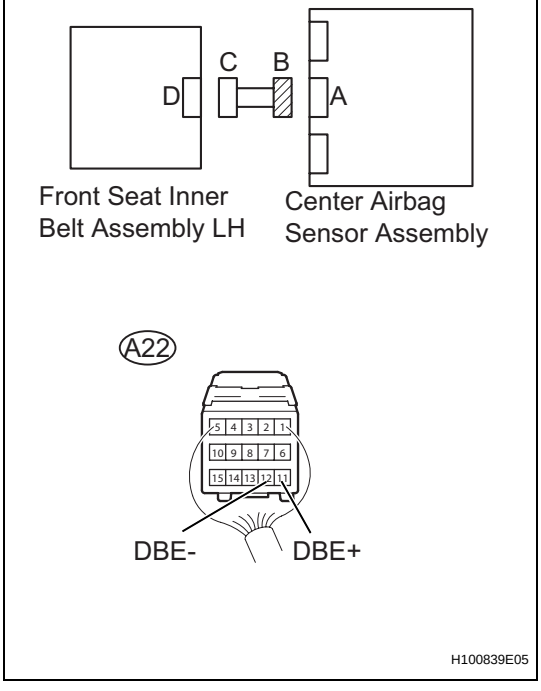
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - A22-12 (DBE-)	Always	1 MΩ or Higher

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

OK

6 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)



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

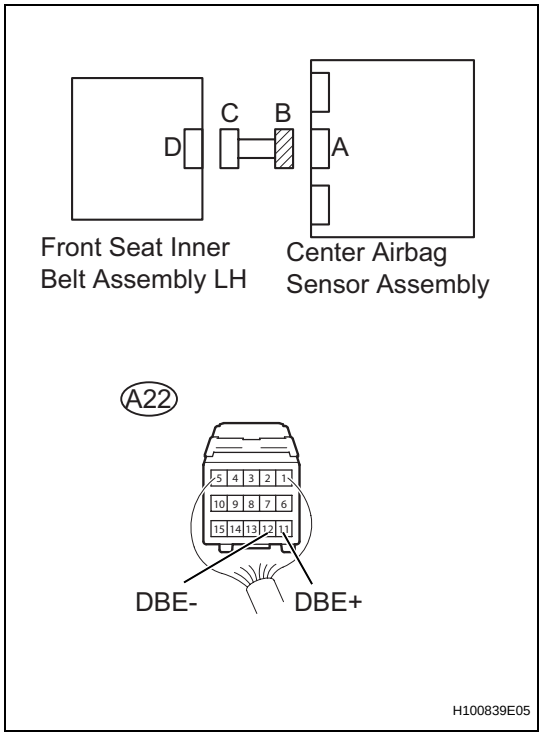
Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - Body ground	Ignition switch ON	Below 1 V
A22-12 (DBE-) - Body ground	Ignition switch ON	Below 1 V

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

OK

RS

7 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



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

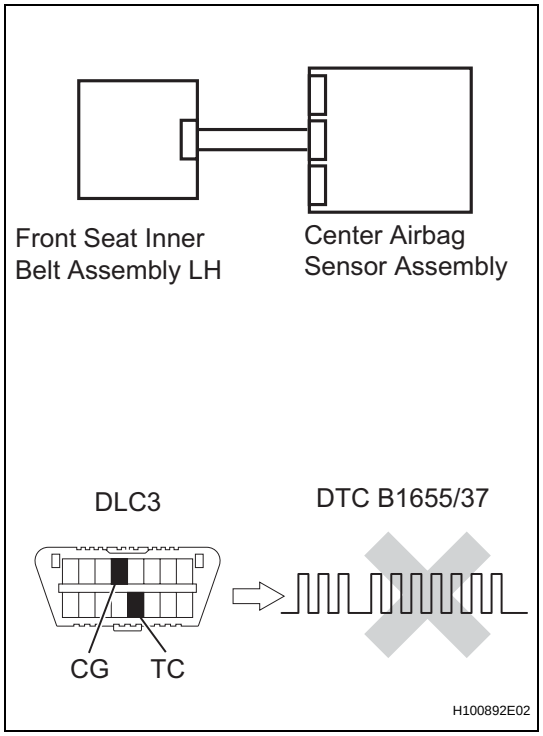
Standard resistance

Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - Body ground	Always	1 MΩ or Higher
A22-12 (DBE-) - Body ground	Always	1 MΩ or Higher

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

OK

8 CHECK FRONT SEAT INNER BELT ASSEMBLY LH



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

OK:

DTC B1655/37 is not output.

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

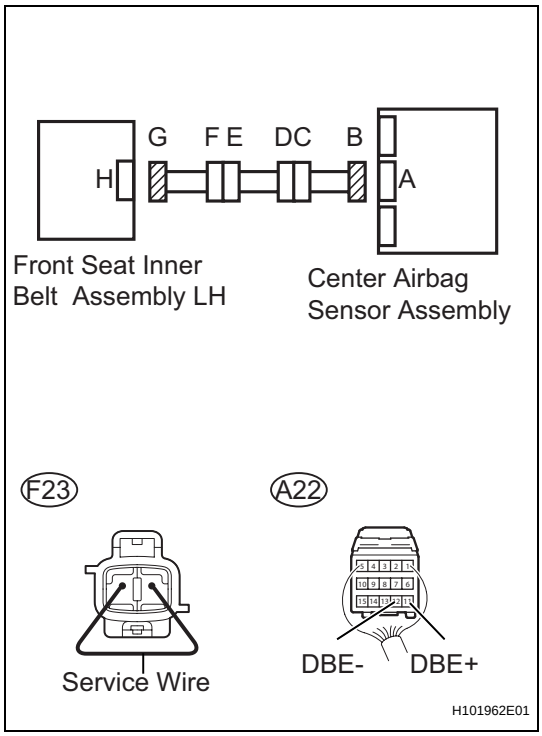
NG → **Go to step 22**

RS

OK

USE SIMULATION METHOD TO CHECK

9	CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)



(a) Disconnect the connectors from the center airbag sensor assembly and the seat inner belt assembly LH.
(b) Using a service wire, connect F23-1 and F23-2 of connector G.

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

(c) Measure the resistance.
Standard resistance

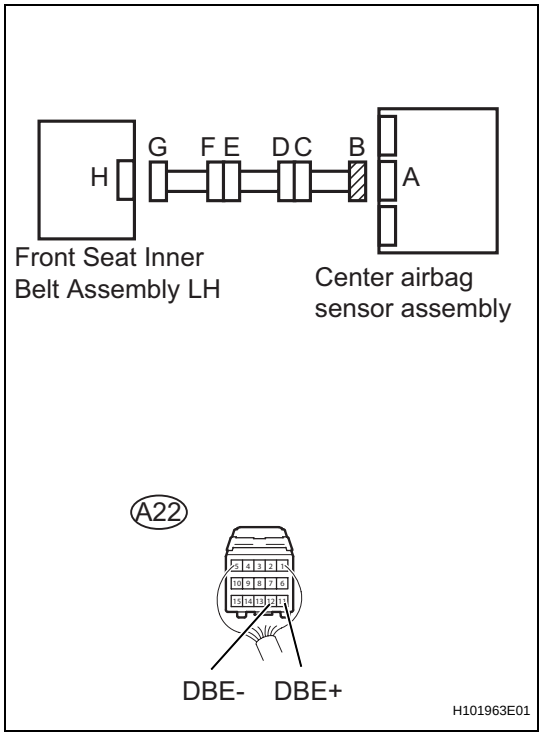
Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - A22-12 (DBE-)	Always	Below 1 Ω

NG → **Go to step 14**

OK

RS

10 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)



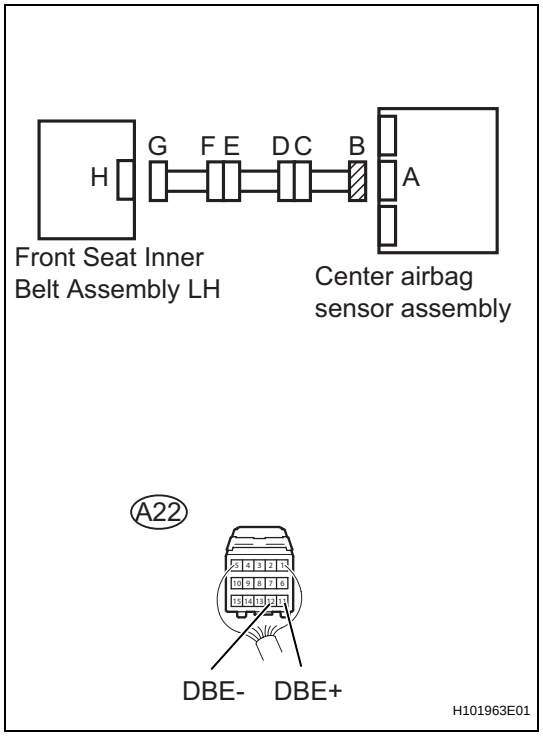
(a) Disconnect the service wire from connector G.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - A22-12 (DBE-)	Always	1 MΩ or Higher

NG → **Go to step 15**

OK

11 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)



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

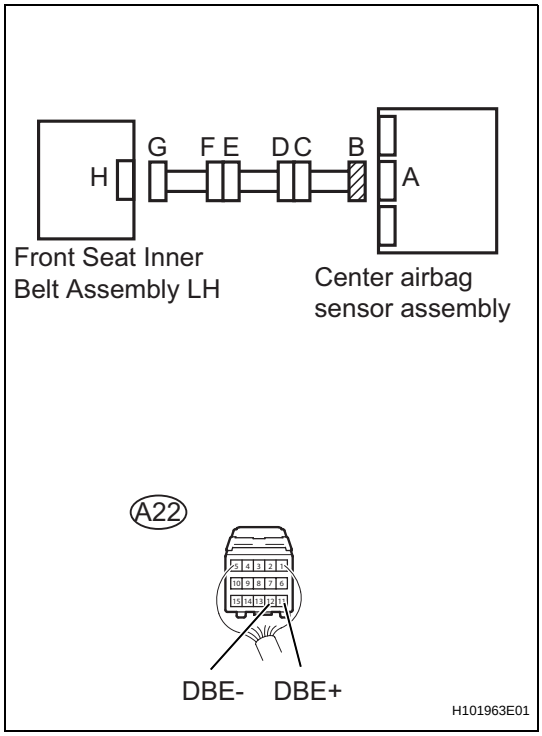
Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - Body ground	Ignition switch ON	Below 1 V
A22-12 (DBE-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 16**

OK

RS

12 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



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

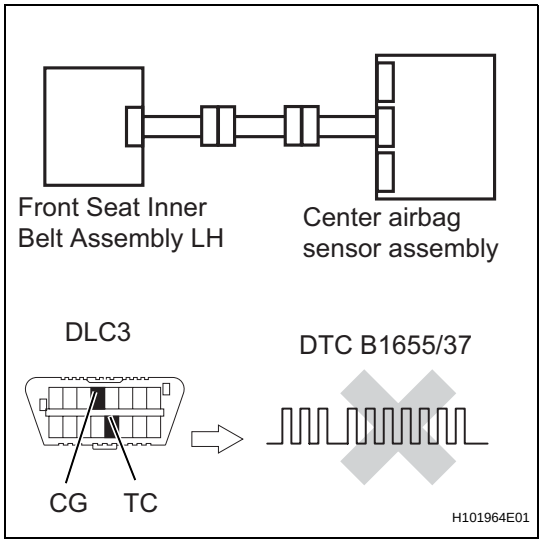
Standard resistance

Tester Connection	Condition	Specified Condition
A22-11 (DBE+) - Body ground	Always	1 MΩ or Higher
A22-12 (DBE-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 17**

OK

13 CHECK FRONT SEAT INNER BELT ASSEMBLY LH



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

OK:

DTC B1655/37 is not output.

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

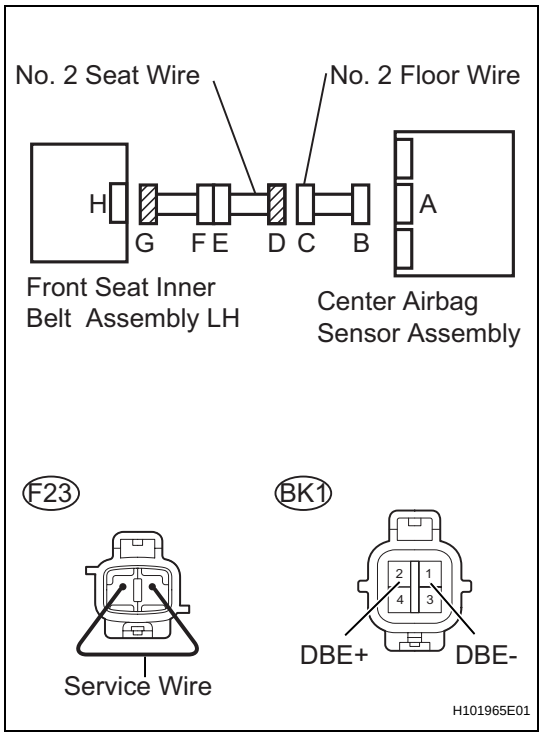
NG → **Go to step 22**

RS

OK

USE SIMULATION METHOD TO CHECK

14 **CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)**



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

HINT:

The service wire has already been inserted into connector G.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BK1-2 (DBE+) - BK1-1 (DBE-)	Always	Below 1 Ω

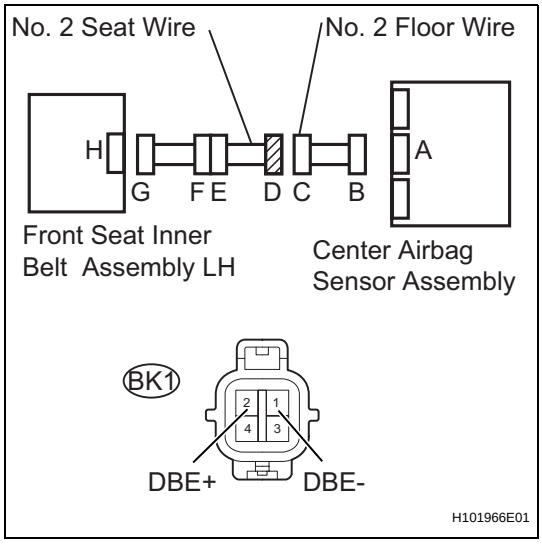
NG → **Go to step 18**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

15 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)



(a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(b) Measure the resistance.
Standard resistance

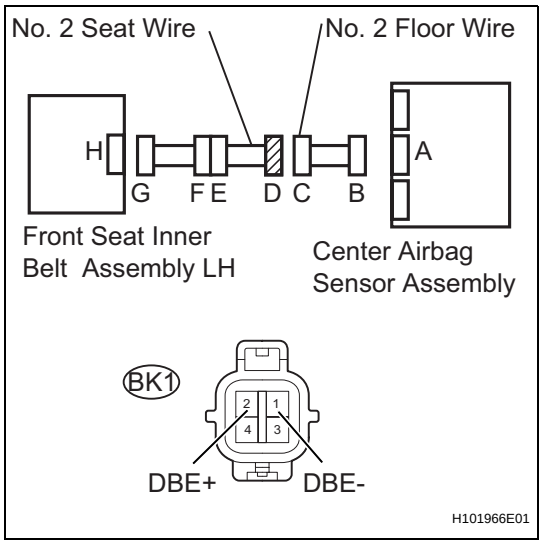
Tester Connection	Condition	Specified Condition
BK1-2 (DBE+) - BK1-1 (DBE-)	Always	1 MΩ or Higher

NG → **Go to step 19**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

16 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
BK1-2 (DBE+) - Body ground	Ignition switch ON	Below 1 V
BK1-1 (DBE-) - Body ground	Ignition switch ON	Below 1 V

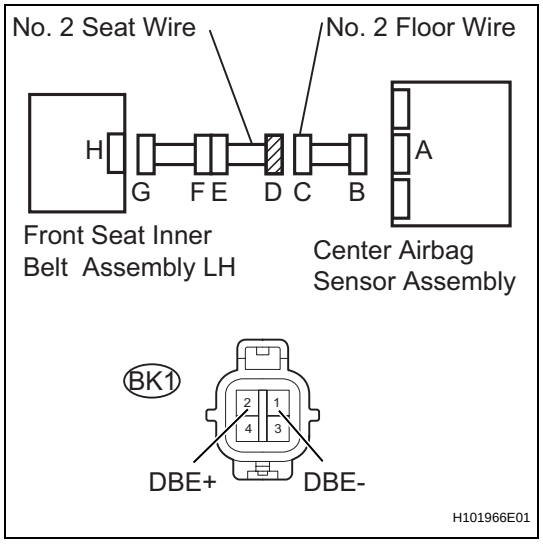
NG → **Go to step 20**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

17 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



(a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
(b) Measure the resistance.
Standard resistance

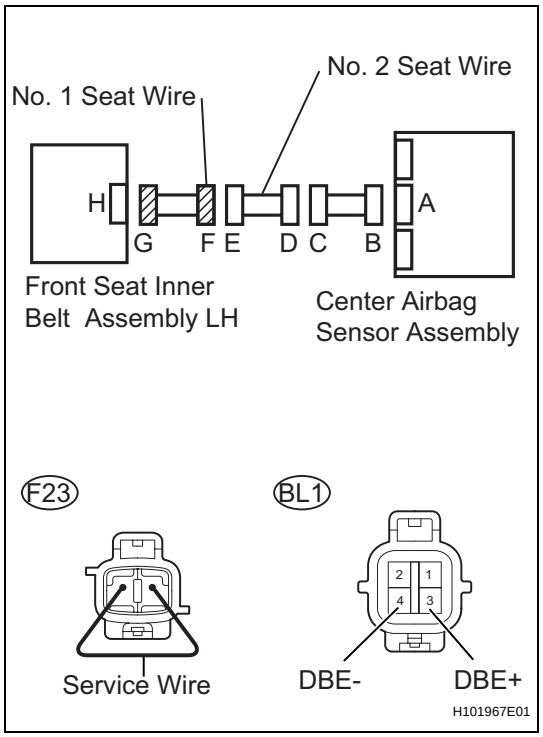
Tester Connection	Condition	Specified Condition
BK1-2 (DBE+) - Body ground	Always	1 MΩ or Higher
BK1-1 (DBE-) - Body ground	Always	1 MΩ or Higher

NG → **Go to step 21**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

18 CHECK NO. 1 SEAT WIRE (FRO OPEN)



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

HINT:
The service wire has already been inserted into connector G.

(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BL1-3 (DBE+) - BL1-4 (DBE-)	Always	Below 1 Ω

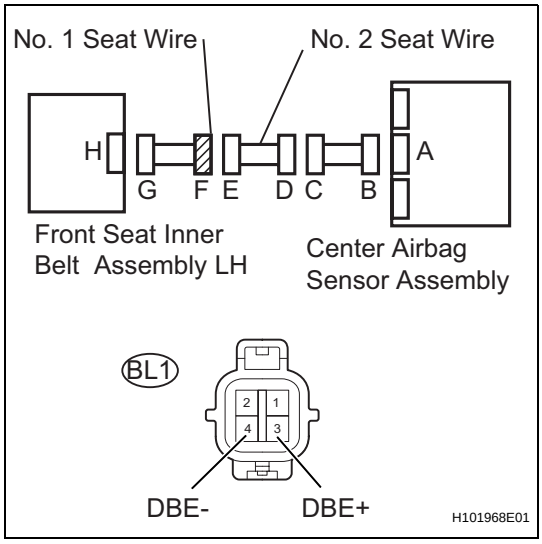
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

RS

19 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(b) Measure the resistance.
Standard resistance

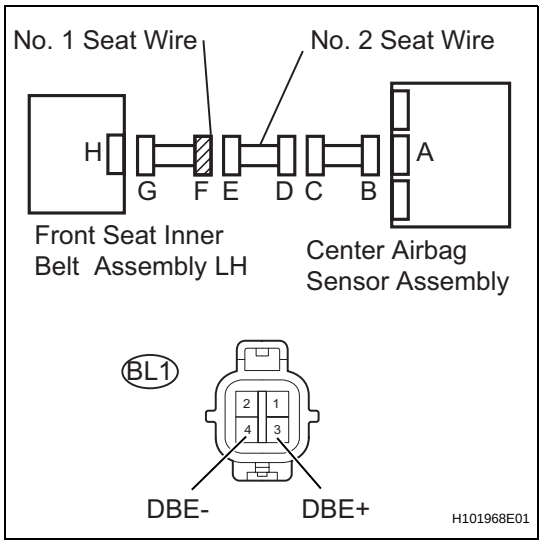
Tester Connection	Condition	Specified Condition
BL1-3 (DBE+) - BL1-4 (DBE-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

20 CHECK NO. 1 SEAT WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
BL1-3 (DBE+) - Body ground	Ignition switch ON	Below 1 V
BL1-4 (DBE-) - Body ground	Ignition switch ON	Below 1 V

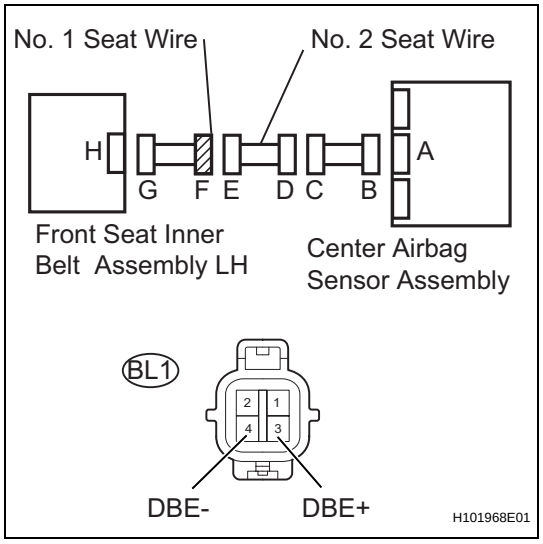
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

RS

21 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BL1-3 (DBE+) - Body ground	Always	1 MΩ or Higher
BL1-4 (DBE-) - Body ground	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

22 REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

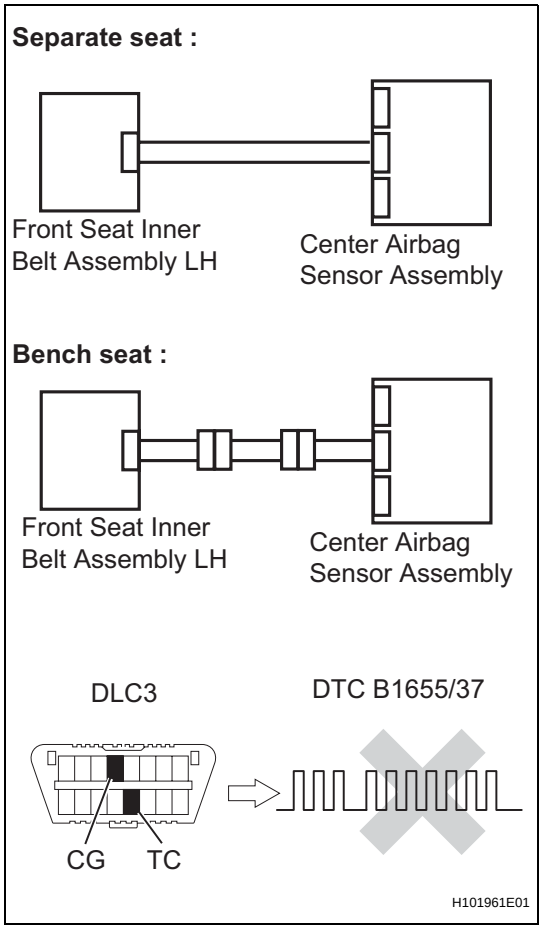
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat inner belt assembly LH (See page SB-12 or SB-8).

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

NEXT

RS

23	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(c) Clear any DTCs stored in the memory (See page RS-34).
(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(f) Check for DTCs (See page RS-34).

OK:

DTC B1655/37 is not output.

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

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

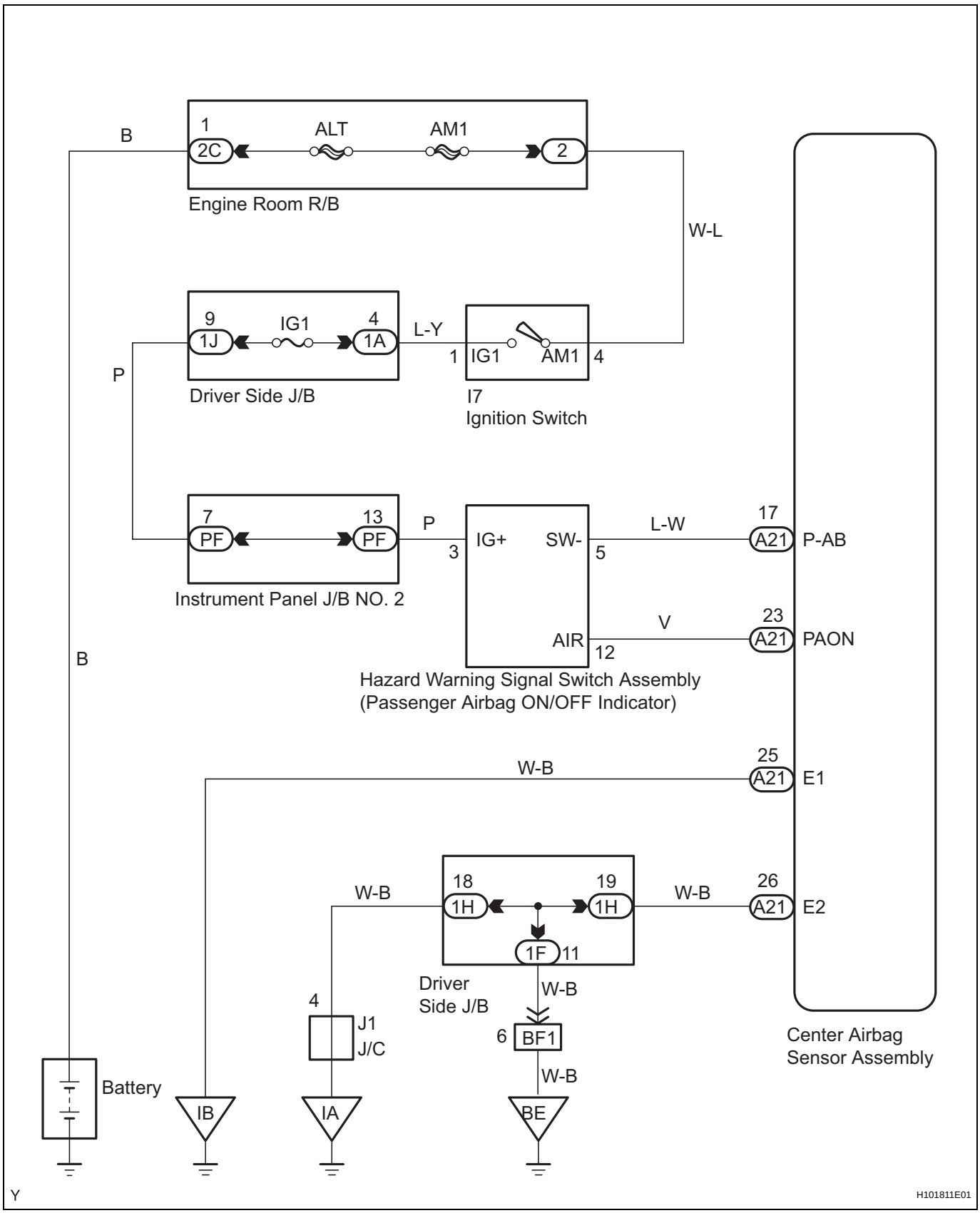
DTC	B1660/43	Passenger Airbag ON / OFF Indicator Circuit Malfunction

DESCRIPTION

The passenger airbag ON/OFF indicator light circuit consists of the center airbag sensor assembly and the passenger seat belt warning light assembly.
This circuit indicates the operation condition of the front passenger airbag assembly, the front seat airbag assembly RH and passenger side seat belt pretensioner.
DTC B1660/43 is set when a malfunction is detected in the passenger airbag ON/OFF indicator circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
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 • Passenger seat belt warning lamp assembly malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Hazard warning signal switch assembly (Passenger airbag ON/OFF indicator) • Center airbag sensor assembly

WIRING DIAGRAM

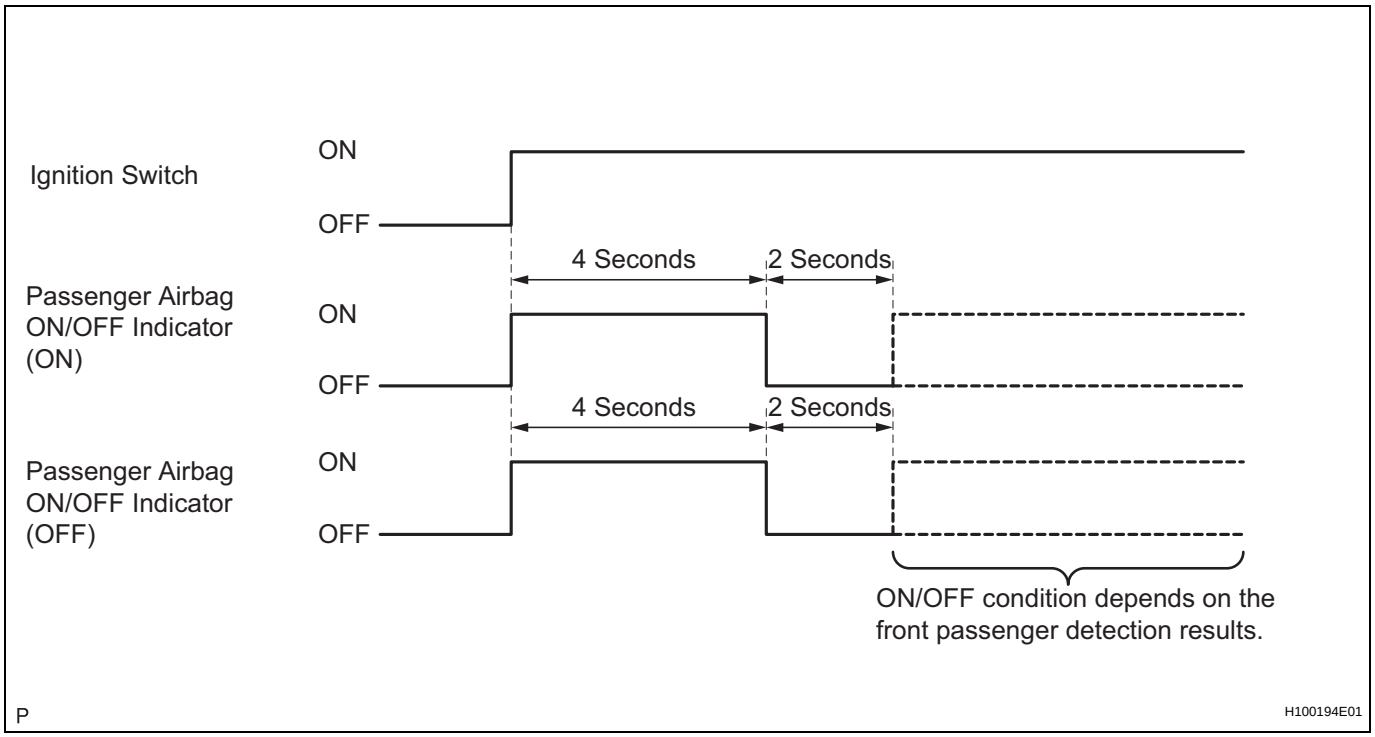


RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(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-484 or RS-362).



Result

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

RS

B → Go to step 9

A

2 CHECK CONNECTION OF CONNECTORS

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

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

3 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and passenger seat belt warning light assembly side) are not damaged (See page IN-34).

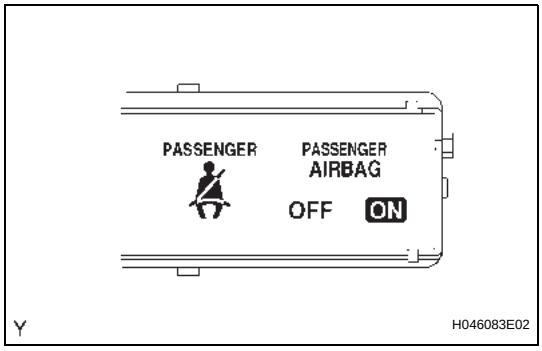
OK:

The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4 CHECK HAZARD WARNING SIGNAL SWITCH ASSEMBLY (PASSENGER AIRBAG ON/OFF INDICATOR)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Check the passenger airbag ON/OFF indicator operation.

OK:

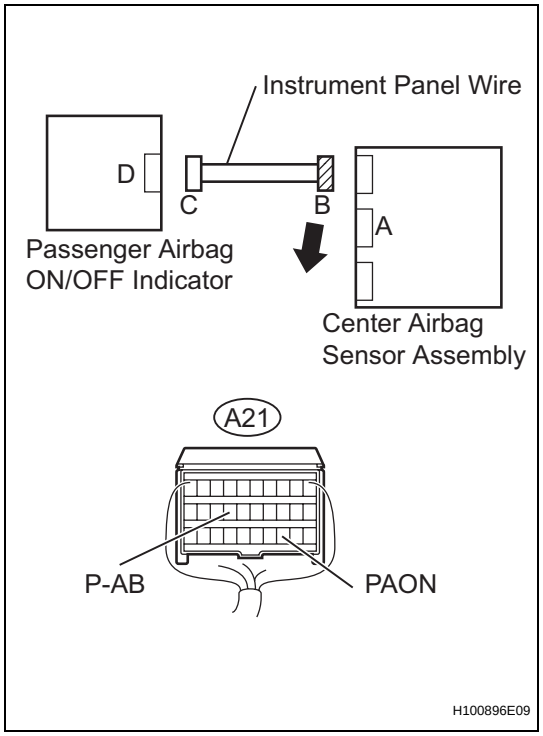
Neither ON nor OFF passenger airbag ON/OFF indicator comes on.

OK → **Go to step 17**

NG

RS

5 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connector from the passenger seat belt warning light assembly.
(d) Measure the resistance.

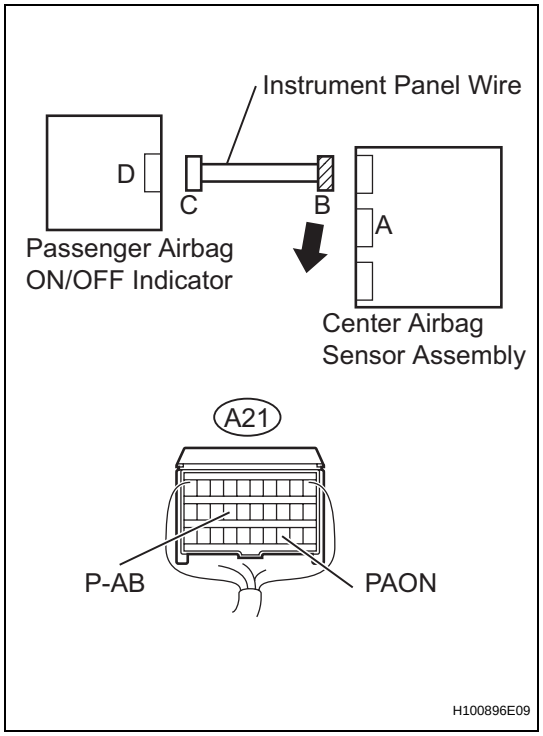
Standard resistance

Tester Connection	Condition	Specified Condition
A21-17 (P-AB) - Body ground	Always	1 MΩ or Higher
A21-23 (PAON) - Body ground	Always	1 MΩ or Higher

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

OK

6 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



(a) Measure the resistance.

Standard resistance

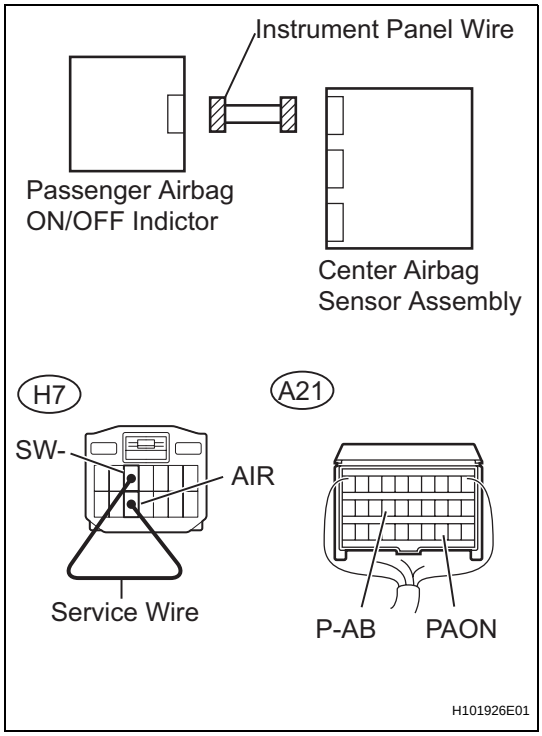
Tester Connection	Condition	Specified Condition
A21-17 (P-AB) - A21-23 (PAON)	Always	1 MΩ or Higher

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

OK

RS

7 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



(a) Using a service wire, connect H7-5 (SW-) and H7-12 (AIR) of connector C.

NOTICE:

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

(b) Measure the resistance.

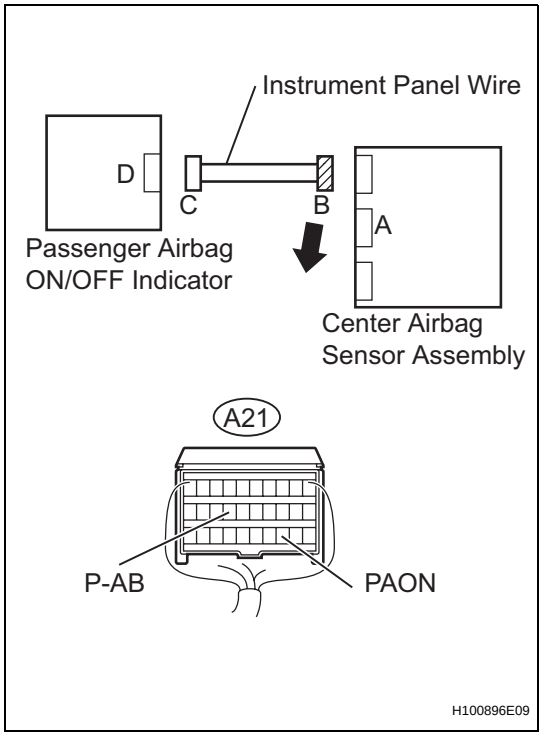
Standard resistance

Tester Connection	Condition	Specified Condition
A21-23 (PAON) - A21-17 (P-AB)	Always	Below 1 Ω

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

OK

8 CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Disconnect the service wire from connector C.

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

(c) Turn the ignition switch to the ON position.

(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
A21-23 (PAON) - Body ground	Ignition switch ON	Below 1 V
A21-17 (P-AB) - Body ground	Ignition switch ON	Below 1 V

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

RS

OK

INSPECT HAZARD WARNING SIGNAL SWITCH ASSEMBLY

9	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

10	CHECK CONNECTORS

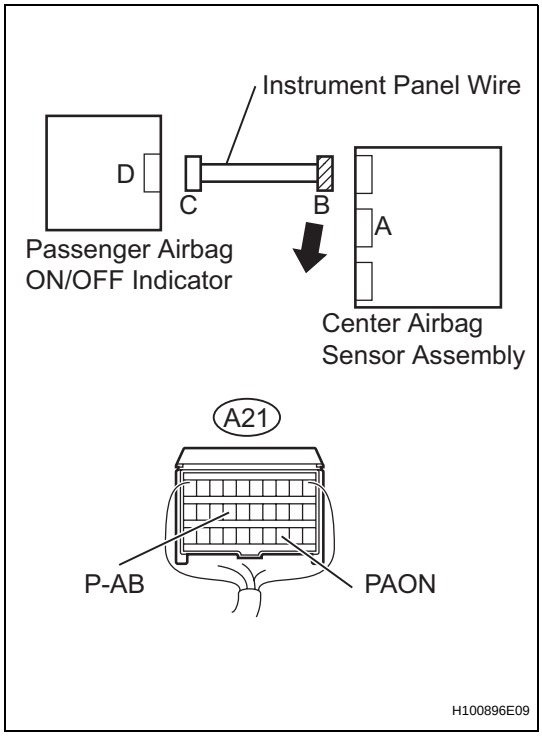
(a) Check that the connectors (on the center airbag sensor assembly side and passenger seat belt warning light assembly side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

RS

11 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



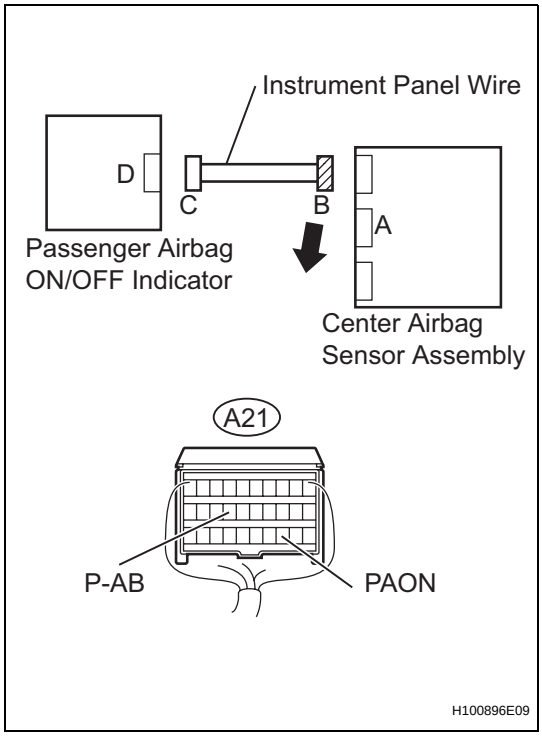
(a) Disconnect the connector from the passenger seat belt warning light assembly.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-17 (P-AB) - Body ground	Always	1 MΩ or Higher
A21-23 (PAON) - Body ground	Always	1 MΩ or Higher

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

OK

12 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

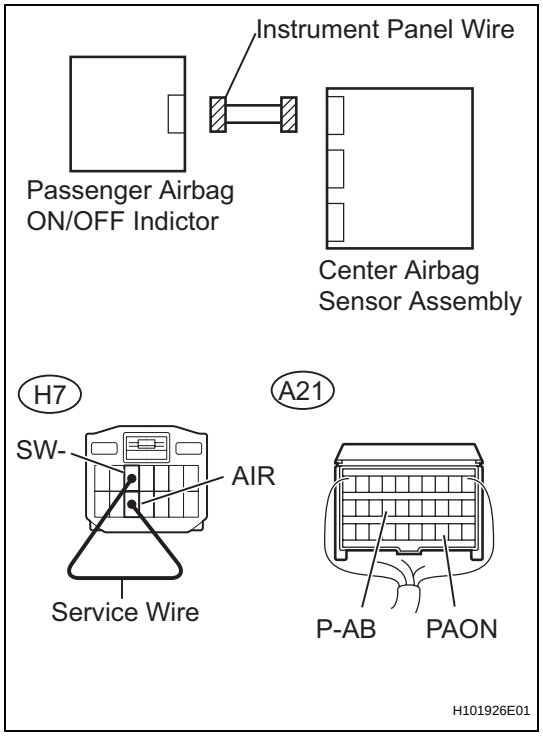
Tester Connection	Condition	Specified Condition
A21-17 (P-AB) - A21-23 (PAON)	Always	1 MΩ or Higher

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

OK

RS

13 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



(a) Using a service wire, connect H7-5 (SW-) and H7-12 (AIR) of connector C.

NOTICE:

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

(b) Measure the resistance.

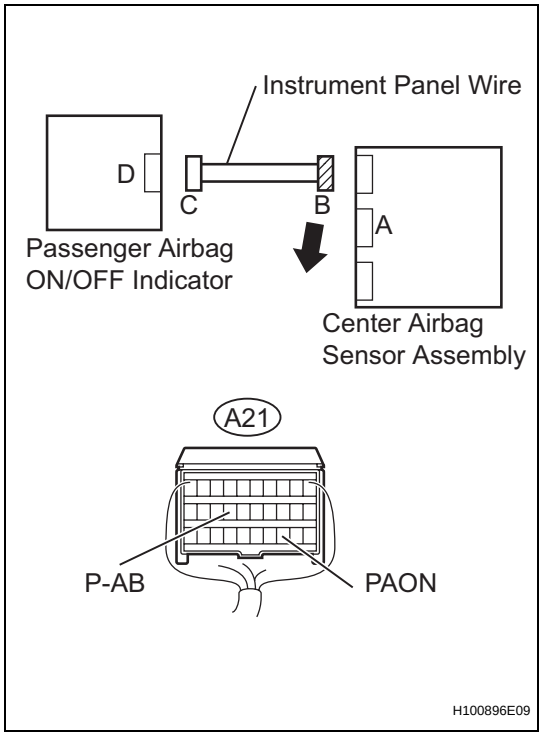
Standard resistance

Tester Connection	Condition	Specified Condition
A21-23 (PAON) - A21-17 (P-AB)	Always	Below 1 Ω

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

OK

14 CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Disconnect the service wire from connector C.

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

(c) Turn the ignition switch to the ON position.

(d) Measure the voltage.

Standard voltage

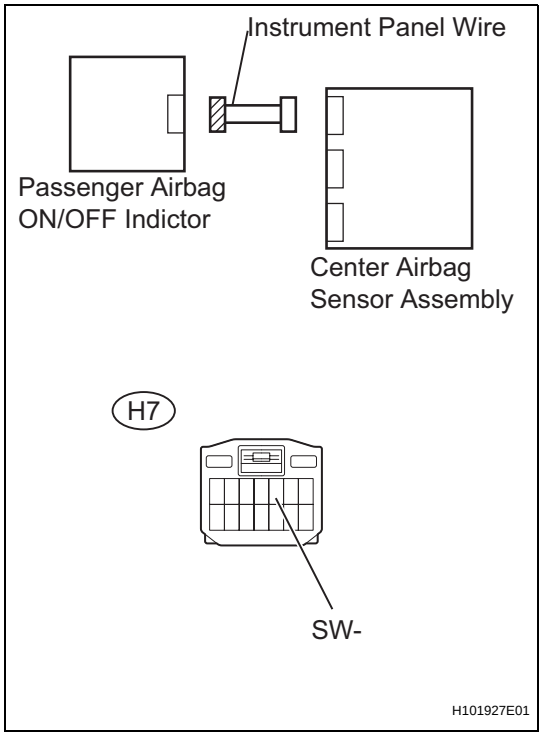
Tester Connection	Condition	Specified Condition
A21-23 (PAON) - Body ground	Ignition switch ON	Below 1 V
A21-17 (P-AB) - Body ground	Ignition switch ON	Below 1 V

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

OK

RS

15 CHECK WIRE HARNESS (POWER SOURCE)



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

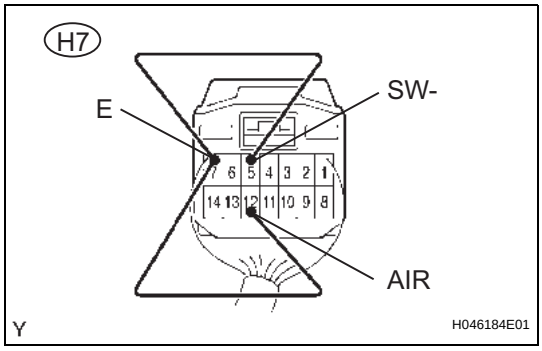
Standard voltage

Tester Connection	Condition	Specified Condition
H7-3 (IG+) - Body ground	Ignition switch ON	10 to 14 V

NG → **REPAIR OR REPLACE POWER SOURCE CIRCUIT**

OK

16 CHECK HAZARD WARNING SIGNAL SWITCH ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the hazard warning signal switch.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Using a service wire, connect H7-5 (SW-) and H7-7 (E) of hazard warning signal switch assembly connector.
(f) Using a service wire, connect H7-12 (AIR) and H7-7 (E) of hazard warning signal switch assembly connector.
(g) Turn the ignition switch to the ON position.
(h) Check the passenger airbag ON/OFF indicator operation.

OK:

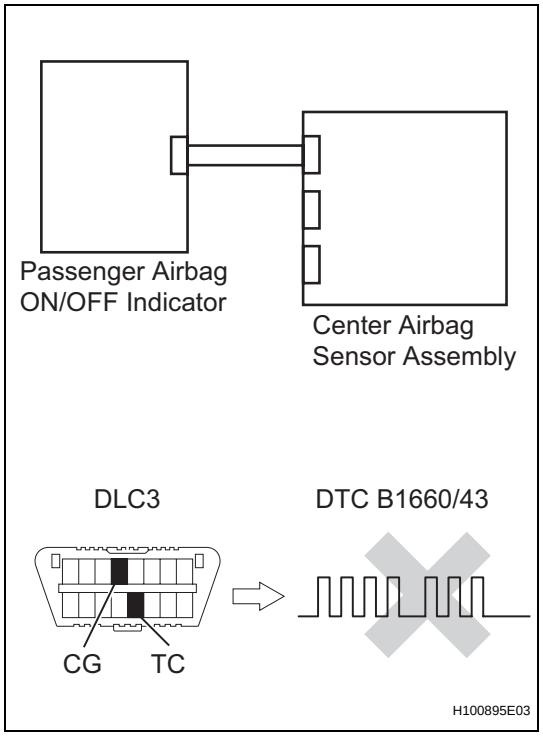
Passenger airbag ON/OFF indicator comes on

NG → **INSPECT HAZARD WARNING SIGNAL SWITCH ASSEMBLY**

OK

RS

17	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Connect the connector to the passenger seat belt warning light assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1660/43 is not output.

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

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

RS

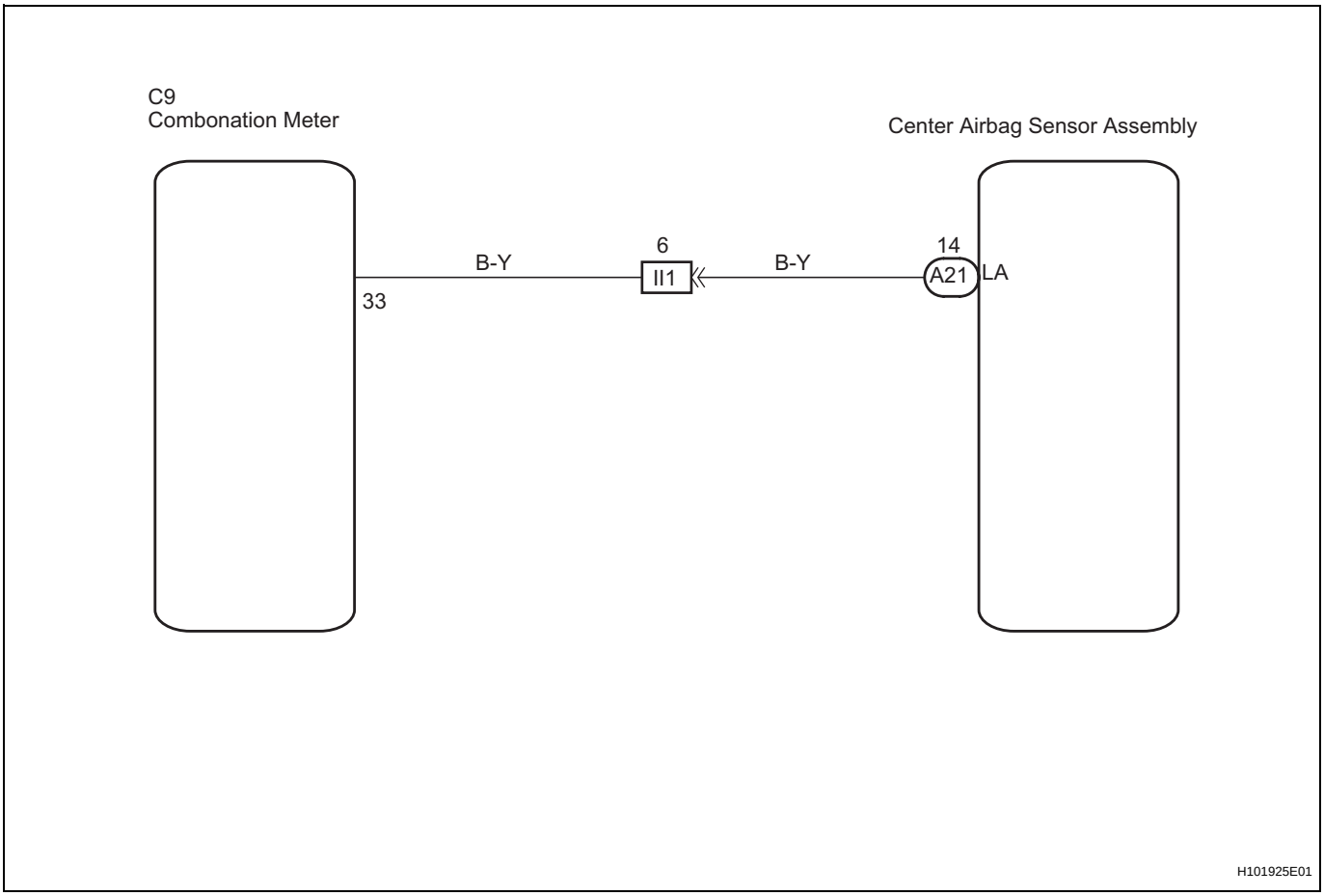
DTC	B1662/45	Indicator Light Circuit Malfunction

DESCRIPTION

The indicator lamp circuit consists of the center airbag sensor assembly and the combination meter.
DTC B1662/45 is set when a malfunction is detected in the indicator light circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1622/45	• 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 indicator light circuit for 2 seconds • Indicator light circuit malfunction • Center airbag sensor assembly malfunction	• Combination meter • Center airbag sensor assembly • Instrument panel wire

WIRING DIAGRAM

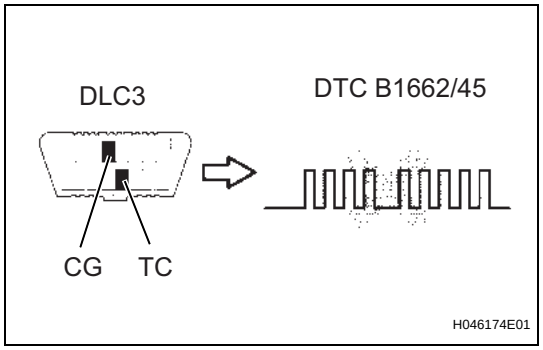


RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.

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

1	CHECK DTC



(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-34).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
(e) Check the DTCs (See page RS-34).
OK:
DTC B1662/45 is not output.
HINT:
DTCs other than B1662/45 may be output at this time, but they are not related to this check.

OK → **OTHERS USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

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

NG → **CONNECT CONNECTOR**

OK

3	CHECK CONNECTORS

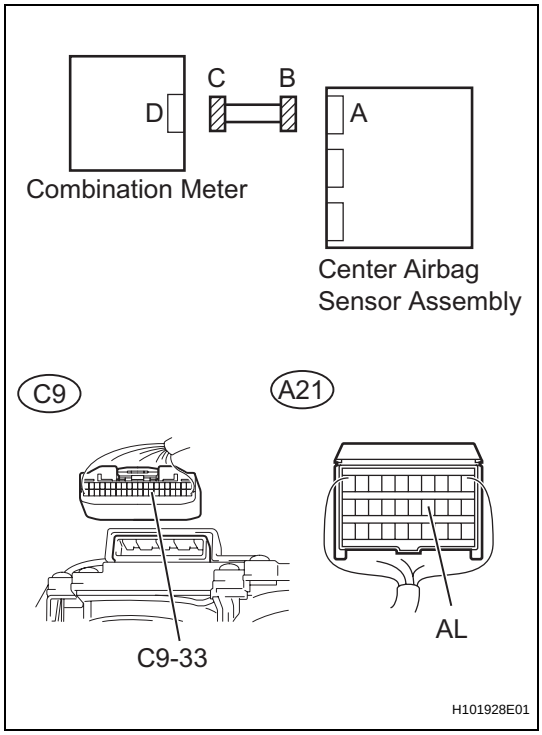
(a) Check that the connectors (on the center airbag sensor assembly side and combination meter side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

RS

OK

4 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



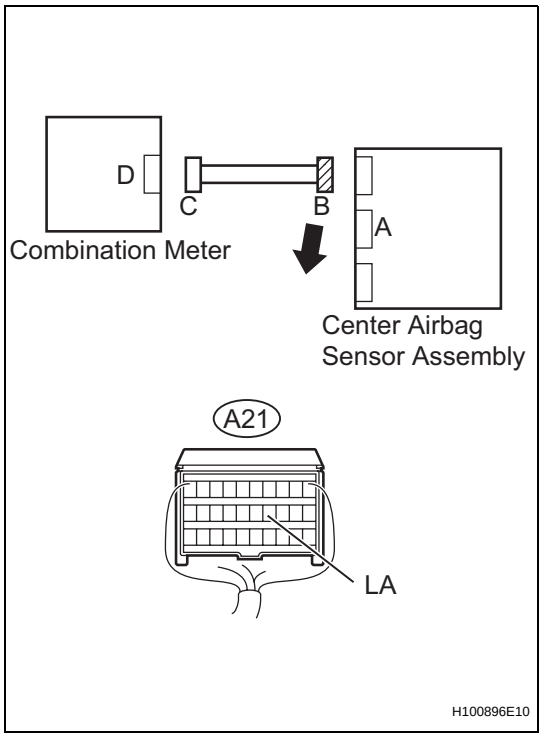
(a) Disconnect the connectors from the center airbag sensor assembly and the combination meter.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-14 (LA) - C9-33	Always	Below 1 Ω

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

OK

5 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

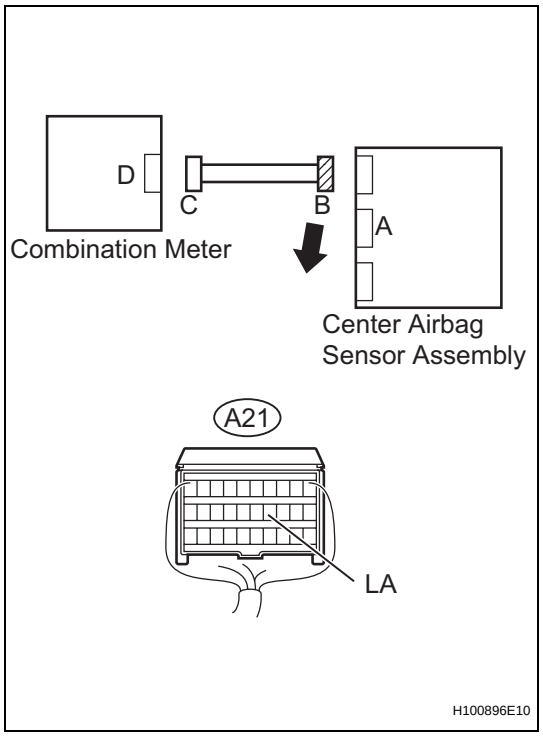
Tester Connection	Condition	Specified Condition
A21-14 (LA) - Body ground	Always	1 MΩ or Higher

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

RS

OK

6 CHECK INSTRUMENT PANEL WIRE (TO B+)



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

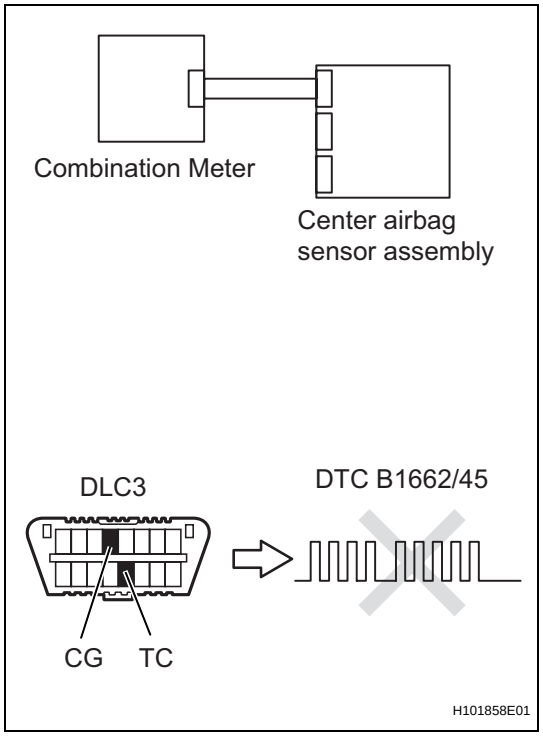
Standard voltage

Tester Connection	Condition	Specified Condition
A21-14 (LA) - Body ground	Ignition switch ON	Below 1 V

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

OK

7 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

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

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

OK:
DTC B1662/45 is not output.

RS

HINT:
DTCs other than B1662/45 may be output at this time, but they are not related to this check.

NG → **INSPECT COMBINATION METER ASSEMBLY**

OK

END

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

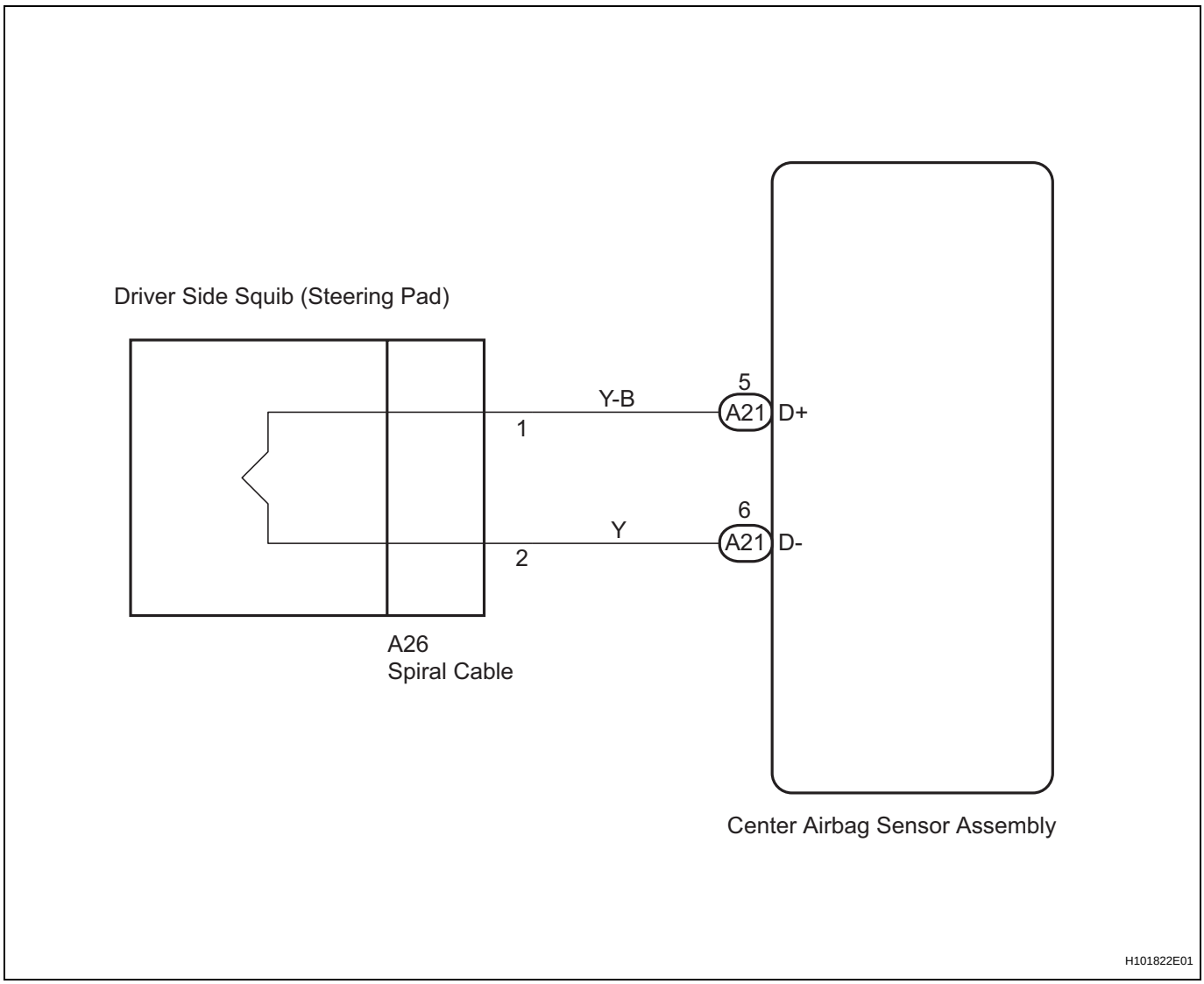
DTC	B1803/51	Short to B+ in Driver Side Squib Circuit

DESCRIPTION

The driver side squib circuit consists of the center airbag sensor assembly, the spiral cable and the steering pad.
The circuit signals the SRS to deploy when deployment conditions are met.
These DTCs are set 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 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
B1801/51	• The center airbag sensor assembly receives a line short 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 line 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 line 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

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

Result

Result	Proceed to
DTC B1800 is output.	A
DTC B1801 is output.	B
DTC B1802 is output.	C
DTC B1803 is output.	D

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

Result

Result	Proceed to
DTC 51 is output.	E

B → Go to step 7

C → Go to step 11

D → Go to step 15

E → Go to step 21

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE

OK

3	CHECK CONNECTION OF CONNECTORS

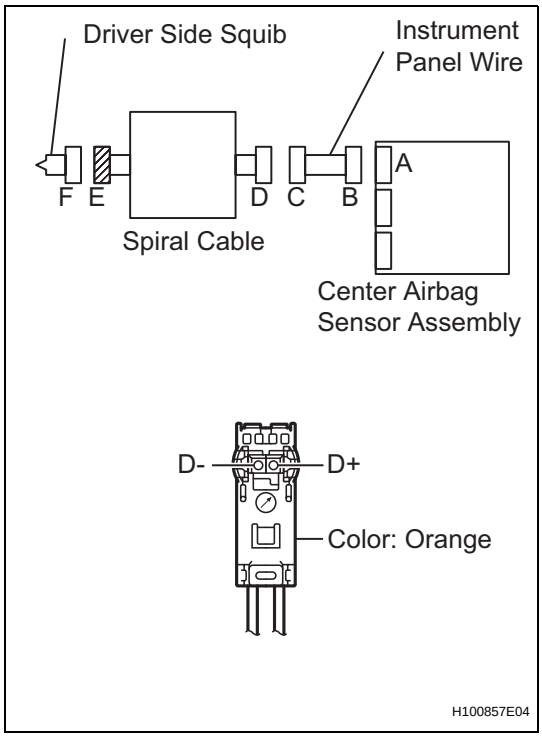
(a) Check that the connectors are properly connected to the center airbag sensor assembly and the spiral cable.
OK:
The connectors are properly connected.

RS

NG → CONNECT CONNECTORS

OK

4 CHECK SPIRAL CABLE (FOR SHORT)



(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Release the activation prevention mechanism built into connector D (See page RS-28).
(c) Measure the resistance.

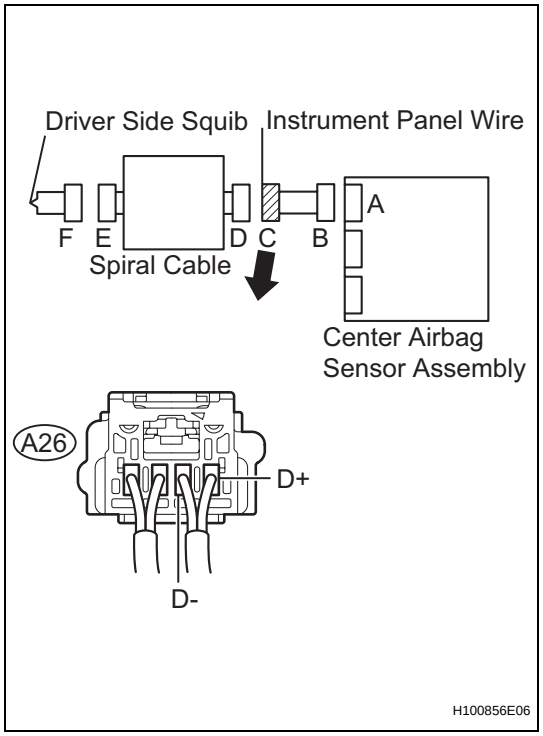
Standard resistance

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

NG → REPLACE SPIRAL CABLE

OK

5 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



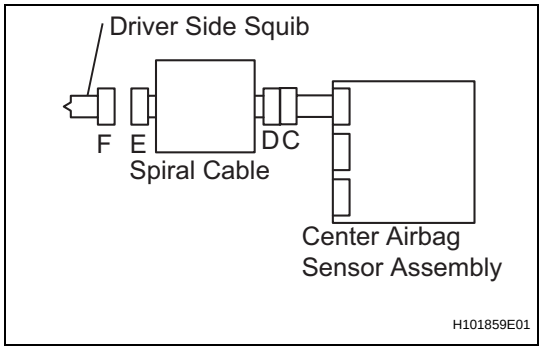
(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Release the activation prevention mechanism built into connector B (See page RS-28).
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A26-1 (D+) - A26-2 (D-)	Always	1 MΩ or Higher

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

OK

6 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the instrument panel wire connectors to the center airbag sensor assembly and spiral cable.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).
OK:
DTC B1800 is not output.

HINT:
DTCs other than B1800 may be output at this time, but they are not related to this check.

OK → **Go to step 20**

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

RS

7	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE SPIRAL CABLE**

OK

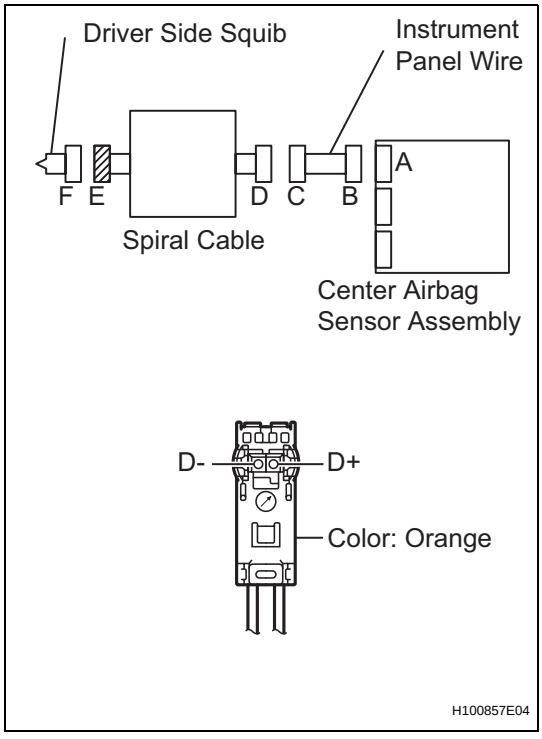
8	CHECK CONNECTION OF CONNECTORS

(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

9	CHECK SPIRAL CABLE (FOR OPEN)



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

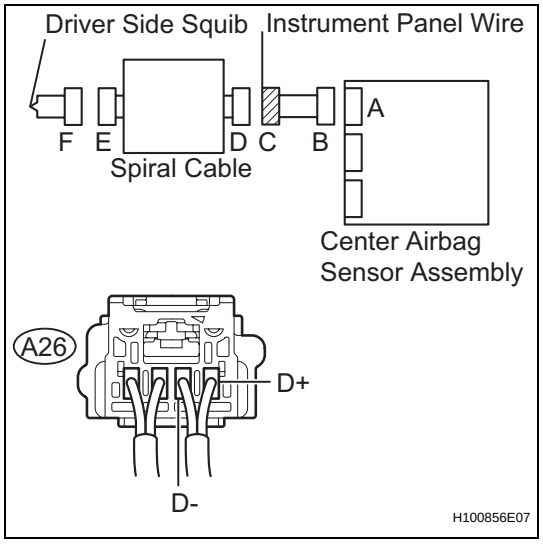
Tester Connection	Condition	Specified Condition
D+ - D-	Always	Below 1 Ω

NG → **REPLACE SPIRAL CABLE**

OK

RS

10 **CHECK INSTRUMENT PANEL WIRE (FOR OPEN)**



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

Tester Connection	Condition	Specified Condition
A26-1 (D+) - A26-2 (D-)	Always	Below 1 Ω

OK → **Go to step 19**

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11 **CHECK CONNECTOR**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE SPIRAL CABLE**

OK

12 **CHECK CONNECTION OF CONNECTORS**

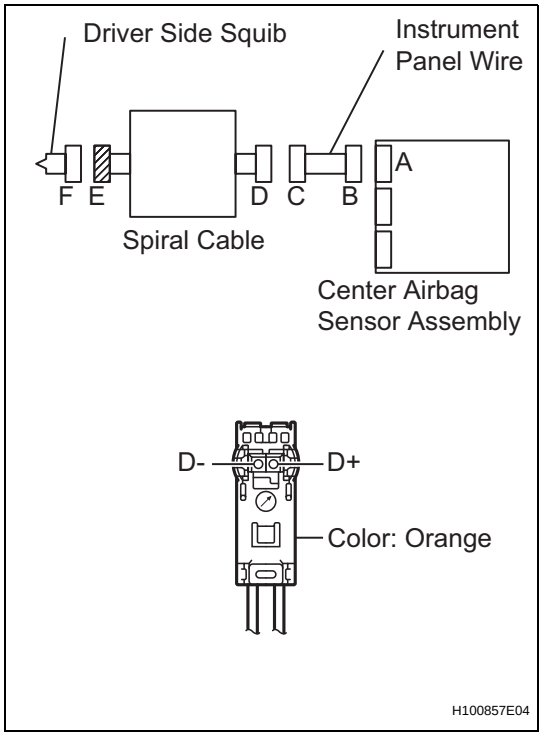
(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

RS

13 CHECK SPIRAL CABLE (TO GROUND)



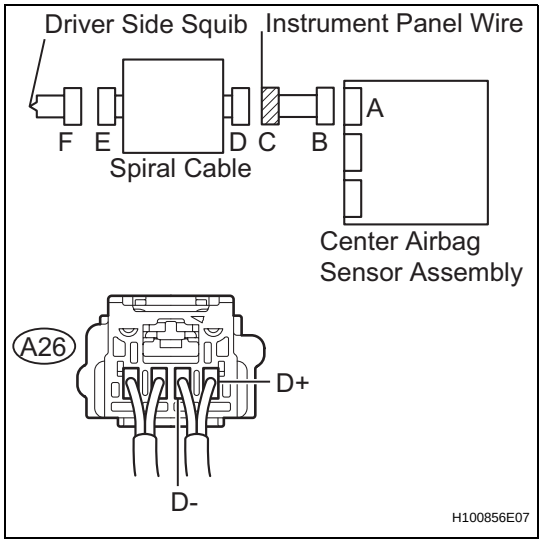
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

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

NG → **REPLACE SPIRAL CABLE**

OK

14 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

Tester Connection	Condition	Specified Condition
A26-1 (D+) - Body ground	Always	1 MΩ or Higher
A26-2 (D-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 19**

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

RS

15 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE SPIRAL CABLE**

OK

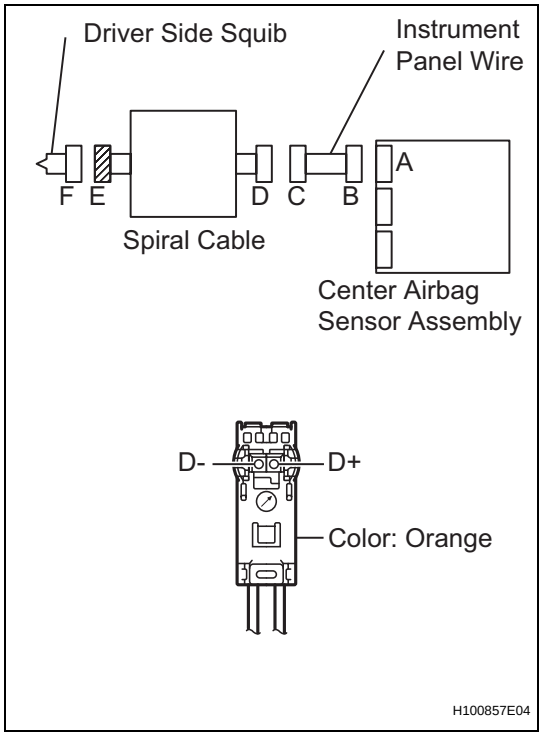
16 CHECK CONNECTION OF CONNECTORS

(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

17 CHECK SPIRAL CABLE (TO B+)



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

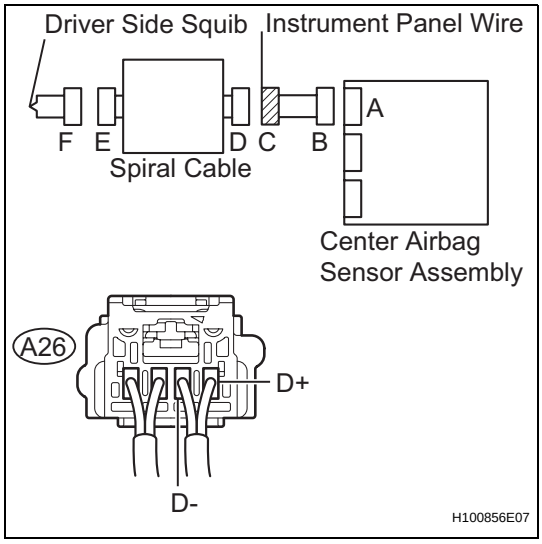
Tester Connection	Condition	Specified Condition
D+ - Body ground	Ignition switch ON	Below 1 V
D- - Body ground	Ignition switch ON	Below 1 V

NG → **REPLACE SPIRAL CABLE**

OK

RS

18 CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

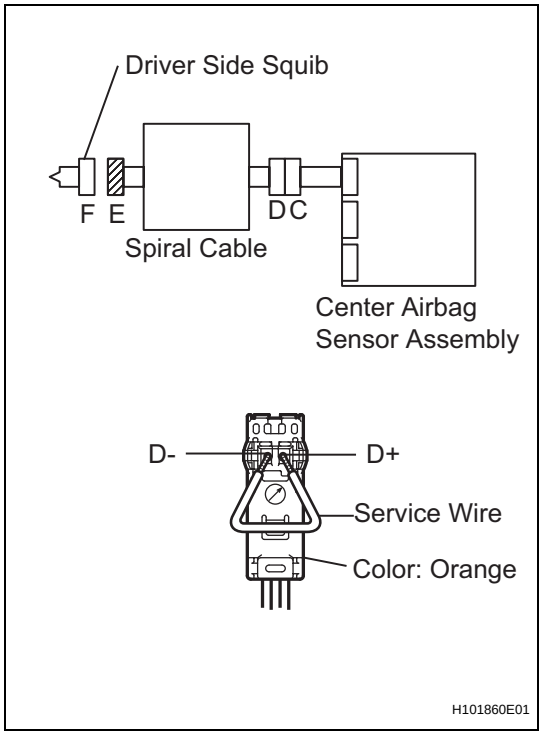
Standard voltage

Tester Connection	Condition	Specified Condition
A26-1 (D+) - Body ground	Ignition switch ON	Below 1 V
A26-2 (D-) - Body ground	Ignition switch ON	Below 1 V

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

OK

19 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 18, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the instrument panel wire connectors to the center airbag sensor assembly.
(d) Using a service wire, connect D+ and D- of connector E.

NOTICE:

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTCs B1801, B1802 and B1803 are not output.

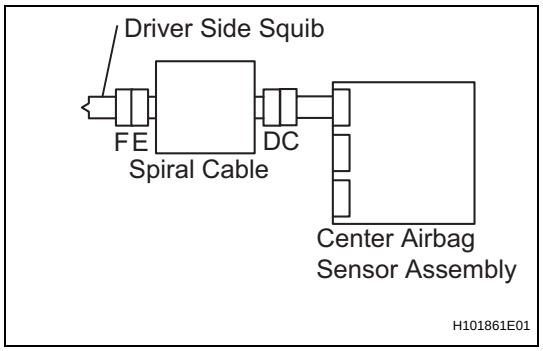
RS

HINT:
DTCs other than B1801, B1802 or B1803 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

20	REPLACE STEERING PAD (DRIVE SIDE SQUIB)



HINT:
If continuing from step 19, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector E.
(d) Connect the connectors to the steering pad.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTCs B1800, B1801, B1802 and B1803 are not output.

HINT:
DTCs other than B1800, B1801, B1802 or B1803 may be output at this time, but they are not related to this check.

NG → **REPLACE STEERING PAD**

OK

OTHERS USE SIMULATION METHOD TO CHECK

21	CHECK CONNECTOR

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

OK

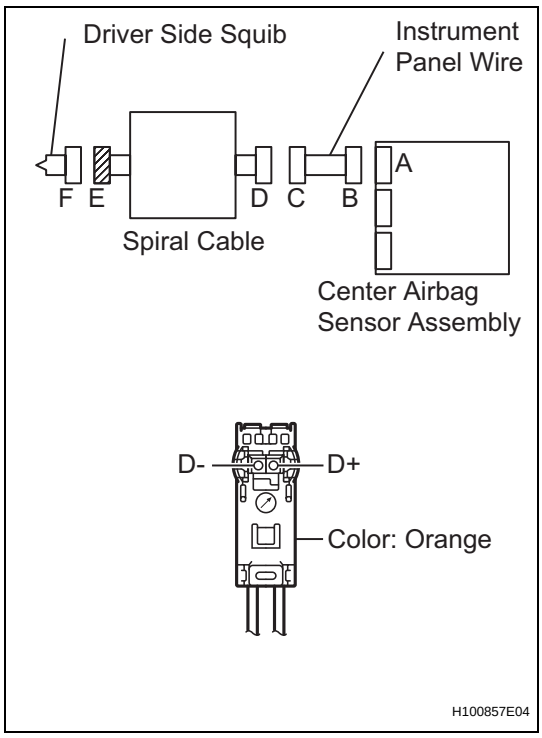
22 CHECK CONNECTORS

(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS

OK

23 CHECK SPIRAL CABLE



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

Tester Connection	Condition	Specified Condition
D+ - Body ground	Ignition switch ON	Below 1 V
D- - Body ground	Ignition switch ON	Below 1 V

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

Tester Connection	Condition	Specified Condition
D+ - D-	Always	Below 1 Ω
D+ - Body ground	Always	1 MΩ or Higher
D- - Body ground	Always	1 MΩ or Higher

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

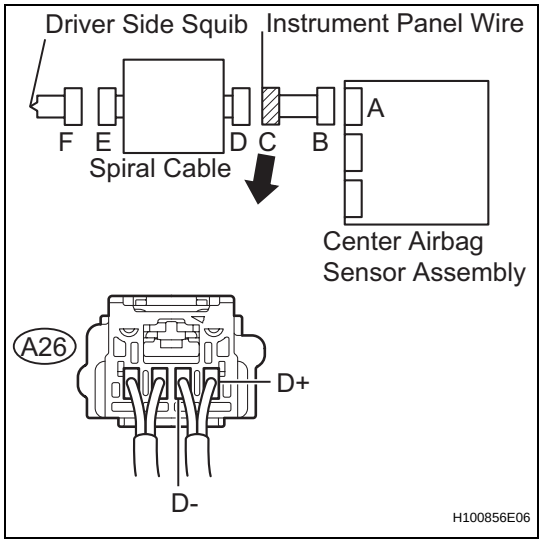
Tester Connection	Condition	Specified Condition
D+ - D-	Always	1 MΩ or Higher

NG → REPLACE SPIRAL CABLE

OK

RS

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

Standard voltage

Tester Connection	Condition	Specified Condition
A26-1 (D+) - Body ground	Ignition switch ON	Below 1 V
A26-2 (D-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
A26-1 (D+) - A26-2 (D-)	Always	Below 1 Ω
A26-1 (D+) - Body ground	Always	1 MΩ or Higher
A26-2 (D-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

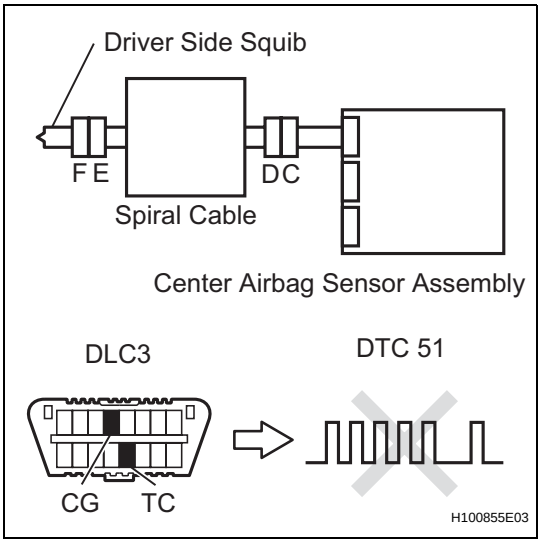
Tester Connection	Condition	Specified Condition
A26-1 (D+) - A26-2 (D-)	Always	1 MΩ or Higher

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

OK

RS

25	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Replace the steering pad (See page RS-557).

HINT:

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

(b) Connect the instrument panel wire to the airbag sensor assembly center and spiral cable.

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

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

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

(f) Clear any DTCs stored in the memory (See page RS-34).

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

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

(i) Check for DTCs (See page RS-34).

OK:

DTC 51 is not output.

HINT:

DTCs other than 51 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

DTC	B1805/52	Short in Front Passenger Side Squib Circuit

DTC	B1806/52	Open in Front Passenger Side Squib Circuit

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

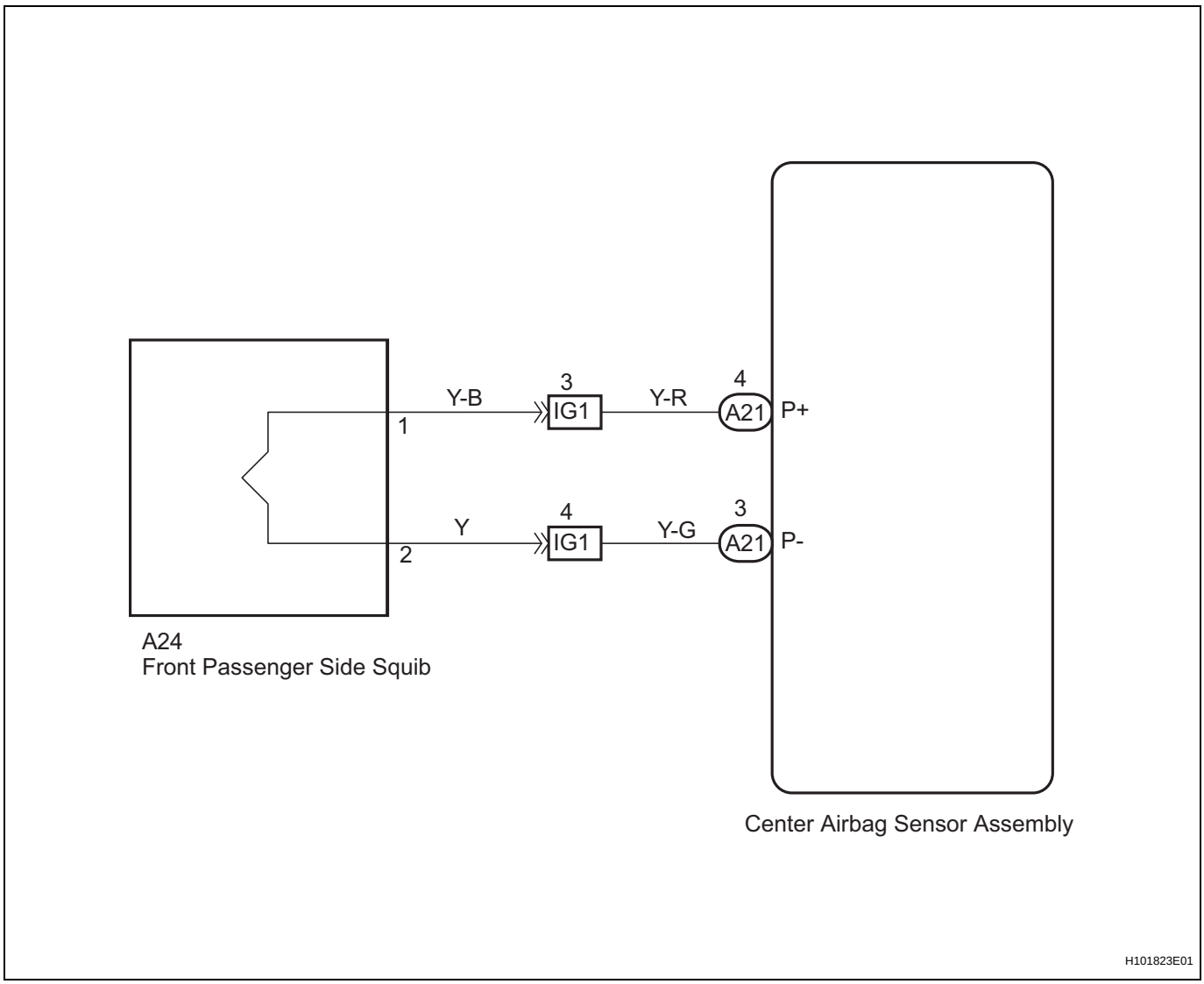
DTC	B1808/52	Short to B+ in Front Passenger Side Squib Circuit

DESCRIPTION

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

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

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

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

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

Result	Proceed to
DTC 52 is output.	E

B → Go to step 7

C → Go to step 11

D → Go to step 15

E → Go to step 21

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

RS

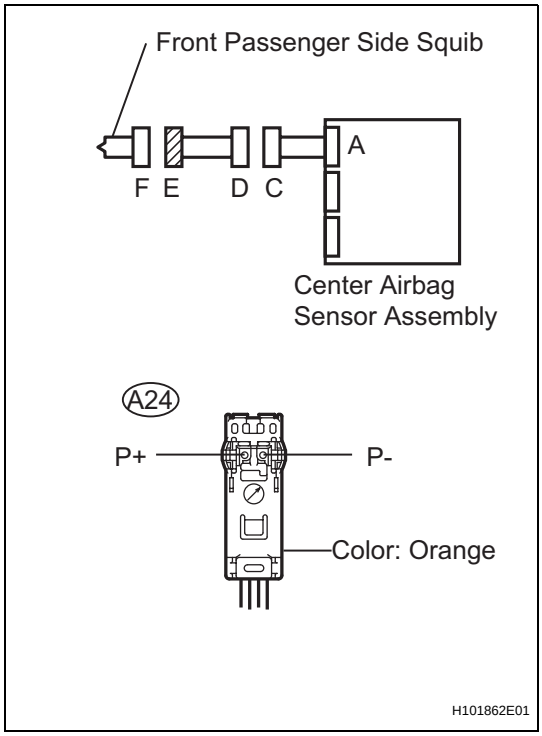
3	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

4	CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR SHORT)



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

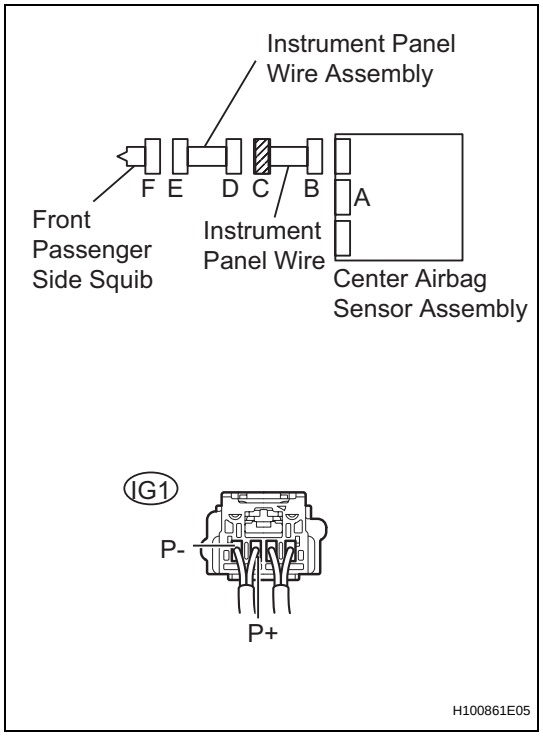
Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2 (P-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

5 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



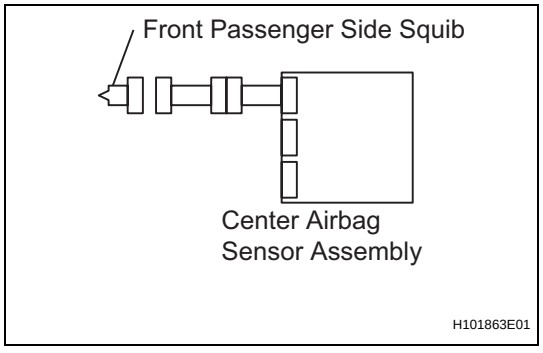
(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Release the activation prevention mechanism built into connector B (See page RS-28).
(c) Measure the resistance.
Standard resistance

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

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

OK

6 CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

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

OK → **Go to step 20**

RS

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

7	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

OK:

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

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

8	CHECK CONNECTORS

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

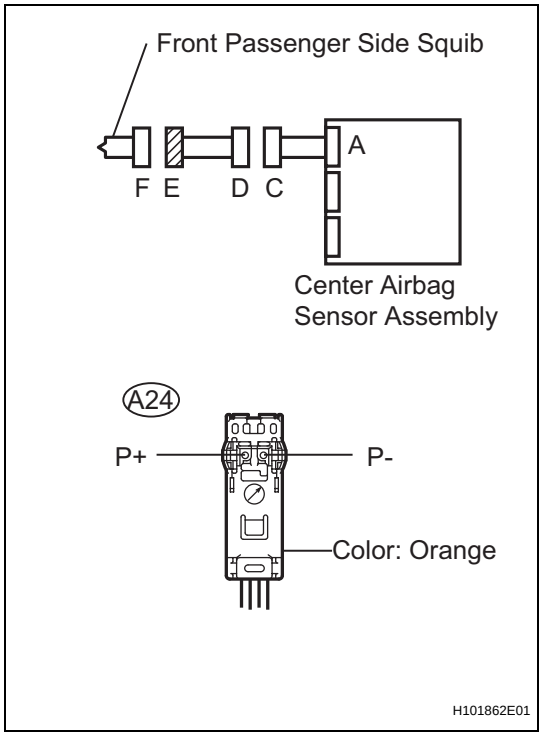
OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

9 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR OPEN)



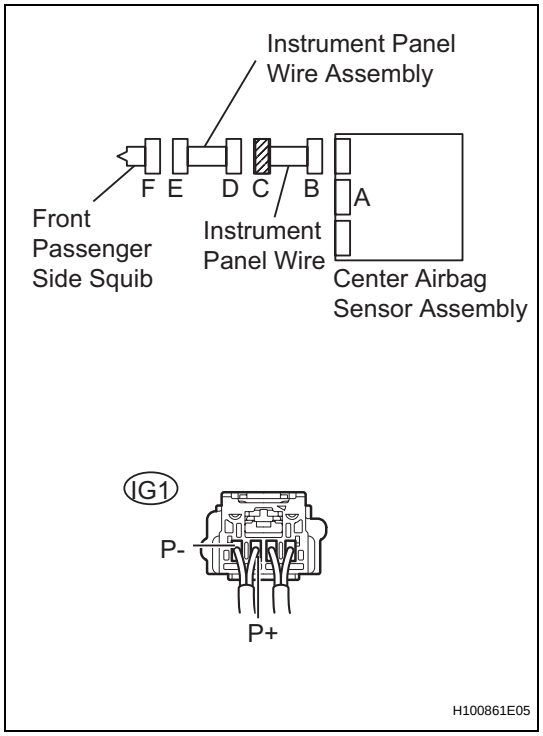
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

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

MG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

10 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



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

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

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.

OK:

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

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

12	CHECK CONNECTION OF CONNECTORS

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

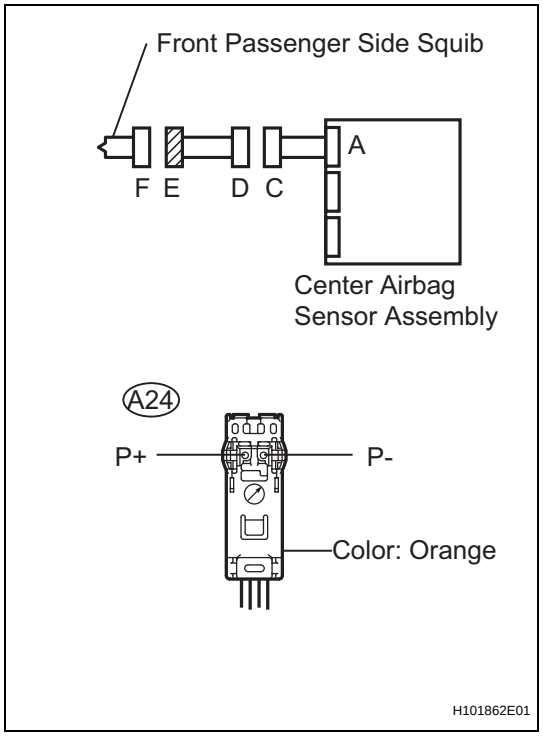
OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

13 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO GROUND)



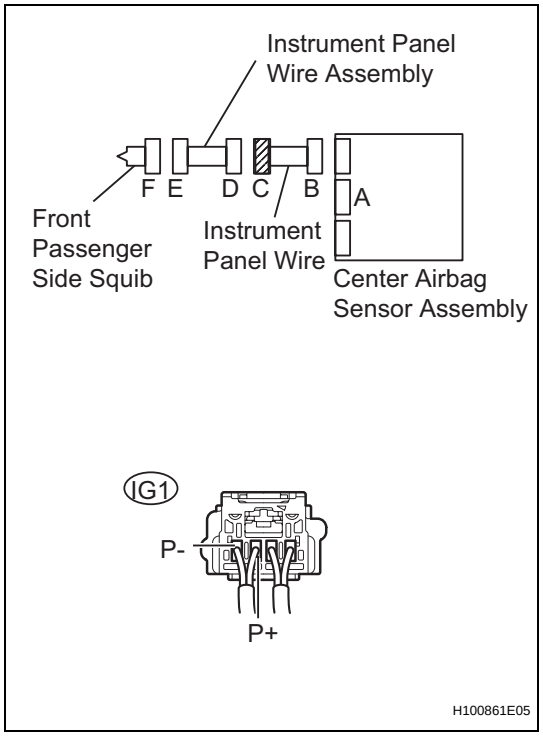
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

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

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

14 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

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

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

15 **CHECK CONNECTOR**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

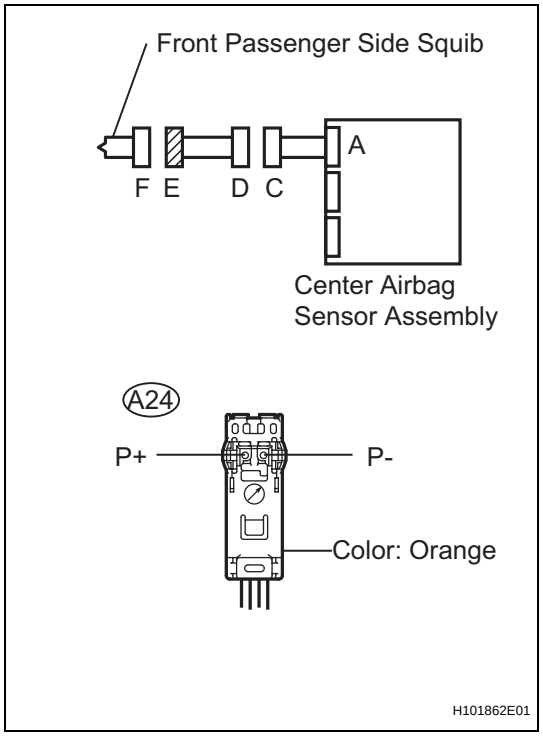
16 **CHECK CONNECTION OF CONNECTORS**

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

NG → **CONNECT CONNECTORS**

OK

17 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO B+)



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

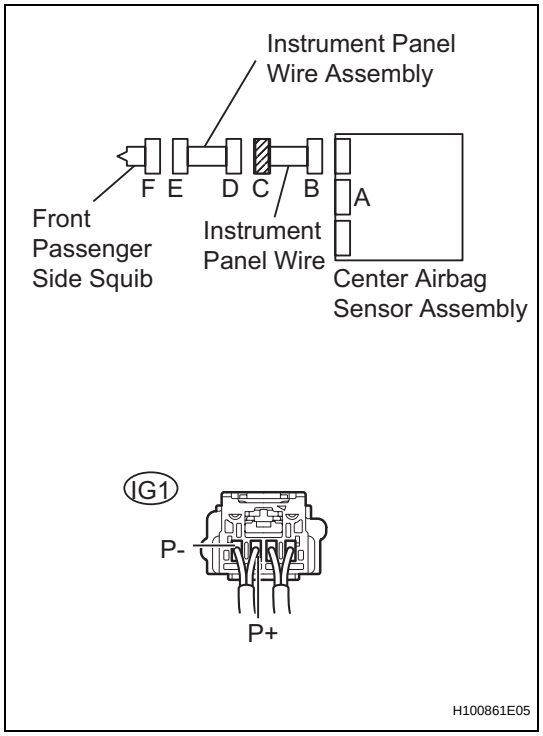
Standard voltage

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

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

18 CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

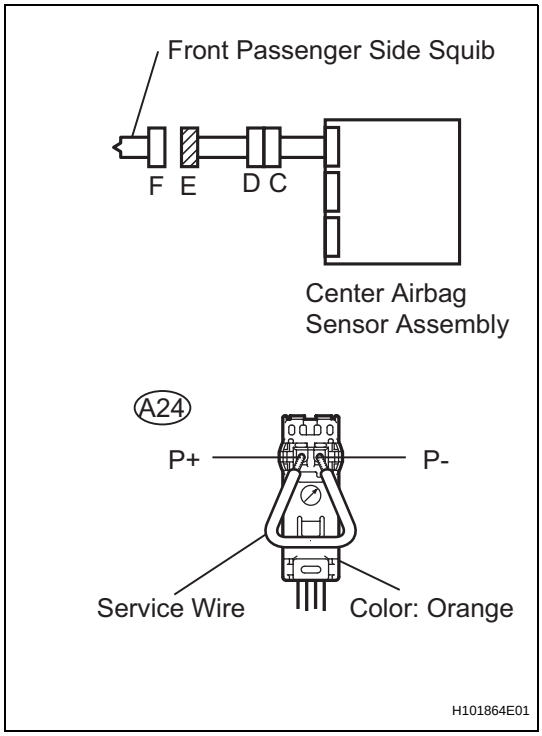
Tester Connection	Condition	Specified Condition
IG1-3 (P+) - Body ground	Ignition switch ON	Below 1 V
IG1-4 (P-) - Body ground	Ignition switch ON	Below 1 V

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

OK

RS

19 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 18, begin from (a). If continuing from any other step, begin from (c).
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect A24-1 (P+) and A24-2 (P-) of connector E.

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

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

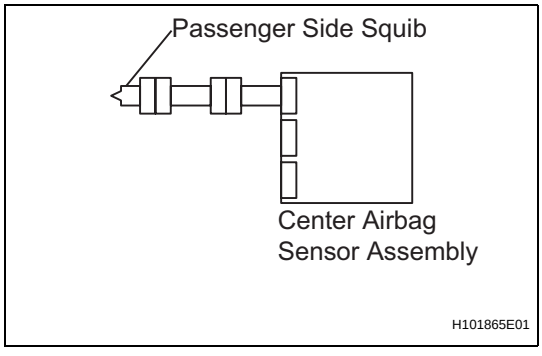
HINT:
DTCs other than B1806, B1807 or B1808 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

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



HINT:
If continuing from step 19, begin from (c). If continuing from any other step, being from (a).
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds
(c) Disconnect the SST from connector C.
(d) Connect the connectors to the front passenger airbag assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

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

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

NG → **REPLACE FRONT PASSENGER AIRBAG ASSEMBLY**

OK ↓

USE SIMULATION METHOD TO CHECK

21	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK ↓

22	CHECK CONNECTORS

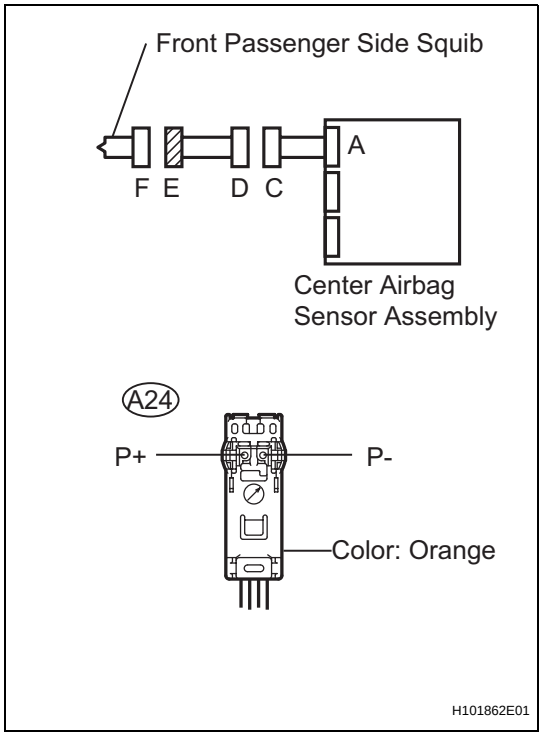
RS

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

NG → **CONNECT CONNECTORS**

OK ↓

23 CHECK INSTRUMENT PANEL WIRE ASSEMBLY



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

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

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

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

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

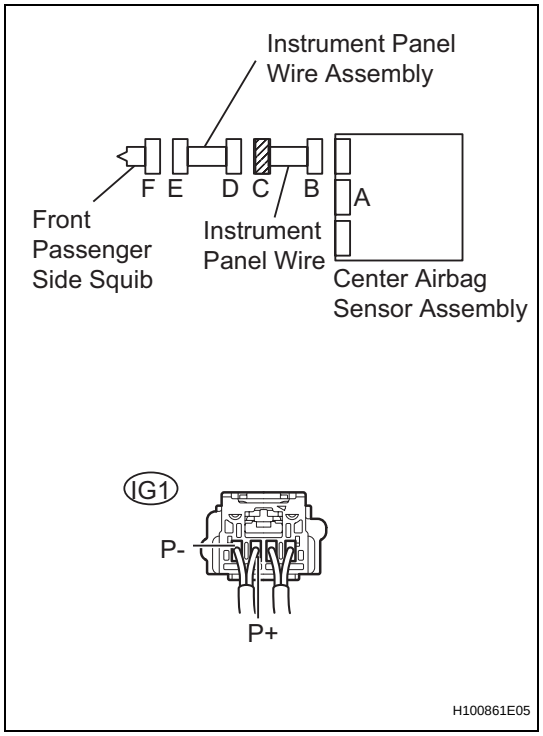
Tester Connection	Condition	Specified Condition
A24-1 (P+) - A24-2 (P-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

24 CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER SIDE SQUIB)



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

Standard voltage

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

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

Standard resistance

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

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

Standard resistance

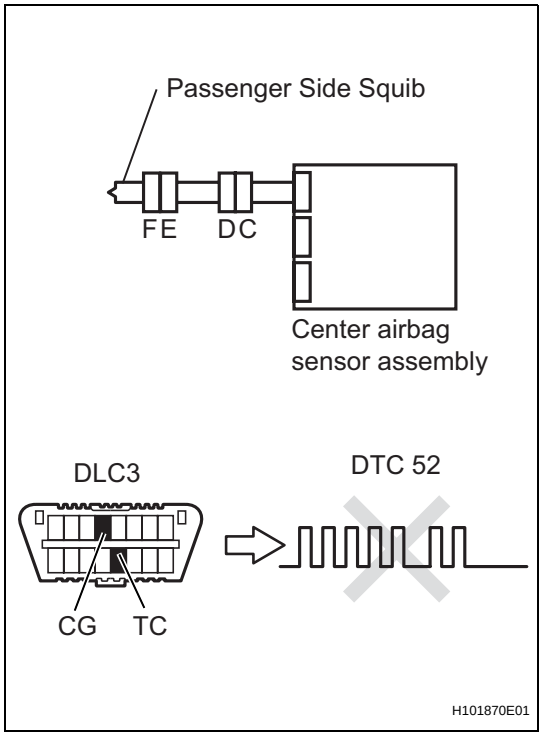
Tester Connection	Condition	Specified Condition
IG1-3 (P+) - IG1-4 (P-)	Always	1 MΩ or Higher

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

OK

RS

25	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

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

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

OK:

DTC 52 is not output.

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

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS

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

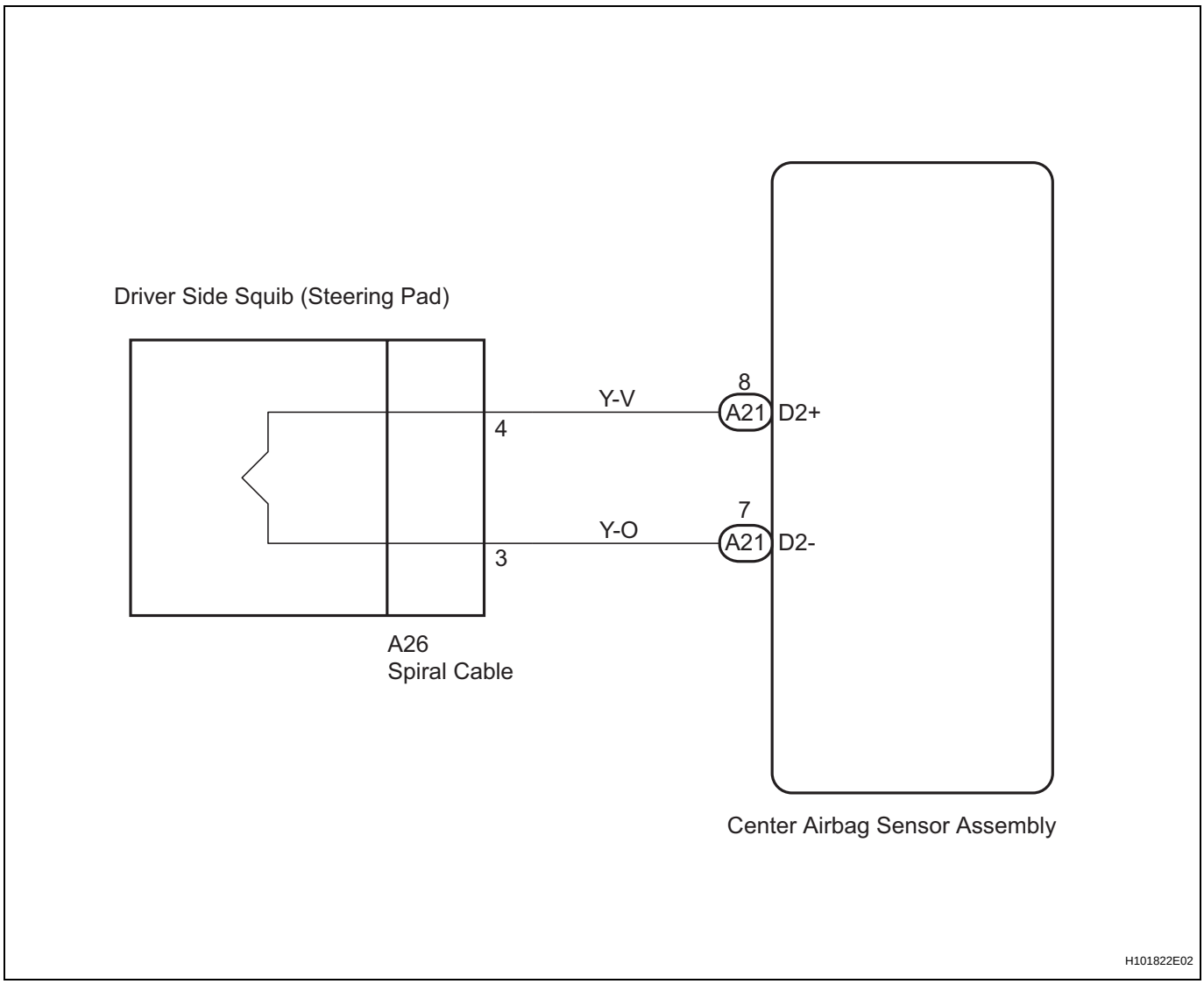
DTC	B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit

DESCRIPTION

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

DTC No.	DTC Detecting Conditions	Trouble Areas
B1810/53	• The center airbag sensor assembly receives a line short circuit signal in the driver side squib (Dual stage - 2nd step) circuit for 2 seconds • Driver side squib (Dual stage - 2nd step) malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib, Dual stage - 2nd step) • Center airbag sensor assembly
B1811/53	• The center airbag sensor assembly receives an open circuit signal in the driver side squib (Dual stage - 2nd step) circuit for 2 seconds malfunction • Driver side squib (Dual stage - 2nd step) • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib, Dual stage - 2nd step) • Center airbag sensor assembly
B1812/53	• The center airbag sensor assembly receives a short circuit to ground signal in the driver side squib (Dual stage - 2nd step) circuit for 0.5 seconds • Driver side squib (Dual stage - 2nd step) malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib, Dual stage - 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 (Dual stage - 2nd step) circuit for 0.5 seconds • Driver side squib (Dual stage - 2nd step) malfunction • Spiral cable malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib, Dual stage - 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

Result	Proceed to
DTC B1810 is output.	A
DTC B1811 is output.	B
DTC B1812 is output.	C
DTC B1813 is output.	D

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

Result	Proceed to
DTC 53 is output.	E

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

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the horn button assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE

OK

3	CHECK CONNECTION OF CONNECTORS

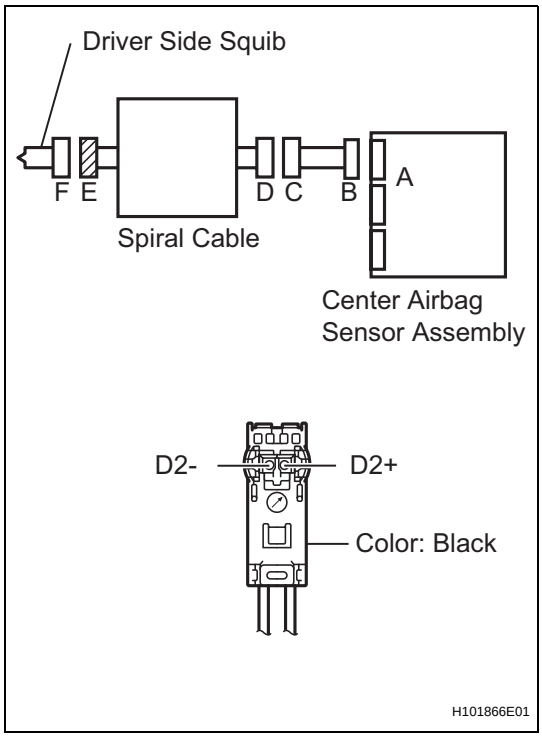
(a) Check that the connectors are properly connected to the center airbag sensor assembly and the spiral cable.
OK:
The connectors are properly connected.

RS

NG → CONNECT CONNECTORS

OK

4 CHECK SPIRAL CABLE (FOR SHORT)



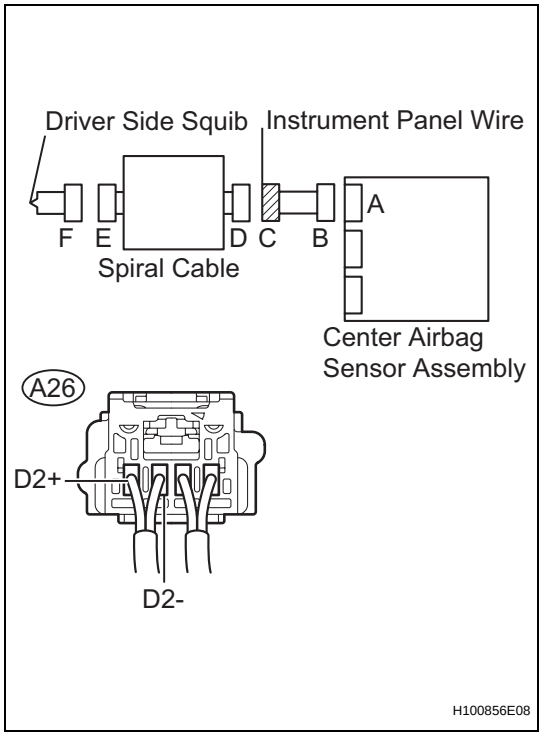
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Release the activation prevention mechanism built into connector D (See page RS-28).
(c) Measure the resistance.
Standard resistance

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

NG → REPLACE SPIRAL CABLE

OK

5 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



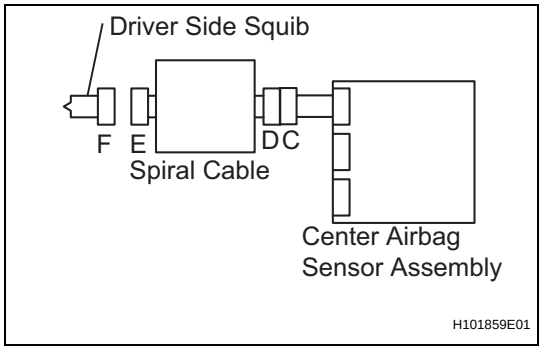
(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Release the activation prevention mechanism built into connector B (See page RS-28).
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - A26-3 (D2-)	Always	1 MΩ or Higher

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

OK

6 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the instrument panel wire connectors to the center airbag sensor assembly and spiral cable.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).
OK:
DTC B1810 is not output.

HINT:
DTCs other than B1810 may be output at this time, but they are not related to this check.

OK → **Go to step 20**

NG

REPLACE CENTER AIRBAG ASSEMBLY

RS

7	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE SPIRAL CABLE**

OK

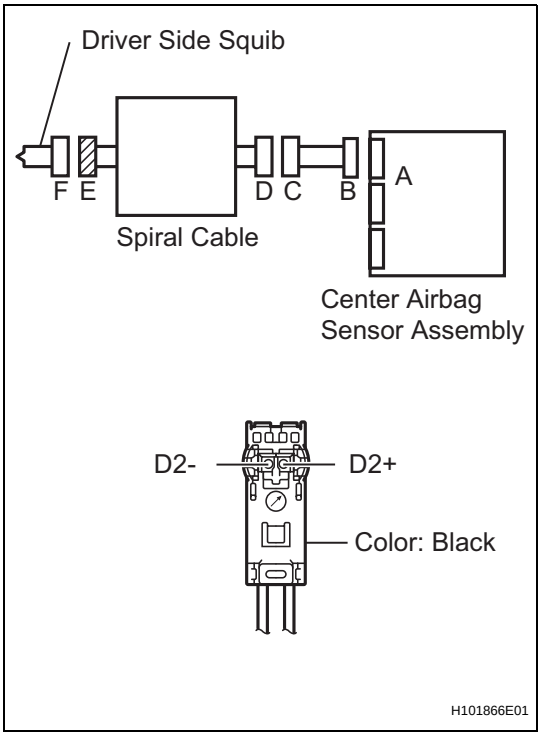
8	CHECK CONNECTION OF CONNECTORS

(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

9	CHECK SPIRAL CABLE (FOR OPEN)



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

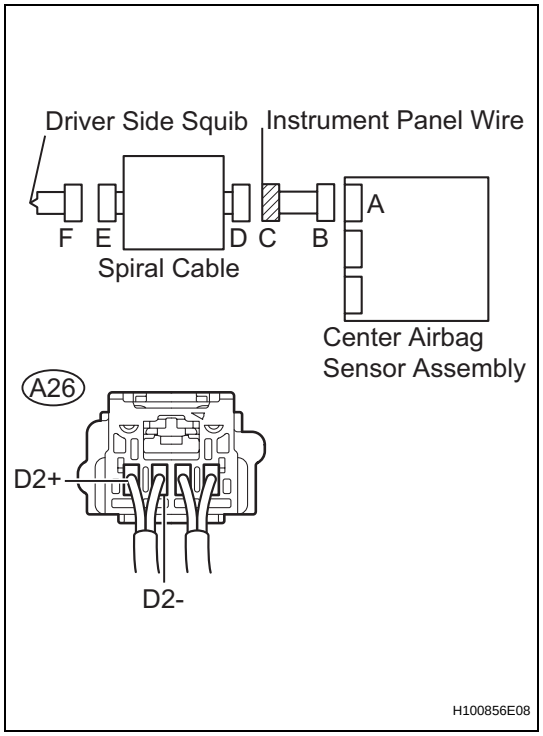
Tester Connection	Condition	Specified Condition
D2+ - D2-	Always	Below 1 Ω

NG → **REPLACE SPIRAL CABLE**

OK

RS

10 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



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

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - A26-3 (D2-)	Always	Below 1 Ω

OK → **Go to step 19**

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11 CHECK CONNECTOR

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

NG → **REPLACE SPIRAL CABLE**

OK

12 CHECK CONNECTION OF CONNECTORS

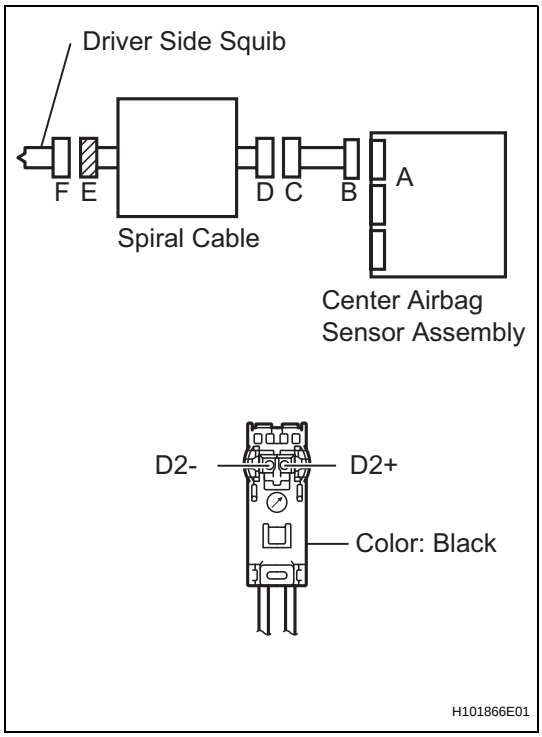
(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

RS

NG → CONNECT CONNECTORS

OK

13 CHECK SPIRAL CABLE (TO GROUND)



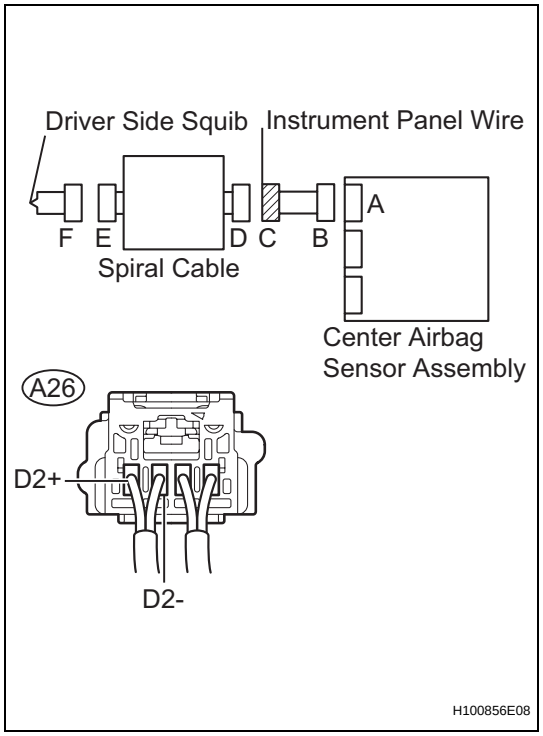
(a) Disconnect the spiral cable connector from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

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

NG → REPLACE SPIRAL CABLE

OK

14 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - Body ground	Always	1 MΩ or Higher
A26-3 (D2-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 19**

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

15 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE SPIRAL CABLE**

OK

16 CHECK CONNECTION OF CONNECTORS

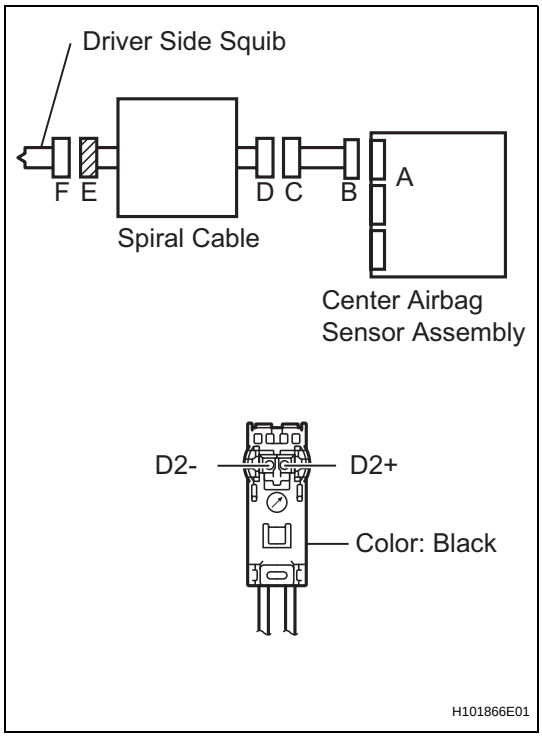
(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.
OK:
The connectors are properly connected.

RS

NG → CONNECT CONNECTORS

OK

17 CHECK SPIRAL CABLE (TO B+)



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

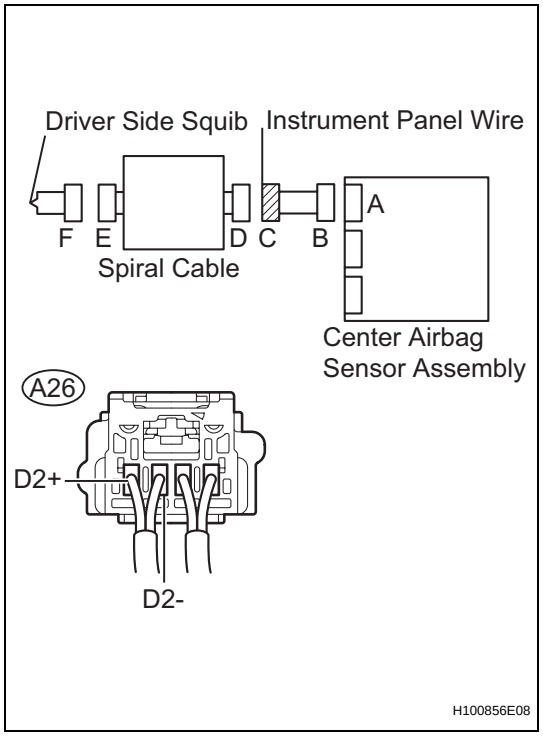
Standard voltage

Tester Connection	Condition	Specified Condition
D2+ - Body ground	Ignition switch ON	Below 1 V
D2- - Body ground	Ignition switch ON	Below 1 V

NG → REPLACE SPIRAL CABLE

OK

18	CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - Body ground	Ignition switch ON	Below 1 V
A26-3 (D2-) - Body ground	Ignition switch ON	Below 1 V

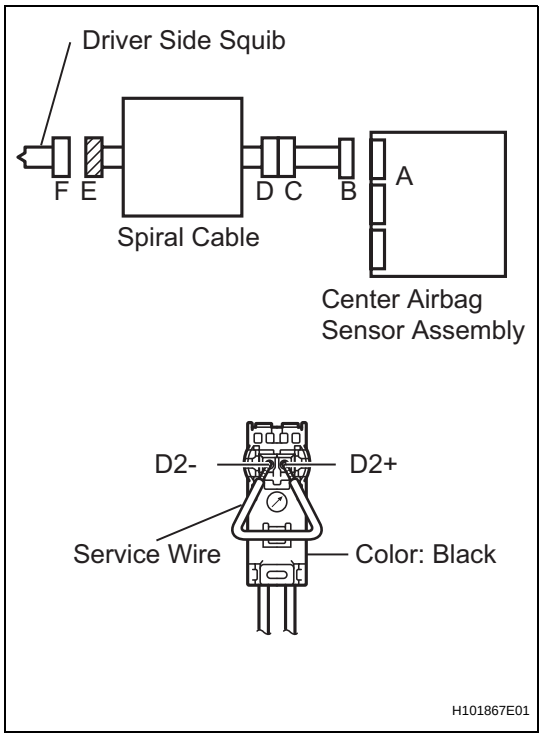
NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

19	REPLACE CENTER AIRBAG SENSOR ASSEMBLY

HINT:
If continuing from step 18, begin from (a). If continuing from any other step, begin from (c).

RS



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect D2+ and D2- of connector E.

NOTICE:

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

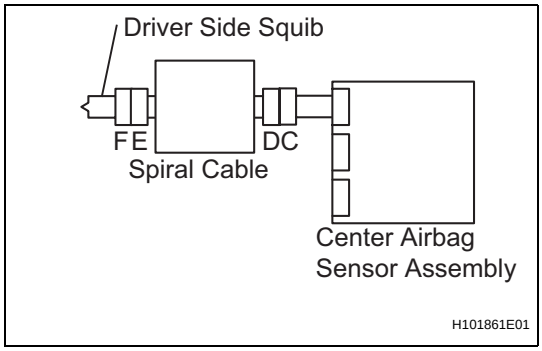
DTCs B1811, B1812 and B1813 are not output.

HINT:
DTCs other than B1811, B1812 or B1813 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG ASSEMBLY**

OK

20	CHECK STEERING PAD (DRIVER SIDE SQUIB)



HINT:
If continuing from step 19, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector E.
(d) Connect the connectors to the steering pad.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

RS

OK:

DTCs B1810, B1811, B1812 and B1813 are not output.

HINT:

DTCs other than B1810, B1811, B1812 or B1813 may be output at this time, but they are not related to this check.

NG → **REPLACE STEERING PAD**

OK ↓

USE SIMULATION METHOD TO CHECK

21	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:

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

NG → **REPLACE SPIRAL CABLE**

OK ↓

22	CHECK CONNECTION OF CONNECTORS

(a) Check that the spiral cable connectors (on the steering pad side) are properly connected.

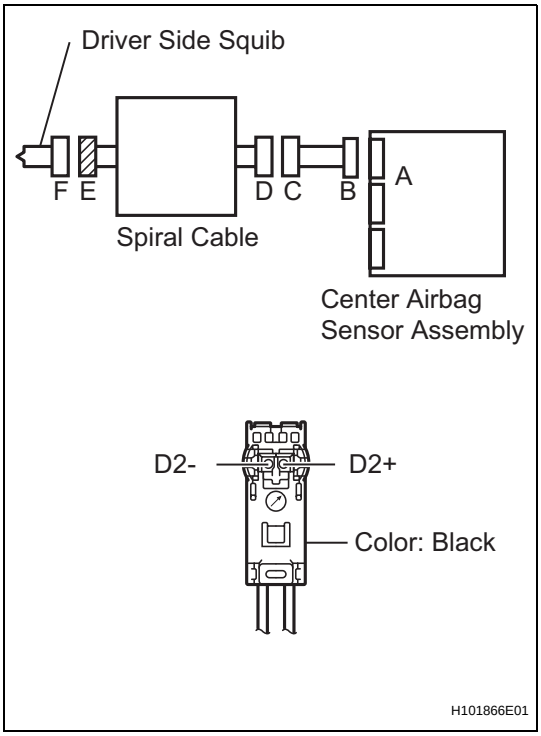
OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK ↓

23 CHECK SPIRAL CABLE



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

Standard voltage

Tester Connection	Condition	Specified Condition
D2+ - Body ground	Ignition switch ON	Below 1 V
D2- - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
D2+ - D2-	Always	Below 1 Ω
D2+ - Body ground	Always	1 MΩ or Higher
D2- - Body ground	Always	1 MΩ or Higher

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

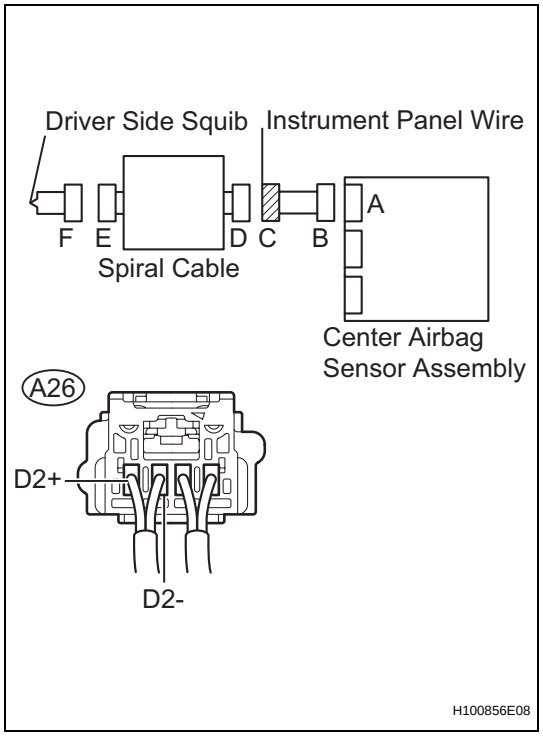
Standard resistance

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

NG → **REPLACE SPIRAL CABLE**

OK

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

Standard voltage

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - Body ground	Ignition switch ON	Below 1 V
A26-3 (D2-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
A26-4 (D2+) - A26-3 (D2-)	Always	Below 1 Ω
A26-4 (D2+) - Body ground	Always	1 MΩ or Higher
A26-3 (D2-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

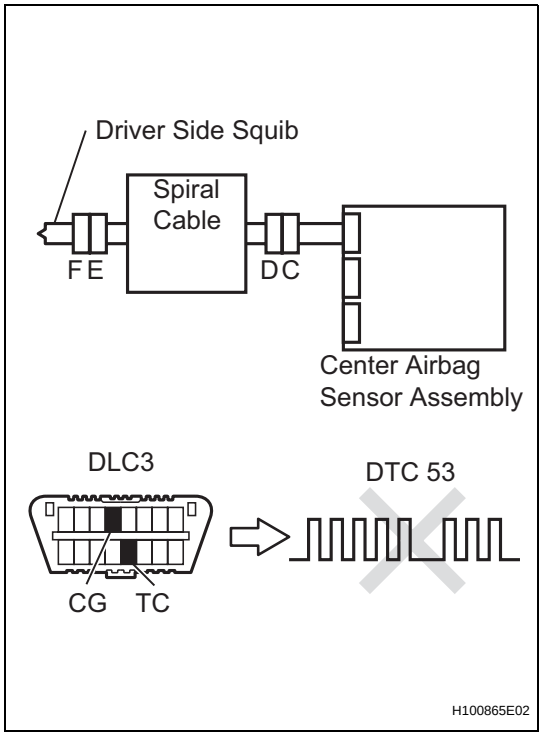
Tester Connection	Condition	Specified Condition
A26-4 (D2+) - A26-3 (D2-)	Always	1 MΩ or Higher

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

OK

RS

25	CHECK CENTER AIRBAG ASSEMBLY



(a) Replace the steering pad (See page RS-557).

HINT:

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

(b) Connect the instrument panel wire to the center airbag sensor assembly and spiral cable.

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

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

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

(f) Clear any DTCs stored in the memory (See page RS-34).

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

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

(i) Check for DTCs (See page RS-34).

OK:

DTC 53 is not output.

HINT:

DTCs other than 53 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG ASSEMBLY**

OK

USE SIMULATION METHOD TO CHECK

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

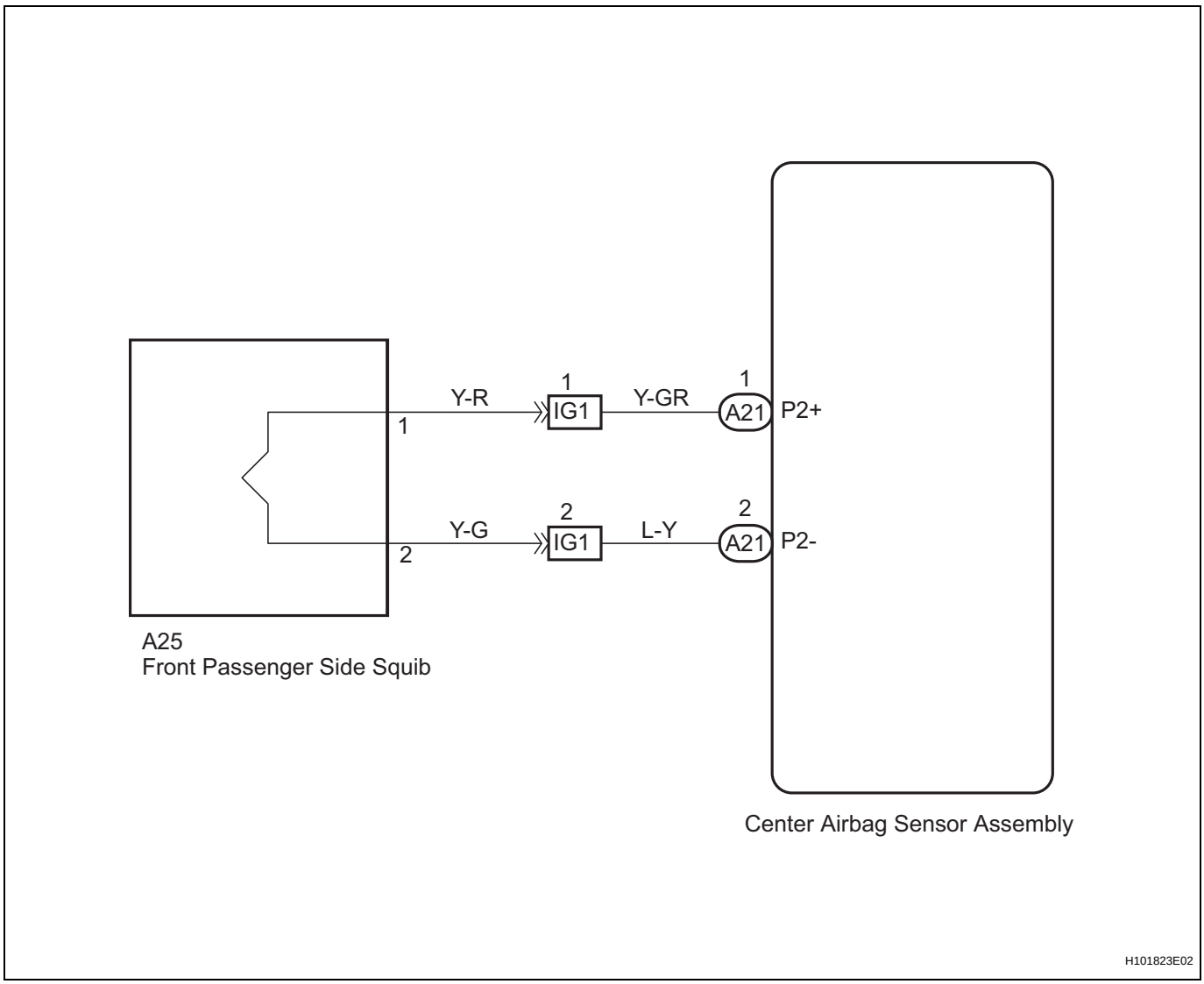
DTC	B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit

DESCRIPTION

The front passenger side squib (Dual stage -2nd step) circuit consists of the center airbag sensor assembly and the front passenger airbag assembly.
The circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the front passenger side squib (Dual stage - 2nd step) circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1815/54	• The center airbag sensor assembly receives a line short circuit signal in the front passenger side squib (Dual stage - 2nd step) circuit for 2 seconds • Front passenger side squib (Dual stage - 2nd step) malfunction • Center airbag sensor assembly center malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib, Dual stage - 2nd step) • Center airbag sensor assembly
B1816/54	• The center airbag sensor assembly receives an open circuit signal in the front passenger side squib (Dual stage - 2nd step) circuit for 2 seconds • Front passenger side squib (Dual stage - 2nd step) malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib, Dual stage - 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 (Dual stage - 2nd step) circuit for 0.5 seconds • Front passenger side squib (Dual stage - 2nd step) malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib, Dual stage - 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 (Dual stage - 2nd step) circuit for 0.5 seconds • Front passenger side squib (Dual stage - 2nd step) malfunction • Center airbag sensor assembly malfunction	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib, Dual stage - 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC OUTPUT

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

Result	Proceed to
DTC B1815 is output.	A
DTC B1816 is output.	B
DTC B1817 is output.	C
DTC B1818 is output.	D

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

Result	Proceed to
DTC 54 is output.	E

B → Go to step 7

C → Go to step 11

D → Go to step 15

E → Go to step 21

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

RS

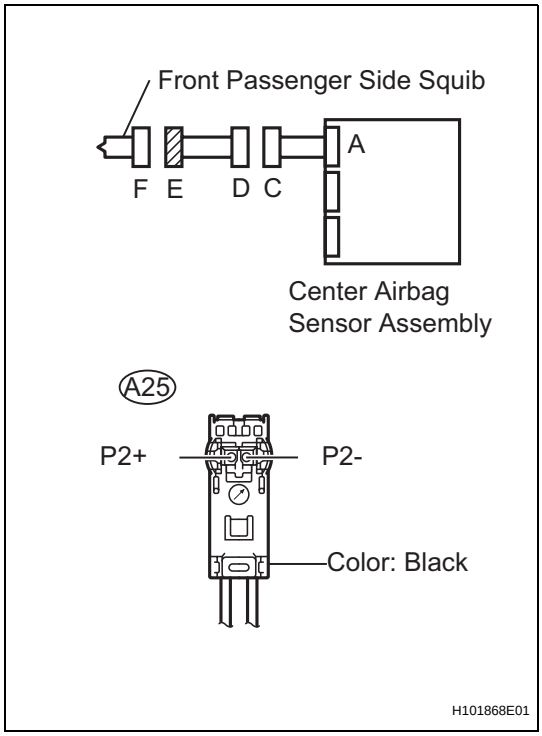
3	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

4	CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR SHORT)



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

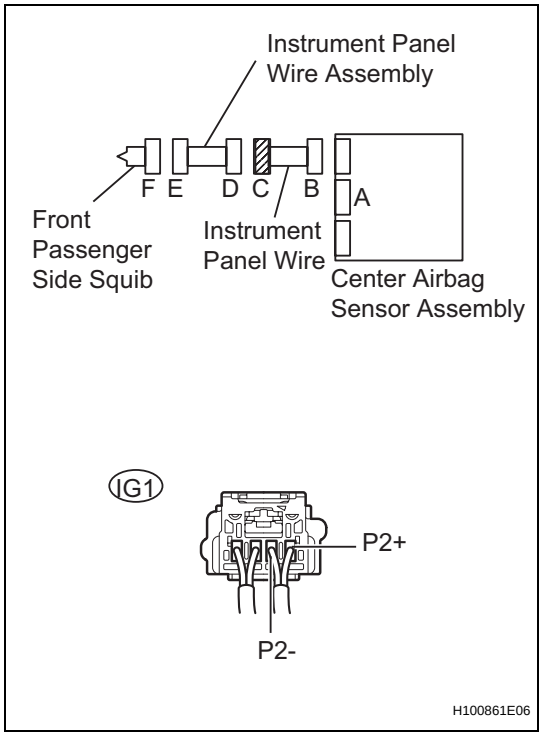
Tester Connection	Condition	Specified Condition
A25-1 (P2+) - A25-2 (P2-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

5 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



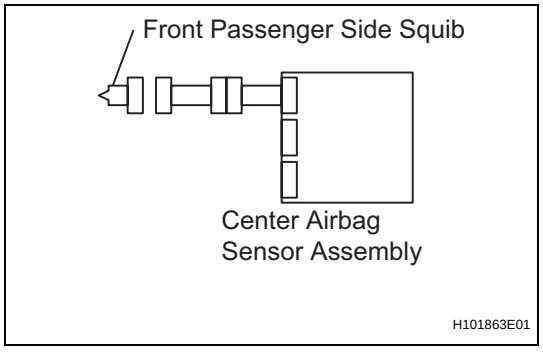
(a) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(b) Release the activation prevention mechanism built into connector B (See page RS-28).
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - IG1-2 (P2-)	Always	1 MΩ or Higher

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

OK

6 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the instrument panel wire connectors to the center airbag sensor assembly and instrument panel wire assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).
OK:
DTC B1815 is not output.

HINT:
DTCs other than B1815 may be output at this time, but they are not related to this check.

OK → **Go to step 20**

RS

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

7	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

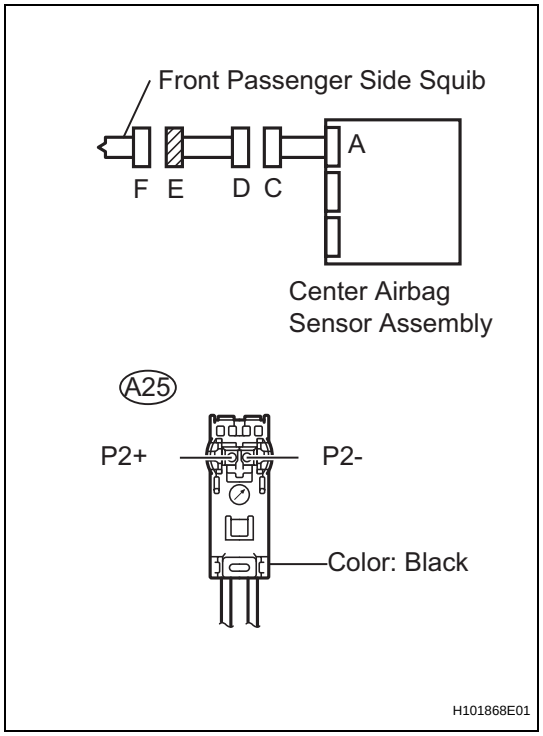
8	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

9 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (FOR OPEN)



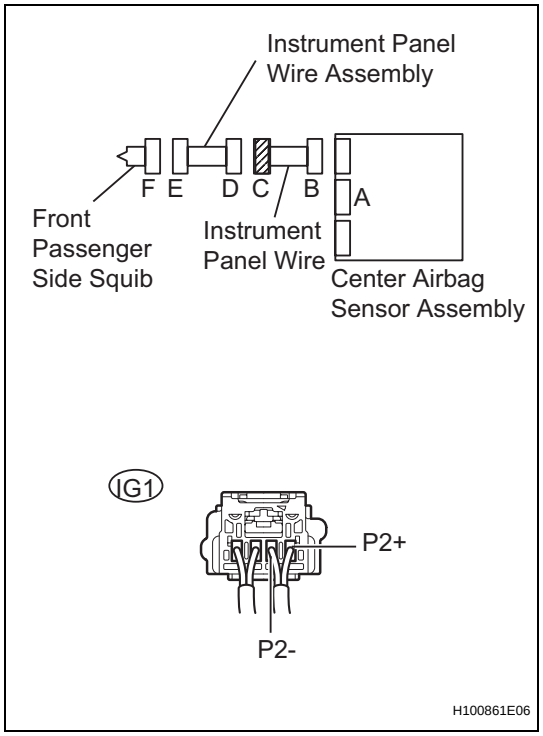
(a) Disconnect the instrument panel wire assembly connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A25-1 (P2+) - A25-2 (P2-)	Always	Below 1 Ω

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

10 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



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

Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - IG1-2 (P2-)	Always	Below 1 Ω

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

11	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

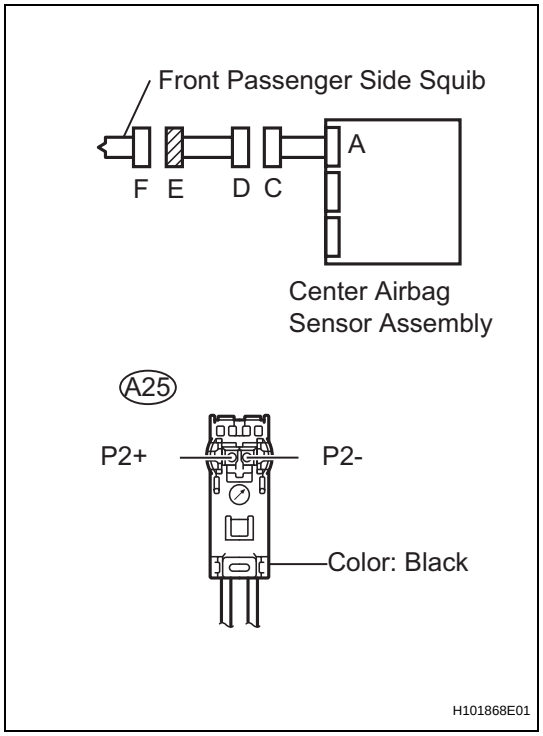
12	CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

13 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO GROUND)



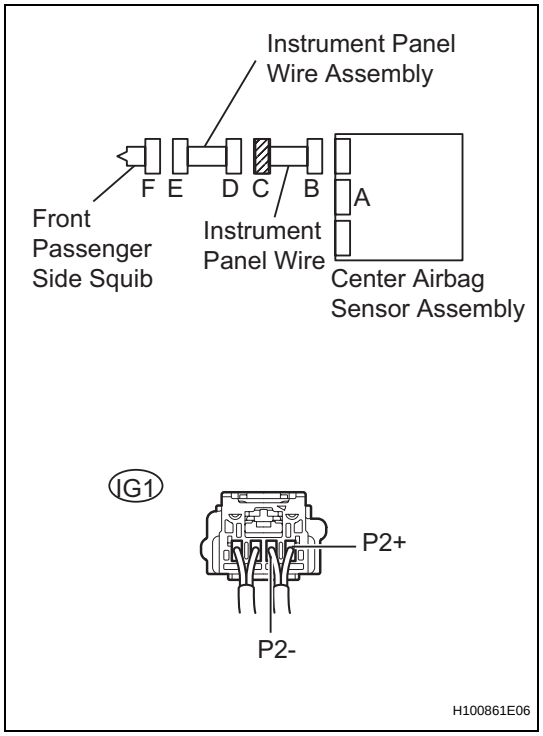
(a) Disconnect the spiral cable connectors from the instrument panel wire and steering pad.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A25-1 (P2+) - Body ground	Always	1 MΩ or Higher
A25-2 (P2-) - Body ground	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

14 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - Body ground	Always	1 MΩ or Higher
IG1-2 (P2-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 19**

RS

NG

REPAIR OR REPLACE INSTRUMENT PANEL WIRE

15 **CHECK CONNECTOR**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

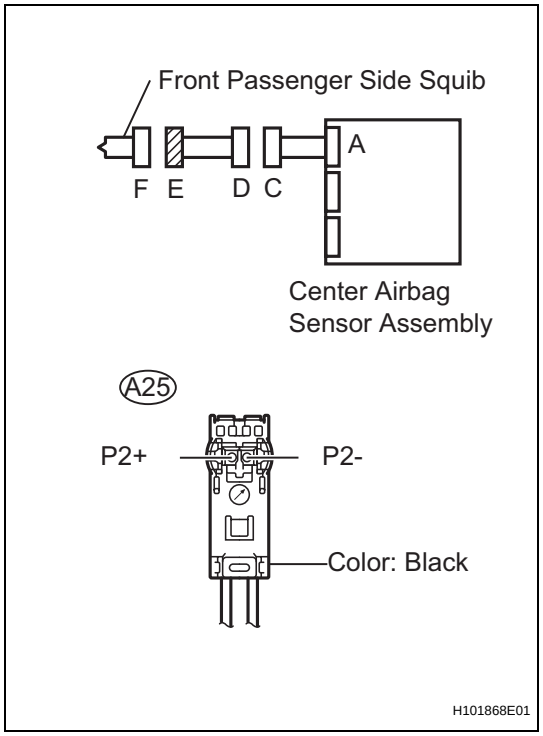
16 **CHECK CONNECTION OF CONNECTORS**

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

NG → **CONNECT CONNECTORS**

OK

17 CHECK INSTRUMENT PANEL WIRE ASSEMBLY (TO B+)



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

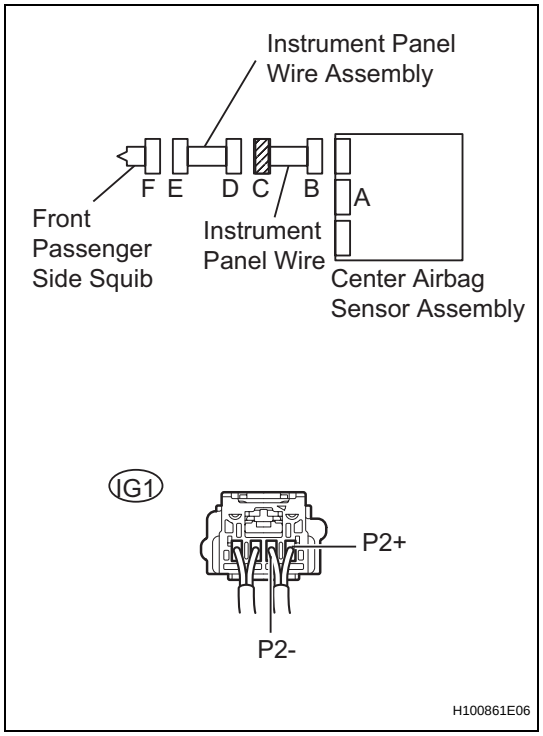
Standard voltage

Tester Connection	Condition	Specified Condition
A25-1 (P2+) - Body ground	Ignition switch ON	Below 1 V
A25-2 (P2-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

18 CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the instrument panel wire connector from the center airbag sensor assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the resistance.

Standard voltage

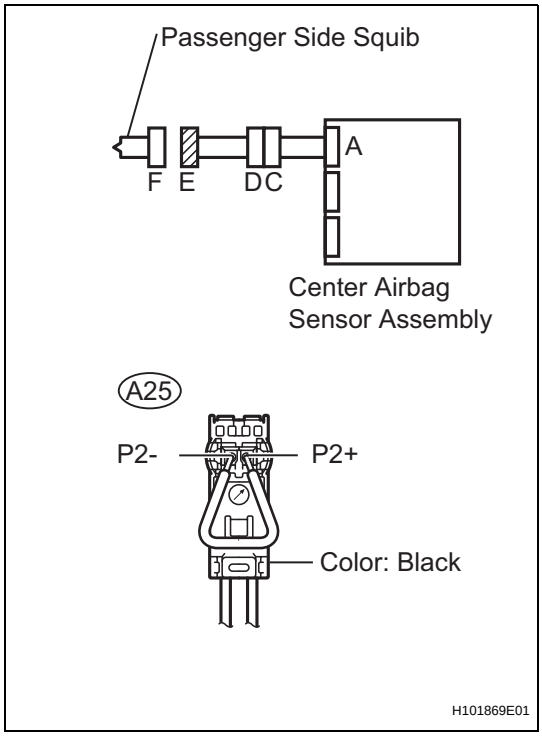
Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - Body ground	Always	Below 1 V
IG1-2 (P2-) - Body ground	Always	Below 1 V

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

OK

RS

19	CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 14, begin from (a). If continuing from any other step, begin from (c).
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect A25-1 (P2+) and A25-2 (P2-) of connector E.

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

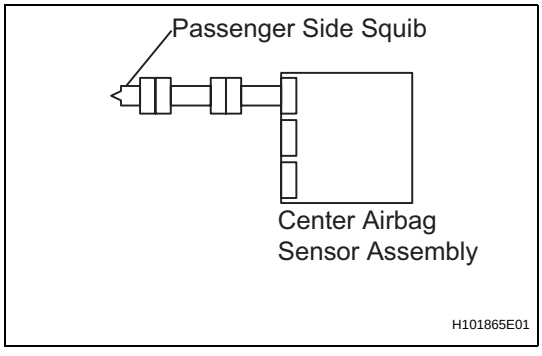
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).
OK:
DTCs B1816, B1817 and B1818 are not output.

HINT:
DTCs other than B1816, B1817 or B1818 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

20	CHECK FRONT PASSENGER AIRBAG ASSEMBLY (PASSENGER SIDE SQUIB)



HINT:
If continuing from step 19, begin from (c) .If continuing from any other step, being from (a).
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the SST from connector C.
(d) Connect the connectors to the front passenger airbag assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.

RS

(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).
OK:
DTC B1815, B1816, B1817 and B1818 are not output.

HINT:
DTCs other than B1815, B1816, B1817 or B1818 may be output at this time, but they are not related to this check.

NG → **REPLACE INSTR PNL PASS L/DOOR AIRBAG ASSEMBLY**

OK

OTHERS USE SIMULATION METHOD TO CHECK

21 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position..
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds
(c) Check that the instrument panel wire assembly connectors (on the front passenger airbag assembly side) are not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

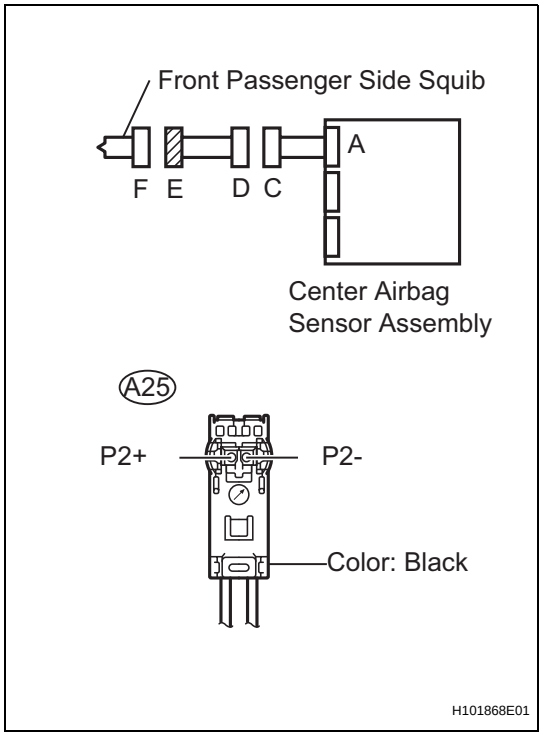
22 CHECK CONNECTION OF CONNECTORS

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

NG → **CONNECT CONNECTORS**

OK

23 CHECK INSTRUMENT PANEL WIRE ASSEMBLY



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

Standard voltage

Tester Connection	Condition	Specified Condition
A25-1 (P2+) - Body ground	Ignition switch ON	Below 1 V
A25-2 (P2-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
A25-1 (P2+) - A25-2 (P2-)	Always	Below 1 Ω
A25-1 (P2+) - Body ground	Always	1 MΩ or Higher
A25-2 (P2-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

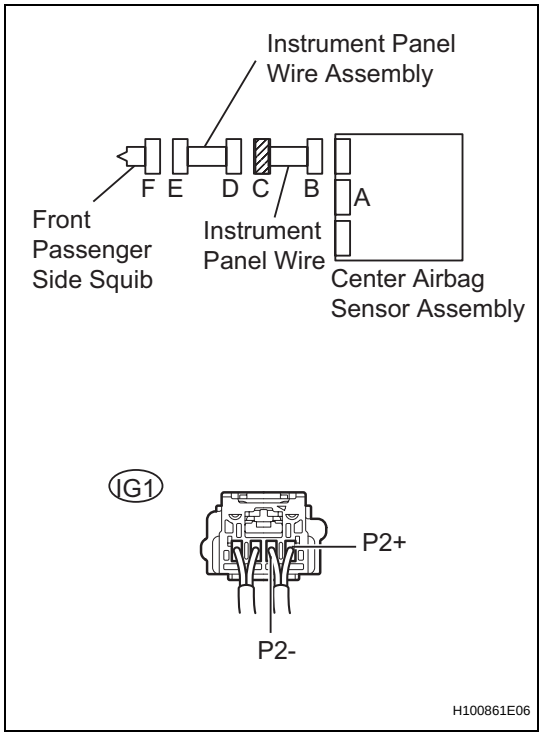
Tester Connection	Condition	Specified Condition
A25-1 (P2+) - A25-2 (P2-)	Always	1 MΩ or Higher

NG → **REPLACE INSTRUMENT PANEL WIRE ASSEMBLY**

OK

RS

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

Standard voltage

Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - Body ground	Ignition switch ON	Below 1 V
IG1-2 (P2-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - IG1-2 (P2-)	Always	Below 1 Ω
IG1-1 (P2+) - Body ground	Always	1 MΩ or Higher
IG1-2 (P2-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

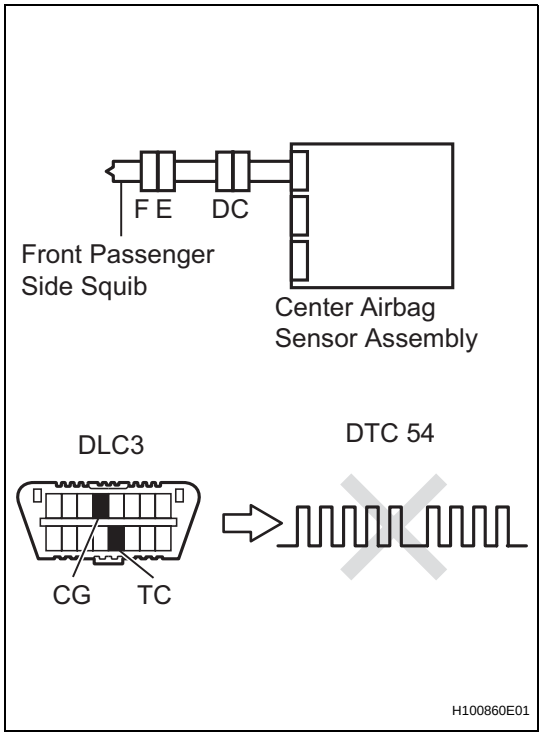
Tester Connection	Condition	Specified Condition
IG1-1 (P2+) - IG1-2 (P2-)	Always	1 MΩ or Higher

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

OK

RS

25	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

HINT:

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

(b) Connect the instrument panel wire to the center airbag sensor assembly and spiral cable.

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

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

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

(f) Clear any DTCs stored in the memory (See page RS-34).

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

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

(i) Check for DTCs (See page RS-34).

OK:

DTC 54 is not output.

HINT:

DTCs other than 54 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

DTC	B1820/55	Short in Driver Side - Side Squib Circuit

DTC	B1821/55	Open in Driver Side - Side Squib Circuit

DTC	B1822/55	Short to GND in Driver Side - Side Squib Circuit

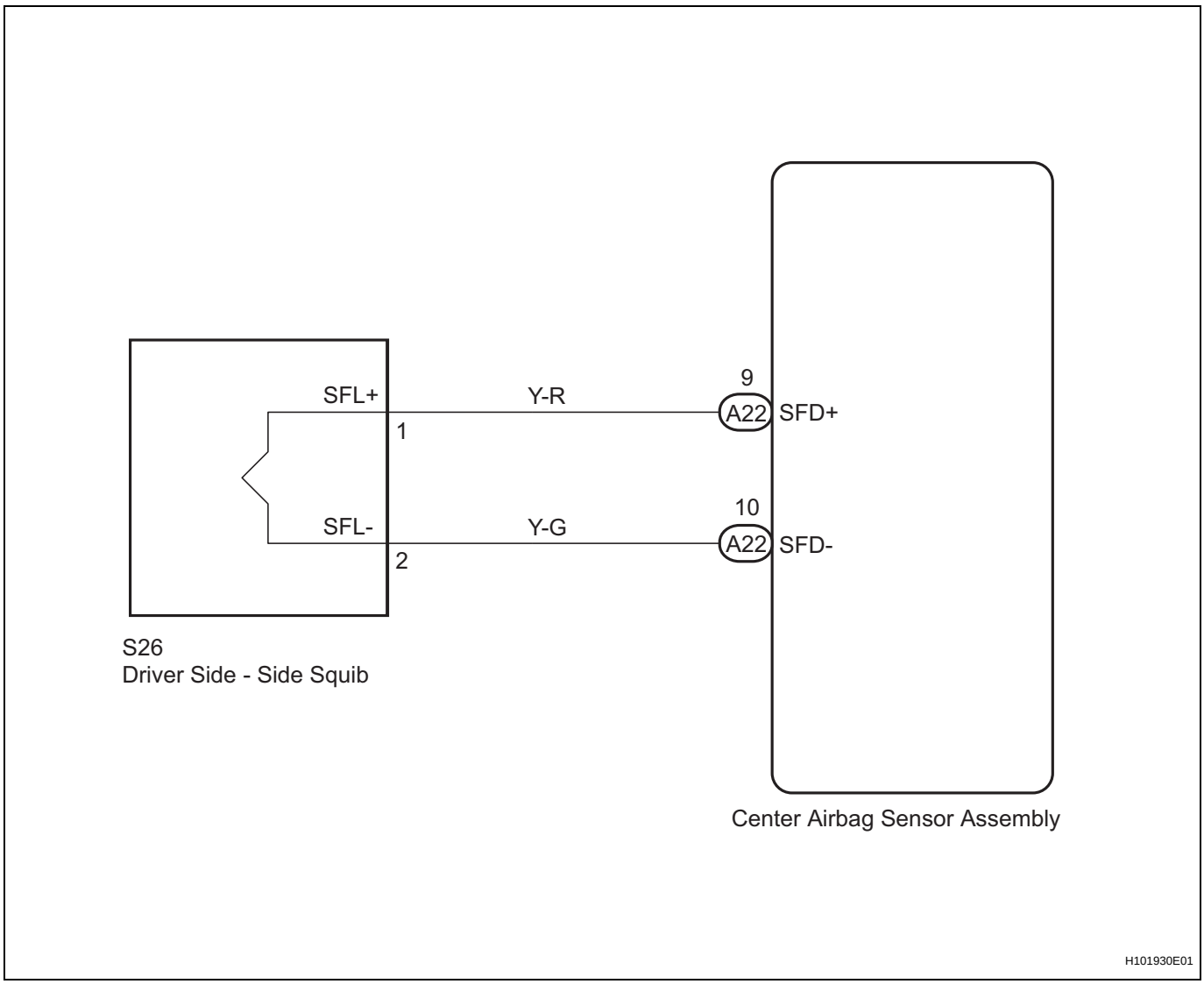
DTC	B1823/55	Short to B+ in Driver Side - Side Squib Circuit

DESCRIPTION

The side squib (driver seat side) circuit consists of the center airbag sensor assembly and the front seat with adjuster frame assembly LH.
This circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the side squib (driver seat side) circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1820/55	• The center airbag sensor assembly receives a line short circuit signal in the side squib (Driver seat side) circuit for 2 seconds • Side squib (Driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • Front seat with adjuster frame assembly LH (Side squib (Driver seat side)) • Center airbag sensor assembly
B1821/55	• The center airbag sensor assembly receives an open circuit signal in the side squib (Driver seat side) circuit for 2 seconds • Side squib (Driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • Front seat with adjuster frame assembly LH (Side squib (Driver seat side)) • Center airbag sensor assembly
B1822/55	• The center airbag sensor assembly receives a short circuit to ground signal in the side squib (Driver seat side) circuit for 0.5 seconds • Side squib (Driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • Front seat with adjuster frame assembly LH (Side squib (Driver seat side)) • Center airbag sensor assembly
B1823/55	• The center airbag sensor assembly receives a short circuit to B+ signal in the side squib (Driver seat side) circuit for 0.5 seconds • Side squib (Driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • Front seat with adjuster frame assembly LH (Side squib (Driver seat side)) • Center airbag sensor assembly

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.

(1) If using the intelligent tester (read the 5-digit DTCs): Using the intelligent tester, check for DTCs (See page RS-34).

Result

Result	Proceed to
DTC B1820 is output.	A
DTC B1821 is output.	B
DTC B1822 is output.	C
DTC B1823 is output.	D

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

Result

Result	Proceed to
DTC 55 is output.	E

B → Go to step 3

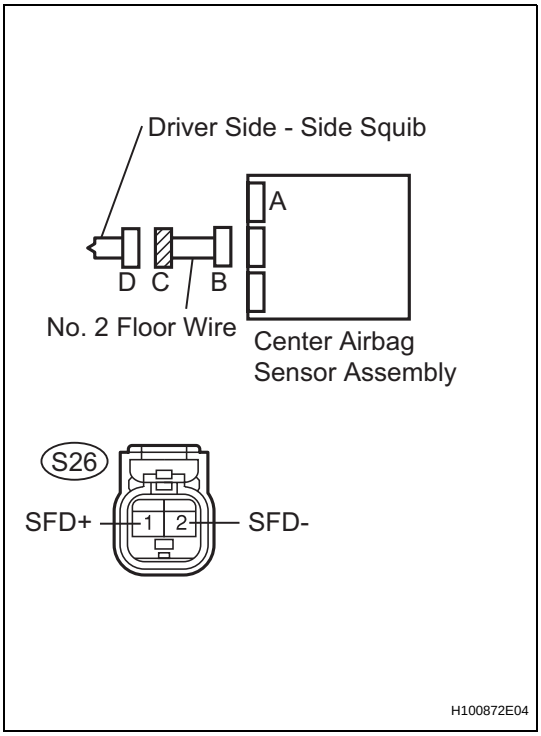
C → Go to step 4

D → Go to step 5

E → Go to step 6

A

2	CHECK NO. 2 FLOOR WIRE (FOR SHORT)



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

Standard resistance

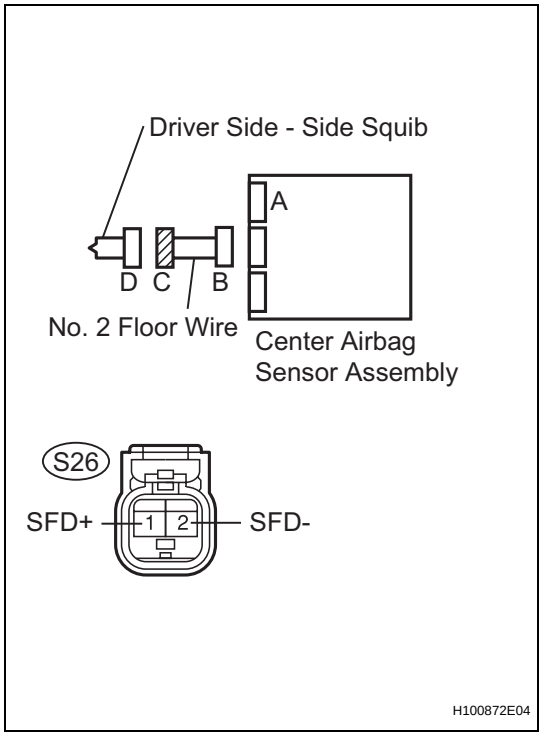
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	1 MΩ or Higher

OK → **Go to step 8**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

3	CHECK NO. 2 FLOOR WIRE (FOR OPEN)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	Below 1 Ω

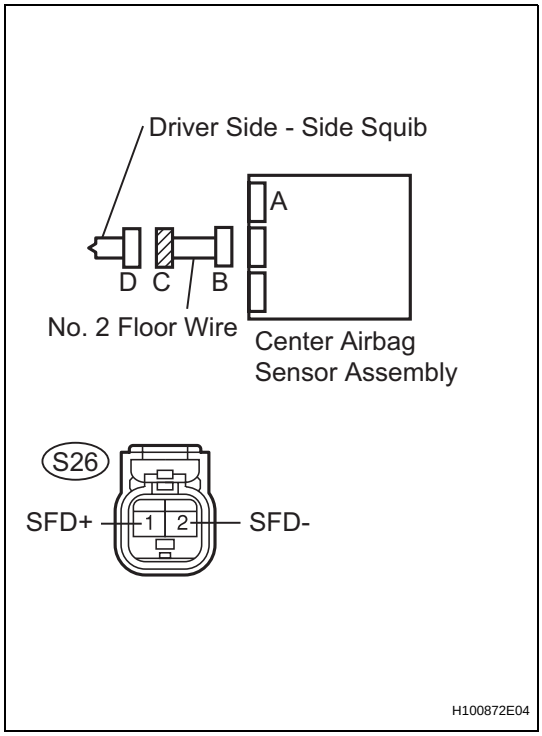
OK → **Go to step 9**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

4	CHECK NO. 2 FLOOR WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

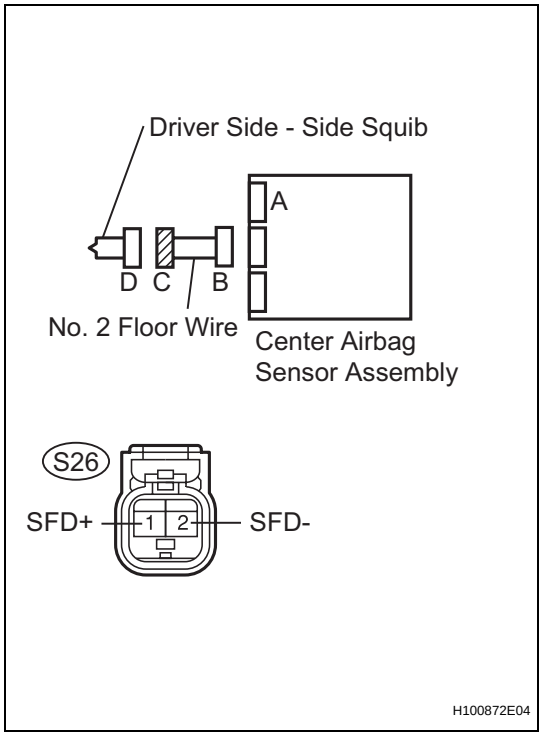
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Always	1 MΩ or Higher
S26-2 (SFD-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 9**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

5	CHECK NO. 2 FLOOR WIRE (TO B+)



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

Standard voltage

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Ignition switch ON	Below 1 V
S26-2 (SFD-) - Body ground	Ignition switch ON	Below 1 V

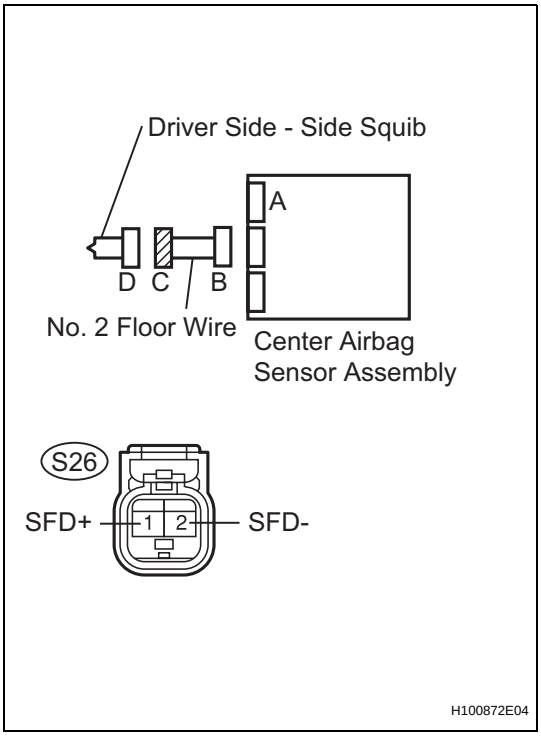
OK → **Go to step 9**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

6	CHECK NO. 2 FLOOR WIRE (SIDE SQUIB (DRIVER SEAT SIDE) CIRCUIT)



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

Standard voltage

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - Body ground	Ignition switch ON	Below 1 V
S26-2 (SFD-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	Below 1 Ω
S26-1 (SFD+) - Body ground	Always	1 MΩ or Higher
S26-2 (SFD-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

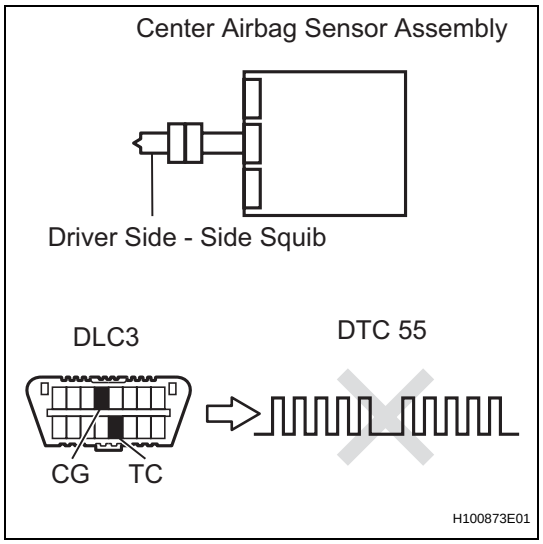
Tester Connection	Condition	Specified Condition
S26-1 (SFD+) - S26-2 (SFD-)	Always	1 MΩ or Higher

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

OK

RS

7	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH (SIDE SQUIB (DRIVER SEAT SIDE))



(a) Replace the front seat with adjuster frame assembly LH (See page SE-23).

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

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

OK:

DTC 55 is not output.

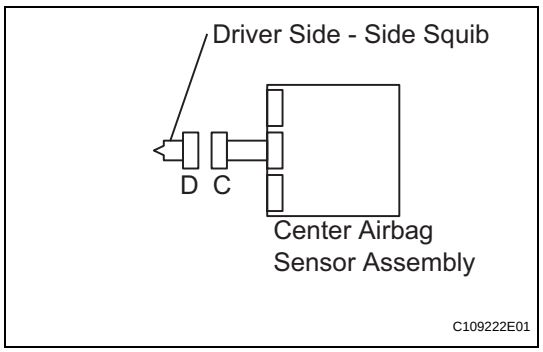
HINT:
DTCs other than 55 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

8	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1820 is not output.

RS

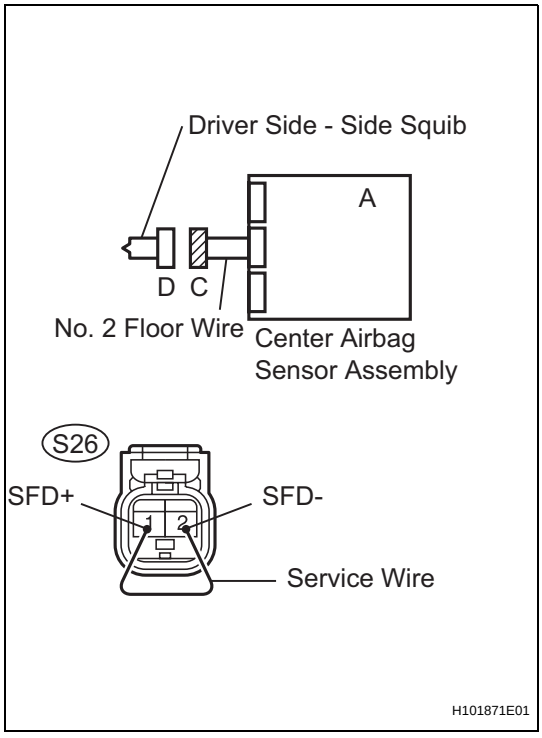
HINT:
DTCs other than B1820 may be output at this time, but they are not related to this check.

OK → Go to step 10

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

9 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 5, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect S26-1 (SFD+) and S26-2 (SFD-) of connector C.

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1821, B1822 and B1823 are not output.

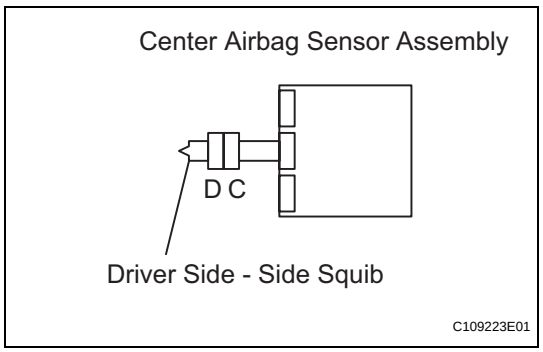
HINT:
DTCs other than B1821, B1822 or B1823 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

10	CHECK FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH



HINT:
If continuing from step 9, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat with adjuster frame assembly LH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1820, B1821, B1822 and B1823 are not output.

HINT:
DTCs other than B1820, B1821, B1822 or B1823 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH**

OK

USE SIMULATION METHOD TO CHECK

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

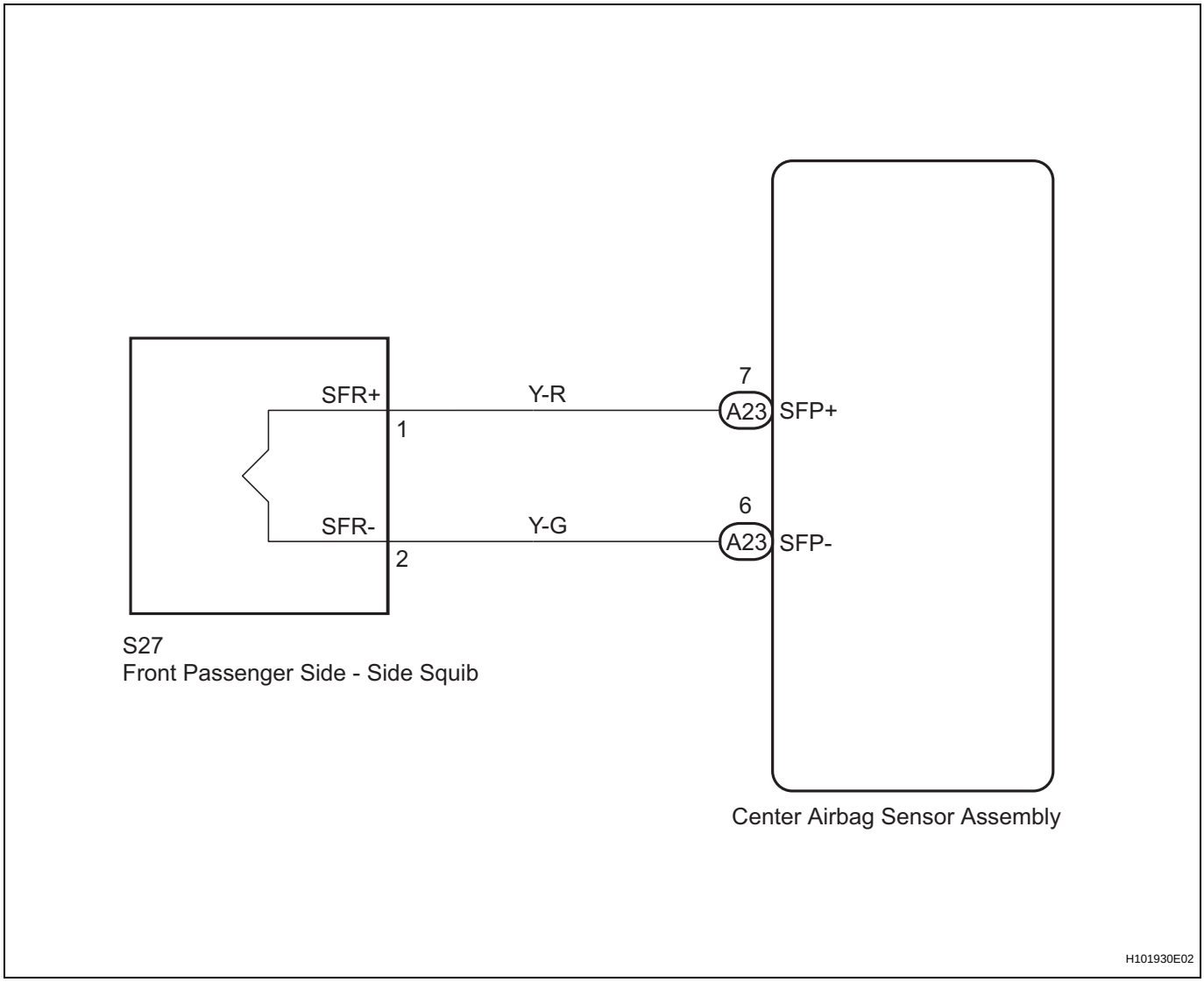
DTC	B1828/56	Short to B+ in Front Passenger Side - Side Squib Circuit

DESCRIPTION

The side squib (front passenger seat side) circuit consists of the center airbag sensor assembly and the front seat with adjuster frame assembly RH.
The circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the side squib (front passenger seat side) circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1825/56	• The center airbag sensor assembly receives a line short circuit signal in the side squib (Front passenger seat side) circuit for 2 seconds • Side squib (Front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat with adjuster frame assembly RH (Side squib [Front passenger seat side]) • Center airbag sensor assembly
B11826/56	• The center airbag sensor assembly receives an open circuit signal in the side squib (Front passenger seat side) circuit for 2 seconds • Side squib (Front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat with adjuster frame assembly RH (Side squib [Front passenger seat side]) • Center airbag sensor assembly
B1827/56	• The center airbag sensor assembly receives a short circuit to ground signal in the side squib (Front passenger seat side) circuit for 0.5 seconds • Side squib (Front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat with adjuster frame assembly RH (Side squib [Front passenger seat side]) • Center airbag sensor assembly
B1828/56	• The center airbag sensor assembly receives a short circuit to B+ signal in the side squib (Front passenger seat side) circuit for 0.5 seconds • Side squib (Front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • Front seat with adjuster frame assembly RH (Side squib [Front passenger seat side]) • Center airbag sensor assembly

WIRING DIAGRAM



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

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.

(1) If using the intelligent tester (read the 5-digit DTCs):
Using the intelligent tester, check for DTCs (See page RS-34).
Result

Result	Proceed to
DTC B1825 is output.	A
DTC B1826 is output.	B
DTC B1827 is output.	C
DTC B1828 is output.	D

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

Result	Proceed to
DTC 56 is output.	E

B → Go to step 3

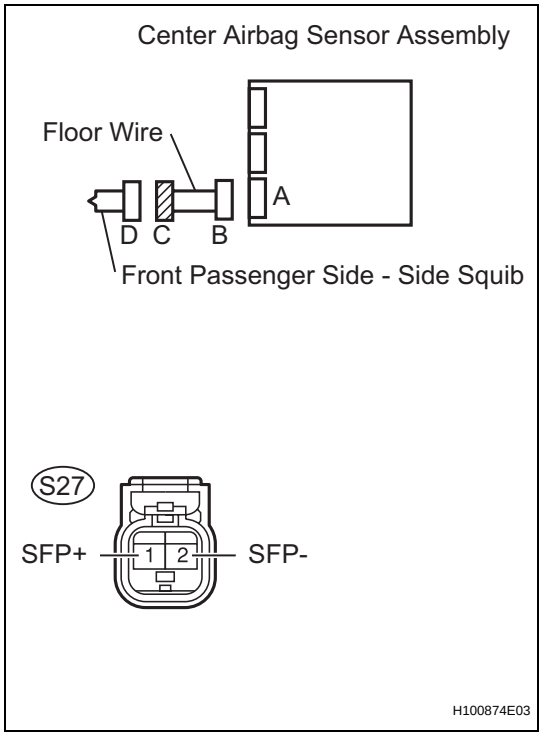
C → Go to step 4

D → Go to step 5

E → Go to step 6

A

2	CHECK FLOOR WIRE (FOR SHORT)



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

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - S27-2 (SFP-)	Always	1 MΩ or Higher

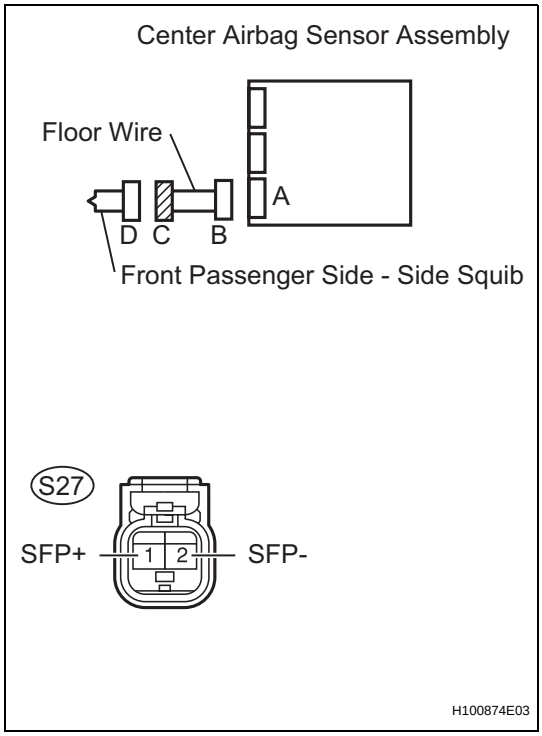
OK → **Go to step 8**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

3	CHECK FLOOR WIRE (FOR OPEN)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - S27-2 (SFP-)	Always	Below 1 Ω

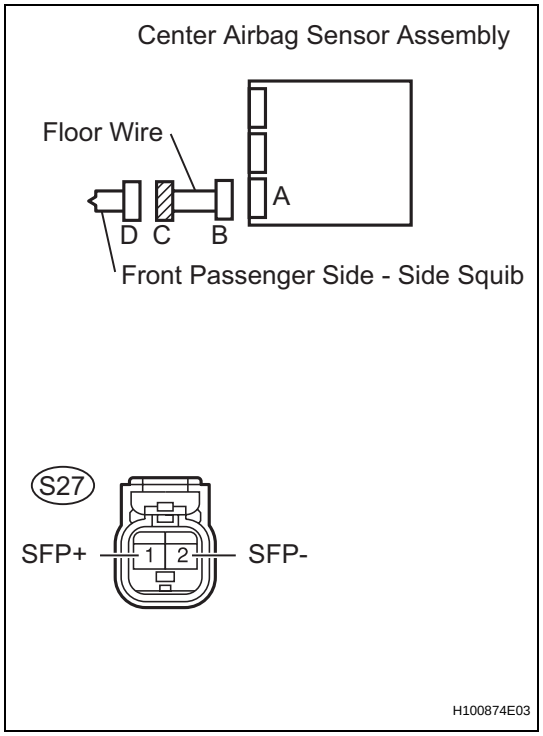
OK → **Go to step 9**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

4	CHECK FLOOR WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - Body ground	Always	1 MΩ or Higher
S27-2 (SFP-) - Body ground	Always	1 MΩ or Higher

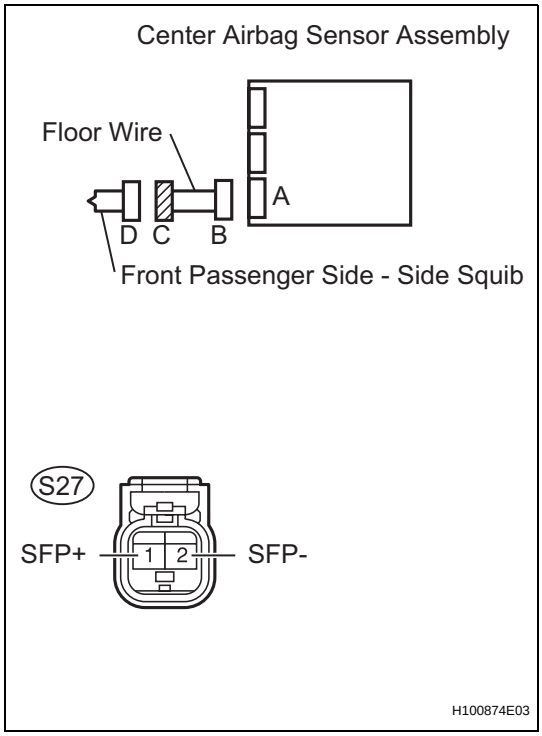
OK → **Go to step 9**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

5	CHECK FLOOR WIRE (TO B+)



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

Standard voltage

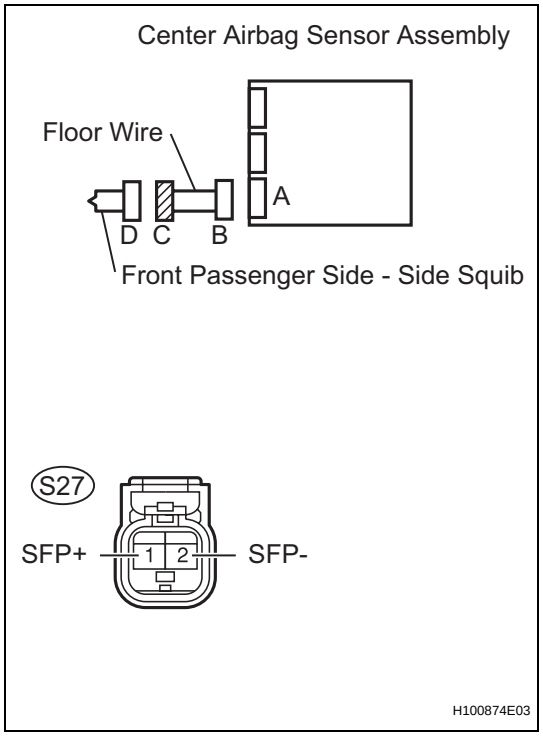
Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - Body ground	Ignition switch ON	Below 1 V
S27-2 (SFP-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 9**

NG

REPAIR OR REPLACE FLOOR WIRE

6 CHECK FLOOR WIRE (SIDE SQUIB (FRONT PASSENGER SEAT SIDE) CIRCUIT)



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

Standard voltage

Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - Body ground	Ignition switch ON	Below 1 V
S27-2 (SFP-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - S27-2 (SFP-)	Always	Below 1 Ω
S27-1 (SFP+) - Body ground	Always	1 MΩ or Higher
S27-2 (SFP-) - Body ground	Always	1 MΩ or Higher

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

Standard resistance

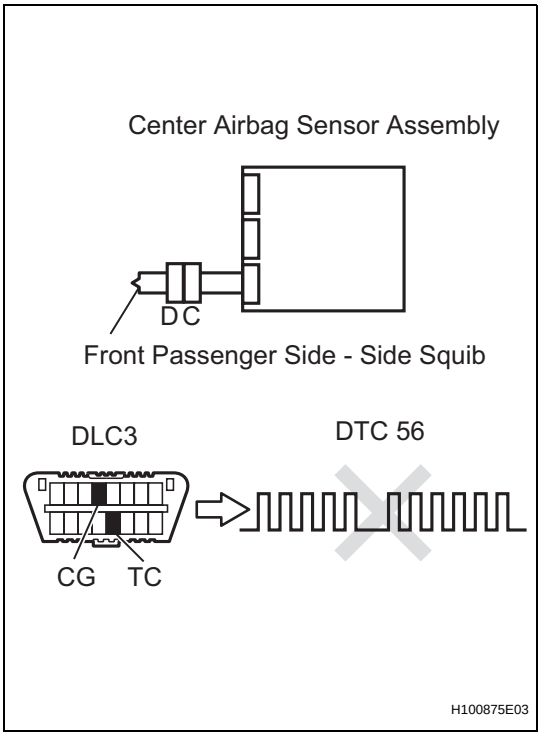
Tester Connection	Condition	Specified Condition
S27-1 (SFP+) - S27-2 (SFP-)	Always	1 MΩ or Higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

7	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH (SIDE SQUIB (FRONT PASSENGER SEAT SIDE))



(a) Replace the front seat with adjuster frame assembly RH (See page SE-38).

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

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

OK:

DTC 56 is not output.

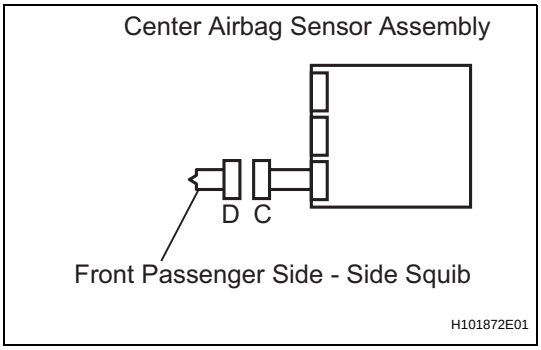
HINT:
DTCs other than 56 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

8	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1825 is not output.

RS

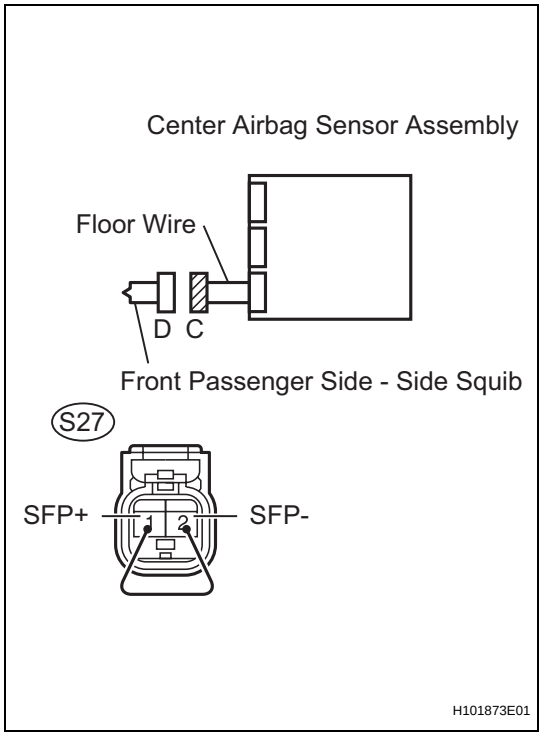
HINT:
DTCs other than B1825 may be output at this time, but they are not related to this check.

OK → Go to step 10

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

9 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 5, begin from (a). If continuing from any other step, begin from (c).

(a) Turn ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect S27-1 (SFP+) and S27-2 (SFP-) of connector C.

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear the DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1826, B1827 and B1828 are not output.

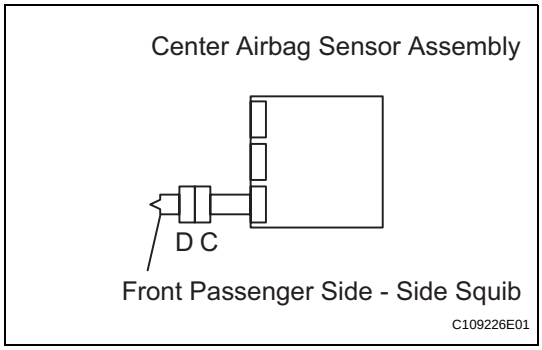
HINT:
DTCs other than B1826, B1827 or B1828 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

10	CHECK FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH



HINT:
If continuing from step 9, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat with adjuster frame assembly RH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1825, B1826, B1827 and B1828 are not output.

HINT:
DTCs other than B1825, B1826, B1827 or B1828 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY LH**

OK

OTHERS USE SIMULATION METHOD TO CHECK

DTC	B1830/57	Short in Driver Side Curtain Shield Squib Circuit

DTC	B1831/57	Open in Driver Side Curtain Shield Squib Circuit

DTC	B1832/57	Short to GND in Driver Side Curtain Shield Squib Circuit

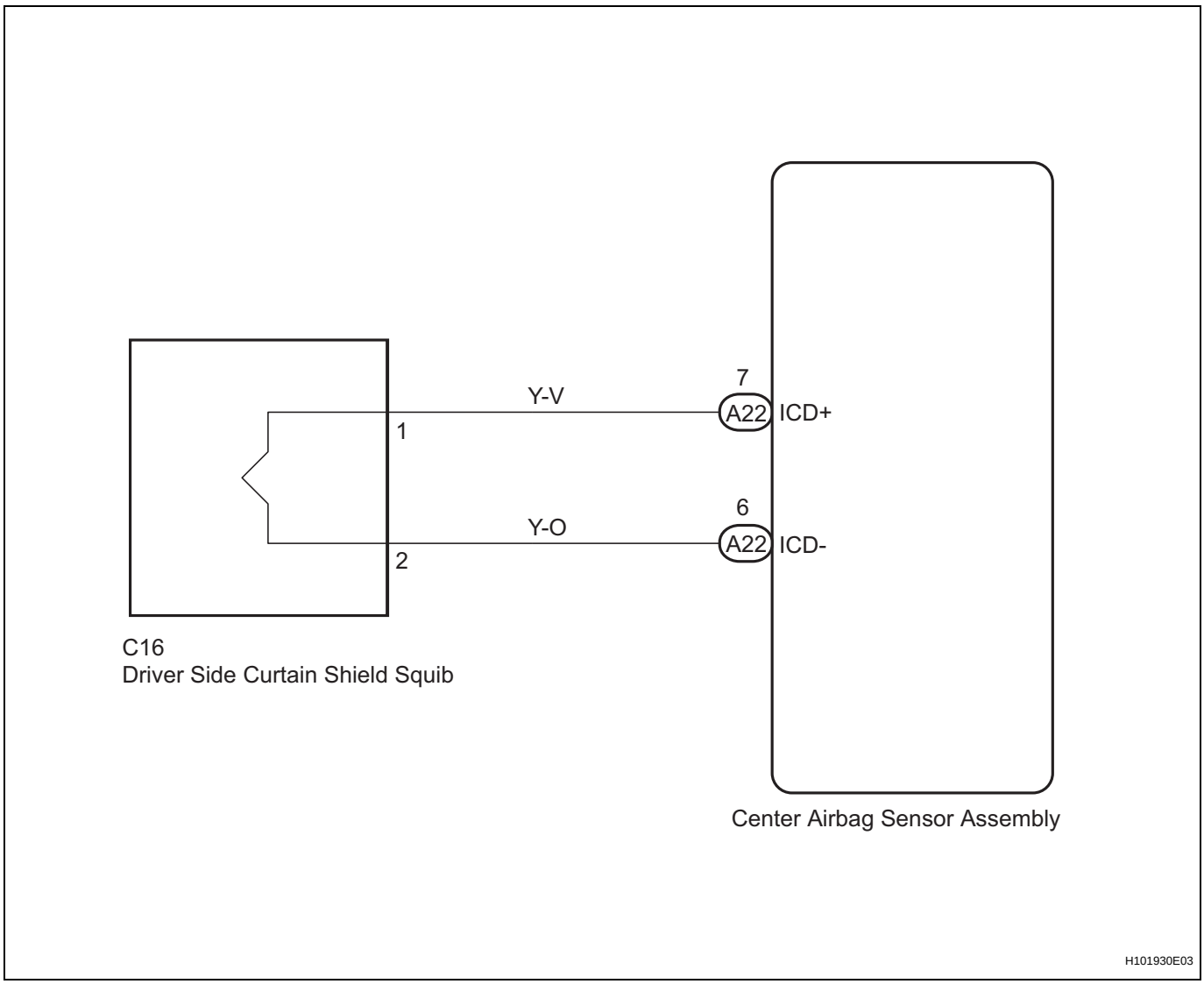
DTC	B1833/57	Short to B+ in Driver Side Curtain Shield Squib Circuit

DESCRIPTION

The curtain shield airbag (driver seat side) squib circuit consists of the center airbag sensor assembly and the curtain shield airbag assembly LH.
The circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the curtain shield airbag (driver seat side) squib circuit.

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

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

Result	Proceed to
DTC B1830 is output.	A
DTC B1831 is output.	B
DTC B1832 is output.	C
DTC B1833 is output.	D

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

Result	Proceed to
DTC 57 is output.	E

B → **Go to step 4**

C → **Go to step 5**

D → **Go to step 6**

E → **Go to step 7**

A

2	CHECK CONNECTOR

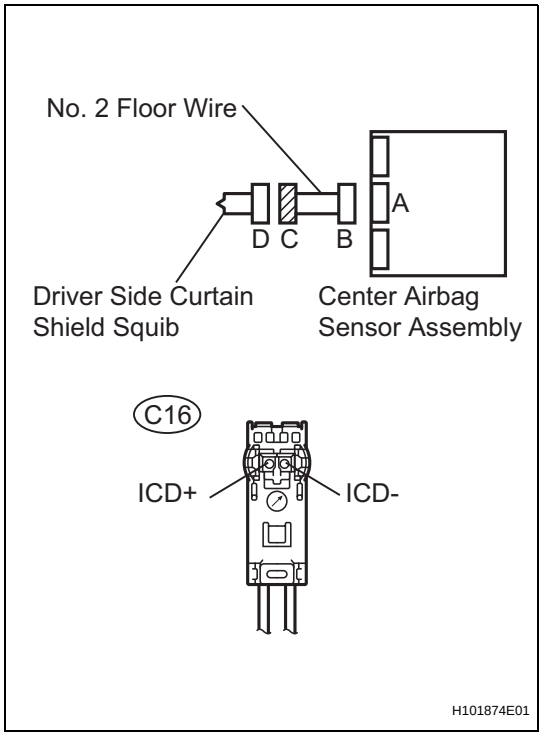
(a) Check that the floor wire connector (on the curtain shield airbag assembly LH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

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

OK

RS

3	CHECK NO. 2 FLOOR WIRE (FOR SHORT)



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

(b) Measure the resistance.

Standard resistance

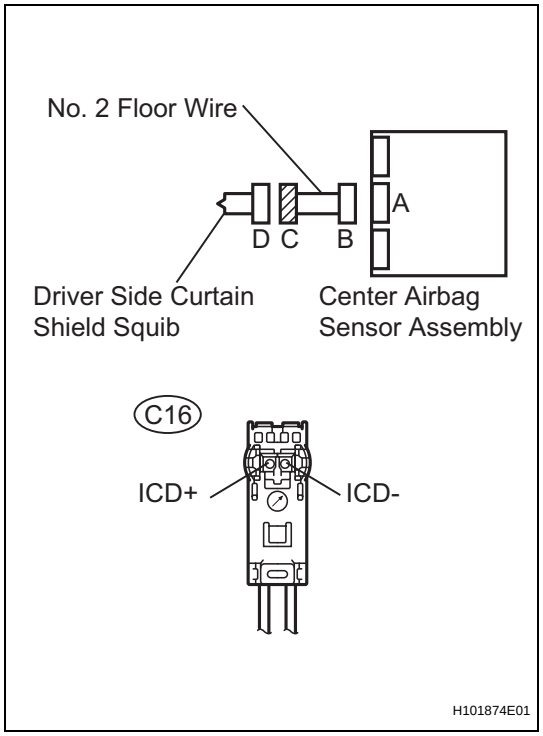
Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	1 MΩ or Higher

OK → **Go to step 10**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

4	CHECK NO. 2 FLOOR WIRE (FOR OPEN)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	Below 1 Ω

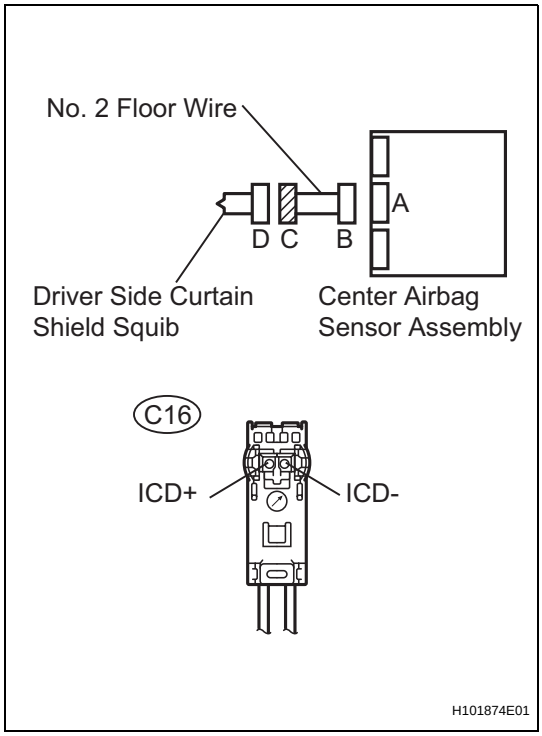
OK → **Go to step 11**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

5	CHECK NO. 2 FLOOR WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

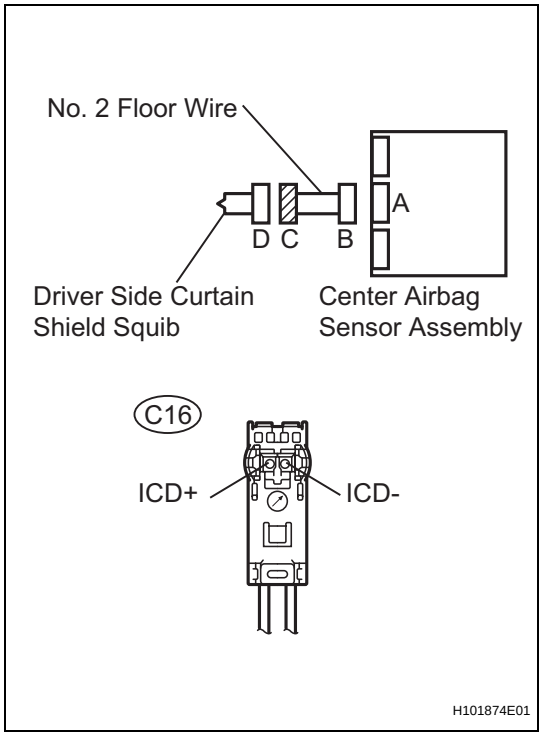
Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - Body ground	Always	1 MΩ or Higher
C16-2 (ICD-) - Body ground	Always	1 MΩ or Higher

OK → **Go to step 11**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

6	CHECK NO. 2 FLOOR WIRE (TO B+)



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

Standard voltage

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - Body ground	Ignition switch ON	Below 1 V
C16-2 (ICD-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 11**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

7	CHECK CONNECTOR

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

OK:

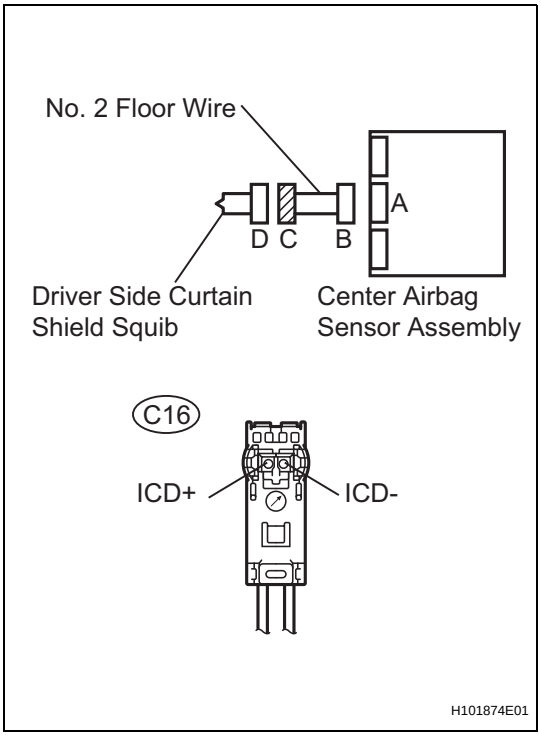
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

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

OK

RS

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



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

Standard voltage

Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - Body ground	Ignition switch ON	Below 1 V
C16-2 (ICD-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

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

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

Standard resistance

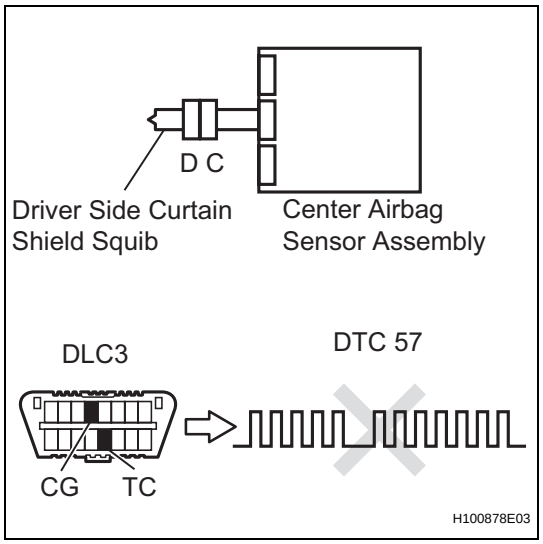
Tester Connection	Condition	Specified Condition
C16-1 (ICD+) - C16-2 (ICD-)	Always	1 MΩ or Higher

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

OK

RS

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



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

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

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

OK:

DTC 57 is not output.

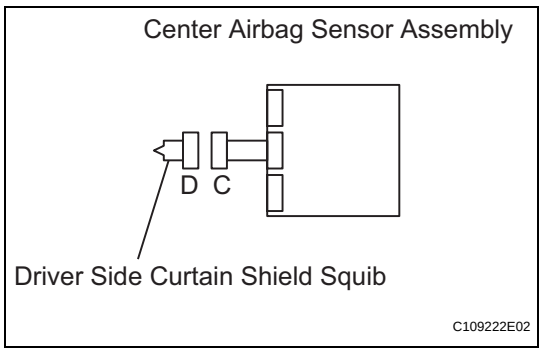
HINT:
DTCs other than 57 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

10	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1830 is not output.

RS

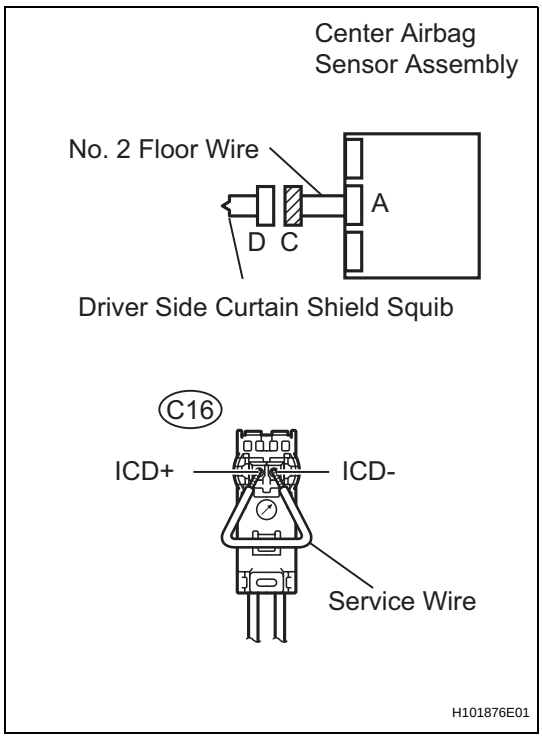
HINT:
DTCs other than B1830 may be output at this time, but they are not related to this check.

OK → Go to step 12

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

11 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 6, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the center airbag sensor assembly.
(d) Using a service wire, connect C16-1 (ICD+) and C16-2 (ICD-) of connector C.

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1831, B1832 and B1833 are not output.

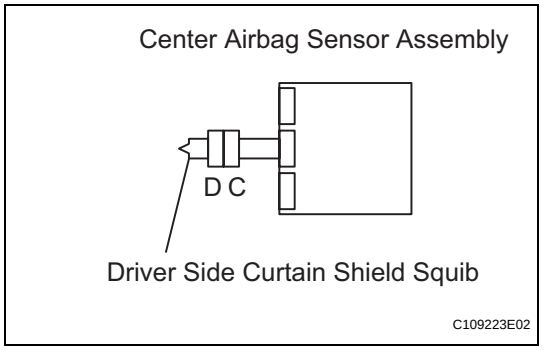
HINT:
DTCs other than B1831, B1832 or B1833 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

RS

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



HINT:
If continuing from step 11, begin from (c) .If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the curtain shield airbag assembly LH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1830, B1831, B1832 and B1833 are not output.

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

NG → **REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH**

OK

OTHERS USE SIMULATION METHOD TO CHECK

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

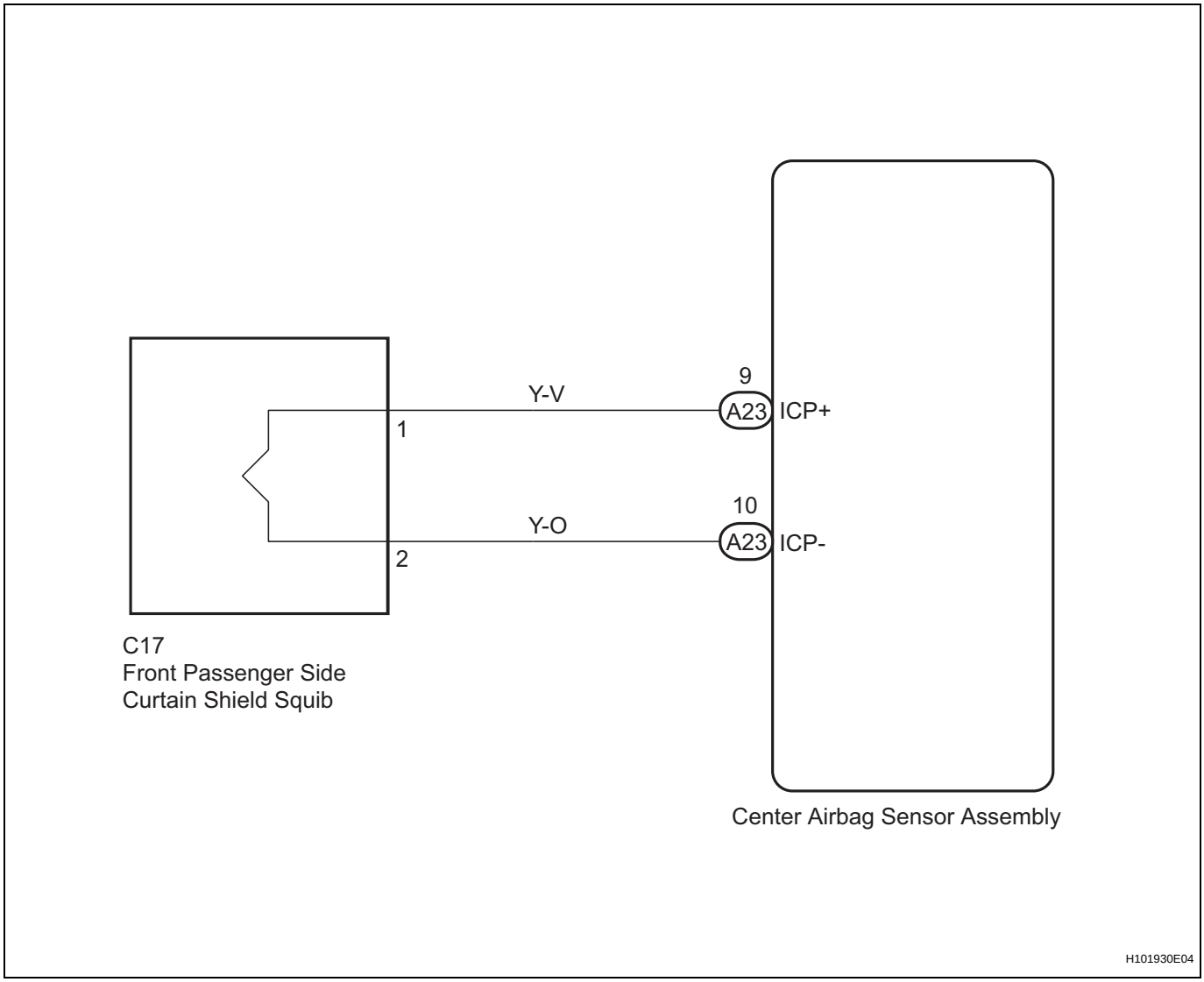
DTC	B1838/58	Short to B+ in Front Passenger Side Curtain Shield Squib Circuit

DESCRIPTION

The curtain shield airbag (front passenger seat side) squib circuit consists of the center airbag sensor assembly and the curtain shield airbag assembly RH.
The circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the curtain shield airbag (front passenger seat side) squib circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
B1835/58	• The center airbag sensor assembly receives a line short circuit signal in the curtain shield airbag (Front passenger seat side) squib circuit for 2 seconds • Curtain shield airbag (Front passenger seat side) squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly RH (Curtain shield airbag [Front passenger seat side] squib) • Center airbag sensor assembly
B1836/58	• The center airbag sensor assembly receives an open circuit signal in the curtain shield airbag (Front passenger seat side) squib circuit for 2 seconds • Curtain shield airbag (Front passenger seat side) squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly RH (Curtain shield airbag [Front passenger seat side] squib) • Center airbag sensor assembly
B1837/58	• The center airbag sensor assembly receives a short circuit to ground signal in the curtain shield airbag (Front passenger seat side) squib circuit for 0.5 seconds • Curtain shield airbag (Front passenger seat side) squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly RH (Curtain shield airbag [Front passenger seat side] squib) • Center airbag sensor assembly
B1838/58	• The center airbag sensor assembly receives a short circuit to B+ signal in the curtain shield airbag (Front passenger seat side) squib circuit for 0.5 seconds • Curtain shield airbag (Front passenger seat side) squib malfunction • Center airbag sensor assembly malfunction	• Floor wire • Curtain shield airbag assembly RH (Curtain shield airbag [Front passenger seat side] squib) • Center airbag sensor assembly

WIRING DIAGRAM



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

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

(a) Proceed to the appropriate step according to DTC readings.

(1) If using the intelligent tester (read the 5-digit DTCs): Using the intelligent tester, check for DTCs (See page RS-34).

Result

Result	Proceed to
B1835 is output.	A
B1836 is output.	B
B1837 is output.	C
B1838 is output.	D

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

Result

Result	Proceed to
DTC 58 is output.	E

B → Go to step 4

C → Go to step 5

D → Go to step 6

E → Go to step 7

A

2	CHECK CONNECTOR

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

OK:

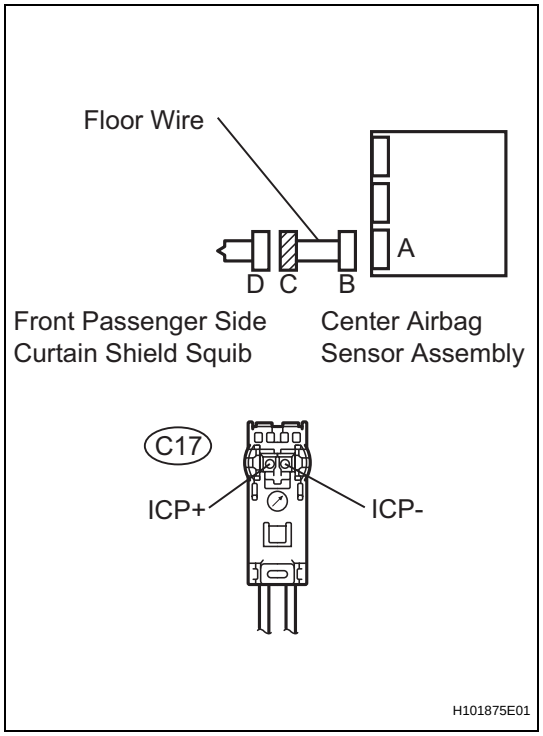
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

3	CHECK FLOOR WIRE (FOR SHORT)



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

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - C17-2 (ICP-)	Always	1 MΩ or higher

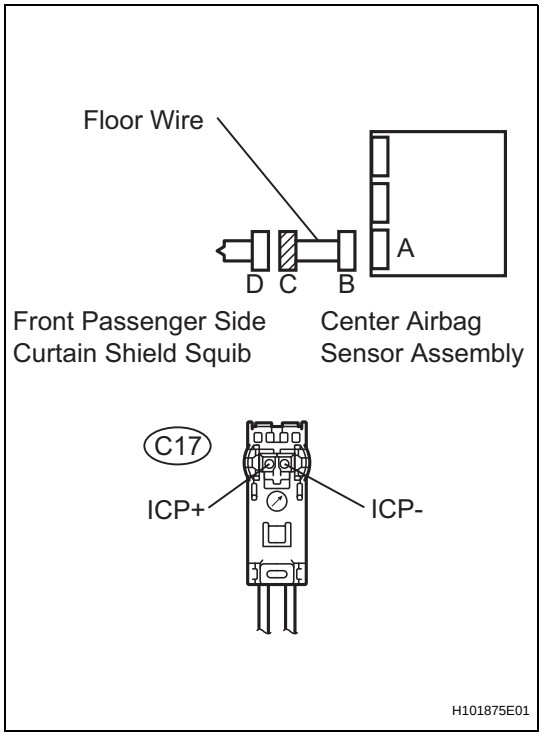
OK → **Go to step 10**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

4	CHECK FLOOR WIRE (FOR OPEN)



(a) Measure the resistance.
Standard resistance

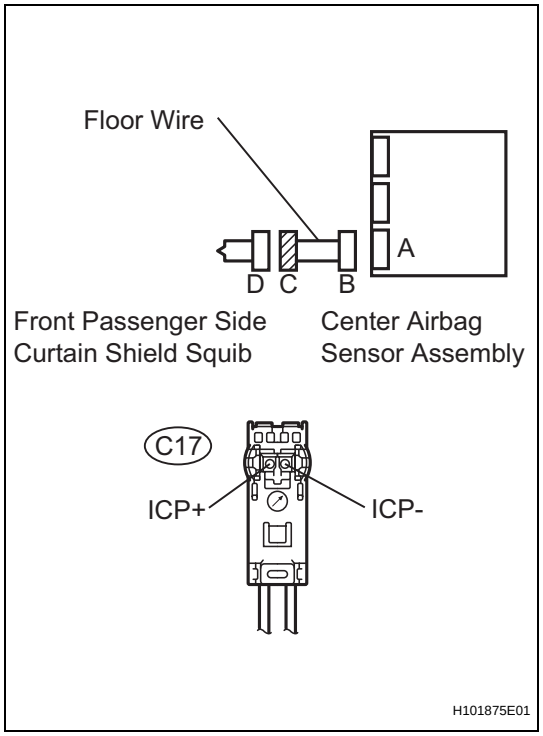
Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - C17-2 (ICP-)	Always	Below 1 Ω

OK → **Go to step 11**

NG

REPAIR OR REPLACE FLOOR WIRE

5	CHECK FLOOR WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - Body ground	Always	1 MΩ or higher
C17-2 (ICP-) - Body ground	Always	1 MΩ or higher

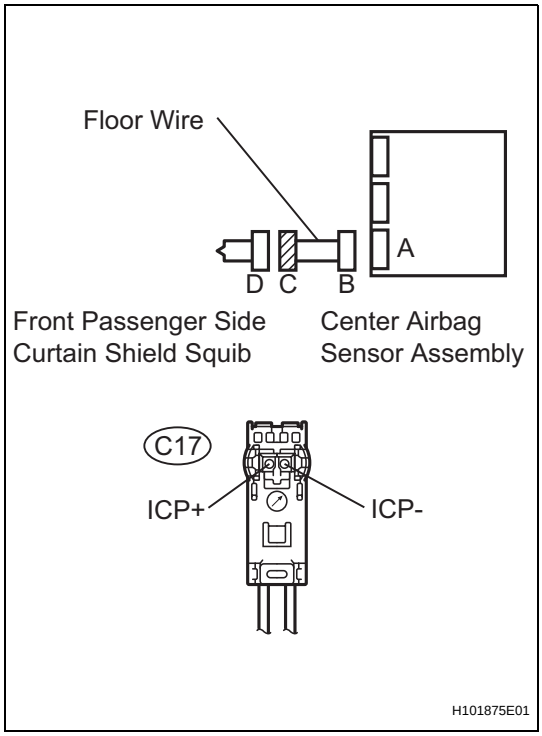
OK → **Go to step 11**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

6	CHECK FLOOR WIRE (TO B+)



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

Standard voltage

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - Body ground	Ignition switch ON	Below 1 V
C17-2 (ICP-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 11**

NG → **REPAIR OR REPLACE FLOOR WIRE**

7	CHECK CONNECTOR

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

OK:

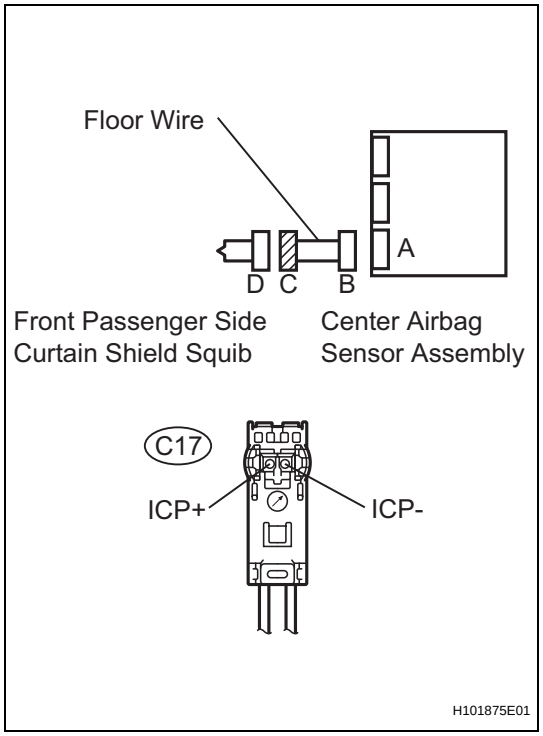
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

8 CHECK FLOOR WIRE



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

Standard voltage

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - Body ground	Ignition switch ON	Below 1 V
C17-2 (ICP-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - C17-2 (ICP-)	Always	Below 1 Ω
C17-1 (ICP+) - Body ground	Always	1 MΩ or higher
C17-2 (ICP-) - Body ground	Always	1 MΩ or higher

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

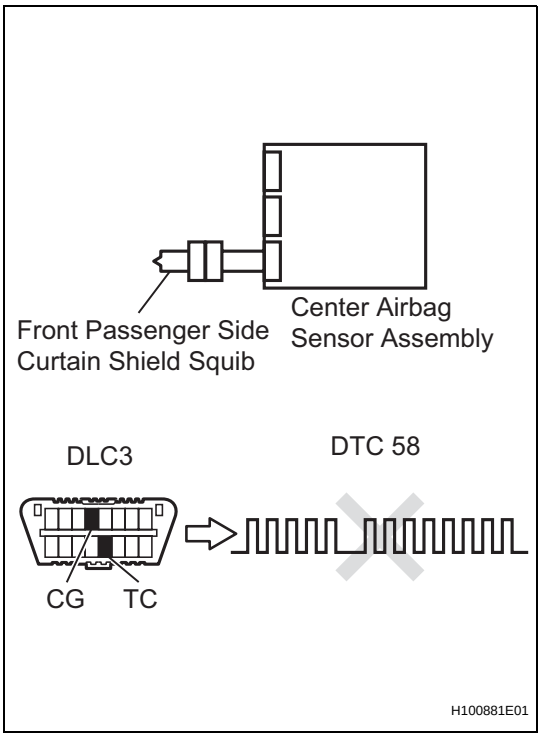
Standard resistance

Tester Connection	Condition	Specified Condition
C17-1 (ICP+) - C17-2 (ICP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

9	REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (CURTAIN SHIELD AIRBAG (FRONT PASSENGER SEAT SIDE) SQUIB)



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

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

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

OK:

DTC 58 is not output.

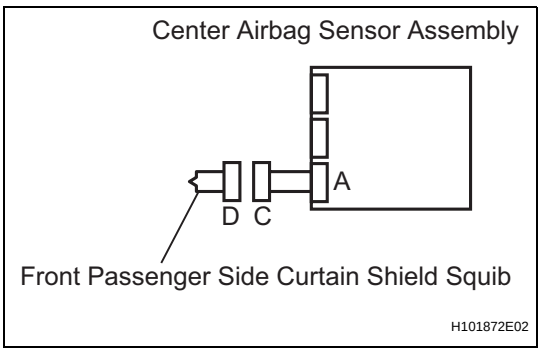
HINT:
DTCs other than 58 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

10	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1835 is not output.

RS

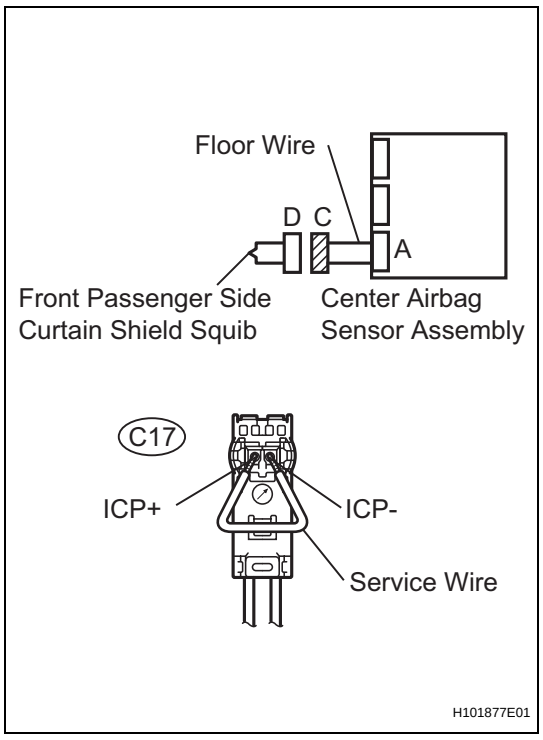
HINT:
DTCs other than B1835 may be output at this time, but they are not related to this check.

OK → Go to step 12

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

11 CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 6, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect C17-1 (ICP+) and C17-2 (ICP-) of connector C.

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1836, B1837 and B1838 are not output.

HINT:
DTCs other than B1836, B1837 or B1838 may be output at this time, but they are not related to this check.

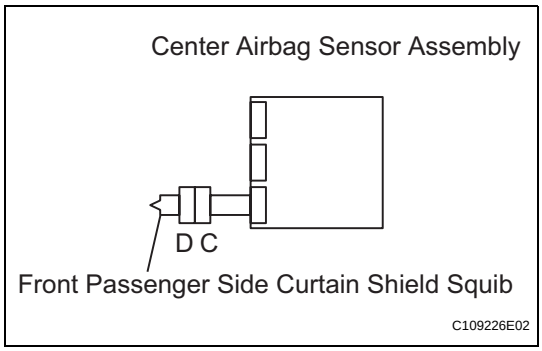
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

12 CHECK CURTAIN SHIELD AIRBAG ASSEMBLY RH

HINT:
If continuing from step 11, begin from (c). If continuing from any other step, being from (a).

RS



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the curtain shield airbag assembly RH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1835, B1836, B1837 and B1838 are not output.

HINT:
DTCs other than B1835, B1836, B1837 or B1838 may be output at this time, but they are not related to this check.

NG → **REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH**

OK

USE SIMULATION METHOD TO CHECK

DTC	B1900/73	Short in Driver Side Front Pretensioner Squib Circuit

DTC	B1901/73	Open in Driver Side Front Pretensioner Squib Circuit

DTC	B1902/73	Short to GND in Driver Side Front Pretensioner Squib Circuit

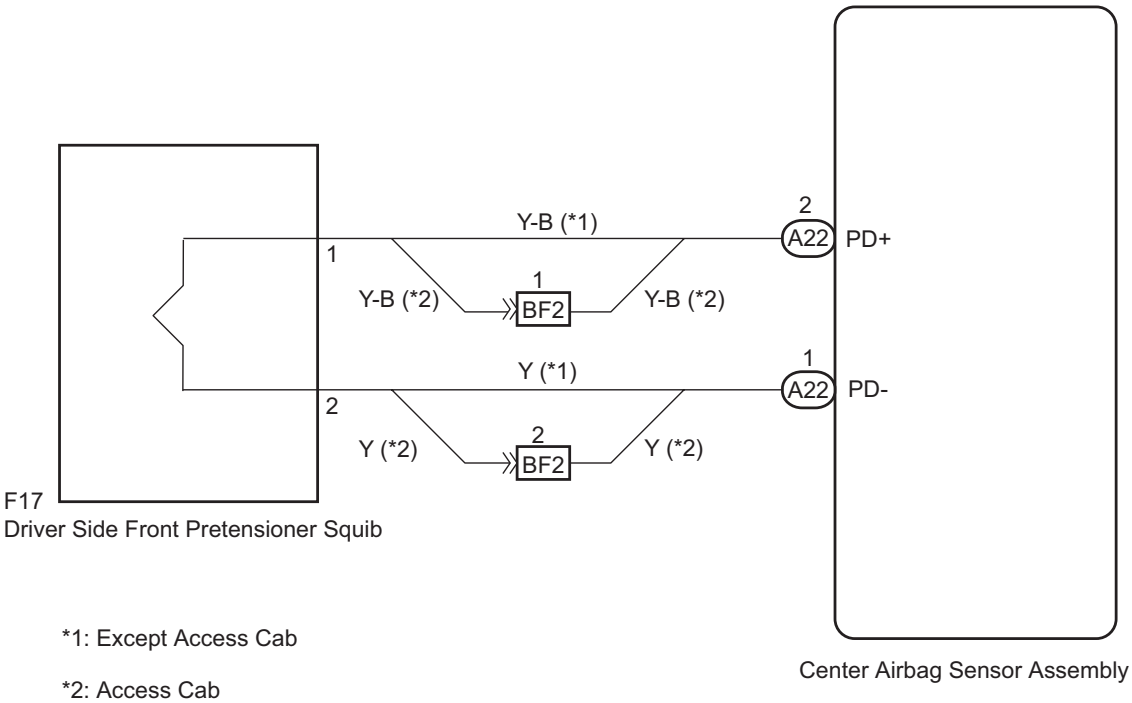
DTC	B1903/73	Short to B+ in Driver Side Front Pretensioner Squib Circuit

DESCRIPTION

The pretensioner squib (driver seat side) circuit consists of the center airbag sensor assembly and the front seat outer belt assembly LH.
This circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the pretensioner squib (driver seat side) circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
B1900/73	• The center airbag sensor assembly receives a line short circuit signal in the pretensioner squib (driver seat side) circuit for 2 seconds • Pretensioner squib (driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • No. 2 rear door wire (*1) • Front seat outer belt assembly LH (Pretensioner squib [driver seat side]) • Center airbag sensor assembly
B1901/73	• The center airbag sensor assembly receives an open circuit signal in the pretensioner squib (driver seat side) circuit for 2 seconds • Pretensioner squib (driver seat side) malfunction • Center airbag sensor assembly center malfunction	• No. 2 floor wire • No. 2 rear door wire (*1) • Front seat outer belt assembly LH (Pretensioner squib [driver seat side]) • Center airbag sensor assembly
B1902/73	• The center airbag sensor assembly receives a short circuit to ground signal in the pretensioner squib (driver seat side) circuit for 0.5 seconds • Pretensioner squib (driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • No. 2 rear door wire (*1) • Front seat outer belt assembly LH (Pretensioner squib [driver seat side]) • Center airbag sensor assembly
B1903/73	• The center airbag sensor assembly receives a short circuit to B+ signal in the pretensioner squib (driver seat side) circuit for 0.5 seconds • Pretensioner squib (driver seat side) malfunction • Center airbag sensor assembly malfunction	• No. 2 floor wire • No. 2 rear door wire (*1) • Front seat outer belt assembly LH (Pretensioner squib [driver seat side]) • Center airbag sensor assembly

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

Result	Proceed to
DTC B1900 is output.	A
DTC B1901 is output.	B
DTC B1902 is output.	C
DTC B1903 is output.	D

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

Result	Proceed to
DTC 73 is output.	E

B → Go to step 9
C → Go to step 14
D → Go to step 19
E → Go to step 28

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly LH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPAIR OR REPLACE NO. 2 FLOOR WIRE (EXCEPT ACCESS CAB)
NG → REPAIR OR REPLACE NO. 2 REAR DOOR WIRE (ACCESS CAB)

OK

RS

3 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor LH.

Result

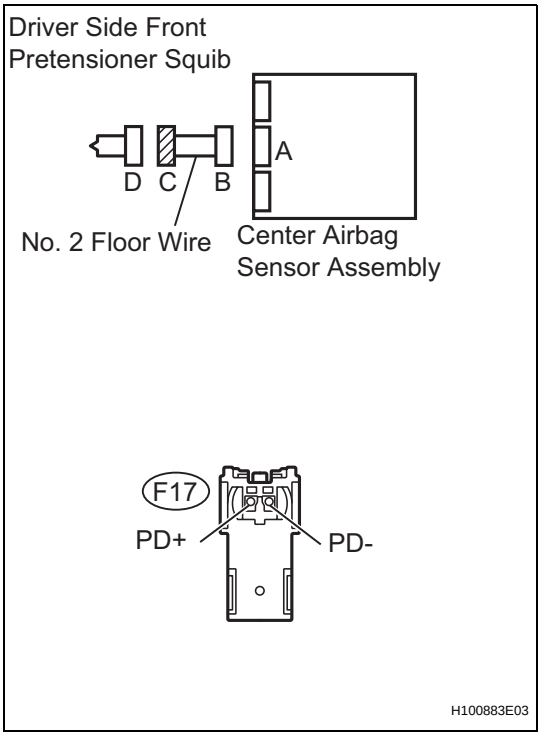
Condition	Proceed to
Normal (Expect access cab)	A
Normal (Access cab)	B
Abnormal	C

B → **Go to step 6**

C → **CONNECT CONNECTORS**

A

4 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR SHORT)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly LH.

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

(c) Measure the resistance.

Standard resistance

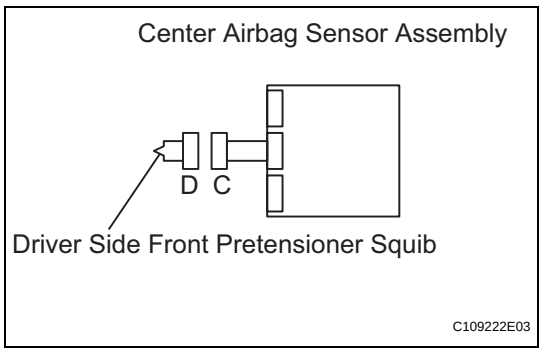
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

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

OK

RS

5 CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1900 is not output.

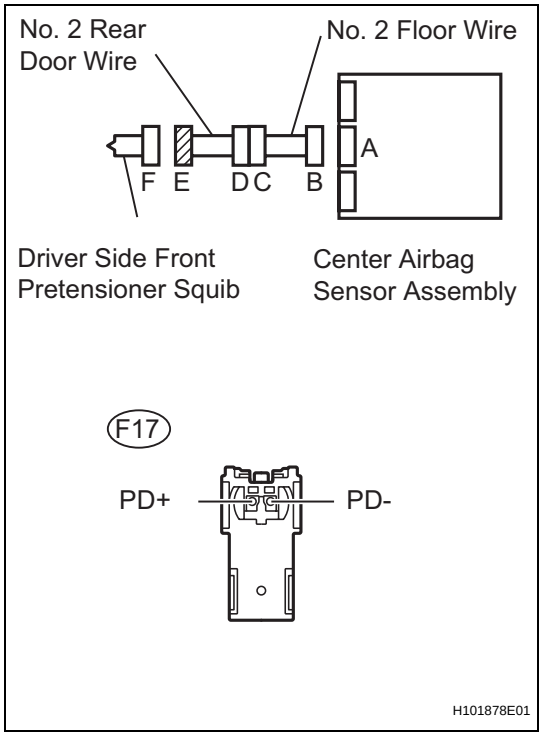
HINT:
DTCs other than B1900 may be output at this time, but they are not related to this check.

OK	Go to step 25

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

6 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR SHORT)



(a) Disconnect the No. 2 floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 2 rear door wire connector from the front seat outer belt assembly LH.
(c) Release the activation prevention mechanism built into connector B (See page RS-28)
(d) Measure the resistance.

Standard resistance

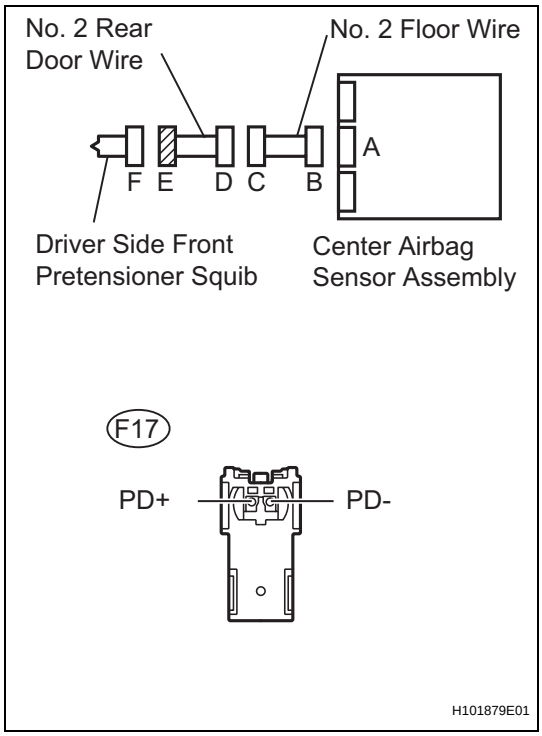
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

OK	Go to step 8

RS

NG

7 CHECK NO. 2 REAR DOOR WIRE (FOR SHORT)



(a) Disconnect the No. 2 floor wire connector from the No. 2 rear door wire.
(b) Release the activation prevention mechanism built into connector D (See page RS-28).
(c) Measure the resistance.
Standard resistance

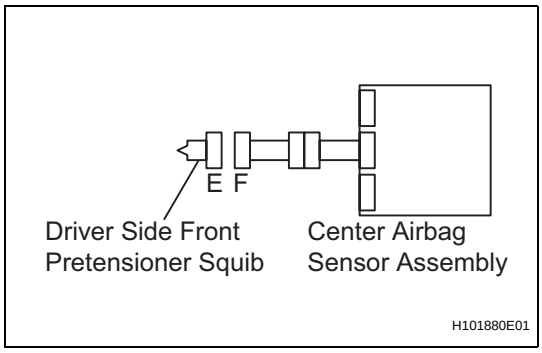
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

8 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the No. 2 floor wire connectors to the center airbag sensor assembly and No. 2 rear door wire.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).
OK:
DTC B1900 is not output.

HINT:
DTCs other than B1900 may be output at this time, but they are not related to this check.

OK → **Go to step 27**

RS

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

9 **CHECK CONNECTOR**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly LH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE NO. 2 FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE (ACCESS CAB)**

OK

10 **CHECK CONNECTION OF CONNECTORS**

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor LH.
Result

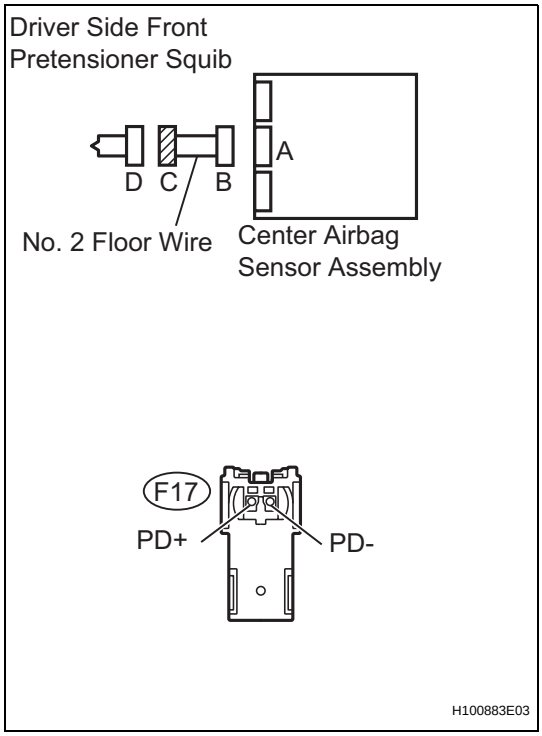
Condition	Proceed to
Normal (Expect access cab)	A
Normal (Access cab)	B
Abnormal	C

B → **Go to step 12**

C → **CONNECT CONNECTORS**

A

11	CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR OPEN)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly LH.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	Below 1 Ω

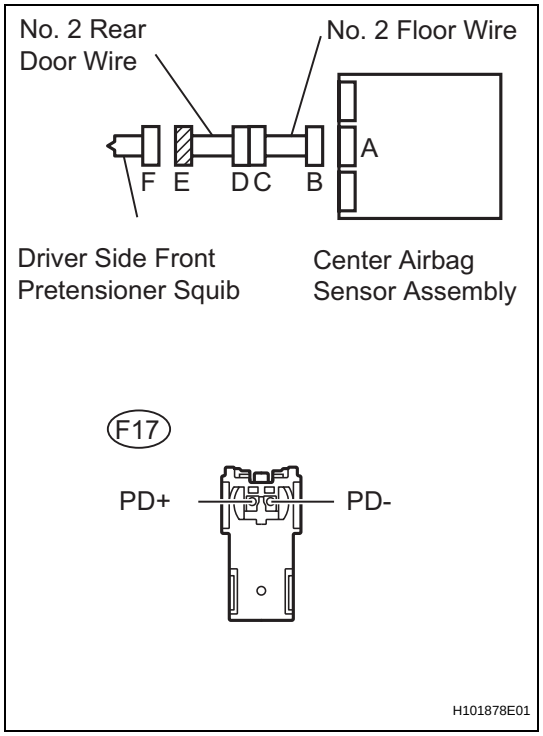
OK → **Go to step 24**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

12 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR OPEN)



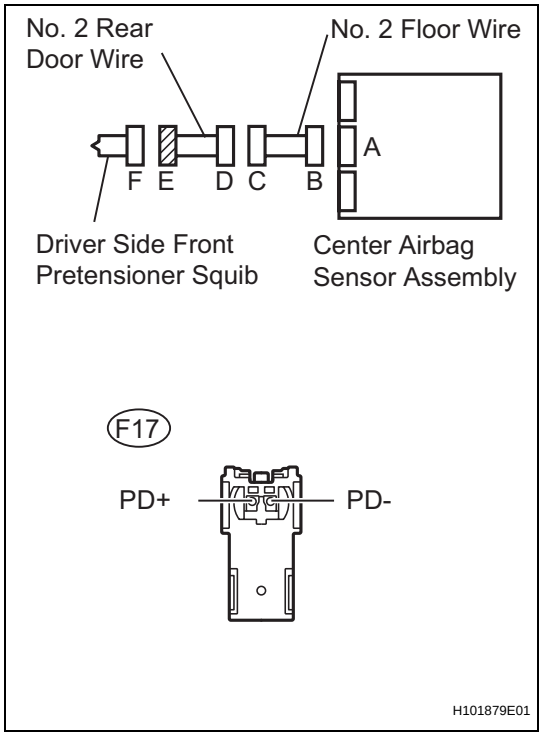
(a) Disconnect the No. 2 floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 2 rear door wire connector from the front seat outer belt assembly LH.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	Below 1 Ω

OK → **Go to step 26**

NG

13 CHECK NO. 2 REAR DOOR WIRE (FOR OPEN)



(a) Disconnect the No. 2 floor wire connector from the No. 2 rear door wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

14 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly LH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE NO. 2 FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE (ACCESS CAB)**

OK

15 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor LH.
Result

Condition	Proceed to
Normal (Expect access cab)	A
Normal (Access cab)	B
Abnormal	C

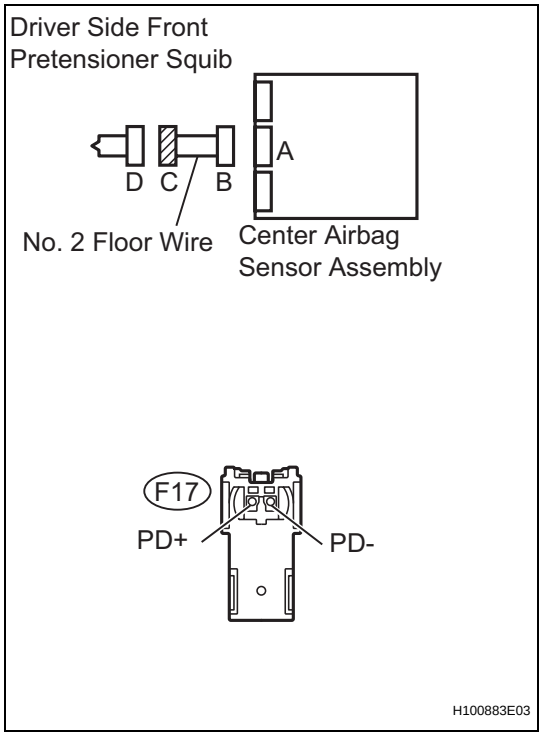
B → **Go to step 17**

C → **CONNECT CONNECTORS**

A

RS

16	CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO GROUND)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly LH.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

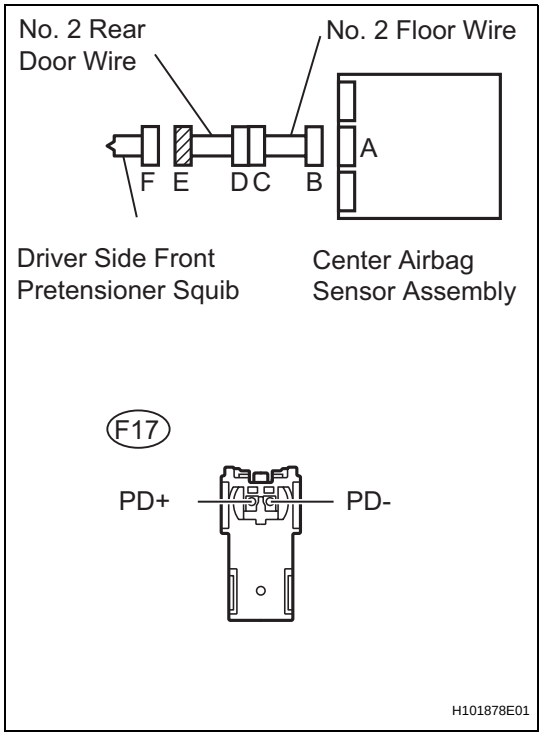
OK → **Go to step 24**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

RS

17 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO GROUND)



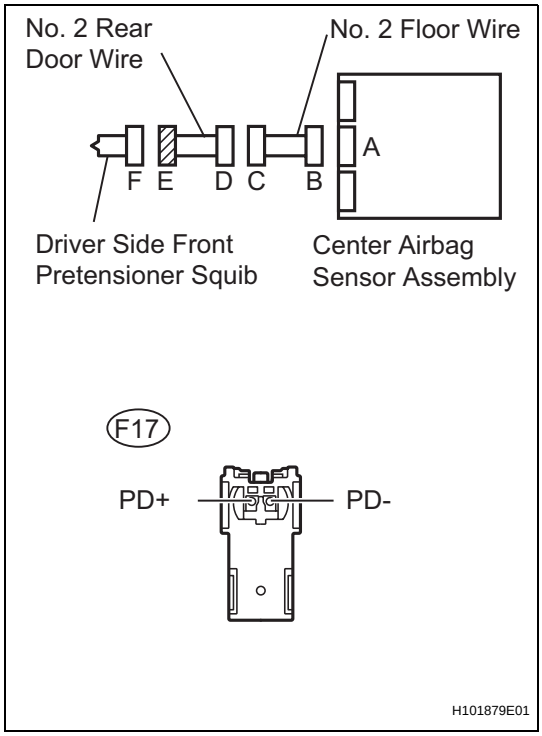
(a) Disconnect the No. 2 floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 2 rear door wire connector from the front seat outer belt assembly LH.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

OK → **Go to step 26**

NG

18 CHECK NO. 2 REAR DOOR WIRE (TO GROUND)



(a) Disconnect the No. 2 floor wire connector from the No. 2 rear door wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

19 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly LH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE NO. 2 FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE (ACCESS CAB)**

OK

20 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor LH.
Result

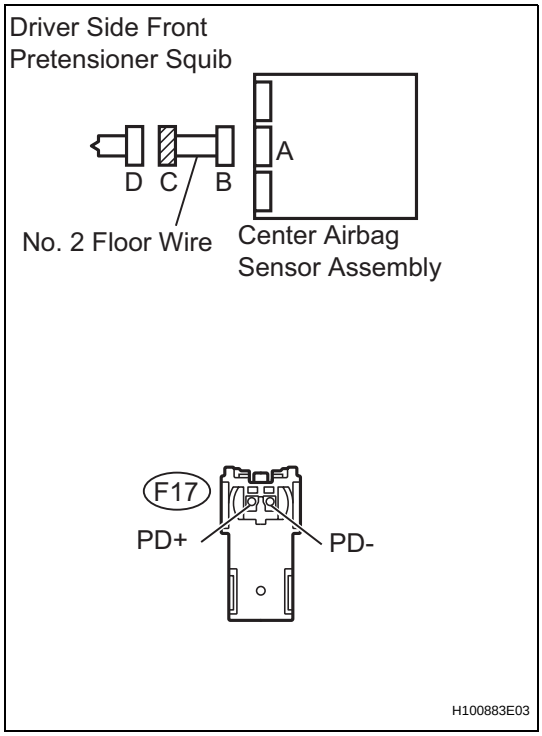
Condition	Proceed to
Normal (Expect access cab)	A
Normal (Access cab)	B
Abnormal	C

B → **Go to step 22**

C → **CONNECT CONNECTORS**

A

21	CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO B+)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly LH.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

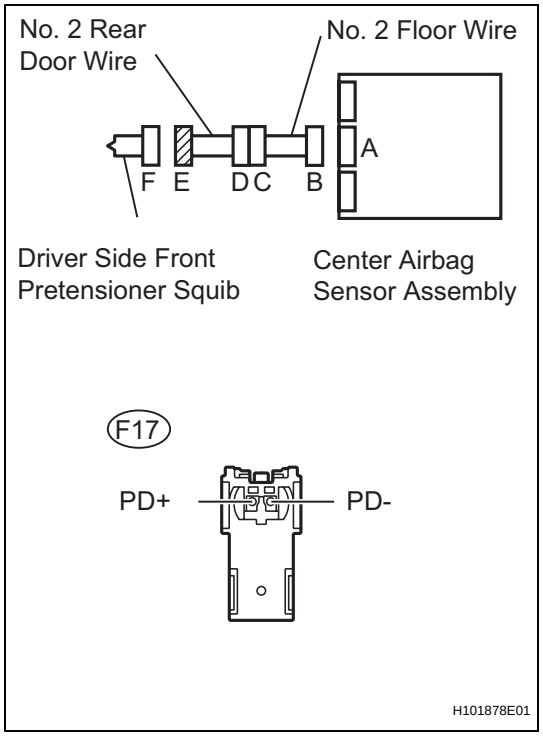
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 24**

NG

REPAIR OR REPLACE NO. 2 FLOOR WIRE

22 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO B+)



(a) Disconnect the No. 2 floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 2 rear door wire connector from the front seat outer belt assembly LH.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position.
(e) Measure the resistance.

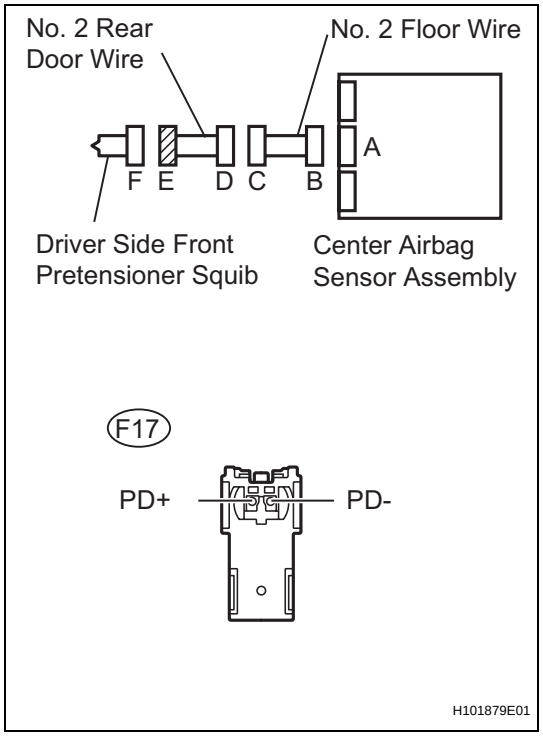
Standard voltage

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 26**

NG

23 CHECK NO. 2 REAR DOOR WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 2 floor wire connector from the No. 2 rear door wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the resistance.

Standard voltage

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

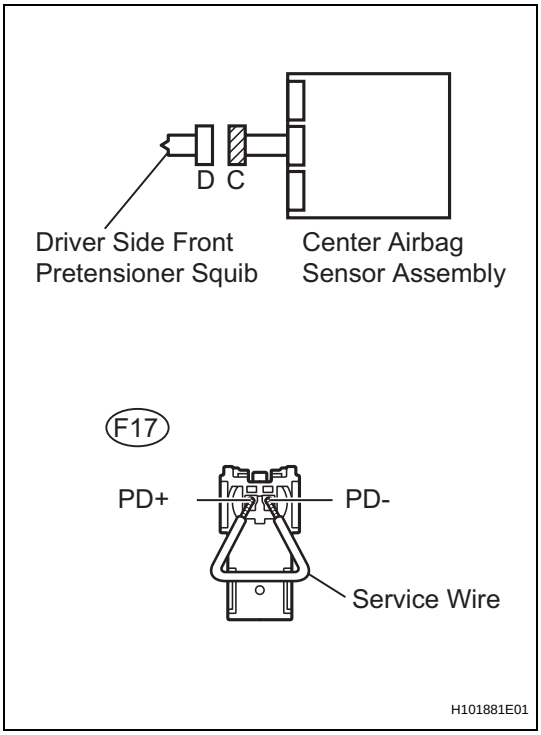
NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

24	CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 21, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect F17-1 (PD+) and F17-2 (PD-) of connector C.

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:
DTC B1901, B1902 and B1903 are not output.

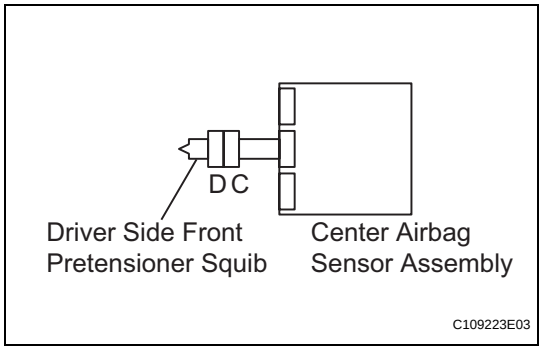
HINT:
DTCs other than B1901, B1902 or B1903 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

RS

OK

25	CHECK FRONT SEAT OUTER BELT ASSEMBLY LH



HINT:
If continuing from step 24, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat outer belt assembly LH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1900, B1901, B1902 and B1903 are not output.

HINT:
DTCs other than B1900, B1901, B1902 or B1903 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH**

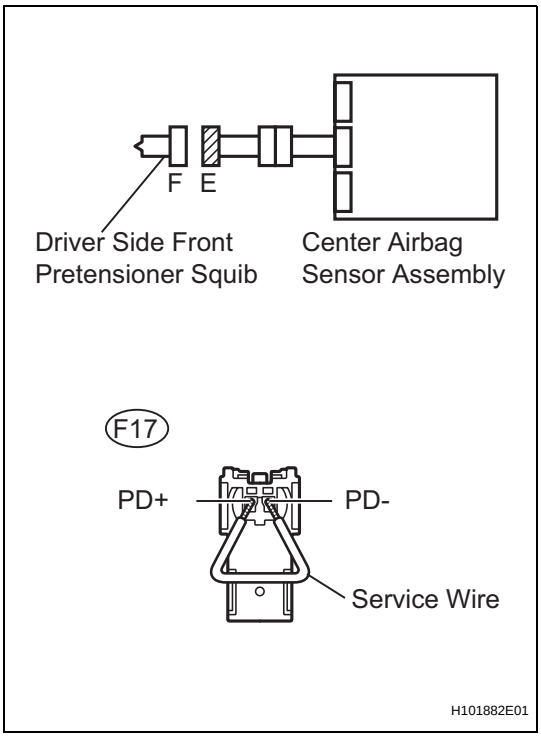
OK

USE SIMULATION METHOD TO CHECK

26	REPLACE CENTER AIRBAG SENSOR ASSEMBLY

HINT:
If continuing from step 22, begin from (a). If continuing from any other step, begin from (c).

RS



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect F17-1 (PD+) and F17-2 (PD-) of connector C.

NOTICE:

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

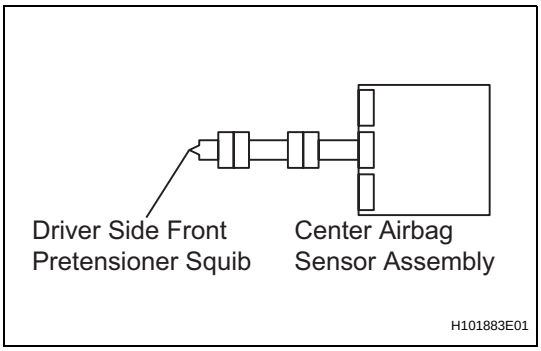
DTC B1901, B1902 and B1903 are not output.

HINT:
DTCs other than B1901, B1902 or B1903 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

27	CHECK FRONT SEAT OUTER BELT ASSEMBLY LH



HINT:
If continuing from step 26, begin from (c). If continuing from any other step, being from (a).
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat outer belt assembly LH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

RS

OK:

DTC B1900, B1901, B1902 and B1903 are not output.

HINT:

DTCs other than B1900, B1901, B1902 or B1903 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH**

OK →

USE SIMULATION METHOD TO CHECK

28 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly LH side) is not damaged.

OK:

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

NG → **REPAIR OR REPLACE NO. 2 FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE (ACCESS CAB)**

OK →

29 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor LH.

Result

Condition	Proceed to
Normal (Expect access cab)	A
Normal (Access cab)	B
Abnormal	C

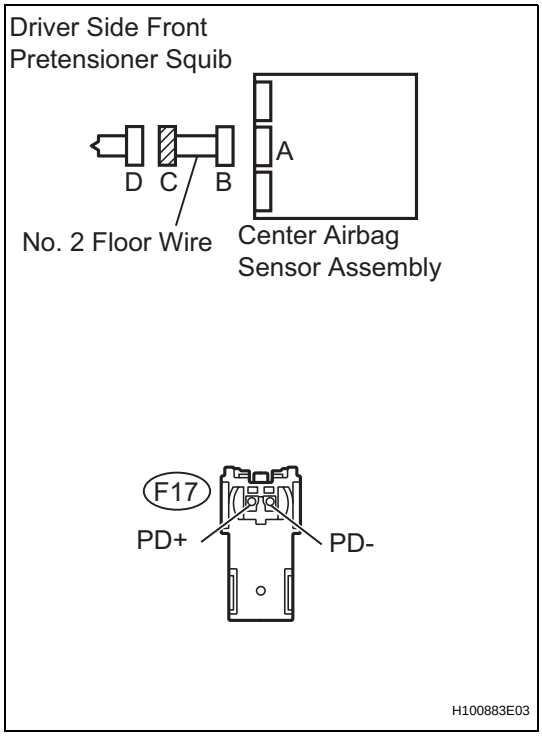
B → **Go to step 32**

C → **CONNECT CONNECTORS**

A →

RS

30 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly LH.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	Below 1 Ω
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

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

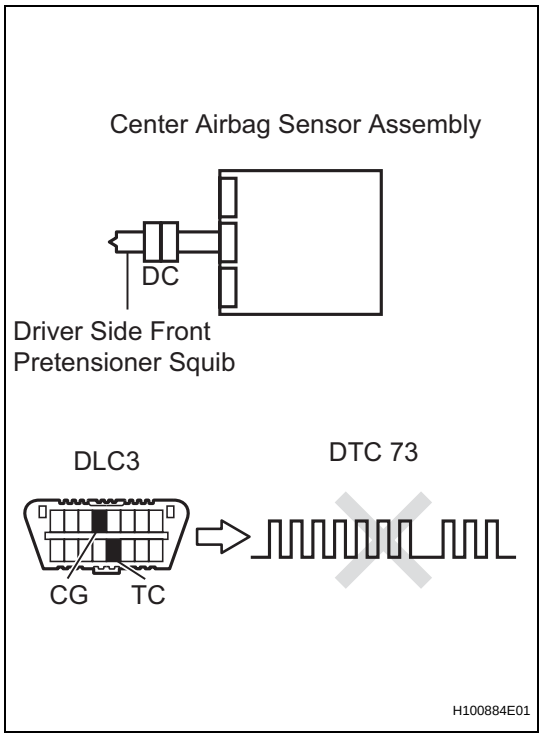
Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

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

OK

31	CHECK FRONT SEAT OUTER BELT ASSEMBLY LH (PRETENSIONER SQUIB (DRIVER SEAT SIDE))



(a) Replace the front seat outer belt assembly LH (See page SB-16, SB-36 or SB-27).

HINT:

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

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

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

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

(e) Clear any DTCs stored in the memory (See page RS-34).

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

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

(h) Check for DTCs (See page RS-34).

OK:

DTC 73 is not output.

HINT:

DTCs other than 73 may be output at this time, but they are not related to this check.

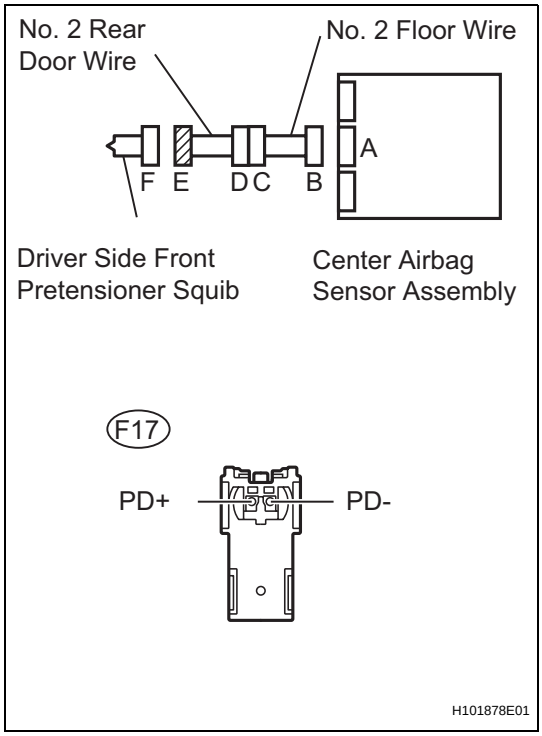
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS

32 CHECK DRIVER SIDE FRONT PRETENSIONER SQUIB CIRCUIT



(a) Disconnect the No. 2 floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 2 rear door wire connector from the front sear outer belt assembly LH.
(c) Connect the negative (-) terminal cable from the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position.
(e) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	Below 1 Ω
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

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

Standard resistance

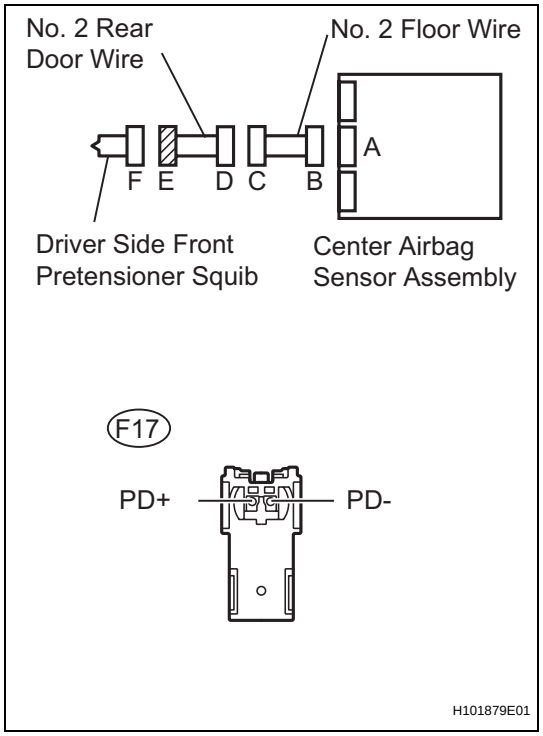
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

RS

OK → **Go to step 34**

NG

33 REPAIR OR REPLACE NO. 2 REAR DOOR WIRE



(a) Disconnect the No. 2 floor wire connector from the No. 2 rear door wire.
(b) Connect the negative (-) terminal cable from the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - Body ground	Ignition switch ON	Below 1 V
F17-2 (PD-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	Below 1 Ω
F17-1 (PD+) - Body ground	Always	1 MΩ or higher
F17-2 (PD-) - Body ground	Always	1 MΩ or higher

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

Standard resistance

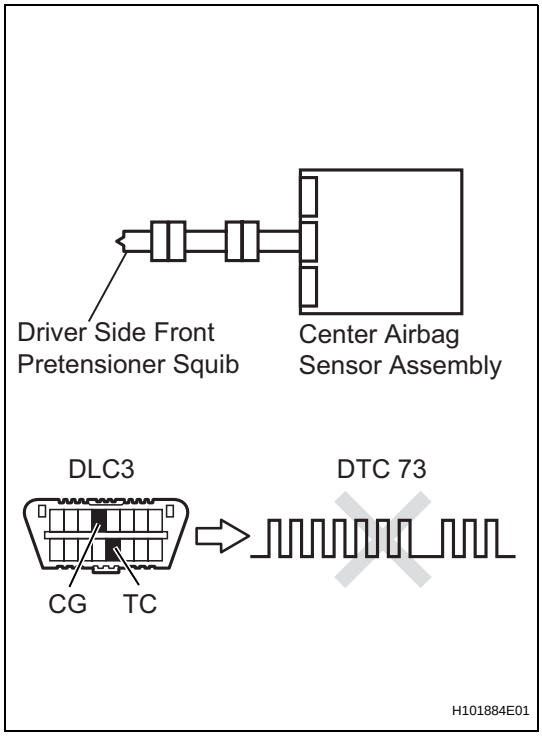
Tester Connection	Condition	Specified Condition
F17-1 (PD+) - F17-2 (PD-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 2 REAR DOOR WIRE**

OK

RS

34	REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH



(a) Replace the front seat outer belt assembly LH (See page SB-16, SB-36 or SB-27).

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

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

OK:

DTC 73 is not output.

HINT:
DTCs other than 73 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS

DTC	B1905/74	Short in Front Passenger Side Front Pretensioner Squib Circuit

DTC	B1906/74	Open in Front Passenger Side Front Pretensioner Squib Circuit

DTC	B1907/74	Short to GND in Front Passenger Side Front Pretensioner Squib Circuit

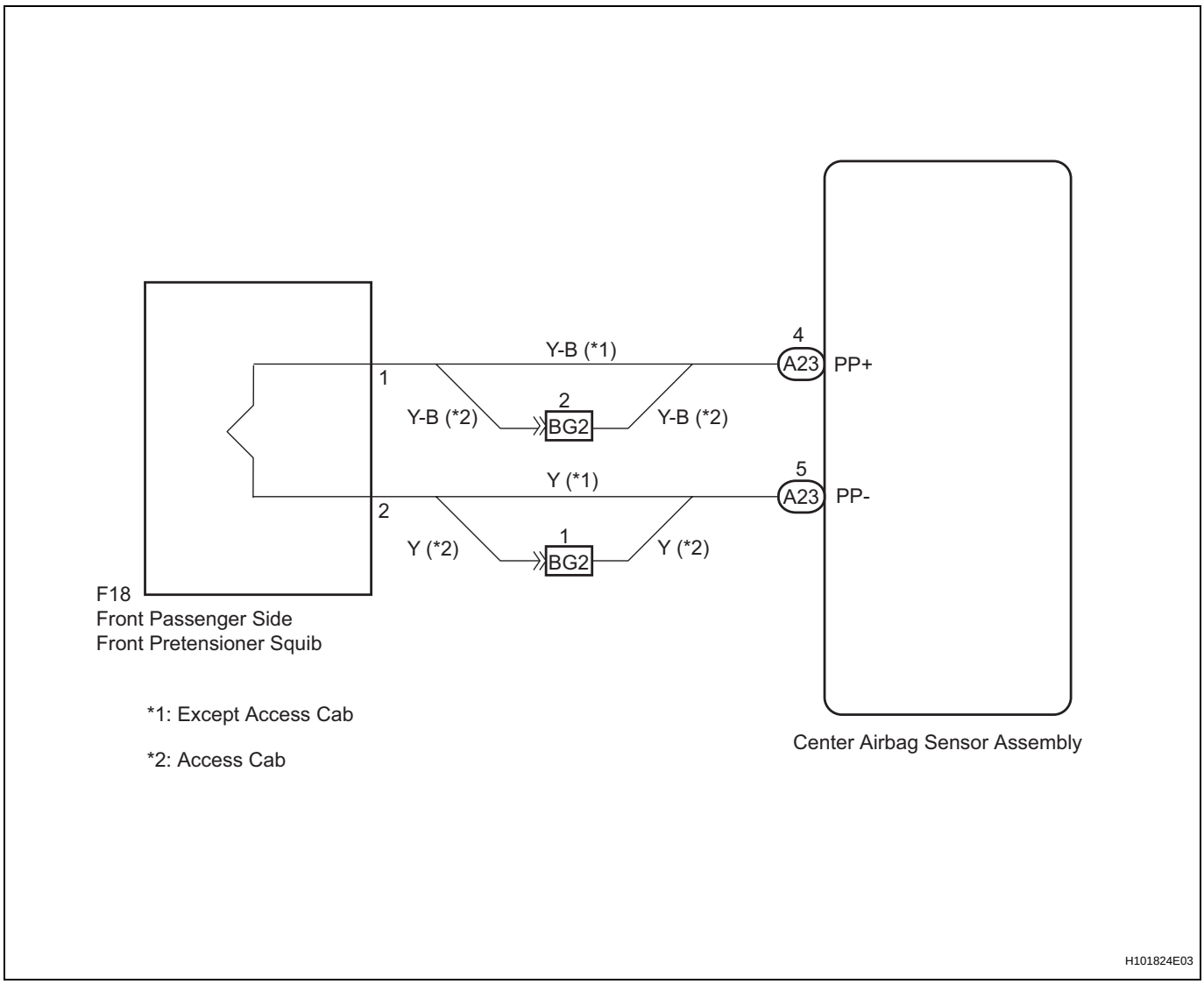
DTC	B1908/74	Short to B+ in Front Passenger Side Front Pretensioner Squib Circuit

DESCRIPTION

The pretensioner squib (front passenger seat side) circuit consists of the center airbag sensor assembly and the front seat outer belt assembly RH.
This circuit signals the SRS to deploy when airbag deployment conditions are met.
These DTCs are set when a malfunction is detected in the pretensioner squib (front passenger seat side) circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
B1905/74	• The center airbag sensor assembly receives a line short circuit signal in the pretensioner squib (front passenger seat side) circuit for 2 seconds • Pretensioner squib (front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • No. 1 rear door wire (*1) • Front seat outer belt assembly RH (Pretensioner squib [front passenger seat side]) • Center airbag sensor assembly
B1906/74	• The center airbag sensor assembly receives an open circuit signal in the pretensioner squib (front passenger seat side) circuit for 2 seconds • Pretensioner squib (front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • No. 1 rear door wire (*1) • Front seat outer belt assembly RH (Pretensioner squib [front passenger seat side]) • Center airbag sensor assembly
B1907/74	• The center airbag sensor assembly receives a short circuit to ground signal in the pretensioner squib (front passenger seat side) circuit for 0.5 seconds • Pretensioner squib (front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • No. 1 rear door wire (*1) • Front seat outer belt assembly RH (Pretensioner squib [front passenger seat side]) • Center airbag sensor assembly
B1908/74	• The center airbag sensor assembly receives a short circuit to B+ signal in the pretensioner squib (front passenger seat side) circuit for 0.5 seconds • Pretensioner squib (front passenger seat side) malfunction • Center airbag sensor assembly malfunction	• Floor wire • No. 1 rear door wire (*1) • Front seat outer belt assembly RH (Pretensioner squib [front passenger seat side]) • Center airbag sensor assembly

WIRING DIAGRAM



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

RS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK DTC

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

Result	Proceed to
DTC B1905 is output.	A
DTC B1906 is output.	B
DTC B1907 is output.	C
DTC B1908 is output.	D

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

Result	Proceed to
DTC 74 is output.	E

B → Go to step 9

C → Go to step 14

D → Go to step 19

E → Go to step 28

A

2	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly RH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPAIR OR REPLACE FLOOR WIRE (EXCEPT ACCESS CAB)

NG → REPAIR OR REPLACE NO. 1 REAR DOOR WIRE (ACCESS CAB)

OK

RS

3	CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor RH.

Result

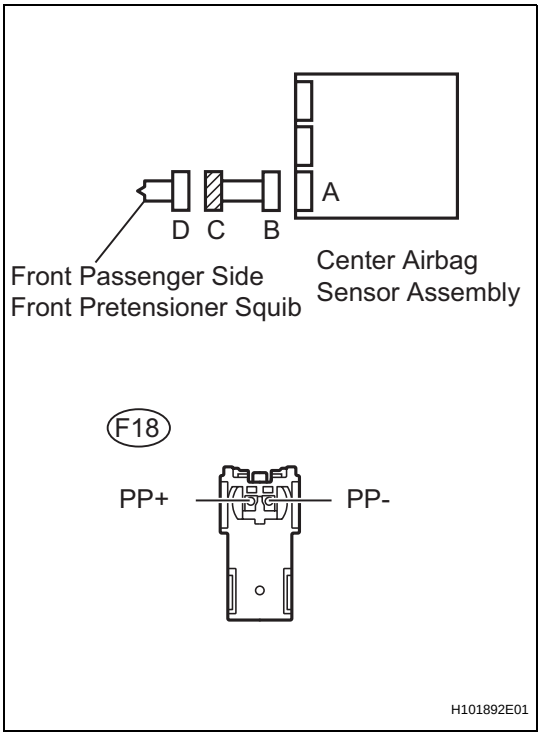
Condition	Proceed to
Normal (Except access cab)	A
Normal (Access cab)	B
Abnormal	C

B → Go to step 6

C → CONNECT CONNECTORS

A

4	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR SHORT)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly RH.

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

(c) Measure the resistance.

Standard resistance

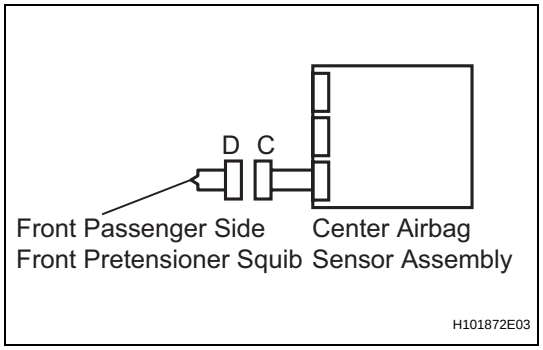
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE FLOOR WIRE

OK

RS

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY



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

OK:

DTC B1905 is not output.

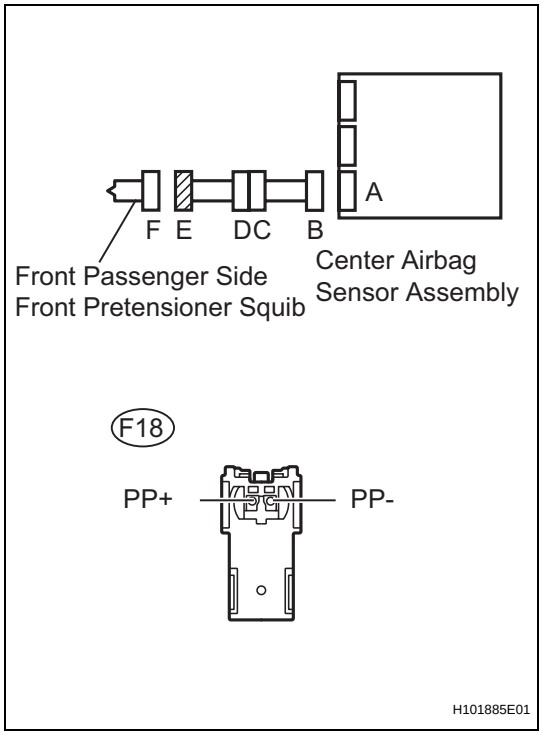
HINT:
DTCs other than B1905 may be output at this time, but they are not related to this check.

OK	Go to step 25

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

6	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR SHORT)



(a) Disconnect the floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 1 rear door wire connector from the front seat outer belt assembly RH.
(c) Release the activation prevention mechanism built into connector B (See page RS-28).
(d) Measure the resistance.

Standard resistance

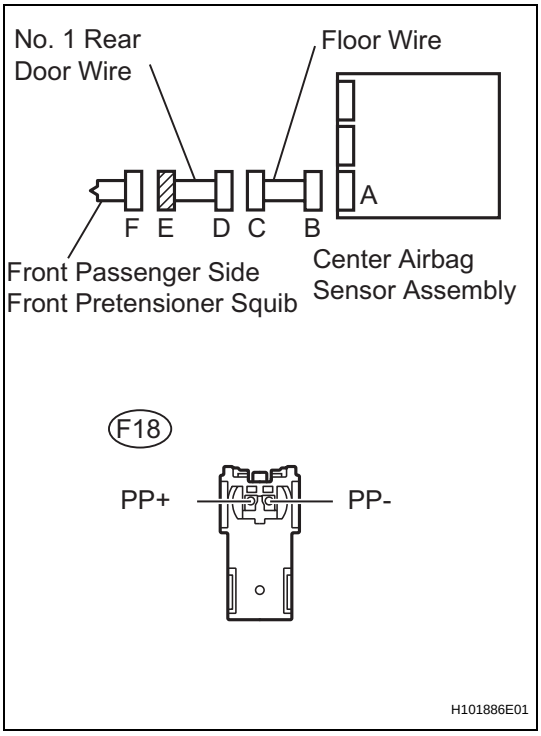
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

OK	Go to step 8

RS

NG

7 CHECK NO. 1 REAR DOOR WIRE (FOR SHORT)



(a) Disconnect the floor wire connector from the No. 1 rear door wire.
(b) Release the activation prevention mechanism built into connector D (See page RS-28).
(c) Measure the resistance.

Standard resistance

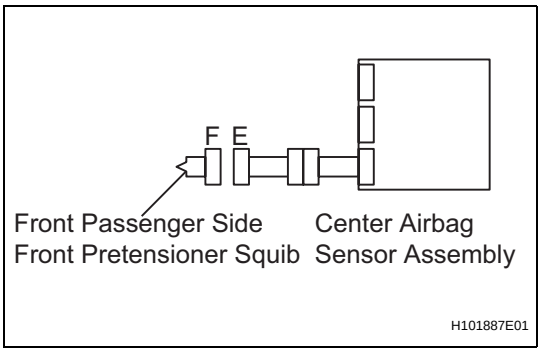
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

8 CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Connect the floor wire connectors to the center airbag sensor assembly and No. 1 rear door wire.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(d) Clear any DTCs stored in the memory (See page RS-34).
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Check for DTCs (See page RS-34).

OK:

DTC B1905 is not output.

HINT:
DTCs other than B1905 may be output at this time, but they are not related to this check.

OK → **Go to step 27**

RS

NG

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

9	CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly RH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG	**REPAIR OR REPLACE FLOOR WIRE (EXCEPT ACCESS CAB)**
NG	**REPAIR OR REPLACE NO. 1 REAR DOOR WIRE (ACCESS CAB)**

OK

10	CHECK CONNECTION OF CONNECTORS

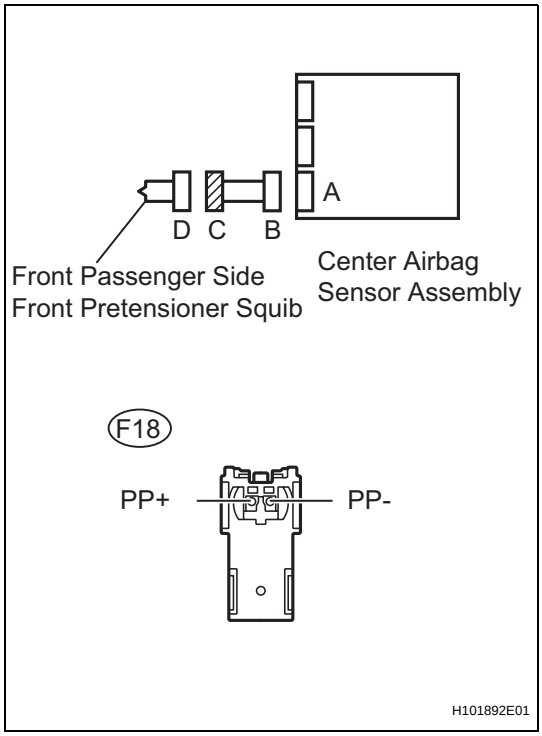
(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor RH.

B	**Go to step 12**
C	**CONNECT CONNECTORS**

A

RS

11	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR OPEN)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly RH.

(b) Measure the resistance.

Standard resistance

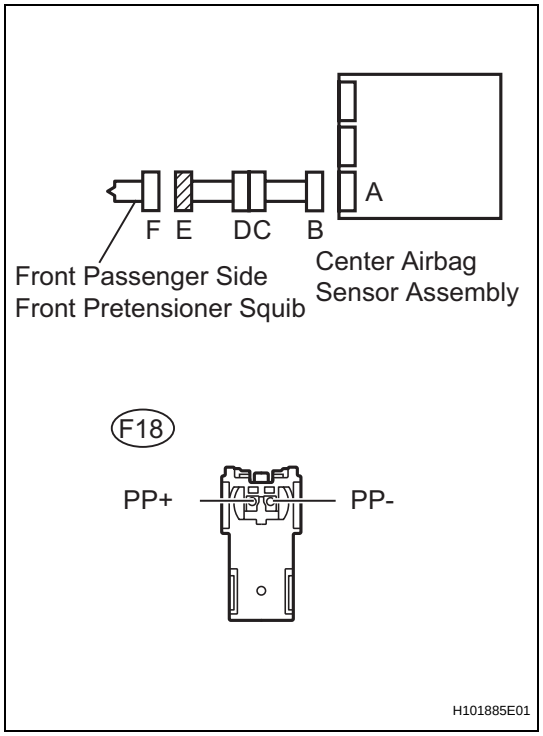
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	Below 1 Ω

OK → **Go to step 24**

NG

REPAIR OR REPLACE FLOOR WIRE

12 CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (FOR OPEN)



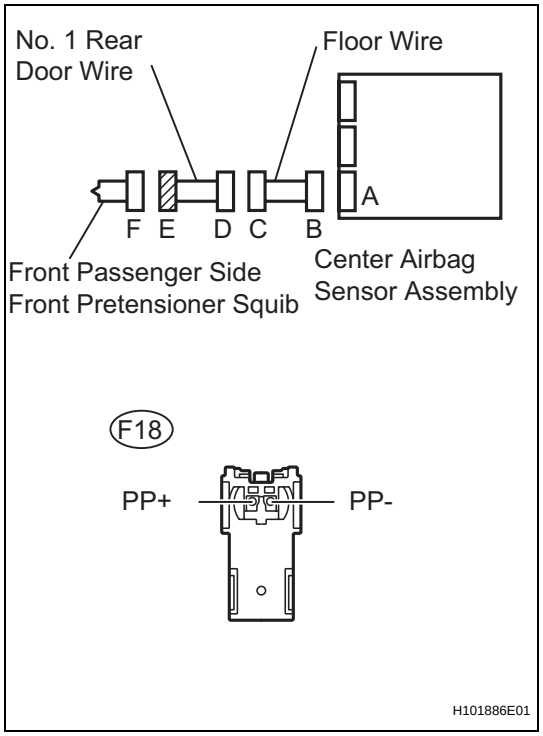
(a) Disconnect the floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 1 rear door wire connector from the front seat outer belt assembly RH.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	Below 1 Ω

OK → **Go to step 26**

NG

13 CHECK NO. 1 REAR DOOR WIRE (FOR OPEN)



(a) Disconnect the floor wire connector from the No. 1 rear door wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE FLOOR WIRE

14 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly RH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE (ACCESS CAB)**

OK

15 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the enter airbag sensor assembly and the front airbag sensor RH.
Result

Condition	Proceed to
Normal (Except access cab)	A
Normal (Access cab)	B
Abnormal	C

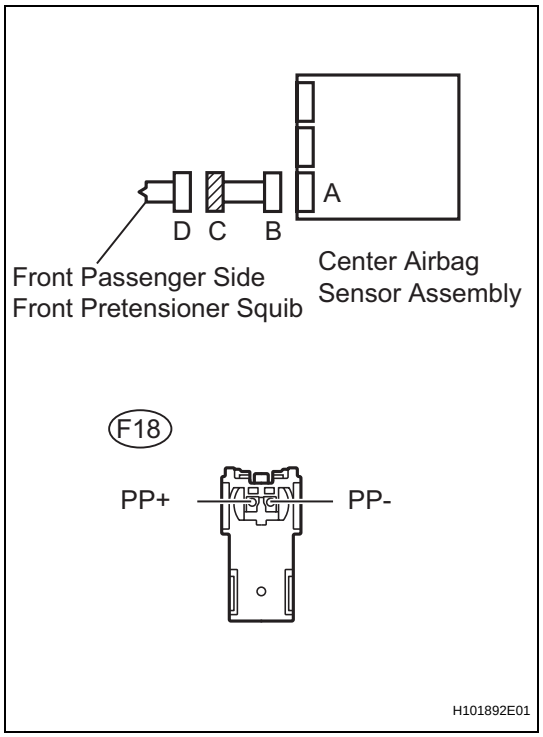
B → **Go to step 17**

C → **CONNECT CONNECTORS**

A

RS

16	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO GROUND)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly RH.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

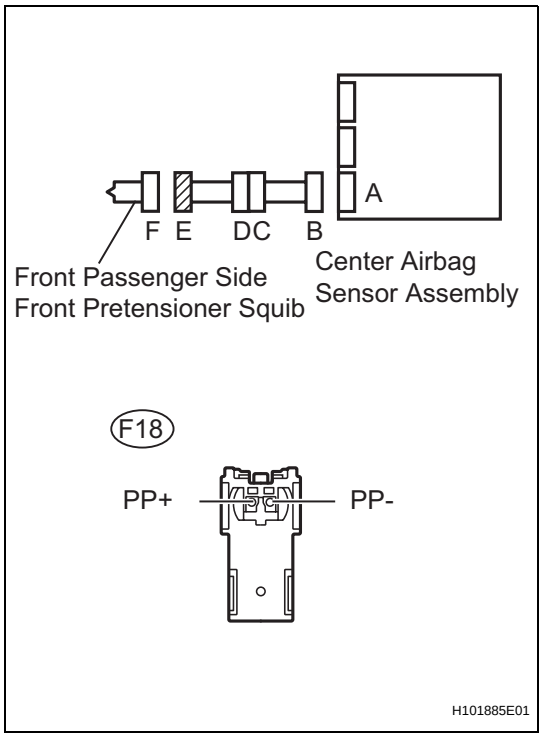
OK → **Go to step 24**

NG

REPAIR OR REPLACE FLOOR WIRE

RS

17 CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO GROUND)



(a) Disconnect the floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 1 rear door wire connector from the front seat outer belt assembly RH.
(c) Measure the resistance.

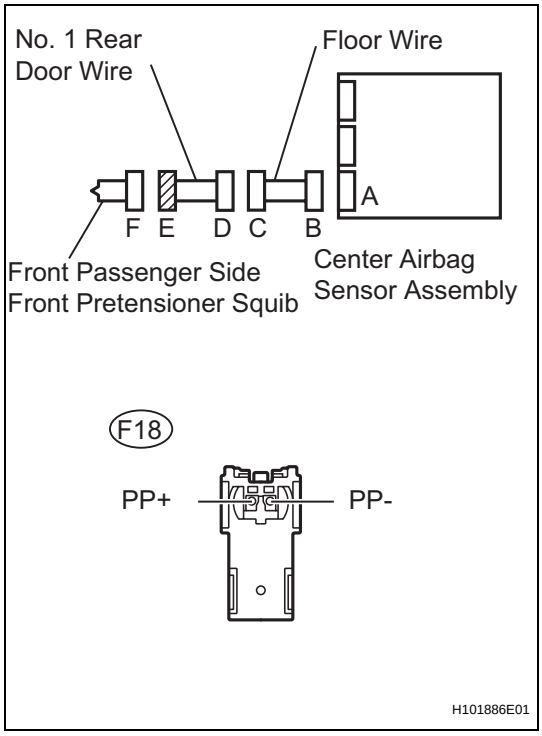
Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

OK → **Go to step 26**

NG

18 CHECK NO. 1 REAR DOOR WIRE (TO GROUND)



(a) Disconnect the floor wire connector from the No. 1 rear door wire.
(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE FLOOR WIRE

19 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly RH side) is not damaged.
OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → **REPAIR OR REPLACE FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE (ACCESS CAB)**

OK

20 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor RH.
Result

Condition	Proceed to
Normal (Except access cab)	A
Normal (Access cab)	B
Abnormal	C

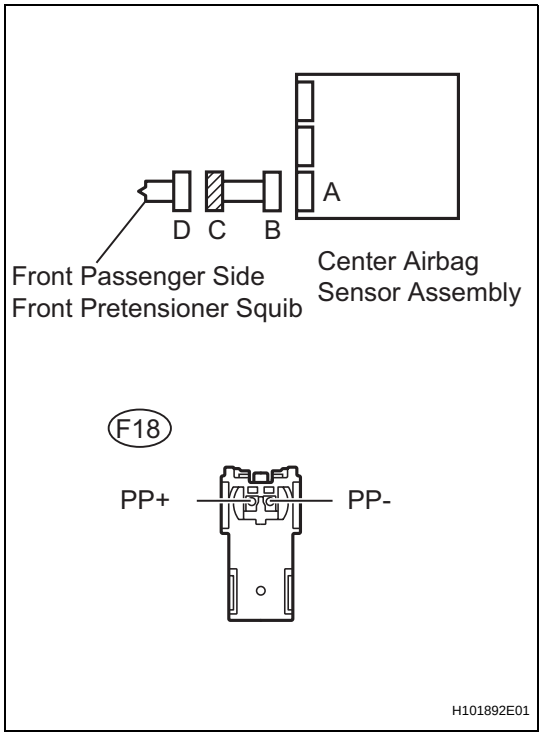
B → **Go to step 22**

C → **CONNECT CONNECTORS**

A

RS

21	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO B+)



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly RH.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

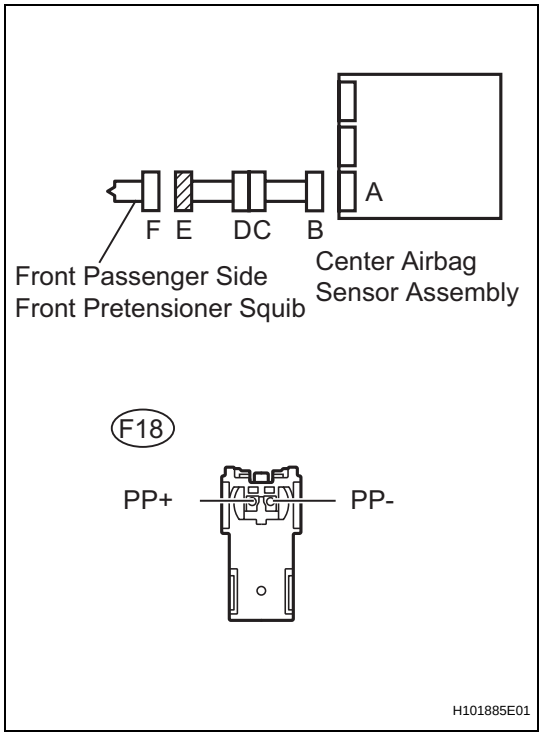
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 24**

NG

REPAIR OR REPLACE FLOOR WIRE

22 CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT (TO B+)



(a) Disconnect the floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 1 rear door wire connector from the front seat outer belt assembly RH.
(c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position.
(e) Measure the voltage.

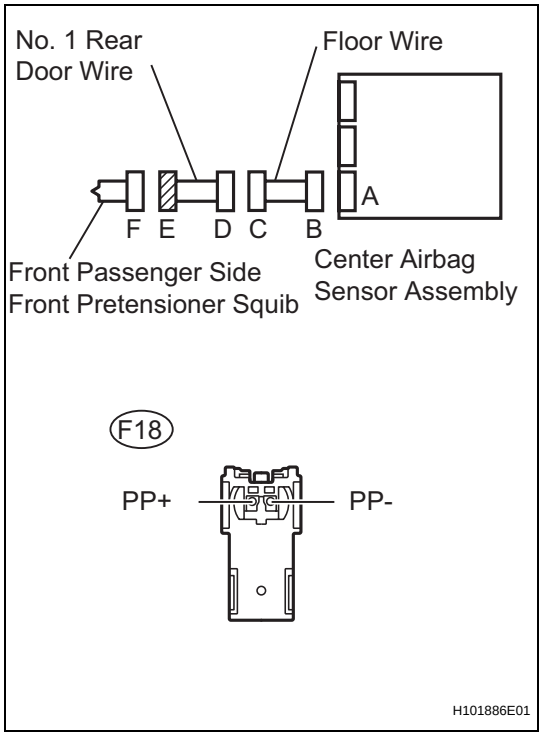
Standard voltage

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

OK → **Go to step 26**

NG

23 CHECK NO. 1 REAR DOOR WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the floor wire connector from the No. 1 rear door wire.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the resistance.

Standard voltage

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

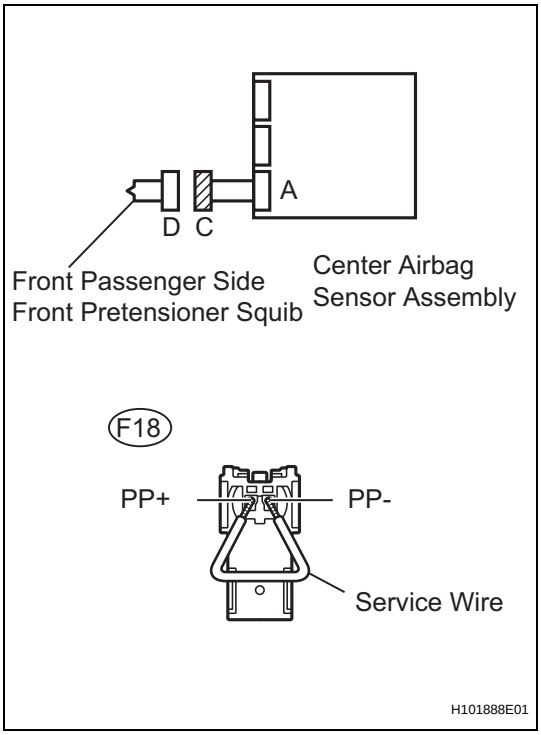
NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE**

RS

OK

REPAIR OR REPLACE FLOOR WIRE

24	CHECK CENTER AIRBAG SENSOR ASSEMBLY



HINT:
If continuing from step 21, begin from (a). If continuing from any other step, begin from (c).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect F18-1 (PP+) and F18-2 (PP-) of connector C.

NOTICE:

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1906, B1907 and B1908 are not output.

HINT:
DTCs other than B1906, B1907 or B1908 may be output at this time, but they are not related to this check.

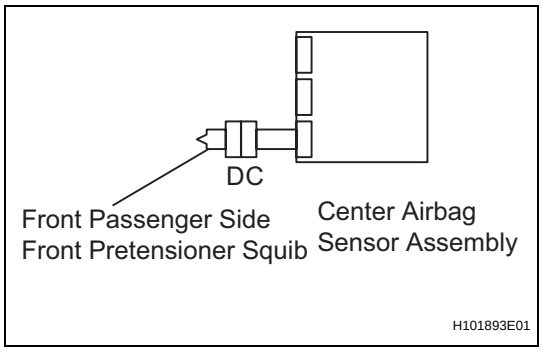
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

RS

OK

25	CHECK FRONT SEAT OUTER BELT ASSEMBLY RH

HINT:
If continuing from step 24, begin from (c). If continuing from any other step, being from (a).



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat outer belt assembly RH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

DTC B1905, B1906, B1907 and B1908 are not output.

HINT:
DTCs other than B1905, B1906, B1907 or B1908 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH**

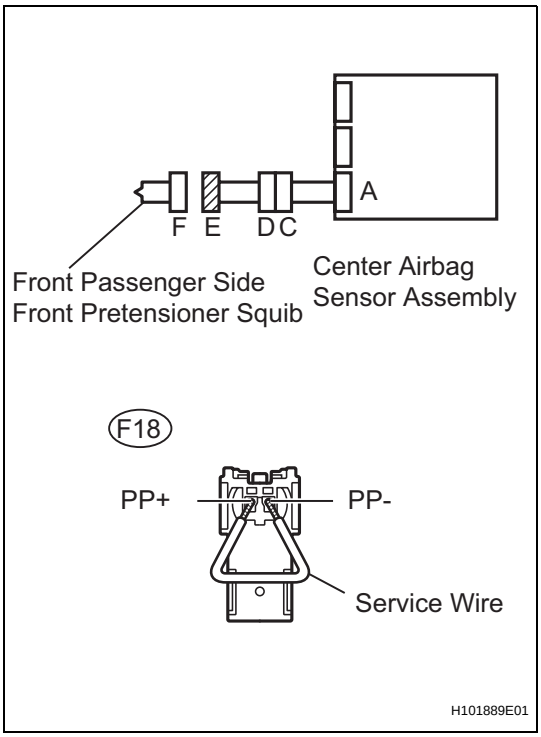
OK

OTHERS USE SIMULATION METHOD TO CHECK

26	CHECK CENTER AIRBAG SENSOR ASSEMBLY

HINT:
If continuing from step 22, begin from (a). If continuing from any other step, begin from (c).

RS



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the center airbag sensor assembly.
(d) Using a service wire, connect F18-1 (PP+) and F18-2 (PP-) of connector E.

NOTICE:

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

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

OK:

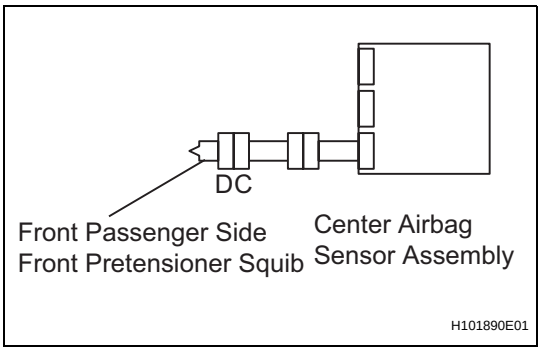
DTC B1906, B1907 and B1908 are not output.

HINT:
DTCs other than B1906, B1907 or B1908 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

27	CHECK FRONT SEAT OUTER BELT ASSEMBLY RH



HINT:
If continuing from step 26, begin from (c). If continuing from any other step, being from (a).

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the service wire from connector C.
(d) Connect the connector to the front seat outer belt assembly RH.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(g) Clear any DTCs stored in the memory (See page RS-34).
(h) Turn the ignition switch to the LOCK position.
(i) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(j) Check for DTCs (See page RS-34).

RS

OK:

DTC B1900, B1901, B1902 and B1903 are not output.

HINT:

DTCs other than B1900, B1901, B1902 or B1903 may be output at this time, but they are not related to this check.

NG → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH**

OK

OTHERS USE SIMULATION METHOD TO CHECK

28 CHECK CONNECTOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connector (on the front seat outer belt assembly RH side) is not damaged.

OK:

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

NG → **REPAIR OR REPLACE FLOOR WIRE (EXCEPT ACCESS CAB)**

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE (ACCESS CAB)**

OK

29 CHECK CONNECTION OF CONNECTORS

(a) Check that the connectors are properly connected to the center airbag sensor assembly and the front airbag sensor RH.

Result

Condition	Proceed to
Normal (Except access cab)	A
Normal (Access cab)	B
Abnormal	C

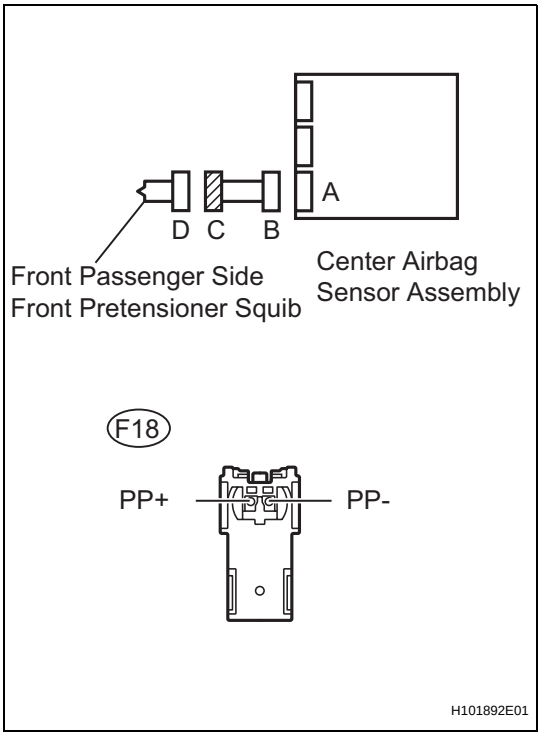
B → **Go to step 32**

C → **CONNECT CONNECTORS**

A

RS

30	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT



(a) Disconnect the floor wire connectors from the center airbag sensor assembly and front seat outer belt assembly RH.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	Below 1 Ω
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

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

Standard resistance

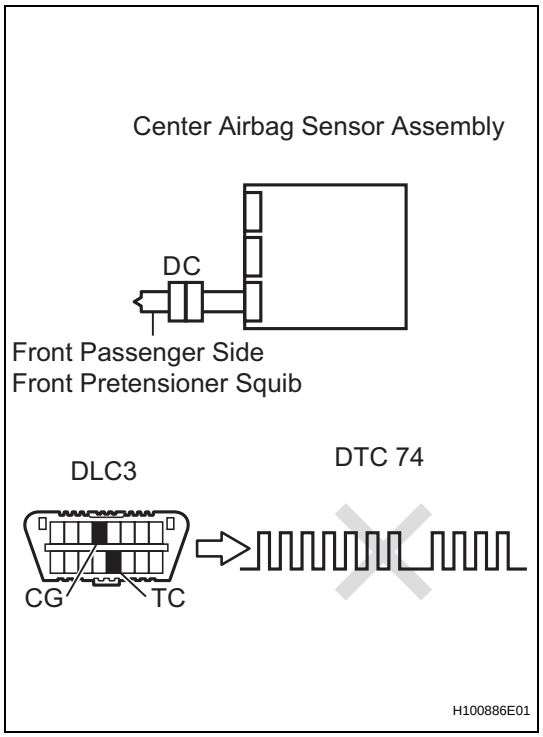
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE FLOOR WIRE**

OK

RS

31	REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (FRONT PASSENGER SEAT SIDE PRETENSIONER SQUIB)



(a) Replace the front seat outer belt assembly RH (See page SB-16, SB-36 or SB-27).

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

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

OK:

DTC 74 is not output.

HINT:
DTCs other than 74 may be output at this time, but they are not related to this check.

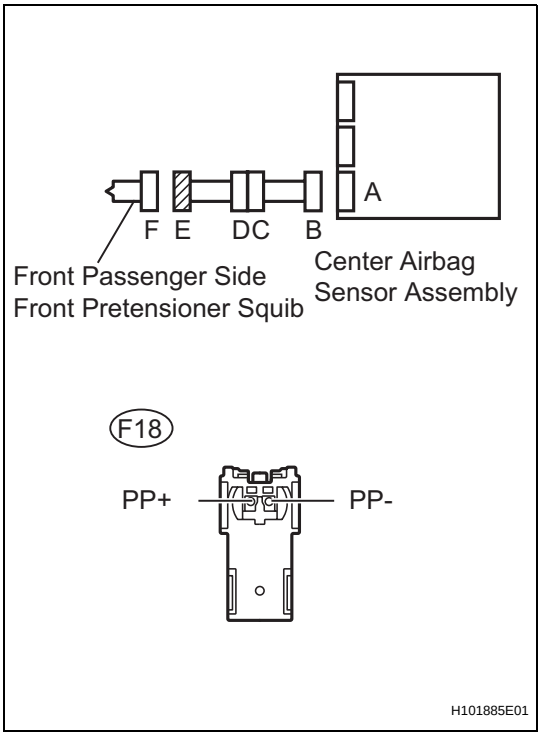
NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS

32	CHECK FRONT PASSENGER SIDE FRONT PRETENSIONER SQUIB CIRCUIT



(a) Disconnect the floor wire connector from the center airbag sensor assembly.
(b) Disconnect the No. 1 rear door wire connector from the front seat outer belt assembly RH.
(c) Connect the negative (-) terminal cable from the battery, and wait for at least 2 seconds.
(d) Turn the ignition switch to the ON position.
(e) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	Below 1 Ω
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

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

Standard resistance

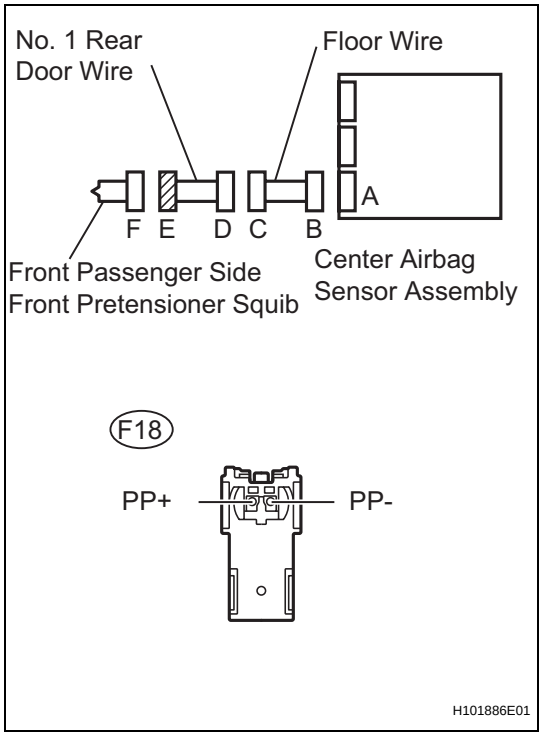
Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

RS

OK → **Go to step 34**

NG

33 CHECK NO. 1 REAR DOOR WIRE



(a) Disconnect the floor wire connector from the No. 1 rear door wire.
(b) Connect the negative (-) terminal cable from the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - Body ground	Ignition switch ON	Below 1 V
F18-2 (PP-) - Body ground	Ignition switch ON	Below 1 V

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

Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	Below 1 Ω
F18-1 (PP+) - Body ground	Always	1 MΩ or higher
F18-2 (PP-) - Body ground	Always	1 MΩ or higher

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

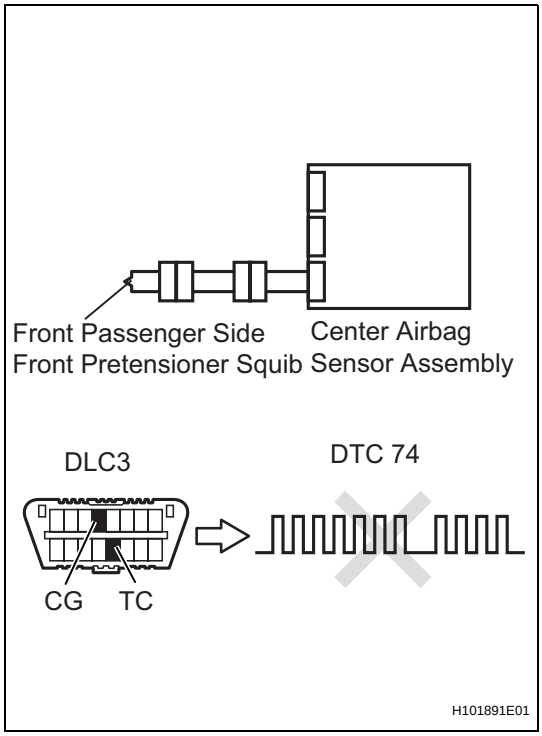
Standard resistance

Tester Connection	Condition	Specified Condition
F18-1 (PP+) - F18-2 (PP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 REAR DOOR WIRE**

OK

34	REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH



(a) Replace the front seat outer belt assembly RH (See page SB-16, SB-36 or SB-27).

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

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

OK:

DTC 74 is not output.

HINT:
DTCs other than 74 may be output at this time, but they are not related to this check.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

END

RS

SRS Warning Light Remains ON

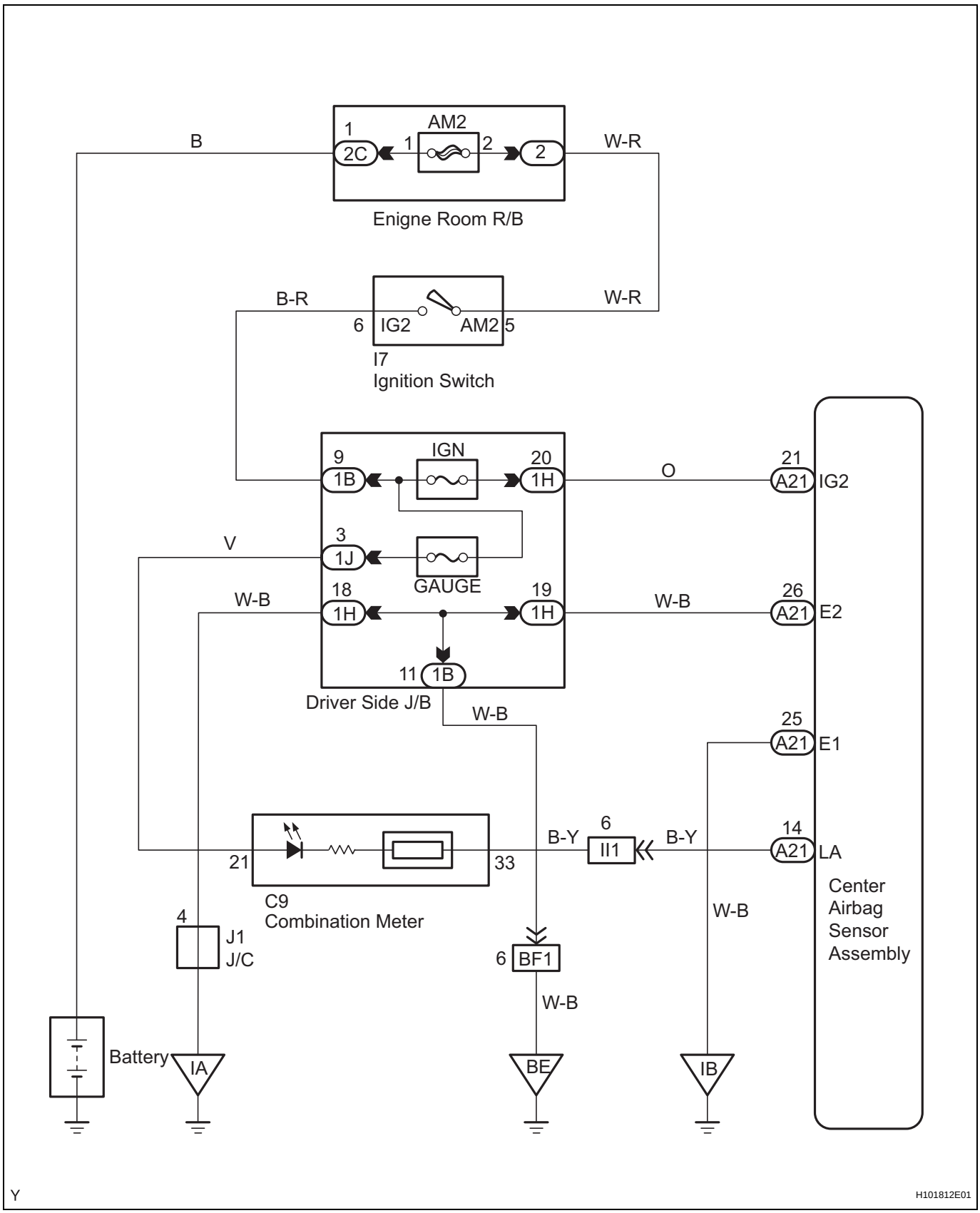
DESCRIPTION

The SRS warning light is located on the combination meter assembly.

When the SRS (supplemental restraint system) is functioning normally, the SRS warning light comes on for approximately 6 seconds after the ignition switch is turned from the LOCK position to the ON position, and then turns off automatically. If there is a malfunction in the SRS, the SRS warning light illumination continues to inform the driver.

If the continuous illumination is caused by problems such as malfunctions in the SRS warning light circuit or a decreased source voltage in the center airbag sensor assembly, no DTCs are set.

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK BATTERY

(a) Measure the voltage of the battery.
Voltage:
11 to 14 V

NG → **REPAIR OR REPLACE BATTERY**

OK ↓

2	CHECK CONNECTION OF CONNECTORS

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

OK ↓

3	CHECK CONNECTORS

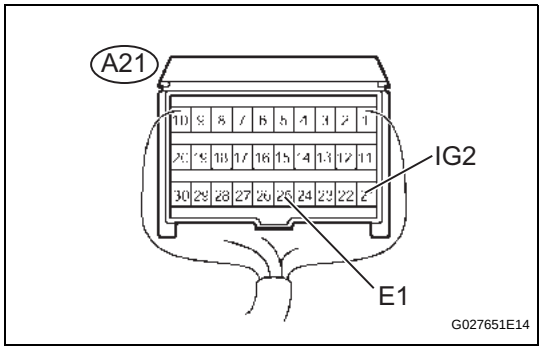
(a) Check that the connectors (on the center airbag sensor assembly side and combination meter assembly side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK ↓

RS

4 CHECK WIRE HARNESS (POWER SOURCE)



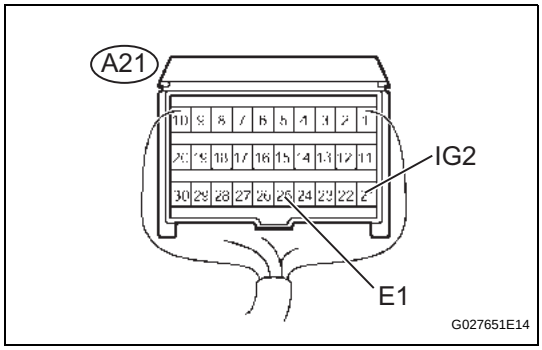
(a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
A21-21 (IG2) - A21-25 (E1)	Ignition switch ON	10 to 14 V

NG → **REPAIR OR REPLACE WIRE HARNESS (BATTERY - CENTER AIRBAG SENSOR ASSEMBLY)**

OK

5 CHECK POWER SOURCE AND ELECTRICAL SYSTEM COMPONENTS



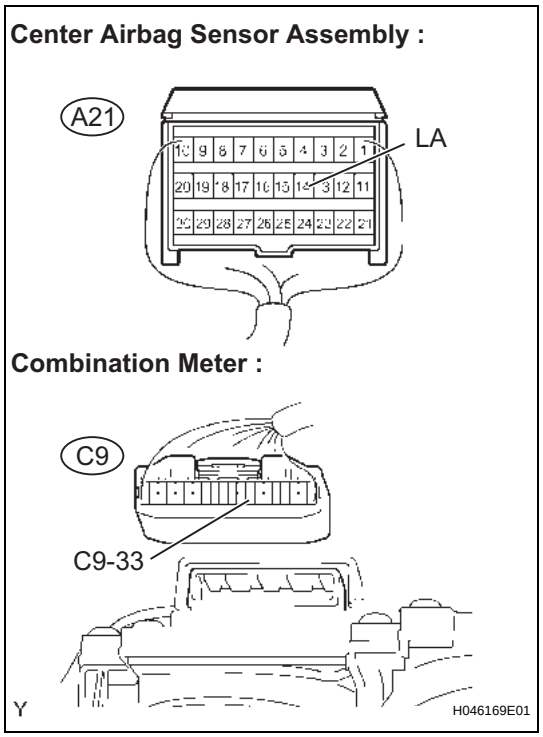
(a) Turn the ignition switch to the ON position.
(b) Turn on all electrical system components such as the defogger, wipers, head lamps and heater blower.
(c) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
A21-21 (IG2) - A21-25 (E1)	Ignition switch ON	10 to 14 V

NG → **REPAIR OR REPLACE POWER SOURCE AND ELECTRICAL SYSTEM COMPONENTS**

OK

6	CHECK WIRE HARNESS (CENTER AIRBAG SENSOR ASSEMBLY - COMBINATION METER ASSEMBLY)



(a) Disconnect the connector from the combination meter assembly.
(b) Measure the voltage and resistance.

Standard voltage

Tester Connection	Condition	Specified Condition
A21-14 (LA) - Body ground	Ignition switch ON	Below 1 V

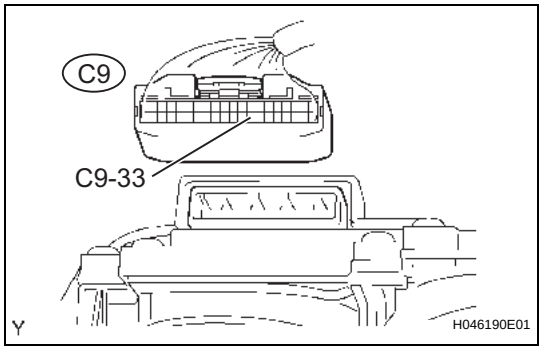
Standard resistance

Tester Connection	Condition	Specified Condition
A21-14 (LA) - C9-33	Always	Below 1 Ω
A21-14 (LA) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

7	CHECK CENTER AIRBAG SENSOR ASSEMBLY



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the center airbag sensor assembly .
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position and wait for at least 6 seconds.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
C9-33 - Body ground	Ignition switch ON	10 to 14 V

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY**

OK

REPLACE COMBINATION METER ASSEMBLY

RS

SRS Warning Light does not Come ON

DESCRIPTION

The SRS warning light is located on the combination meter assembly.
When the SRS (supplemental restraint system) is normal, the SRS warning light comes on for approximately 6 seconds after the ignition switch is turned from the LOCK position to the ON position, and then turns off automatically.
If there is a malfunction in the SRS, the SRS warning light comes on to inform the driver.
When terminals TC and CG of the DLC3 are connected, the SRS warning light blinks to indicate the DTCs stored in the center airbag sensor assembly.

WIRING DIAGRAM

See page RS-341.

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK BATTERY

(a) Measure the voltage battery.
Standard Voltage:
11 to 14 V

RS

NG → **REPAIR OR REPLACE BATTERY**

OK

2	CHECK CONNECTORS

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

OK

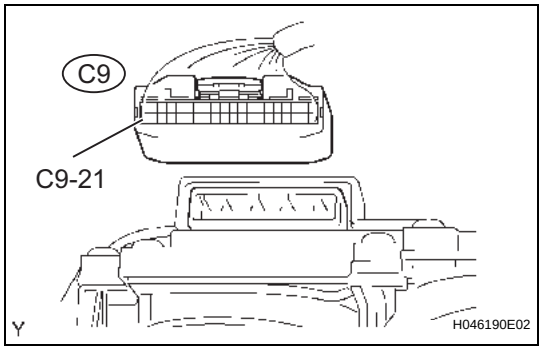
3 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and combination meter assembly side) are not damaged (See page RS-28).
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE WIRE HARNESS

OK

4 CHECK WIRE HARNESS (COMBINATION METER ASSEMBLY - BATTERY)



(a) Disconnect the connector from the combination meter assembly.
(b) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(c) Turn the ignition switch to the ON position and wait for at least 6 seconds.
(d) Measure the voltage.
Standard voltage

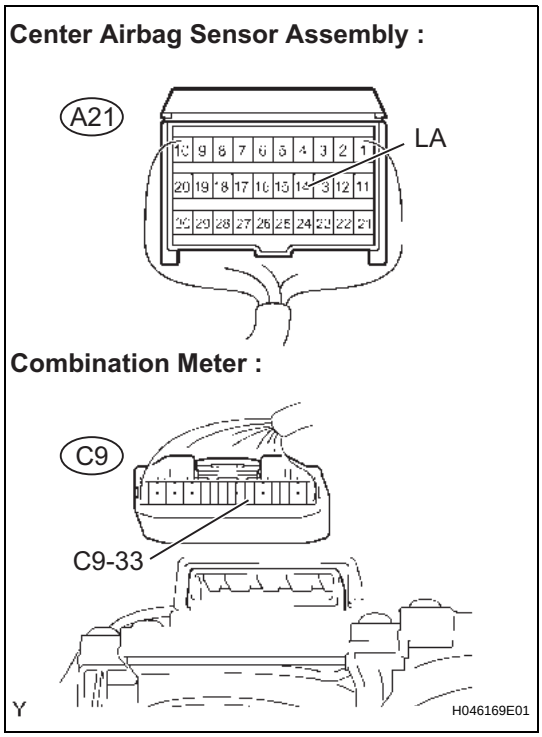
Tester Connection	Condition	Specified Condition
C9-21 - Body ground	Ignition switch ON	10 to 14 V

NG → REPAIR OR REPLACE WIRE HARNESS

OK

RS

5	CHECK WIRE HARNESS (CENTER AIRBAG SENSOR ASSEMBLY - COMBINATION METER ASSEMBLY)



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

Standard resistance

Tester Connection	Condition	Specified Condition
A21-14 (LA) - C9-33	Always	Below 1 Ω
A21-14 (LA) - Body ground	Always	1 MΩ or higher

(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
C9-33 - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE WIRE HARNESS

OK

6	CHECK COMBINATION METER

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connector to the combination meter assembly.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Check the SRS warning light operation.

OK:

The SRS warning light comes on.

NG → REPLACE COMBINATION METER

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

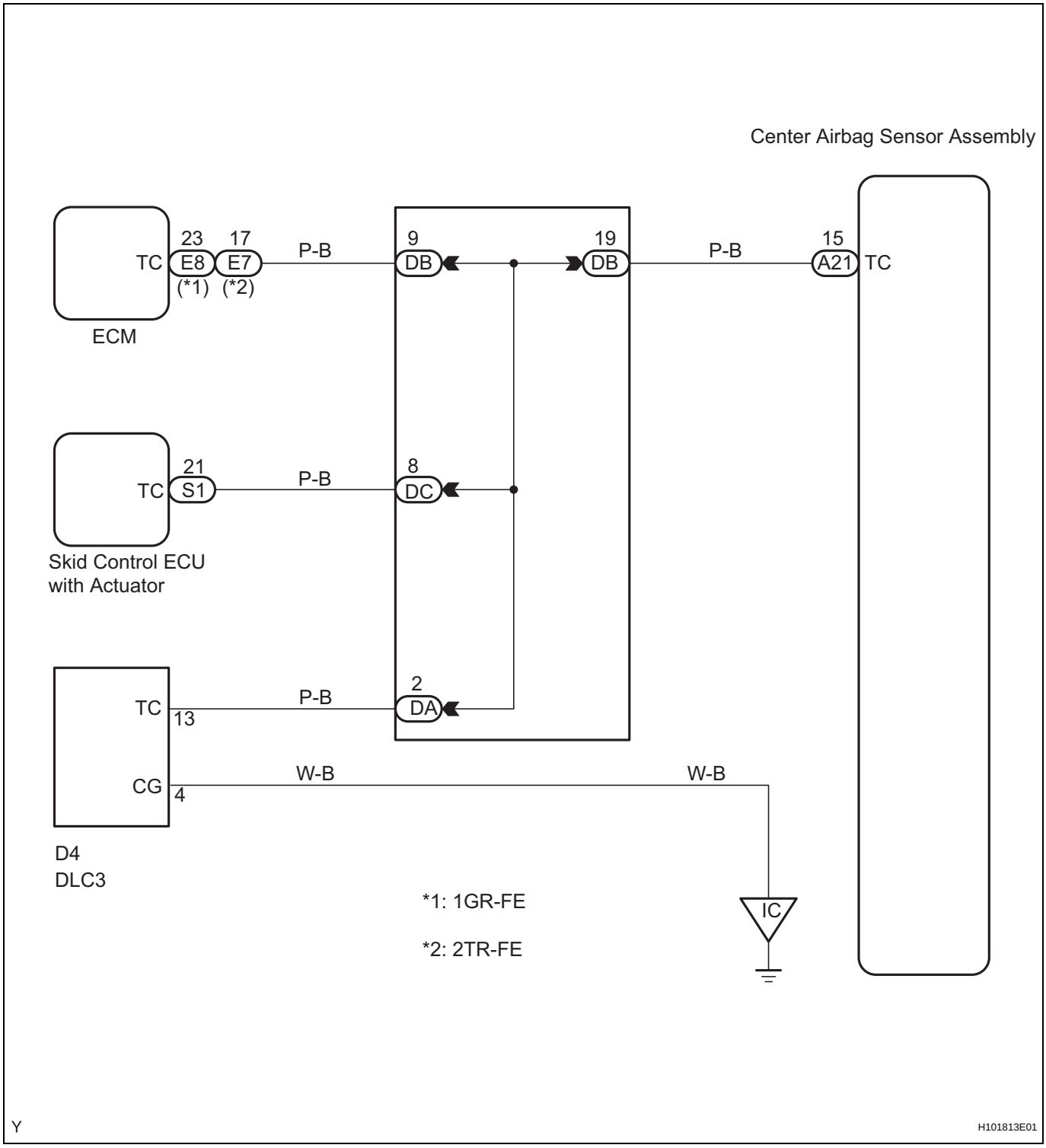
RS

TC and CG Terminal Circuit

DESCRIPTION

DTC output mode is set by connecting terminals TC and CG of the DLC3.
The DTCs stored in the center airbag sensor assembly are displayed by blinking patterns of the SRS warning light.

WIRING DIAGRAM



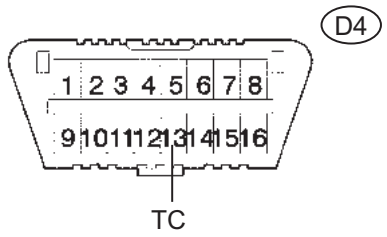
RS

HINT:
When all of the warning lights blink continuously, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in each ECU is suspected.

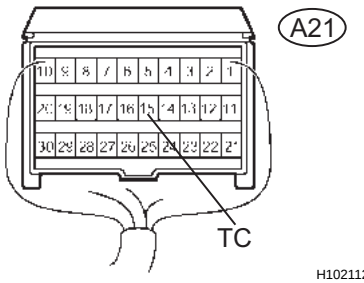
CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

1	CHECK WIRE HARNESS (DLC3 - CENTER AIRBAG SENSOR ASSEMBLY)

DLC3:



Center Airbag Sensor Assembly:



(a) Measure the resistance.
Standard resistance

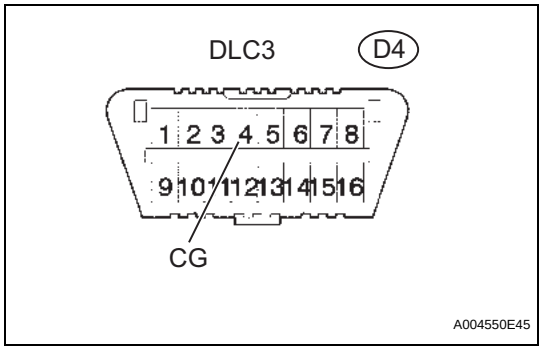
Tester Connection	Condition	Specified Condition
D4-13 (TC) - A21-15 (TC)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE WIRE HARNESS (TC OF DLC3 - TC OF CENTER AIRBAG SENSOR ASSEMBLY)**

OK

RS

2	CHECK WIRE HARNESS (CG OF DLC3 - BODY GROUND)



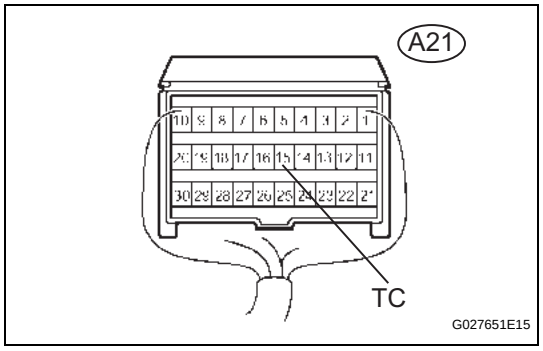
(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
D4-4 (CG) - Body ground	Always	Below 1 Ω

NG → **REPAIR OR REPLACE WIRE HARNESS (CG OF DLC3 - BODY GROUND)**

OK

3	CHECK WIRE HARNESS (TC OF CENTER AIRBAG SENSOR ASSEMBLY - BODY GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-15 (TC) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE WIRE HARNESS AND EACH ECU**

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY

OCCUPANT CLASSIFICATION SYSTEM (for Separate Seat Type)

PRECAUTION

1. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

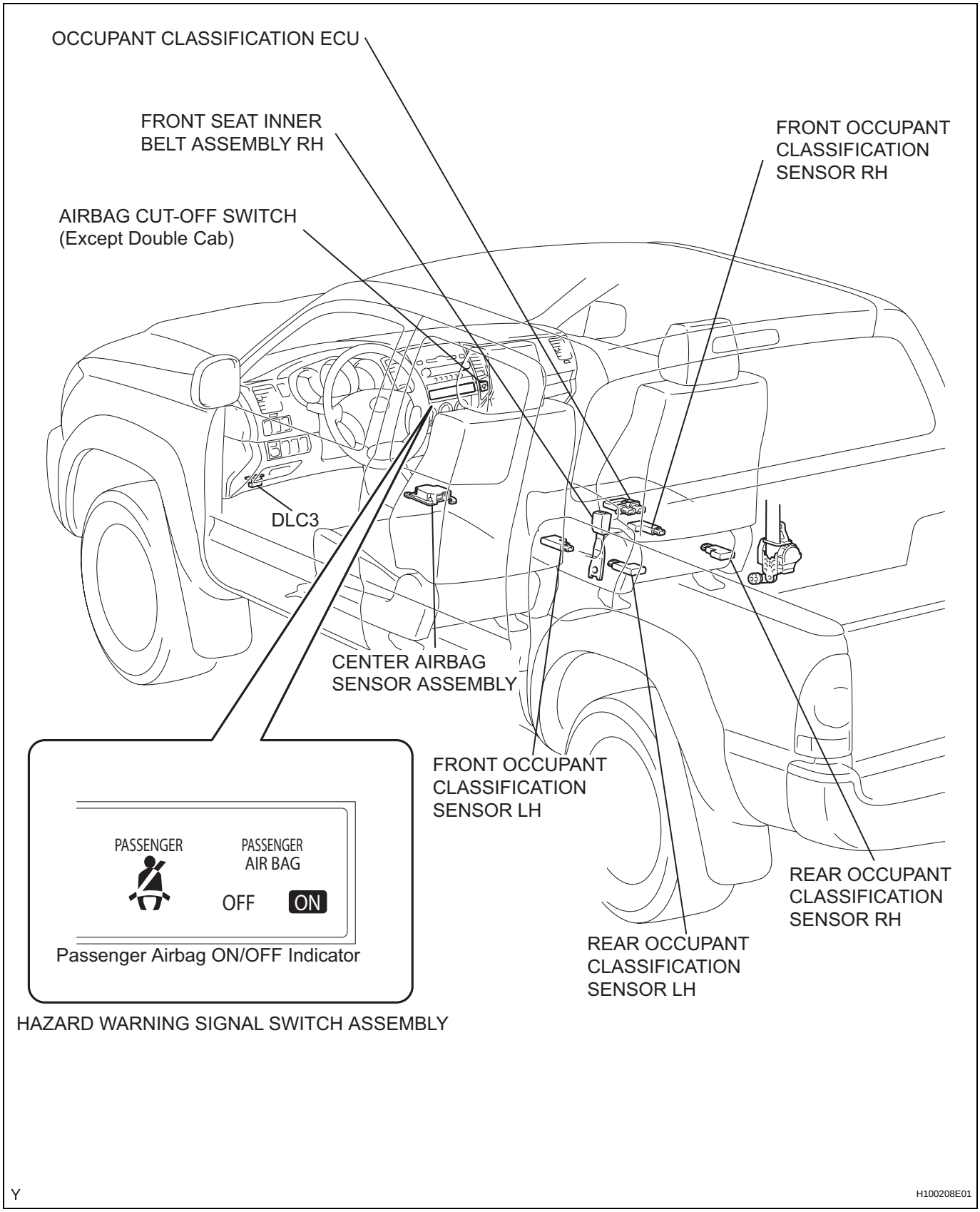
(a) Perform the zero point calibration and sensitivity check if any of the following conditions apply.

- 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 floor where the front passenger seat is mounted. If the flatness is not within +- 3.0 mm (0.118 in.), adjust it to the specified range.

PARTS LOCATION

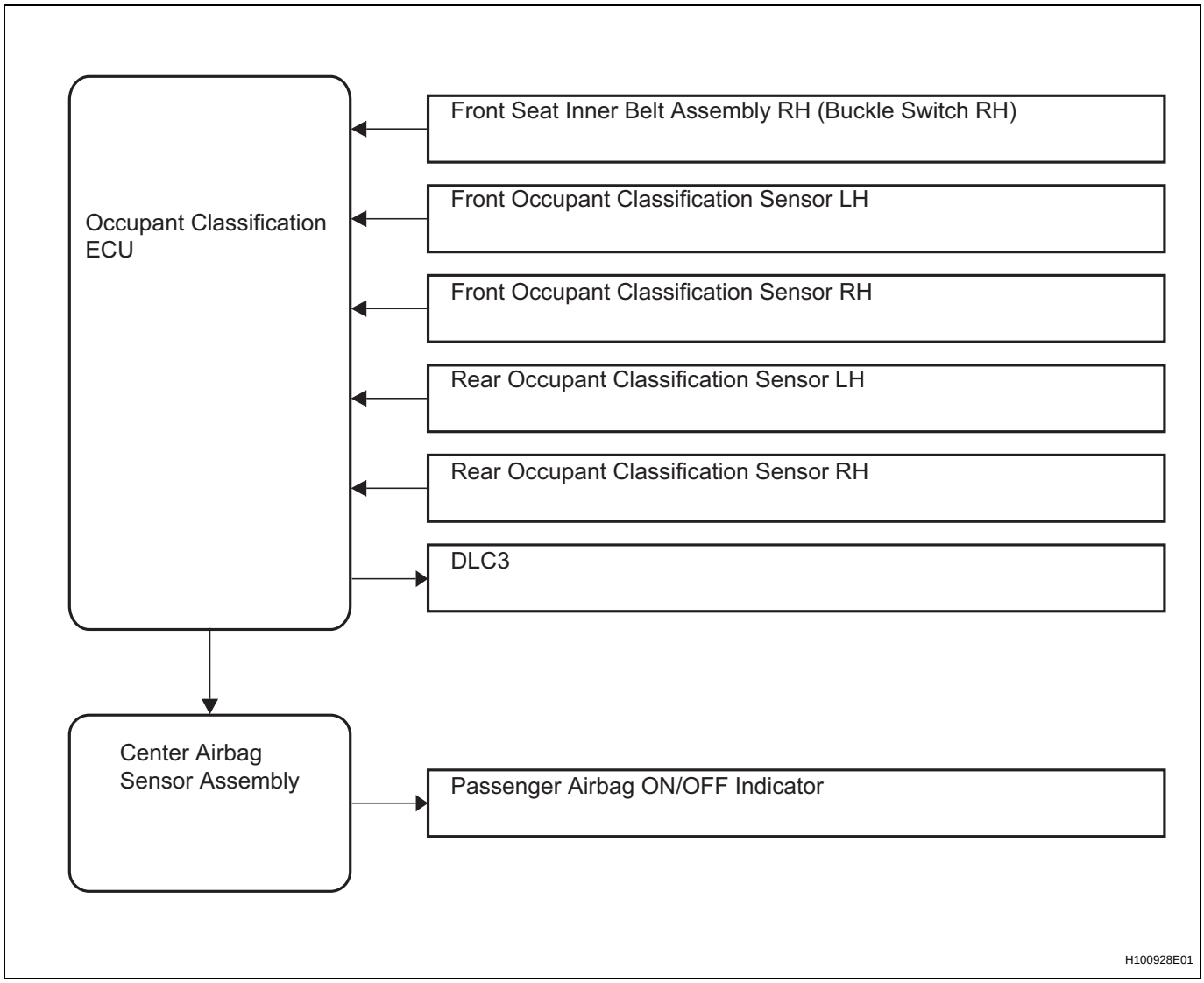


RS

Y

H100208E01

SYSTEM DIAGRAM



SYSTEM DESCRIPTION

1. FRONT PASSENGER OCCUPANT CLASSIFICATION SYSTEM

(a) General Description

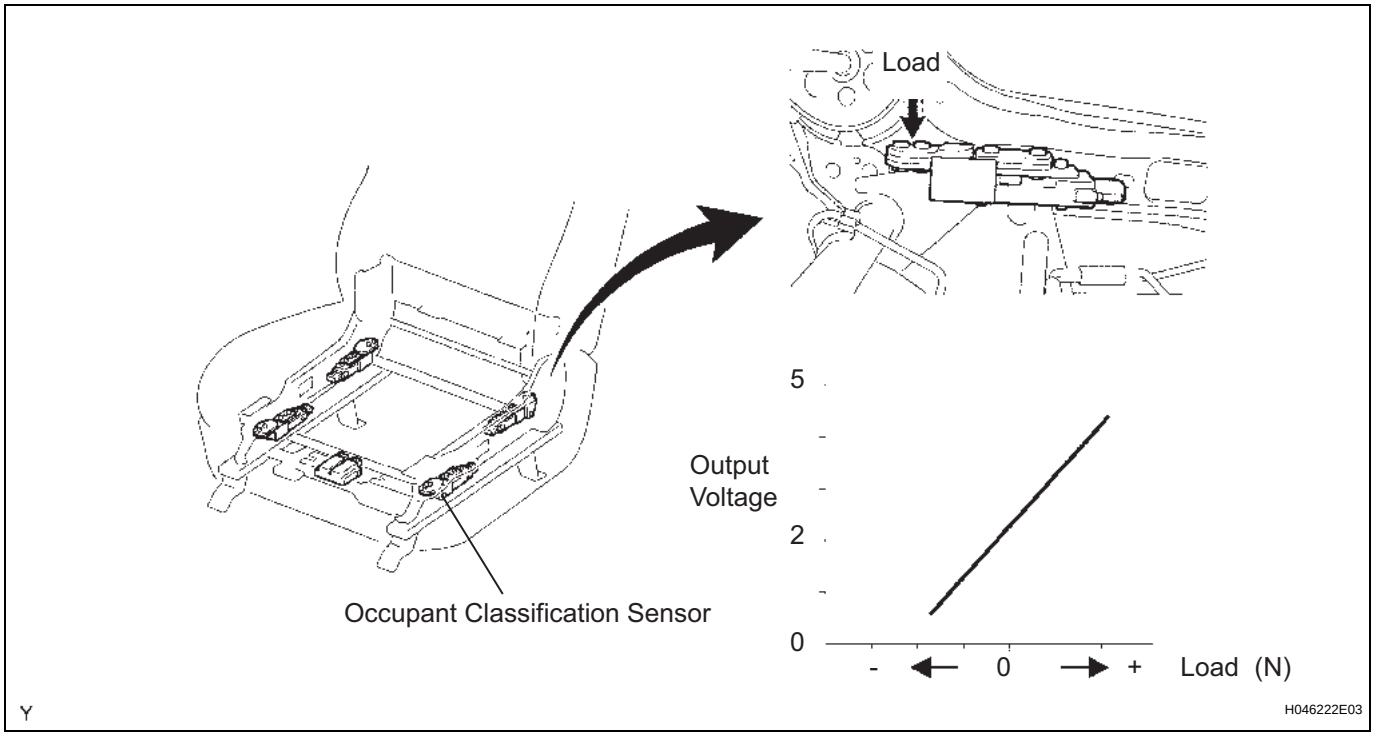
(1) The front passenger occupant classification system determines whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, based on the load that is applied to the front passenger seat and whether the seat belt is buckled. The system restricts the deployment of the front passenger airbag, front passenger side airbag, and the front passenger seat belt pretensioner in accordance with this judgement. The result is informed to the driver through the airbag ON/OFF indicator illumination.

(b) System Configuration

(1) This system consists of the occupant classification ECU, occupant classification sensors, airbag ON/OFF indicator, seat belt buckle switches, and center airbag sensor assembly.

(c) Occupant Classification ECU and Sensor

(1) The occupant classification sensors are installed on four brackets connecting the seat rail and the seat frame. The resistance values of these sensors, which vary in accordance with the load that acts on the brackets, are transmitted to the occupant classification ECU as signals. Upon receipt of the signals, the ECU determines the front passenger seat occupant conditions.



RS

HOW TO PROCEED WITH TROUBLESHOOTING

1	VEHICLE BROUGHT TO WORKSHOP

NEXT

2	CUSTOMER PROBLEM ANALYSIS (See page IN-26)

NEXT

3	PASSENGER AIRBAG ON/OFF INDICATOR CHECK (See page RS-362)

NEXT

4	DTCs CHECK (Present and Past DTCs) (See page RS-365)

(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 (See page RS-368)

NEXT

6	CIRCUIT INSPECTION

NEXT

7	REPAIR OR REPLACEMENT

NEXT

8	DTC CLEARANCE (Present and Past DTCs) (See page RS-365)

(a) Clear the DTCs.

NEXT

9	DTC CHECK (Present and Past DTCs) (See page RS-365)

(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 (See page RS-361)

(a) Check the passenger airbag ON/OFF indicator condition.

Result

Result	Proceed to
Passenger airbag ON/OFF indicator is operating 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

INITIALIZATION

1. ZERO POINT CALIBRATION

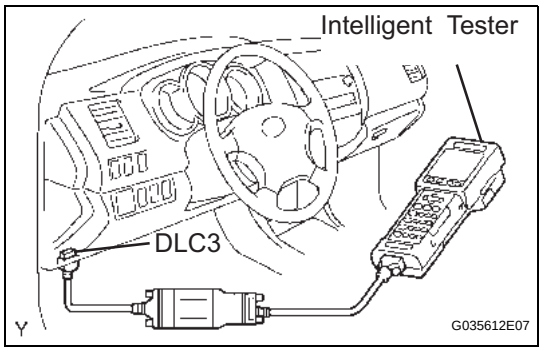
NOTICE:

Make sure that the front passenger seat is not occupied before performing the operation.

HINT:

Perform the zero point calibration and sensitivity check if any of the following conditions apply.

- 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 the zero point calibration has finished normally, and then perform the sensitivity check.

(1) Adjust the seat position in accordance with the table below.

Adjustment Item	Position
Slide Direction	Rearmost position
Reclining Angle	Upright position
Headrest Height	Lowest position
Lifter Height	Lowest position

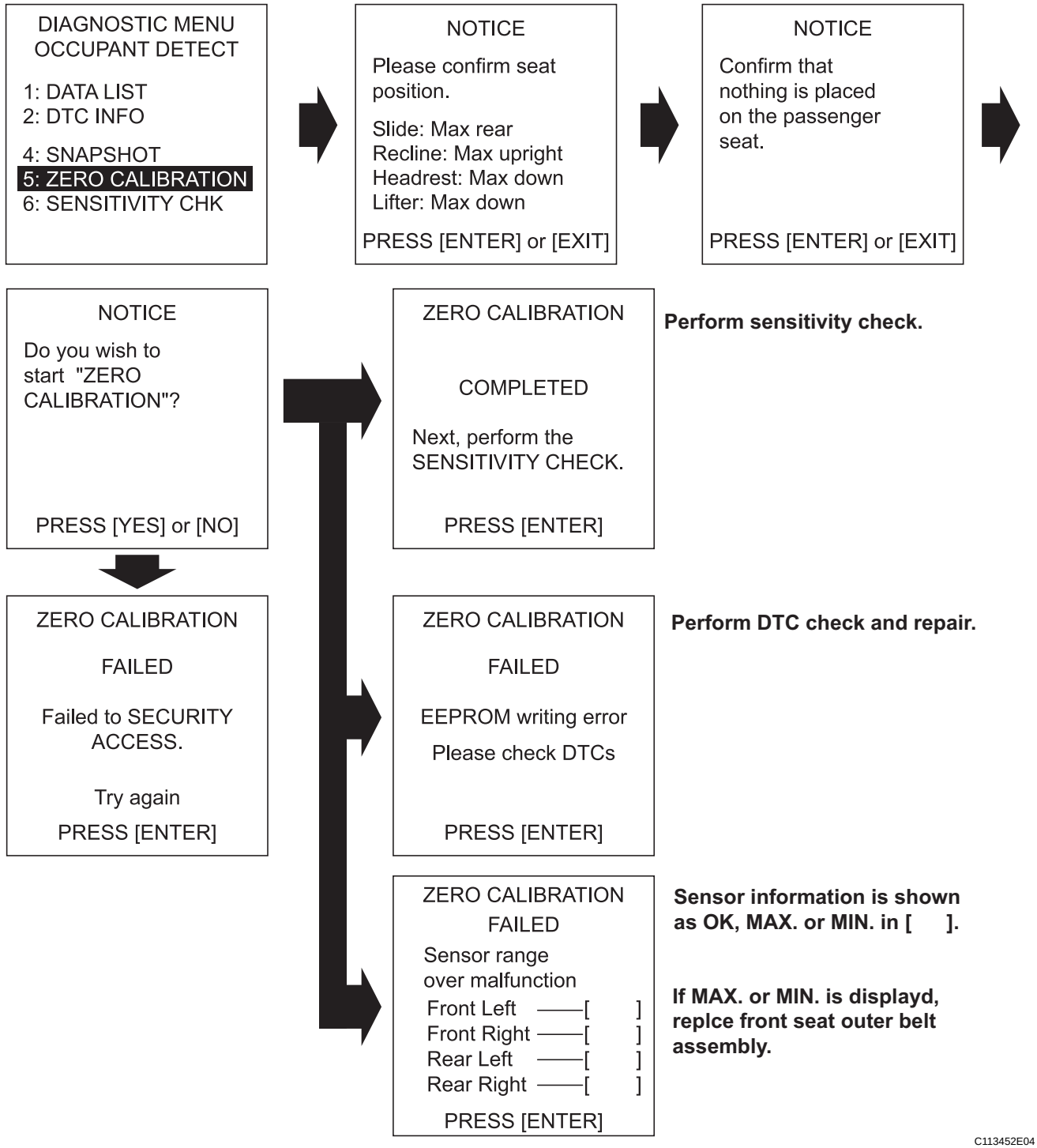
(2) Connect the intelligent tester to the DLC3.

(3) Turn the ignition switch to the ON position.

(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 - 9: OCCUPANT DETECT
Refer to the following screen flow.



HINT:
Refer to the intelligent tester operator's manual for further details.

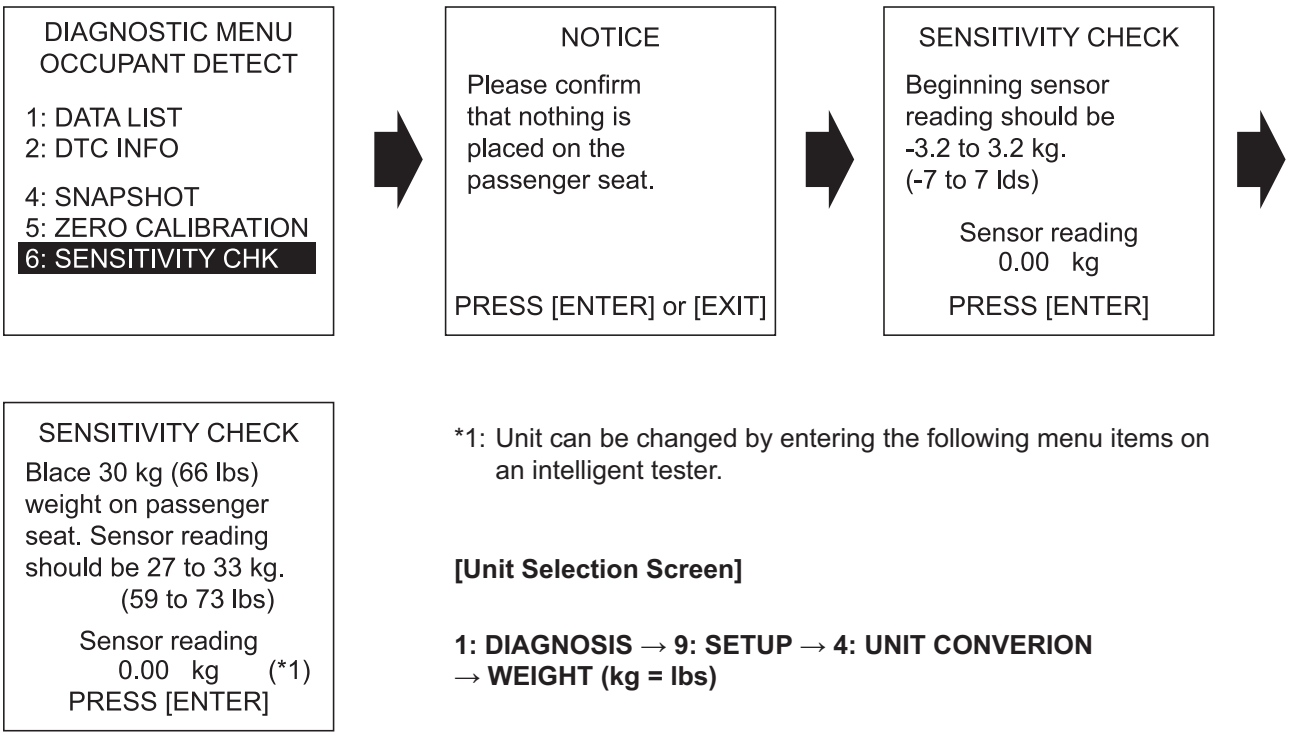
RS

OK:
COMPLETE is displayed.

(5) Perform the sensitivity check by following the prompts on the tester screen.
(6) Confirm that the beginning sensor reading is within the standard range.
Standard range:
-3.2 to 3.2 kg (-7 to 7 lb)
(7) Place a 30 kg (66.14 lb) weight (e.g. a lead mass) onto the front passenger seat.
(8) Confirm that the sensitivity is within the standard range.

SENSITIVITY CHECK PROCEDURE

1: DIAGNOSIS → 1: OBD/MOBD → MODEL YEAR → MODEL SELECTION → 9: OCCUPANT DETECT



*1: Unit can be changed by entering the following menu items on an intelligent tester.

[Unit Selection Screen]

1: DIAGNOSIS → 9: SETUP → 4: UNIT CONVERION → WEIGHT (kg = lbs)

C C113453E04

Standard range:
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 be accurate if a liquid weight is used).

RS

- If the sensitivity deviates from the standard range, retighten the bolts of the front passenger seat taking care not to deform the seat rail. After performing this procedure, if the sensitivity is not within the standard range, replace the front seat assembly RH.
- If the zero point calibration has not finished normally, replace the front seat assembly RH.

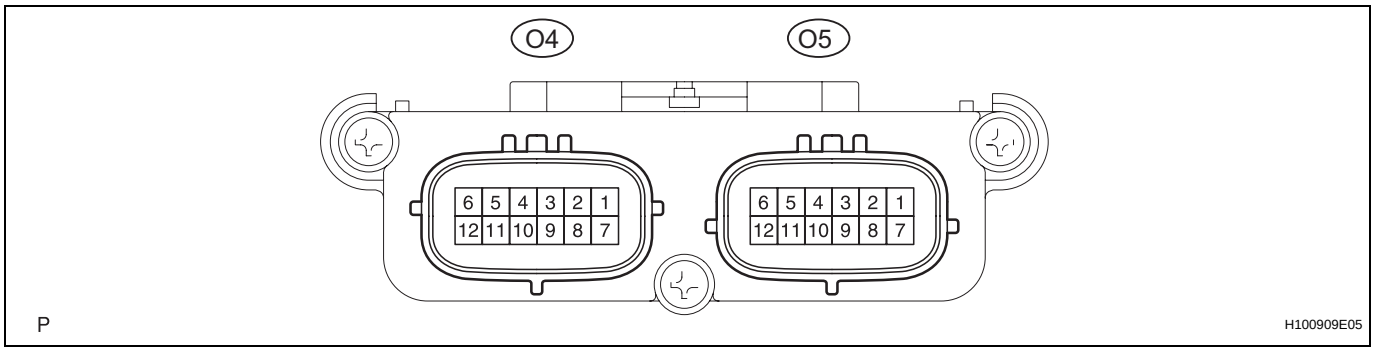
PROBLEM SYMPTOMS TABLE

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

Symptom	Suspected area	See page
Selected airbag cut-off switch position (AUTO or OFF) and displayed passenger airbag ON/OFF indicator of passenger seat occupant conditions do not correspond (for except Double Cab)	Trouble in Passenger Airbag ON/OFF Indicator	RS-450
Passenger seat occupant conditions and displayed passenger airbag ON/OFF indicator do not correspond (for Double Cab)	Trouble in Passenger Airbag ON/OFF Indicator	RS-450

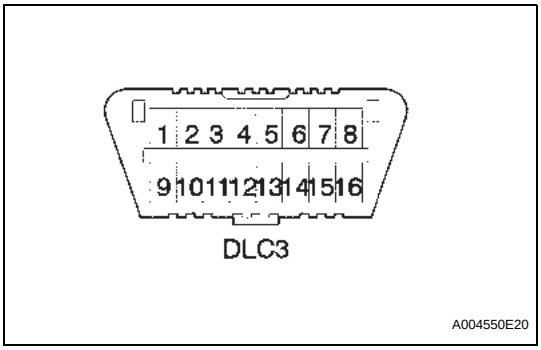
TERMINALS OF ECU

1. OCCUPANT CLASSIFICATION ECU



Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
+B (O5-1) - GND (O5-3)	R - W-B	Battery	Ignition switch on	10 to 14 V
DIA (O5-2) - GND (O5-3)	W - W-B	Diagnosis (DLC3)	Ignition switch on	Pulse generation
GND (O5-3) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
FSR- (O5-4) - GND (O5-3)	G-B - W-B	Center airbag sensor assembly communication line (-)	Always	Below 1 Ω
BGND (O5-5) - GND (O5-3)	P-G - W-B	Passenger side buckle switch ground line	Always	Below 1 Ω
IG (O5-7) - GND (O5-3)	O - W-B	Power source (IGN Fuse)	Ignition switch on	10 to 14 V
FSR+ (O5-8) - FSR- (O5-4)	G-R - G-B	Center airbag sensor assembly communication line	Ignition switch on	Pulse generation
BSW (O5-9) - BGND (O5-5)	B - P-G	Passenger side buckle switch line	Buckle switch ON Buckle switch OFF	Pulse generation
SGD1 (O4-1) - GND (O5-3)	L - W-B	Occupant classification sensor front LH ground line	Always	Below 1 Ω
SGD2 (O4-2) - GND (O5-3)	O - W-B	Occupant classification sensor front RH ground line	Always	Below 1 Ω
SGD3 (O4-3) - GND (O5-3)	P-G - W-B	Occupant classification sensor rear LH ground line	Always	Below 1 Ω
SGD4 (O4-4) - GND (O5-3)	B-R - W-B	Occupant classification sensor rear RH ground line	Always	Below 1 Ω
SVC1 (O4-11) - SGD1 (O4-1)	B-L - L	Occupant classification sensor front LH power supply line	Ignition switch on, a load is applied to occupant classification sensor front LH	4.5 to 5.1 V
SVC2 (O4-12) - SGD2 (O4-2)	LG-B - O	Occupant classification sensor front RH power supply line	Ignition switch on, a load is applied to occupant classification sensor front RH	4.5 to 5.1 V
SVC3 (O4-5) - SGD3 (O4-3)	B-O -P-G	Occupant classification sensor rear LH power supply line	Ignition switch on, a load is applied to occupant classification sensor rear LH	4.5 to 5.1 V
SVC4 (O4-6) - SGD4 (O4-4)	GR-L - B-R	Occupant classification sensor rear RH power supply line	Ignition switch on, a load is applied to occupant classification sensor rear RH	4.5 to 5.1 V
SIG1 (O4-7) - SGD1 (O4-1)	G - L	Occupant classification sensor front LH signal line	Ignition switch on, a load is applied to occupant classification sensor front LH	Pulse generation

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
SIG2 (O4-8) - SGD2 (O4-2)	R-L - O	Occupant classification sensor front RH signal line	Ignition switch on, a load is applied to occupant classification sensor front RH	Pulse generation
SIG3 (O4-9) - SGD3 (O4-3)	R-B - P-G	Occupant classification sensor rear LH signal line	Ignition switch on, a load is applied to occupant classification sensor rear LH	Pulse generation
SIG4 (O4-10) - SGD4 (O4-4)	L-R - B-R	Occupant classification sensor rear RH signal line	Ignition switch on, a load is applied to occupant classification sensor rear RH	Pulse generation



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The vehicle's ECU uses the ISO 9141-2 for communication protocol. 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
BAT (16) - Body ground	Battery positive	Always	11 to 14 V

HINT:

If the display shows a communication error message when the intelligent tester is connected to the DLC3, the ignition switch is turned to the ON position and the intelligent tester is operated, there is a problem on the vehicle side or tool side.

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

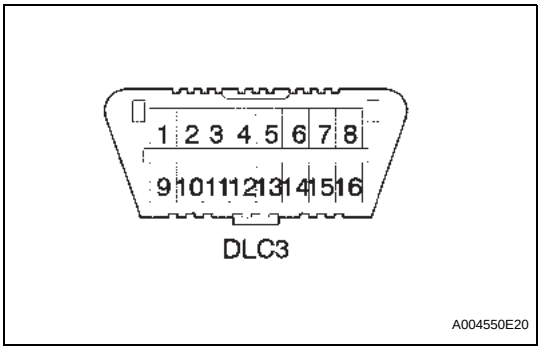
2. SYMPTOM SIMULATION

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. Regardless of the technician's experience or skill, if troubleshooting proceeds without confirmation of the problem symptoms, something important is likely to be overlooked and incorrect guesses may be made at some points in the repair operation.

This leads to a standstill in troubleshooting.

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specification
SIG2 (O4-8) - SGD2 (O4-2)	R-L - O	Occupant classification sensor front RH signal line	Ignition switch on, a load is applied to occupant classification sensor front RH	Pulse generation
SIG3 (O4-9) - SGD3 (O4-3)	R-B - P-G	Occupant classification sensor rear LH signal line	Ignition switch on, a load is applied to occupant classification sensor rear LH	Pulse generation
SIG4 (O4-10) - SGD4 (O4-4)	L-R - B-R	Occupant classification sensor rear RH signal line	Ignition switch on, a load is applied to occupant classification sensor rear RH	Pulse generation



DIAGNOSIS SYSTEM

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HINT:

If the display shows a communication error message when the intelligent tester is connected to the DLC3, the ignition switch is turned to the ON position and the intelligent tester is operated, there is a problem on the vehicle side or tool side.

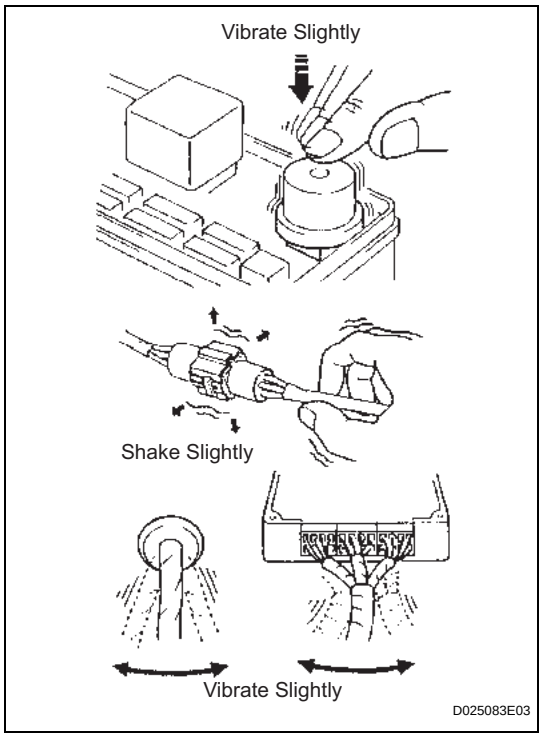
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The most difficult case in troubleshooting is when no symptoms occur. In such cases, a thorough customer problem analysis must be carried out. Then the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be simulated. Regardless of the technician's experience or skill, if troubleshooting proceeds without confirmation of the problem symptoms, something important is likely to be overlooked and incorrect guesses may be made 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 ignition switch is turned to the on position).
(1) Slightly vibrate the part of the sensor considered to be the cause of the problem 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.

(b) Simulation method for DTC B1795: Turn the ignition switch from the lock to the on position, hold for 10 seconds, and then back to the lock position again 50 times in a row.
HINT:
DTC B1795 is output if the occupant classification ECU receives the ignition switch lock-on-lock 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 ignition switch to the on position.
(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 ignition switch is turned to the on position, the passenger airbag ON/OFF indicator will be ON/OFF depending on the conditions listed below.

RS

Double cab

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF
Passenger occupant classification system failure	OFF	ON	ON

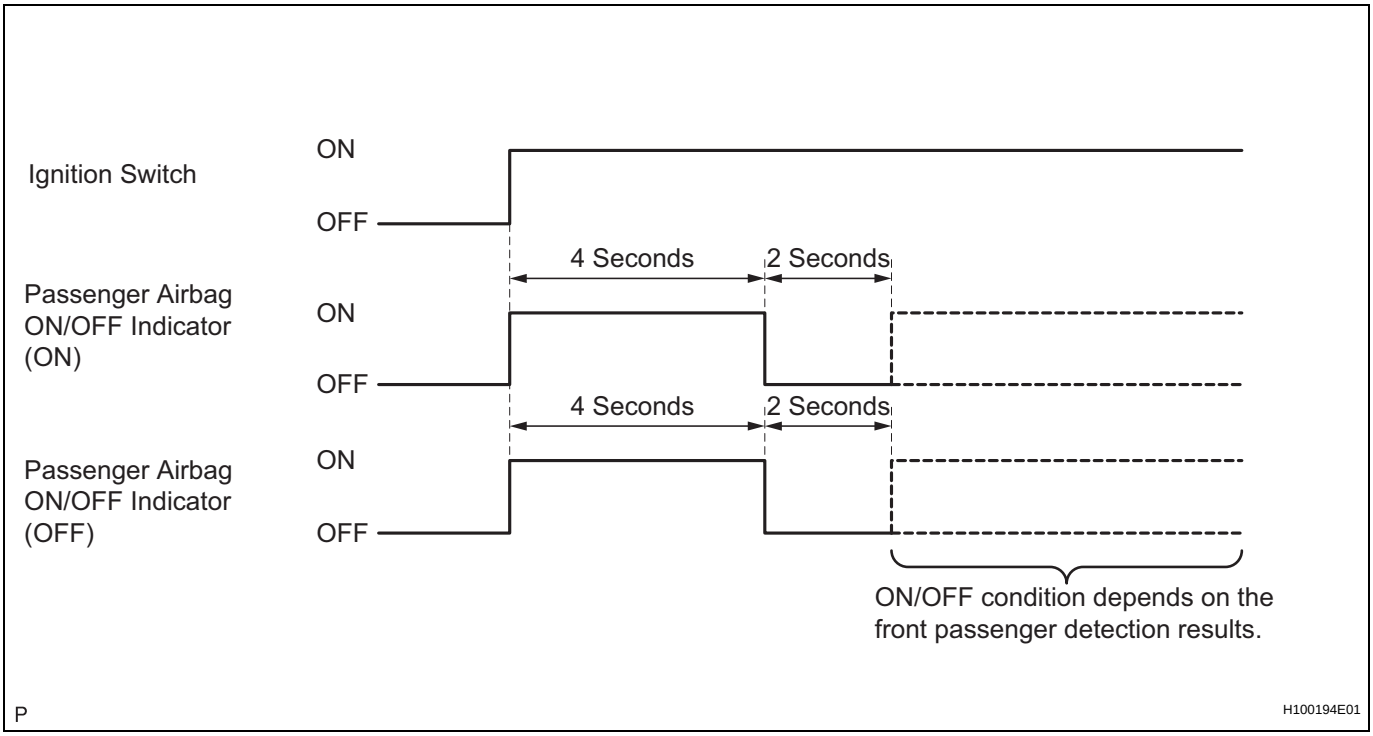
Except double cab

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	Airbag cut off switch system failure	OFF	ON	ON
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Child seated / Child restrain system set	Airbag cut off switch system failure	OFF	ON	ON
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF
Vacant	Airbag cut off switch system failure	OFF	ON	ON
Passenger occupant classification system failure	AUTO	OFF	ON	ON
Passenger occupant classification system failure	OFF	OFF	ON	ON
Passenger occupant classification system failure	Airbag cut off switch system failure	OFF	ON	ON

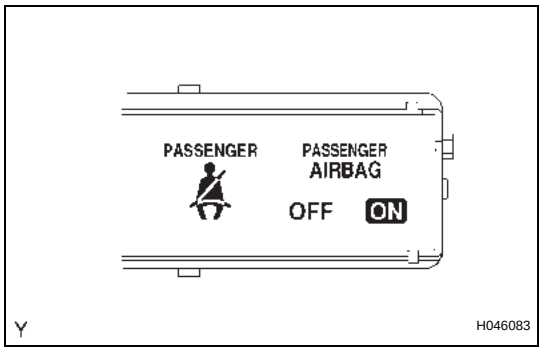
HINT:

- The passenger airbag ON/OFF indicator operates 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 the airbag system first.

RS



4. PASSENGER AIRBAG ON/OFF INDICATOR CHECK

(a) Turn the ignition switch to the on position.

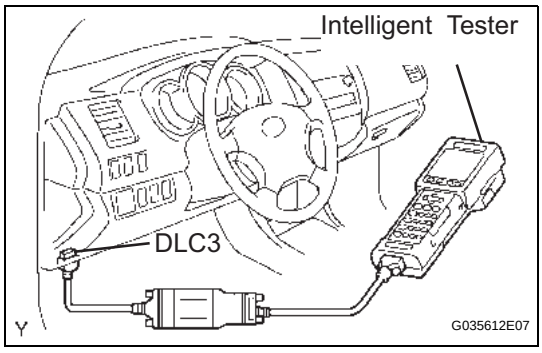
(b) Check that the passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then goes off for approximately 2 seconds.
HINT:
Refer to the table in the previous step regarding the passenger airbag ON/OFF indicator when approximately 6 seconds have elapsed after the ignition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

DTC CHECK / CLEAR

1. DTC CHECK

HINT:

- When DTC B1650/23 is detected as a result of troubleshooting for the airbag system, troubleshoot the occupant classification system.
- Use the intelligent tester to read and clear DTCs, otherwise the DTCs cannot be read and cleared.



(a) Check for DTCs.

(1) Connect the intelligent tester to the DLC3.

(2) Turn the ignition switch to the on position.

(3) Check for 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 ignition switch to the on position.

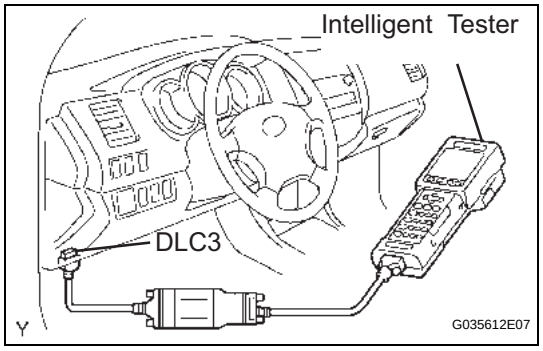
(3) Clear the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

DATA LIST / ACTIVE TEST

HINT:
By accessing the DATA LIST displayed by the intelligent tester, you can check values of switches and sensors without removing any parts. Reading the DATA LIST as the first step of troubleshooting is one method to shorten diagnostic time.



1. DATA LIST FOR OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the on position.
(c) Following the display on the tester screen, read the DATA LIST.

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
IG SW	Ignition switch condition/ ON: Ignition switch ON OFF: Ignition switch OFF	ON/OFF	-
P BUCKLE SW	Buckle switch (passenger side)/ UNSET: Passenger side seat belt is unfastened SET: Passenger side seat belt is fastened NG: Passenger side seat belt is malfunctioning	UNSET/SET	-
PASSENGER CLASS	Passenger classification/ 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 CHILD: Child (less than 36 kg (79.37 lb)) is seated CRS: Child restraint system and passenger side buckle switch ON, then 7 to 36 kg (15.43 to 79.37 lb) is set OFF: Vacant	AF05/AM50/CHILD/CRS/OFF	-
SENS RANGE INF	Sensor range information/ OK: The sensor value is within the range NG: The sensor value is outside 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	-
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	-

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
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.: 5 V	0 to 5 V	-
FR SENS VOL	Front right sensor voltage/ Min.: 0 V Max.: 5 V	0 to 5 V	-
RL SENS VOL	Rear left sensor voltage/ Min.: 0 V Max.: 5 V	0 to 5 V	-
RR SENS VOL	Rear right sensor voltage/ Min.: 0 V Max.: 5 V	0 to 5 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 DTCs Min.: 0, Max.: 255	0	-
#PAST CODES	Number of past DTCs 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).

1. Occupant Classification ECU

HINT:

When DTC B1650/32 is detected as a result of troubleshooting the Supplemental Restraint System, perform troubleshooting for the occupant classification system as shown in the chart below.

DTC No.	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 (Buckle switch RH) 2. No. 1 seat wire 3. Floor wire 4. Occupant classification ECU	ON	RS-370
B1780	Front Occupant Classification Sensor LH Circuit Malfunction	1. Front seat with adjuster frame assembly RH (Occupant classification sensor front LH) 2. No. 1 seat wire 3. Occupant classification ECU	ON	RS-377
B1781	Front Occupant Classification Sensor RH Circuit Malfunction	1. Front seat with adjuster frame assembly RH (Occupant classification sensor front RH) 2. No. 1 seat wire 3. Occupant classification ECU	ON	RS-385
B1782	Rear Occupant Classification Sensor LH Circuit Malfunction	1. Front seat with adjuster frame assembly RH (Occupant classification sensor rear LH) 2. No. 1 seat wire 3. Occupant classification ECU	ON	RS-393
B1783	Rear Occupant Classification Sensor RH Circuit Malfunction	1. Front seat with adjuster frame assembly RH (Occupant classification sensor rear RH) 2. No. 1 seat wire 3. Occupant classification ECU	ON	RS-401
B1785	Front Occupant Classification Sensor LH Collision Detection	1. Front seat with adjuster frame assembly RH (Occupant classification sensor front LH) 2. Occupant classification ECU	ON	RS-409
B1786	Front Occupant Classification Sensor RH Collision Detection	1. Front seat with adjuster frame assembly RH (Occupant classification sensor front RH) 2. Occupant classification ECU	ON	RS-413
B1787	Rear Occupant Classification Sensor LH Collision Detection	1. Front seat with adjuster frame assembly RH (Occupant classification sensor rear LH) 2. Occupant classification ECU	ON	RS-417
B1788	Rear Occupant Classification Sensor RH Collision Detection	1. Front seat with adjuster frame assembly RH (Occupant classification sensor rear RH) 2. Occupant classification ECU	ON	RS-421
B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction	1. Floor wire 2. No. 1 seat wire 3. Occupant classification ECU 4. Center airbag sensor assembly	ON	RS-425
B1793	Occupant Classification Sensor Power Supply Circuit Malfunction	1. Front seat with adjuster frame assembly RH (Occupant classification sensors) 2. No. 1 seat wire 3. Occupant classification ECU	ON	RS-434
B1794	Open in Occupant Classification ECU Battery Positive Line	1. Wire harness 2. Occupant classification ECU	ON	RS-441
B1795	Occupant Classification ECU Malfunction	1. Occupant classification ECU	ON	RS-446

DTC No.	Detection Item	Trouble Area	Passenger Airbag ON/ OFF Indicator (OFF Indicator)	See page
B1796	Sleep Operation Failure of Occupant Classification ECU	1. Occupant classification ECU	ON	RS-448

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.

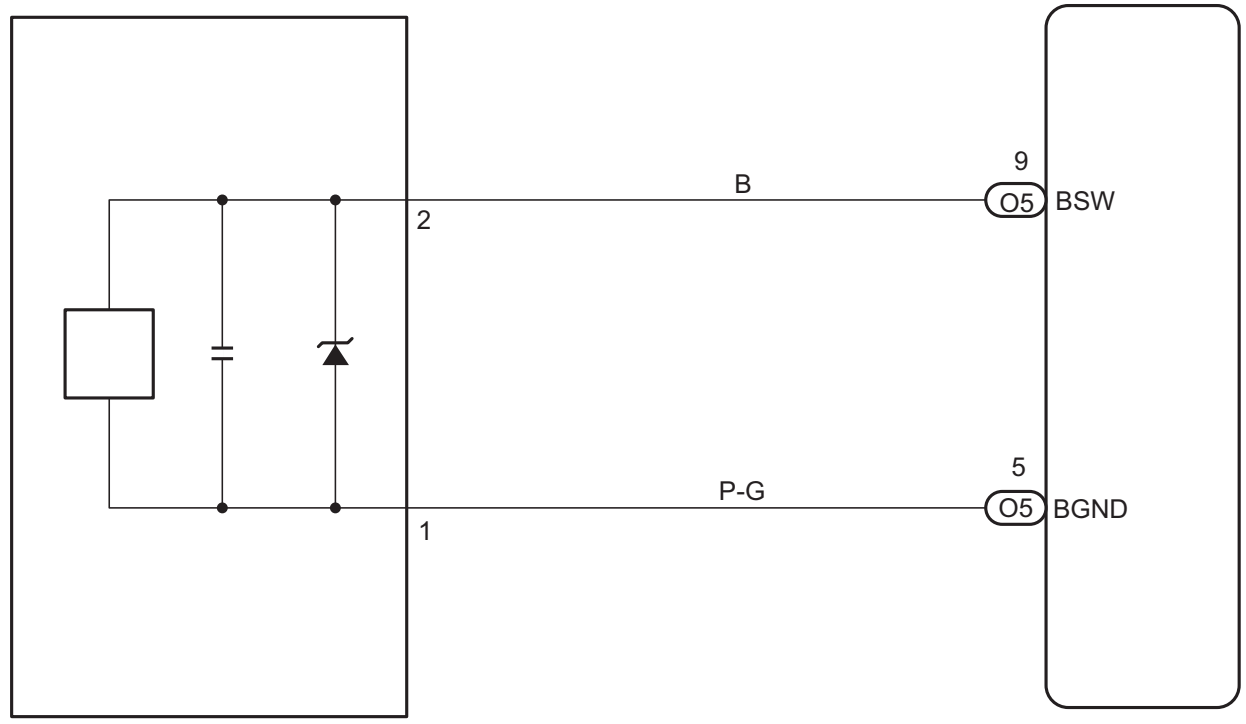
Troubleshoot DTC B1771 first when DTCs B1771 and B1795 are output simultaneously.

DTC No.	DTC Detecting Condition	Trouble Area
B1771	• Occupant classification ECU detects line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in the passenger side buckle switch circuit for 2 seconds • Passenger side buckle switch malfunction • Occupant classification ECU malfunction	• No .1 seat wire • Floor wire • Front seat inner belt assembly RH (Buckle switch RH) • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1771 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat for a long period of time may cause a problem, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	**CHECK DTC**

(a) Turn the ignition switch to the on position.
(b) Clear the DTCs stored in the memory (See page RS-365).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the lock position.
(d) Turn the ignition switch to the on position.
(e) Check the DTCs (See page RS-365).
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**

NG

2 CHECK CONNECTION OF CONNECTORS

(a) Turn the ignition switch to the lock position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the front seat inner belt assembly RH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

3 CHECK CONNECTORS

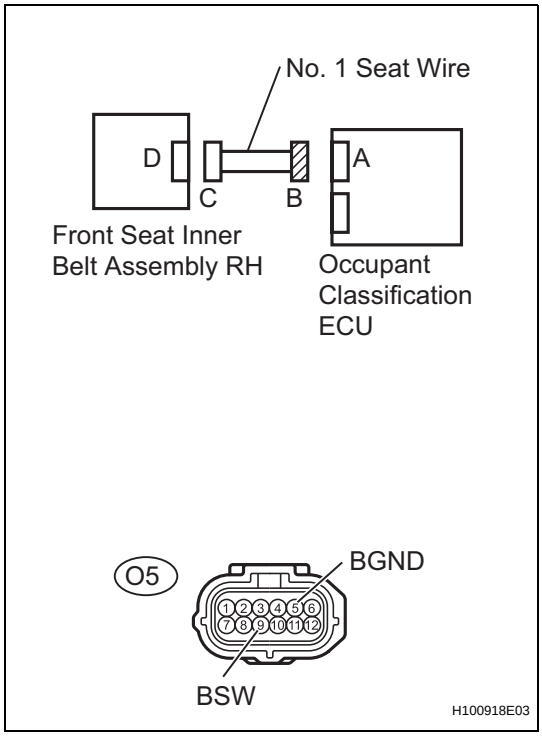
(a) Check that the connectors (on the occupant classification ECU side and buckle switch RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

RS

4 CHECK NO. 1 SEAT WIRE (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 ignition switch to the on position.
(d) Measure the voltage.

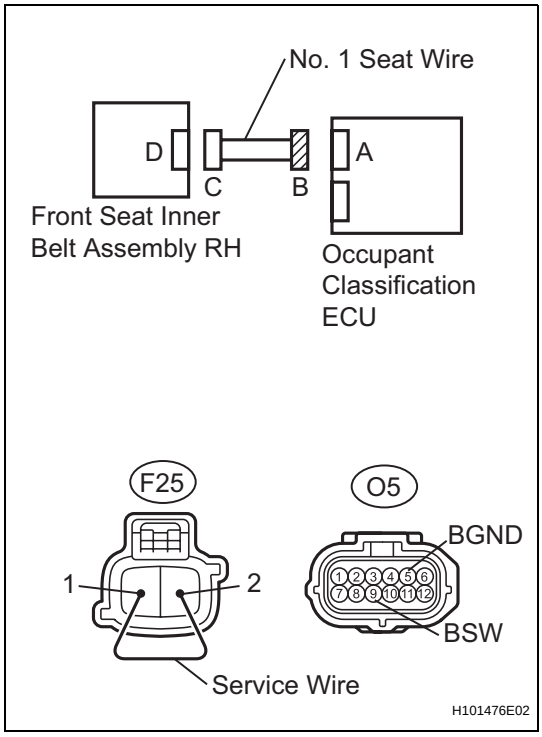
Standard voltage

Tester connection	Condition	Specified condition
O5-9 (BSW) - Body ground	Ignition switch on	Below 1 V
O5-5 (BGND) - Body ground	Ignition switch on	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the lock position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect J11-2 and J11-1 of connector C.

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

(d) Measure the resistance.

Standard resistance

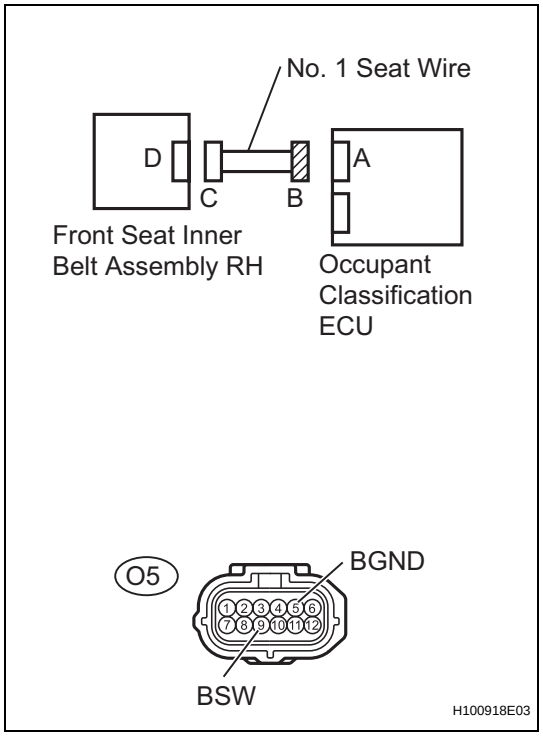
Tester connection	Condition	Specified condition
O5-9 (BSW) - O5-5 (BGND)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



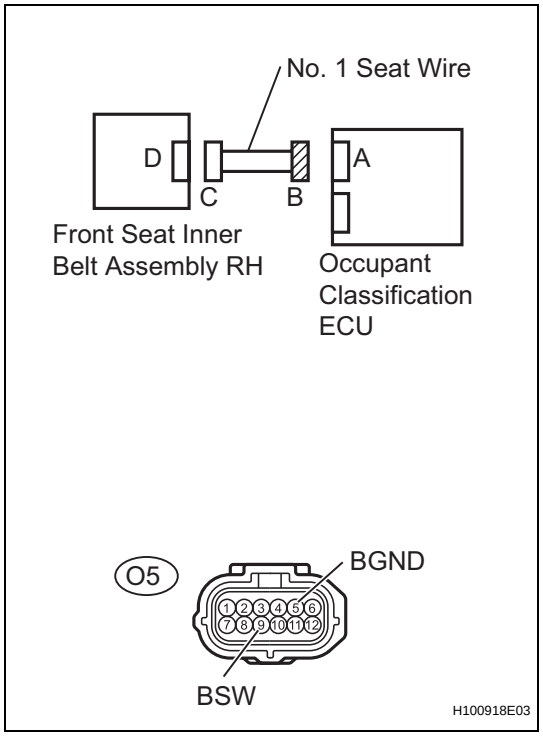
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester connection	Condition	Specified condition
O5-9 (BSW) - O5-5 (BGND)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

7 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester connection	Condition	Specified condition
O5-9 (BSW) - Body ground	Always	1 MΩ or higher
O5-5 (BGND) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

8	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 ignition switch to the on position.
(d) Clear the DTCs stored in the memory (See page RS-365).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the lock position.
(f) Turn the ignition switch to the on position.
(g) Check the DTCs (See page RS-365).
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

NG

9	REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

(a) Turn the ignition switch to the lock position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat inner belt assembly RH (See page SB-8).
HINT:
Perform the inspection using parts from a normal vehicle if possible.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the on position.
(f) Clear the DTCs stored in the memory (See page RS-365).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the lock position.
(h) Turn the ignition switch to the on position.
(i) Check the DTCs (See page RS-365).
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

RS

NG

10	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the lock position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

NEXT

11	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the on position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

12	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard values:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

RS

DTC	B1780	Front Occupant Classification Sensor LH Circuit Malfunction

DESCRIPTION

The occupant classification sensor front LH circuit consists of the occupant classification ECU and the occupant classification sensor front LH.

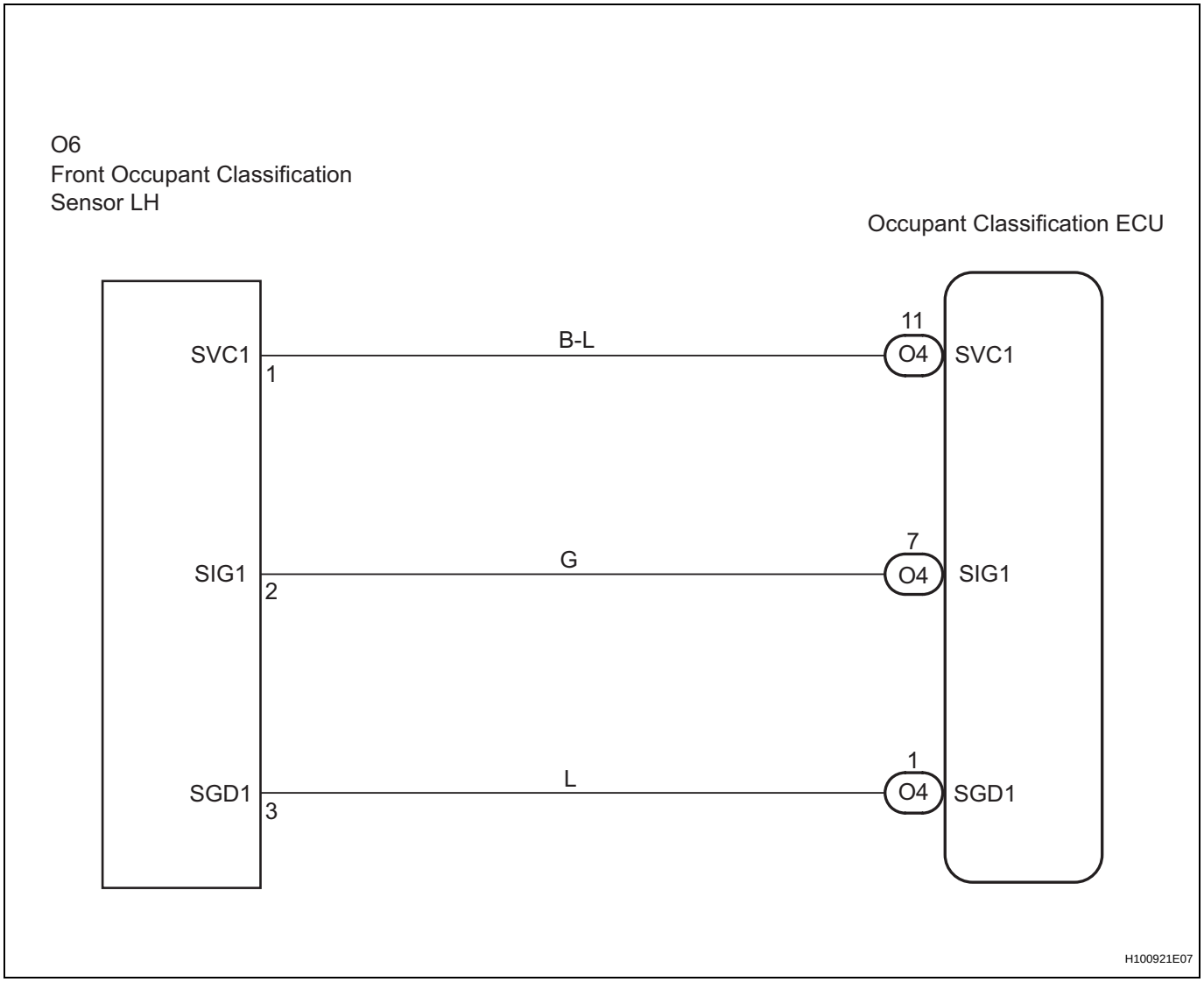
DTC B1780 is set when a malfunction is detected in the occupant classification sensor front LH circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
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 occupant classification sensor front LH circuit for 2 seconds • Occupant classification sensor front LH malfunction • Occupant classification ECU malfunction	• Front seat with adjuster frame assembly RH (Occupant classification sensor front LH) • No. 1 seat wire • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1780 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

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

(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1780 is not output.

HINT:
DTCs other than B1780 may be output at this time, but they are not related to this check.

OK → **PERFORM SENSITIVITY CHECK**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the occupant classification sensor front LH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

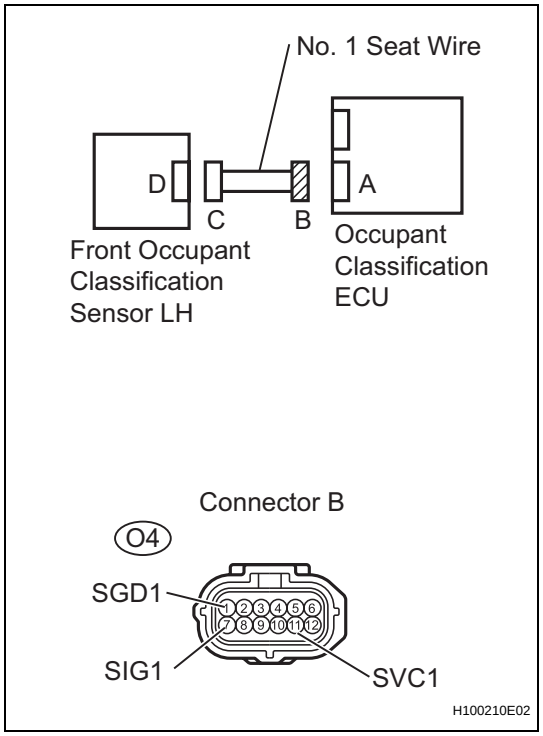
3	CHECK CONNECTORS

(a) Check that the connectors (on the occupant classification ECU side and occupant classification sensor front LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4 CHECK NO. 1 SEAT WIRE (TO B+)



(a) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor front LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.

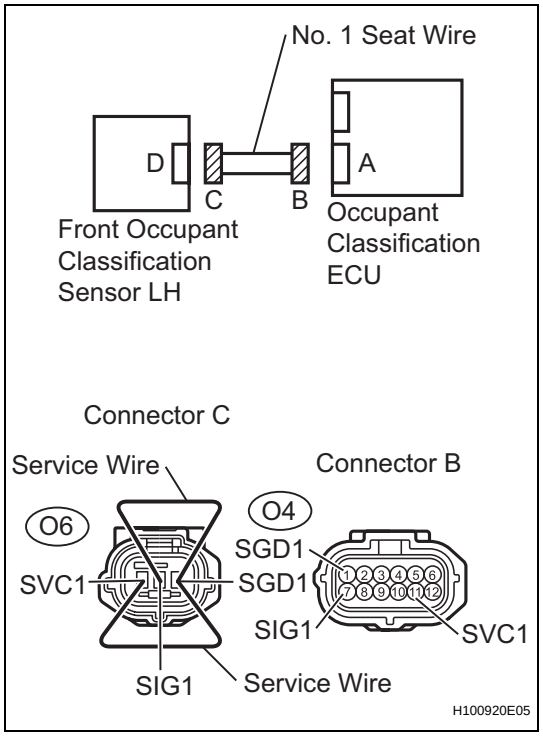
Standard voltage

Tester Connection	Condition	Specified Condition
O4-1 (SGD1) - Body ground	Ignition switch ON	Below 1 V
O4-7 (SIG1) - Body ground	Ignition switch ON	Below 1 V
O4-11 (SVC1) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using service wires, connect O6-1 (SVC1) and O6-3 (SGD1), and connect O6-2 (SIG1) and O6-3 (SGD1) of connector C.

NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.

(d) Measure the resistance.

Standard resistance

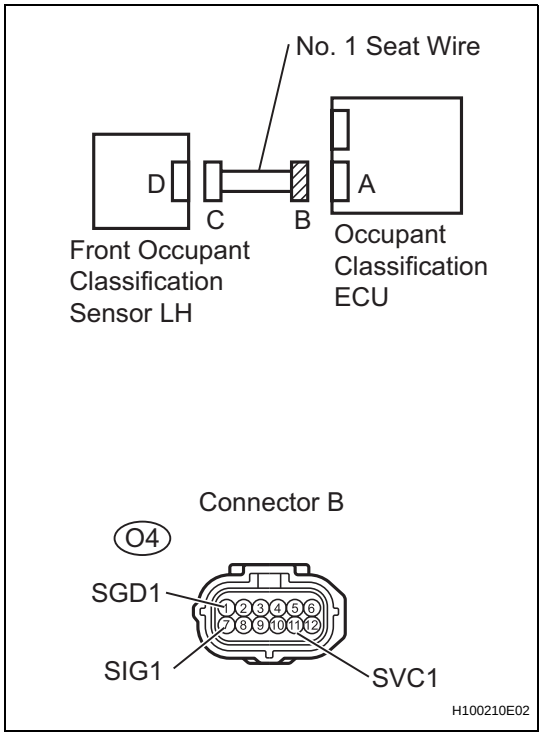
Tester Connection	Condition	Specified Condition
O4-7 (SIG1) - O4-1 (SGD1)	Always	Below 1 Ω
O4-11 (SVC1) - O4-1 (SGD1)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



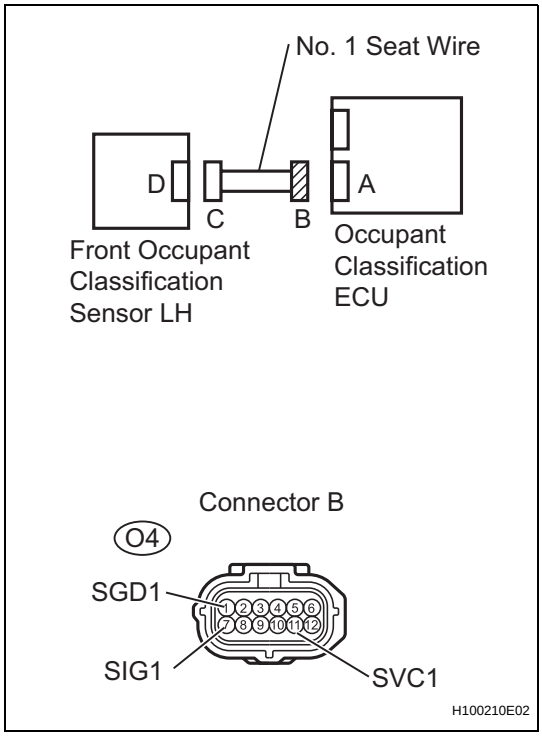
(a) Disconnect the service wires from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-7 (SIG1) - O4-1 (SGD1)	Always	1 MΩ or higher
O4-11 (SVC1) - O4-1 (SGD1)	Always	1 MΩ or higher
O4-7 (SIG1) - O4-11 (SVC1)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

7 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-1 (SGD1) - Body ground	Always	1 MΩ or higher
O4-7 (SIG1) - Body ground	Always	1 MΩ or higher
O4-11 (SVC1) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

8	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the occupant classification sensor front LH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1780 is not output.

HINT:
DTCs other than B1780 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

HINT:
Perform the inspection using parts from a normal vehicle when 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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG	Go to step 13

OK

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 13**

OK

12	CHECK DTC

(a) Connect the negative (-) terminal cable to the battery.
(b) Turn the ignition switch to the ON position.
(c) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1780 is not output.

HINT:
DTCs other than B1780 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

13	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

NEXT

14	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.

(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

15	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1781	Front Occupant Classification Sensor RH Circuit Malfunction

DESCRIPTION

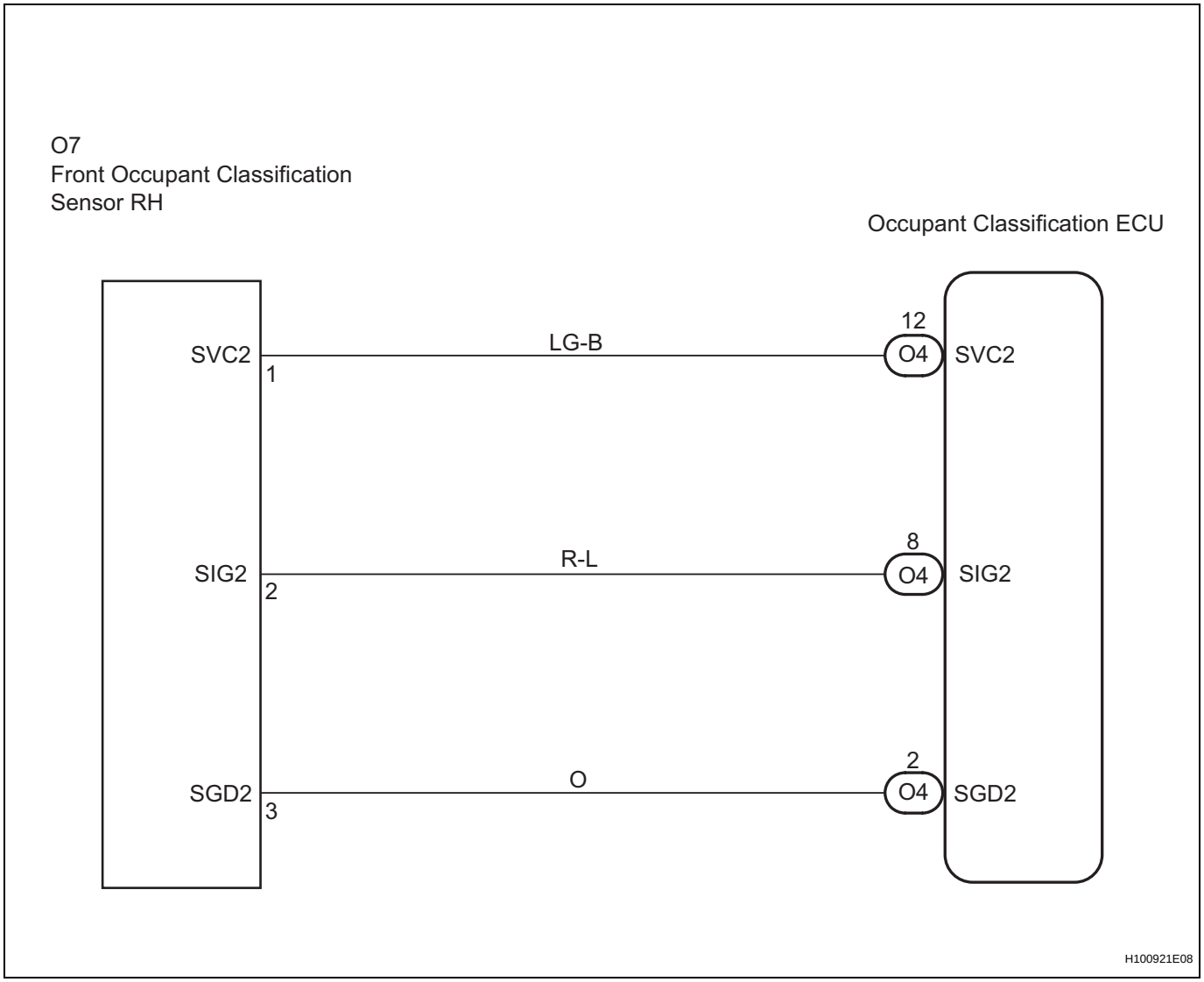
The front occupant classification sensor RH circuit consists of the occupant classification ECU and the front occupant classification sensor RH.
DTC B1781 is set when a malfunction is detected in the front occupant classification sensor RH circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
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 • Occupant classification sensor front RH malfunction • Occupant classification ECU malfunction	• Front seat with adjuster frame assembly RH (Front occupant classification sensor RH) • No. 1 seat wire • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1781 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

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

(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1781 is not output.

HINT:
DTCs other than B1781 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECTION OF CONNECTORS**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the front occupant classification sensor RH.
OK:
The connectors are properly connected.

NG	**OTHERS CONNECTORS**

OK

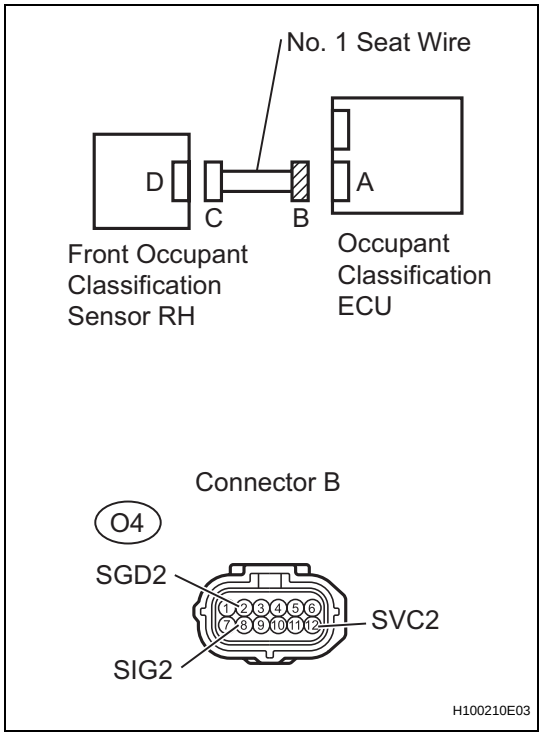
3	**CHECK CONNECTORS**

(a) Check that the connectors (on the occupant classification ECU side and front occupant classification sensor RH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG	**REPAIR OR REPLACE WIRE HARNESS**

OK

4 CHECK NO. 1 SEAT WIRE (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 ignition switch to the ON position.
(d) Measure the voltage.

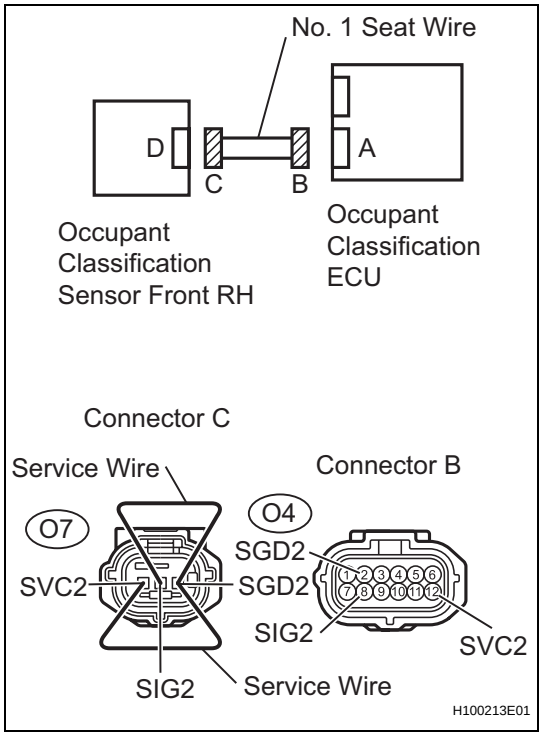
Standard voltage

Tester Connection	Condition	Specified Condition
O4-2 (SGD2) - Body ground	Ignition switch ON	Below 1 V
O4-8 (SIG2) - Body ground	Ignition switch ON	Below 1 V
O4-12 (SVC2) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using service wires, connect O7-1 (SVC2) and O7-3 (SGD2), and connect O7-2 (SIG2) and O7-3 (SGD2) of connector C.

NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.

(d) Measure the resistance.

Standard resistance

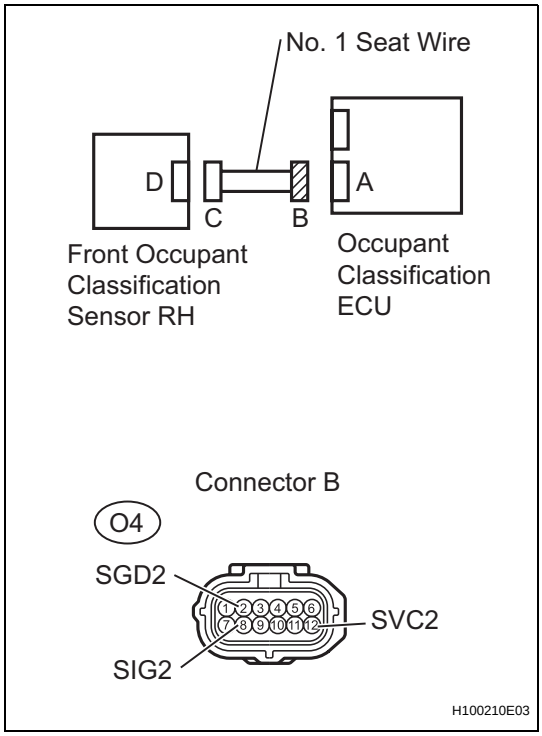
Tester Connection	Condition	Specified Condition
O4-8 (SIG2) - O4-2 (SGD2)	Always	Below 1 Ω
O4-12 (SVC2) - O4-2 (SGD2)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



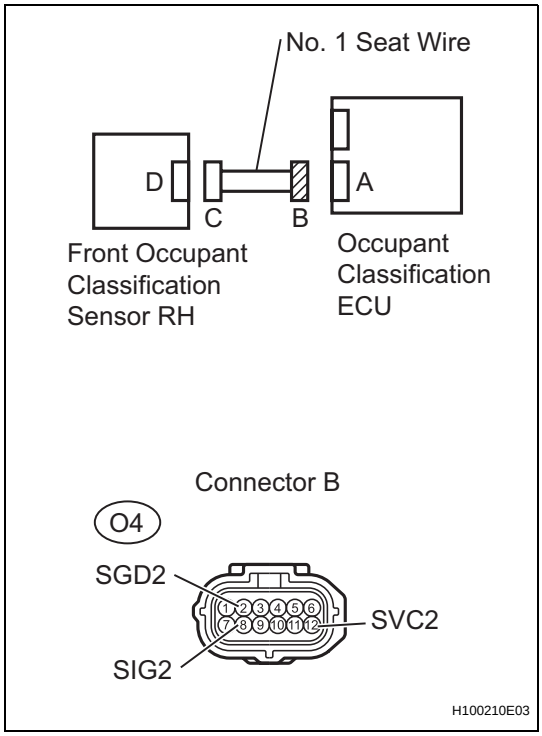
(a) Disconnect the service wires from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-8 (SIG2) - O4-2 (SGD2)	Always	1 MΩ or higher
O4-12 (SVC2) - O4-2 (SGD2)	Always	1 MΩ or higher
O4-8 (SIG2) - O4-12 (SVC2)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

7 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-2 (SGD2) - Body ground	Always	1 MΩ or higher
O4-8 (SIG2) - Body ground	Always	1 MΩ or higher
O4-12 (SVC2) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1781 is not output.

HINT:
DTCs other than B1781 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG	Go to step 13

OK

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 13**

OK

12	CHECK DTC

(a) Connect the negative (-) terminal cable to the battery.
(b) Turn the ignition switch to the ON position.
(c) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1781 is not output.

HINT:
DTCs other than B1781 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

13	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

NEXT

14	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.

(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

15	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

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.

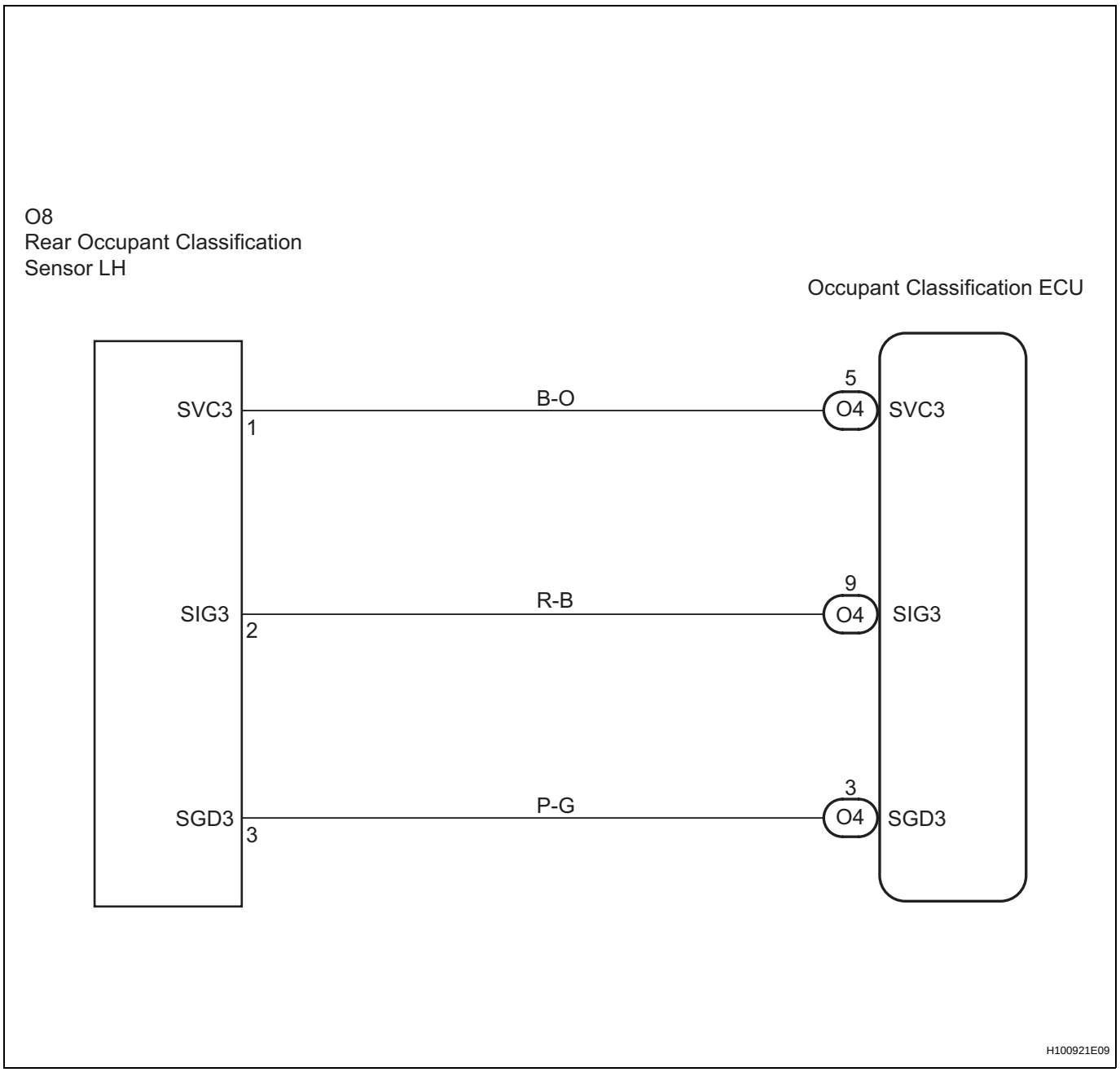
DTC B1782 is set when a malfunction is detected in the rear occupant classification sensor LH circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
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 with adjuster frame assembly RH (Rear occupant classification sensor LH) • No. 1 seat wire • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1782 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



RS

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1782 is not output.

HINT:
DTCs other than B1782 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTION OF CONNECTORS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the rear occupant classification sensor LH.
OK:
The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

3	REPAIR CONNECTORS

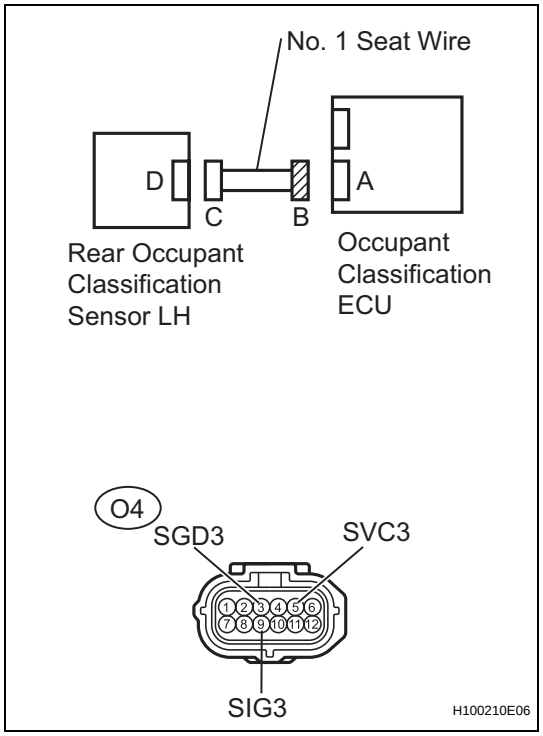
(a) Check that the connectors (on the occupant classification ECU side and rear occupant classification sensor LH side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

RS

4 CHECK NO. 1 SEAT WIRE (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 ignition switch to the ON position.
(d) Measure the voltage.

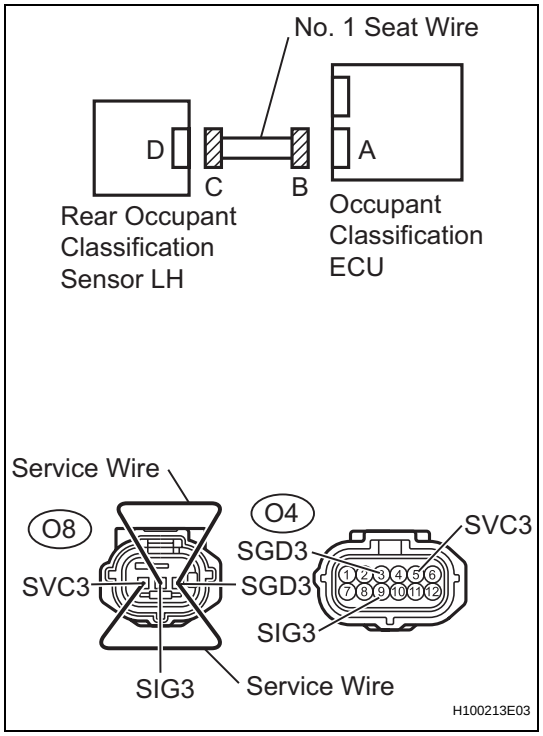
Standard voltage

Tester Connection	Condition	Specified Condition
O4-3 (SGD3) - Body ground	Ignition switch ON	Below 1 V
O4-5 (SVC3) - Body ground	Ignition switch ON	Below 1 V
O4-9 (SIG3) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using service wires, connect O8-1 (SVC3) and O8-3 (SGD3), and connect O8-2 (SIG3) and O8-3 (SGD3) of connector C.

HINT:
Do not forcibly insert the service wires into the terminals of the connector when connecting.

(d) Measure the resistance.

Standard resistance

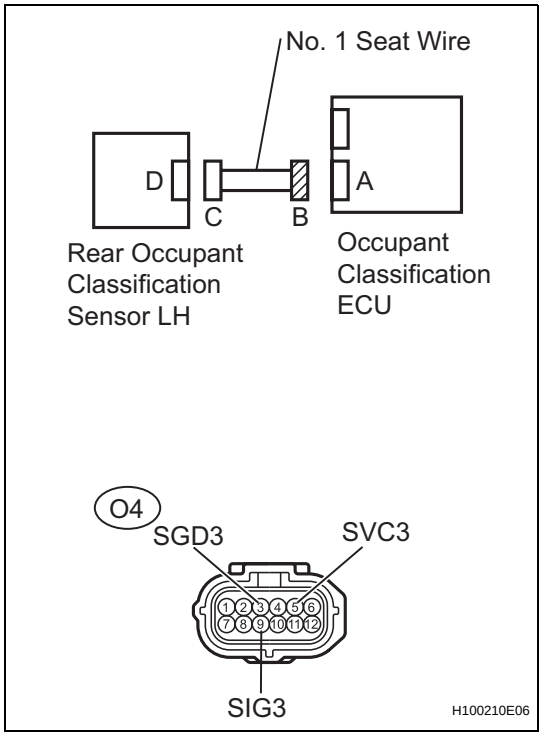
Tester Connection	Condition	Specified Condition
O4-5 (SVC3) - O4-3 (SGD3)	Always	Below 1 Ω
O4-9 (SIG3) - O4-3 (SGD3)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



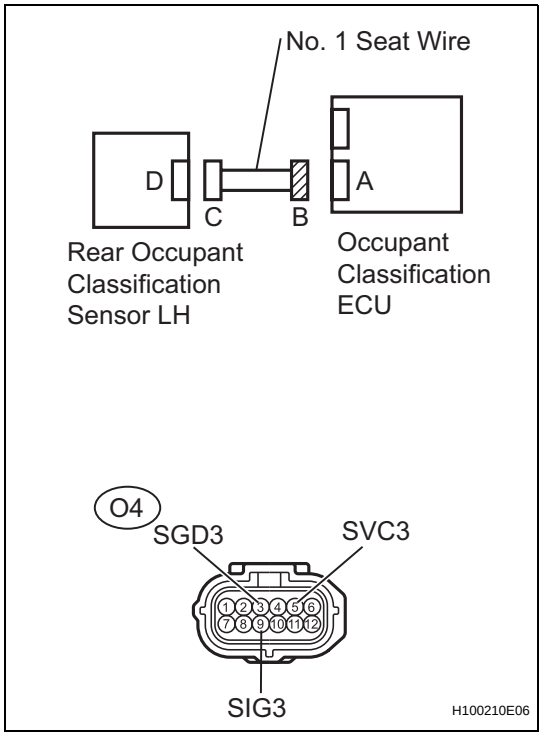
(a) Disconnect the service wires from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-5 (SVC3) - O4-3 (SGD3)	Always	1 MΩ or higher
O4-9 (SIG3) - O4-3 (SGD3)	Always	1 MΩ or higher
O4-5 (SVC3) - O4-9 (SIG3)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

7 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-3 (SGD3) - Body ground	Always	1 MΩ or higher
O4-5 (SVC3) - Body ground	Always	1 MΩ or higher
O4-9 (SIG3) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1782 is not output.

HINT:
DTCs other than B1782 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG	Go to step 13

OK

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.72 lb)

NG → **Go to step 13**

OK

12	CHECK DTC

(a) Connect the negative (-) terminal cable to the battery.
(b) Turn the ignition switch to the ON position.
(c) Clear the DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

HINT:
DTCs other than B1782 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

13	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

NEXT

14	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).

RS

OK:
COMPLETED is displayed on the tester.

NEXT

15	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1783	Rear Occupant Classification Sensor RH Circuit Malfunction

DESCRIPTION

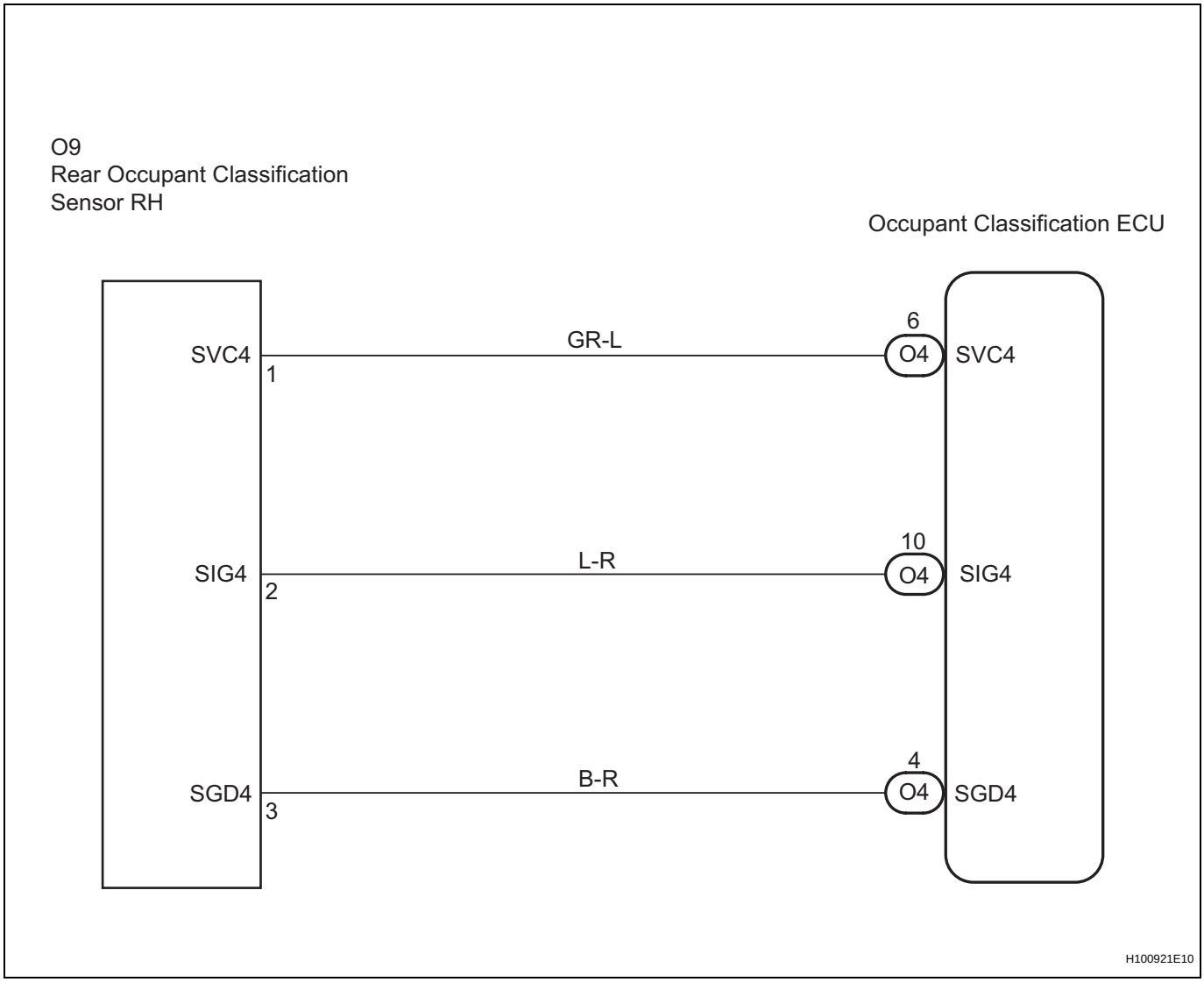
The rear occupant classification sensor RH circuit consists of the occupant classification ECU and the rear occupant classification sensor RH.
DTC B1783 is set when a malfunction is detected in the rear occupant classification sensor RH circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
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 occupant classification sensor rear RH circuit for 2 seconds • Rear occupant classification sensor RH malfunction • Occupant classification ECU malfunction	• Front seat with adjuster frame assembly RH (Rear occupant classification sensor RH) • No. 1 seat wire • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1783 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

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

(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1783 is not output.

HINT:
DTCs other than B1783 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECTION OF CONNECTORS**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the rear occupant classification sensor RH.
OK:
The connectors are properly connected.

NG	**CONNECT CONNECTORS**

OK

3	**CHECK CONNECTORS**

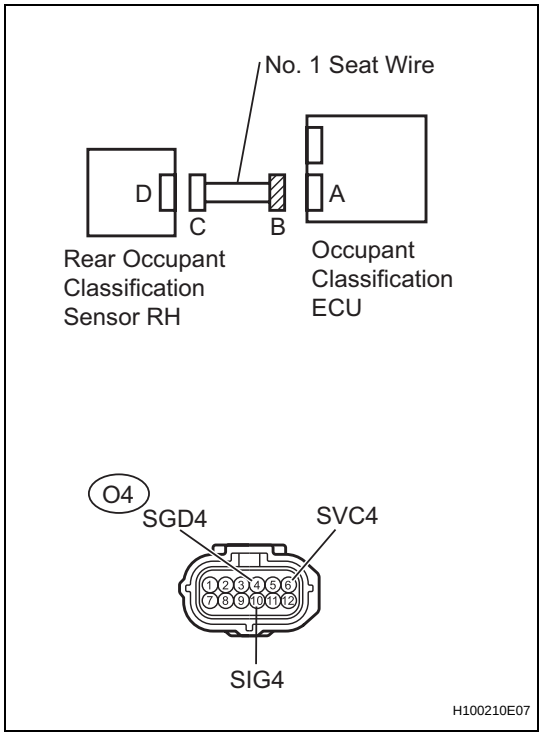
(a) Check that the connectors (on the occupant classification ECU side and rear occupant classification sensor RH side) are not damaged (See page SE-38).
OK:
The connectors are not deformed or damaged.

NG	**REPAIR OR REPLACE WIRE HARNESS**

OK

RS

4 CHECK NO. 1 SEAT WIRE (TO B+)



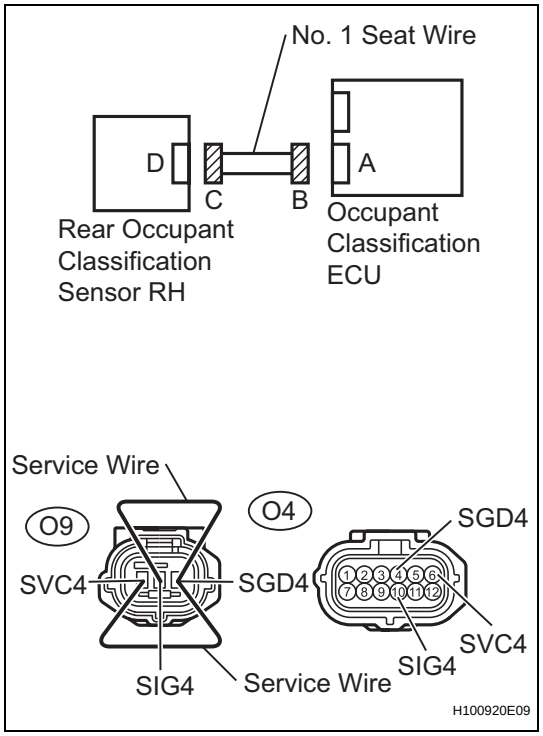
(a) Disconnect the connectors from the occupant classification ECU and the rear occupant classification sensor RH.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O4-4 (SGD4) - Body ground	Ignition switch ON	Below 1 V
O4-6 (SVC4) - Body ground	Ignition switch ON	Below 1 V
O4-10 (SIG4) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using service wires, connect O9-1 (SVC4) and O9-3 (SGD4), and connect O9-2 (SIG4) and O9-3 (SGD4) of connector C.

NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.

(d) Measure the resistance.
Standard resistance

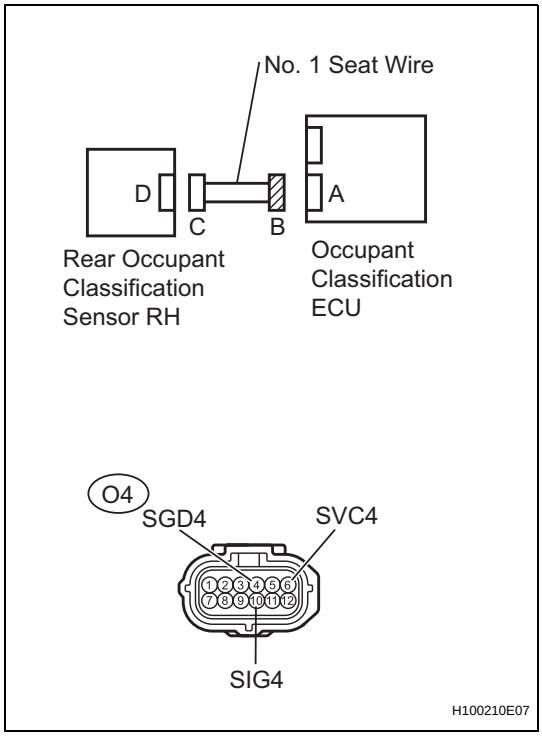
Tester Connection	Condition	Specified Condition
O4-6 (SVC4) - O4-4 (SGD4)	Always	Below 1 Ω
O4-10 (SIG4) - O4-4 (SGD4)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



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

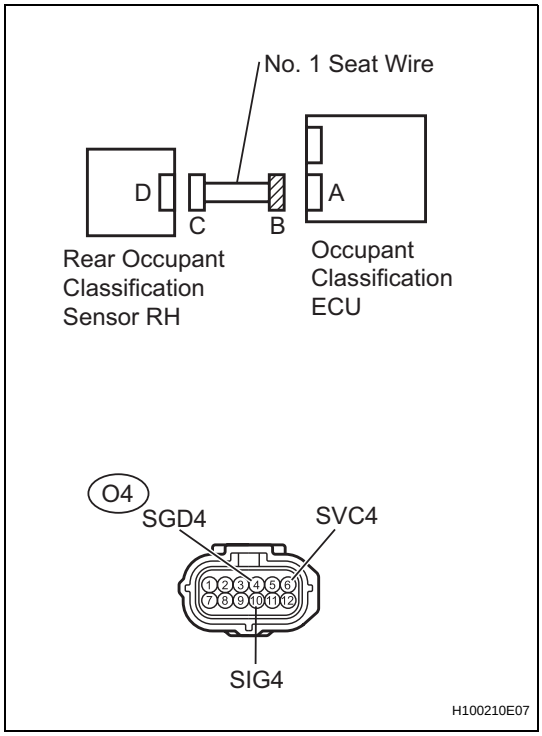
Standard resistance

Tester Connection	Condition	Specified Condition
O4-6 (SVC4) - O4-4 (SGD4)	Always	1 MΩ or higher
O4-10 (SIG4) - O4-4 (SGD4)	Always	1 MΩ or higher
O4-6 (SVC4) - O4-10 (SIG4)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

7 CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Measure the resistance.

Standard voltage

Tester Connection	Condition	Specified Condition
O4-4 (SGD4) - Body ground	Always	1 MΩ or higher
O4-6 (SVC4) - Body ground	Always	1 MΩ or higher
O4-10 (SIG4) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1783 is not output.

HINT:
DTCs other than B1783 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG	Go to step 13

OK

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 13**

OK

12	CHECK DTC

(a) Connect the negative (-) terminal cable to the battery.
(b) Turn the ignition switch to the ON position.
(c) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1783 is not output.

HINT:
DTCs other than B1783 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

13	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

NEXT

14	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.

(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

15	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1785	Front Occupant Classification Sensor LH Collision Detection

DESCRIPTION

DTC B1785 is set when the occupant classification ECU receives a collision detection signal, which is sent by the occupant classification sensor front LH when an accident occurs.
DTC B1785 is also set when the front seat with adjuster frame assembly RH is subjected to a strong impact, even if an actual accident has not occurred.
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 conducting the zero point calibration and sensitivity check.
Therefore, if DTC B1785 is set, first perform the zero point calibration and sensitivity check.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1785	• Front seat wioth adjuster frame assembly RH malfunction • Occupant classification ECU malfunction • Front occupant classification sensor LH senses a large load	• Front seat with adjuster frame assembly RH (Front occupant classification sensor LH) • Occupant classification ECU

HINT:
- When DTC B1650/32 is set as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1785 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM

(See page RS-377)

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1785 is not output.

HINT:
DTCs other than B1785 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.

(c) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 5**

OK

3 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 5**

OK

4 CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1785 is not output.

HINT:
DTCs other than B1785 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

5 REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

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

NEXT

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 9**

OK

7	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 9**

OK

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1785 is not output.

HINT:
DTCs other than B1785 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1786	Front Occupant Classification Sensor RH Collision Detection

DESCRIPTION

DTC B1786 is set when the occupant classification ECU receives a collision detection signal, which is sent by the front occupant classification sensor RH when an accident occurs.
DTC B1786 is also set when the front seat with adjuster frame assembly RH is subjected to a strong impact, even if an actual accident has not occurred.
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 conducting the zero point calibration and sensitivity check.
Therefore, if DTC B1786 is set, first perform the zero point calibration and sensitivity check.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1786	• Front seat with adjuster frame assembly RH malfunction • Occupant classification ECU malfunction • Front occupant classification sensor RH senses a large load	• Front seat with adjuster frame assembly RH (Front occupant classification sensor RH) • Occupant classification ECU

HINT:
- When DTC B1650/32 is set as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1786 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM

(See page RS-385)

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1786 is not output.

HINT:
DTCs other than B1786 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.

(c) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 5**

OK

3	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 5**

OK

4	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1786 is not output.

HINT:
DTCs other than B1786 may be output at this time, but they are not related to this check.

NG → **USE SIMULATION METHOD TO CHECK**

NG

5	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

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

NEXT

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 9**

OK

7	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 9**

OK

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1786 is not output.

HINT:
DTCs other than B1786 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1787	Rear Occupant Classification Sensor LH Collision Detection

DESCRIPTION

DTC B1787 is set when the occupant classification ECU receives a collision detection signal, which is sent by the occupant classification sensor rear LH when an accident occurs.
DTC B1787 is also set when the front seat with adjuster frame assembly RH is subjected to a strong impact, even if an actual accident has not occurred.
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 conducting the zero point calibration and sensitivity check.
Therefore, if DTC B1787 is output, first perform the zero point calibration and sensitivity check.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1787	• Front seat with adjuster frame assembly RH malfunction • Occupant classification ECU malfunction • Rear occupant classification sensor LH senses a large load	• Front seat with adjuster frame assembly RH (Rear occupant classification sensor LH) • Occupant classification ECU

HINT:
- When DTC B1650/32 is set as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1787 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM

(See page RS-393)

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1787 is not output.

HINT:
DTCs other than B1787 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.

(c) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 5**

OK

3 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 5**

OK

4 CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1787 is not output.

HINT:
DTCs other than B1787 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

5 REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

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

NEXT

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 9**

OK

7	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 9**

OK

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1787 is not output.

HINT:
DTCs other than B1787 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

RS

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-3571).
OK:
COMPLETED is displayed on the tester.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

RS

DTC	B1788	Rear Occupant Classification Sensor RH Collision Detection

DESCRIPTION

DTC B1788 is set when the occupant classification ECU receives a collision detection signal, which is sent by the occupant classification sensor rear RH when an accident occurs.
DTC B1788 is also set when the front seat with adjuster frame assembly RH is subjected to a strong impact, even if an actual accident has not occurred.
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 conducting the zero point calibration and sensitivity check.
Therefore, if DTC B1788 is output, first perform the zero point calibration and sensitivity check.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1788	• Front seat with adjuster frame assembly RH malfunction • Occupant classification ECU malfunction • Rear occupant classification sensor RH senses a large load	• Front seat with adjuster frame assembly RH (Rear occupant classification sensor RH) • Occupant classification ECU

HINT:
- When DTC B1650/32 is set as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1788 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM

(See page RS-401)

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

OK:

DTC B1788 is not output.

HINT:
DTCs other than B1788 may be output at this time, but they are not related to this check.

OK → **OTHERS USE SIMULATION METHOD TO CHECK**

NG

2	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.

RS

(c) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG	Go to step 5

OK

3	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NG	Go to step 5

OK

4	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the center airbag sensor assembly (See page RS-365).
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1788 is not output.

HINT:
DTCs other than B1788 may be output at this time, but they are not related to this check.

OK	OTHERS USE SIMULATION METHOD TO CHECK

NG

5	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

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

NEXT

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 9**

OK

7	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 9**

OK

8	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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1788 is not output.

HINT:
DTCs other than B1788 may be output at this time, but they are not related to this check.

OK → **OTHERS USE SIMULATION METHOD TO CHECK**

NG

RS

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

OTHERS USE SIMULATION METHOD TO CHECK

DTC	B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction

DESCRIPTION

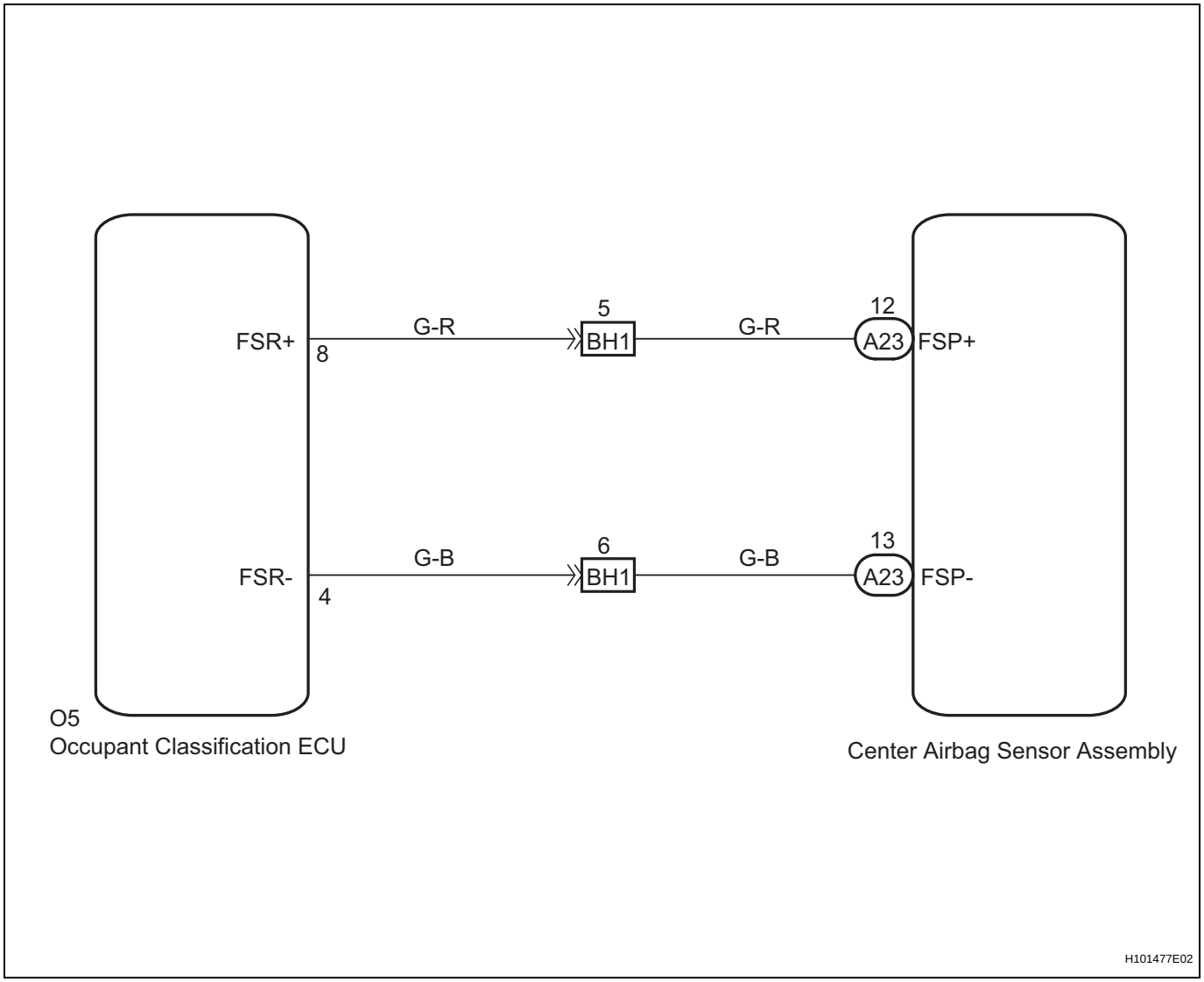
The center airbag sensor assembly communication circuit consists of the occupant classification ECU and the center airbag sensor assembly.
DTC B1790 is set when a malfunction is detected in the center airbag sensor assembly communication circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
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	• Floor wire • No. 1 seat wire • Occupant classification ECU • Center airbag sensor assembly

HINT:

- When DTC B1630/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1790 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



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

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad assembly.
(e) Disconnect the connector from the front passenger airbag assembly.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(f) Disconnect the connector from the front seat airbag assembly LH.
(g) Disconnect the connector from the front seat airbag assembly RH.
(h) Disconnect the connector from the curtain shield airbag assembly LH.
(i) Disconnect the connector from the curtain shield airbag assembly RH.
(j) Disconnect the connector from the front seat outer belt assembly LH.
(k) Disconnect the connector from the front seat outer belt assembly RH.

RS

HINT:
- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

OK:

DTC B1790 is not output.

HINT:
DTCs other than B1790 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECT CONNECTORS

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

OK:

The connectors are properly connected.

NG → **CONNECT CONNECTORS**

OK

3	CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and occupant classification ECU side) are not damaged (See page IN-34).

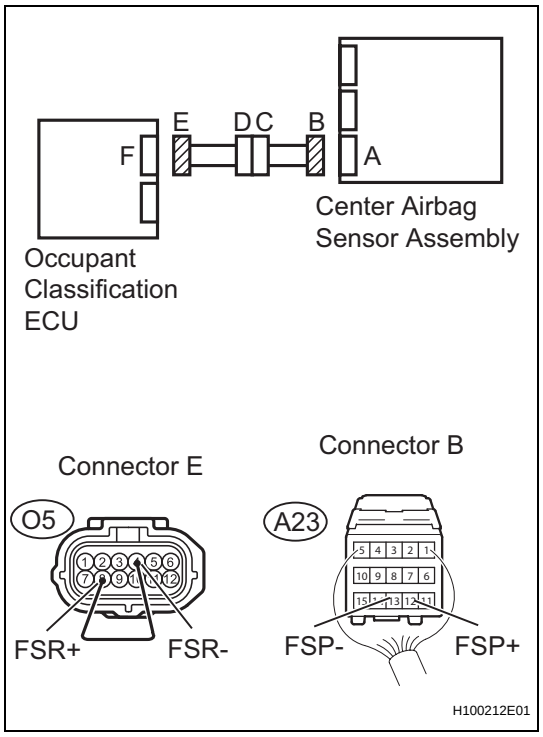
OK:

The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK

4 CHECK AIRBAG SENSOR ASSEMBLY CENTER COMMUNICATION CIRCUIT (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect O5-8 (FSR+) and O5-4 (FSR-) of connector E.

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

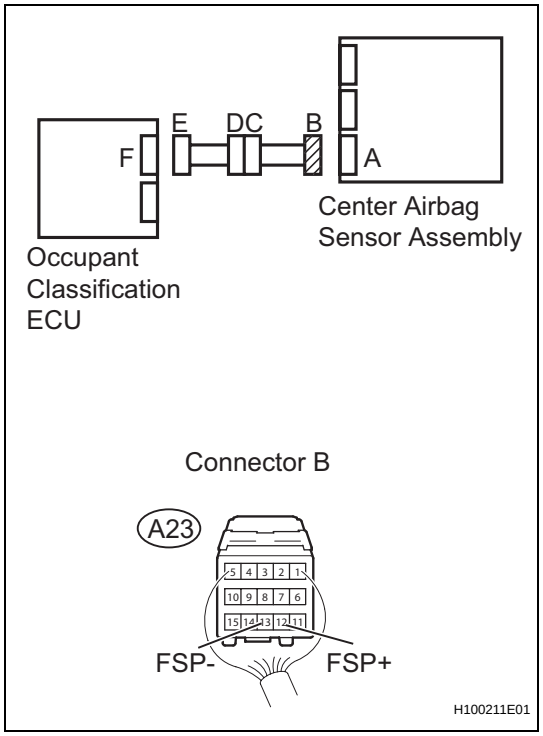
(d) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	Below 1 Ω

NG → **Go to step 13**

OK

5 CHECK AIRBAG SENSOR ASSEMBLY CENTER COMMUNICATION CIRCUIT (FOR SHORT)



(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

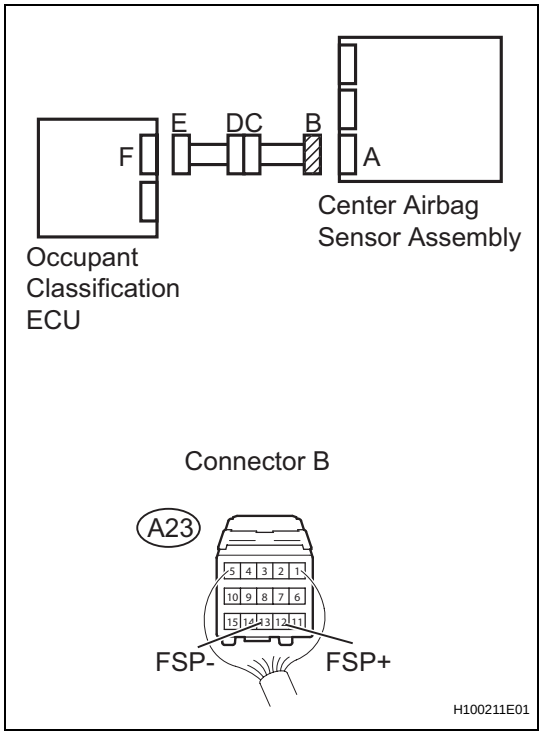
Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	1 MΩ or higher

NG → **Go to step 14**

RS

OK

6	CHECK AIRBAG SENSOR ASSEMBLY CENTER COMMUNICATION CIRCUIT (TO B+)



(a) Connect the negative (-) terminal cable to the battery.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage.

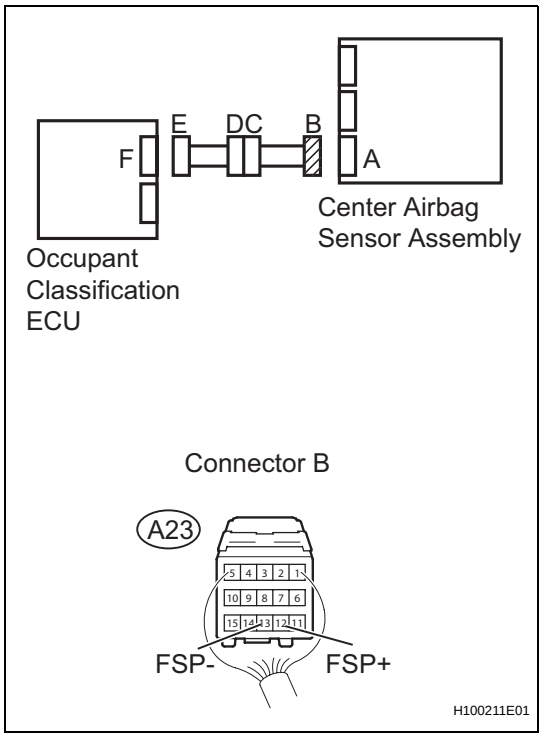
Standard voltage

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Ignition switch ON	Below 1 V
A23-13 (FSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 15**

OK

7	CHECK AIRBAG SENSOR ASSEMBLY CENTER COMMUNICATION CIRCUIT (TO GROUND)



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

Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Always	1 MΩ or higher
A23-13 (FSP-) - Body ground	Always	1 MΩ or higher

NG → **Go to step 16**

RS

OK

8	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear any DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

OK:

DTC B1790 is not output.

HINT:

DTCs other than B1790 may be output at this time, but they are not related to this check.

NG → **USE SIMULATION METHOD TO CHECK**

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

HINT:

Perform the inspection using parts from a normal vehicle when 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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).

OK:

COMPLETED is displayed on the tester.

RS

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

12	CHECK DTC

(a) Connect the connector to the occupant classification ECU.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1790 is not output.

HINT:
DTCs other than B1790 may be output at this time, but they are not related to this check.

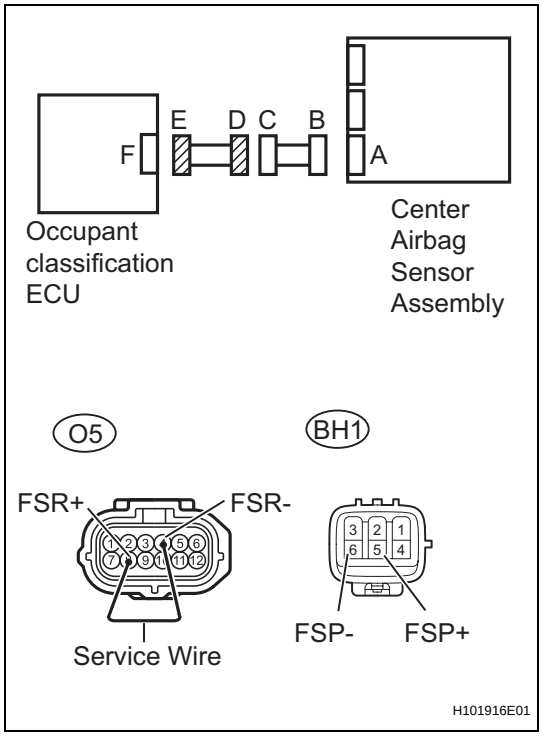
NG → **REPLACE AIRBAG SENSOR ASSEMBLY CENTER**

OK

RS

END

13 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Disconnect the No.1 seat wire connector from the occupant classification ECU.

HINT:

The service wire has already been inserted into connector E.

(b) Measure the resistance.

Standard resistance

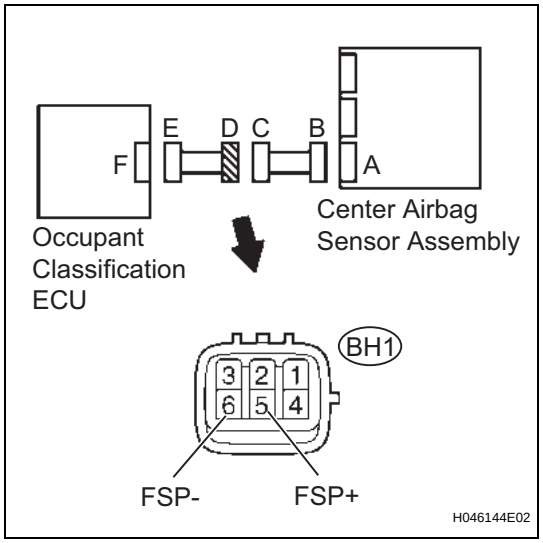
Tester Connection	Condition	Specified Condition
BH1-5 (FSP+) - BH1-6 (FSP-)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

14 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Disconnect the No.1 seat wire connector from the occupant classification ECU.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BH1-5 (FSP+) - BH1-6 (FSP-)	Always	1 MΩ or higher

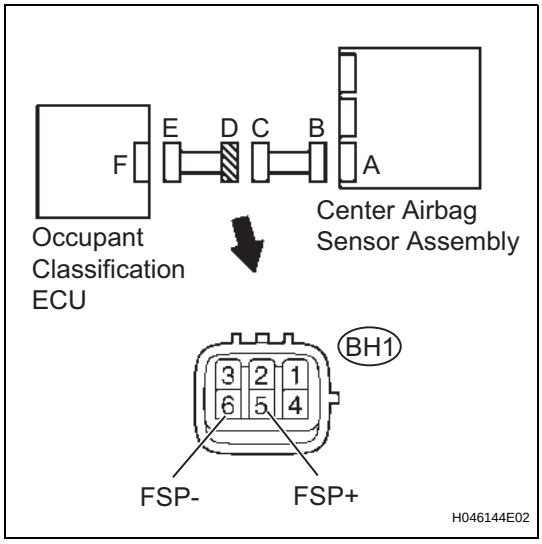
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

15	CHECK NO. 1 SEAT WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 1 seat wire connector from the occupant classification ECU.
(d) Disconnect the connector from the occupant classification ECU.
(e) Connect the negative (-) terminal cable to the battery.
(f) Turn the ignition switch to the ON position.
(g) Measure the voltage.

Standard voltage

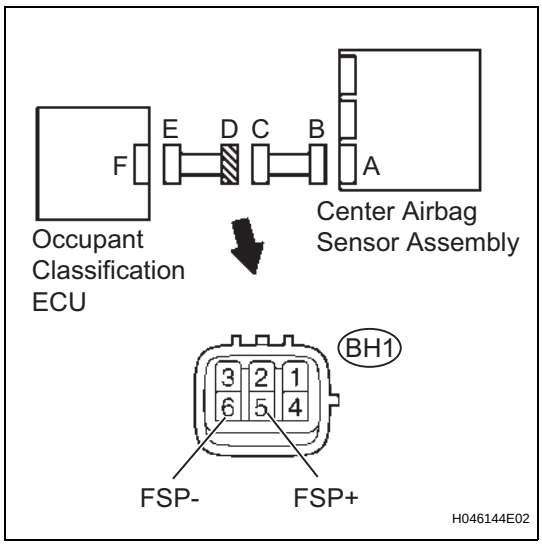
Tester Connection	Condition	Specified Condition
BH1-5 (FSP+) - Body ground	Ignition switch ON	Below 1 V
BH1-6 (FSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

16	CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Disconnect the No. 1 seat wire connector from the occupant classification ECU.
(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BH1-5 (FSP+) - Body ground	Always	1 MΩ or higher
BH1-6 (FSP-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

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.

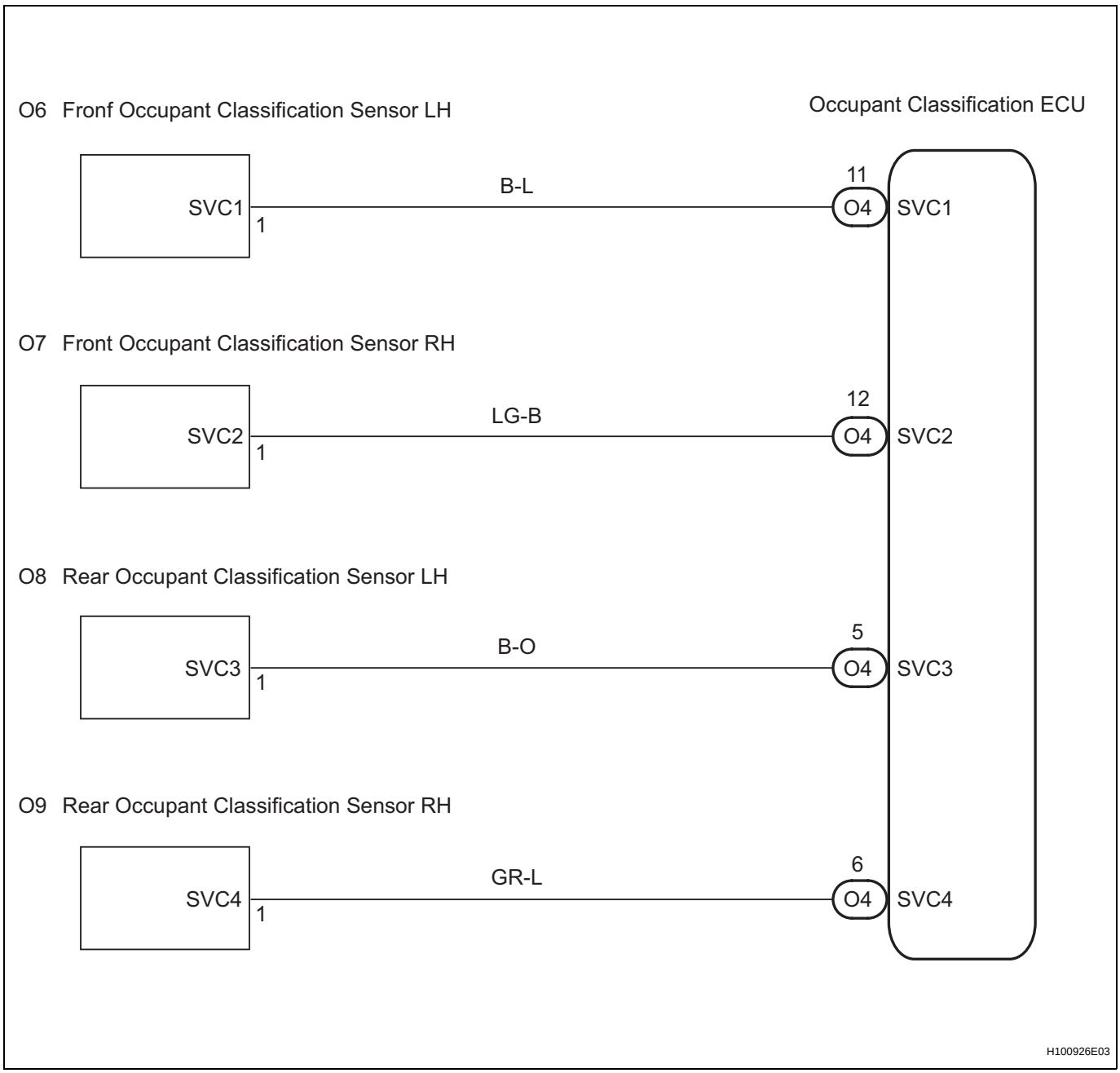
DTC B1793 is set when a malfunction is detected in the occupant classification sensor power supply circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
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 clarification sensor power supply circuit for 2 seconds • Open circuit in occupant classification sensor wire harness • Occupant classification ECU malfunction	• Front seat with adjuster frame assembly RH (Occupant classification sensors) • No. 1 seat wire • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1793 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



RS

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the 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 problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1793 is not output.

HINT:
DTCs other than B1793 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECT CONNECTORS**

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the occupant classification sensors.
OK:
The connectors are properly connected.

NG	**CONNECT CONNECTORS**

OK

3	**CHECK CONNECTORS**

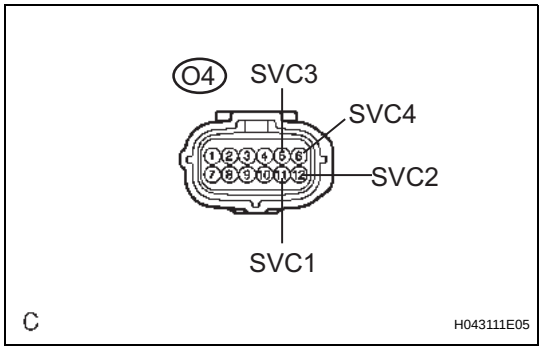
(a) Check that the connectors (on the occupant classification ECU side and the occupant classification sensors side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG	**REPAIR OR REPLACE WIRE HARNESS**

OK

RS

4	CHECK NO. 1 SEAT WIRE (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 ignition switch to the ON position.
(d) Measure the voltage.

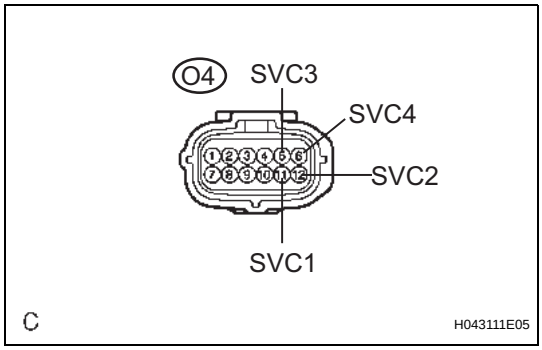
Standard voltage

Tester Connection	Condition	Specified Condition
O4-11 (SVC1) - Body ground	Ignition switch ON	Below 1 Ω
O4-12 (SVC2) - Body ground	Ignition switch ON	Below 1 Ω
O4-5 (SVC3) - Body ground	Ignition switch ON	Below 1 Ω
O4-6 (SVC4) - Body ground	Ignition switch ON	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

5	CHECK NO. 1 SEAT WIRE (TO GROUND)



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

Standard resistance

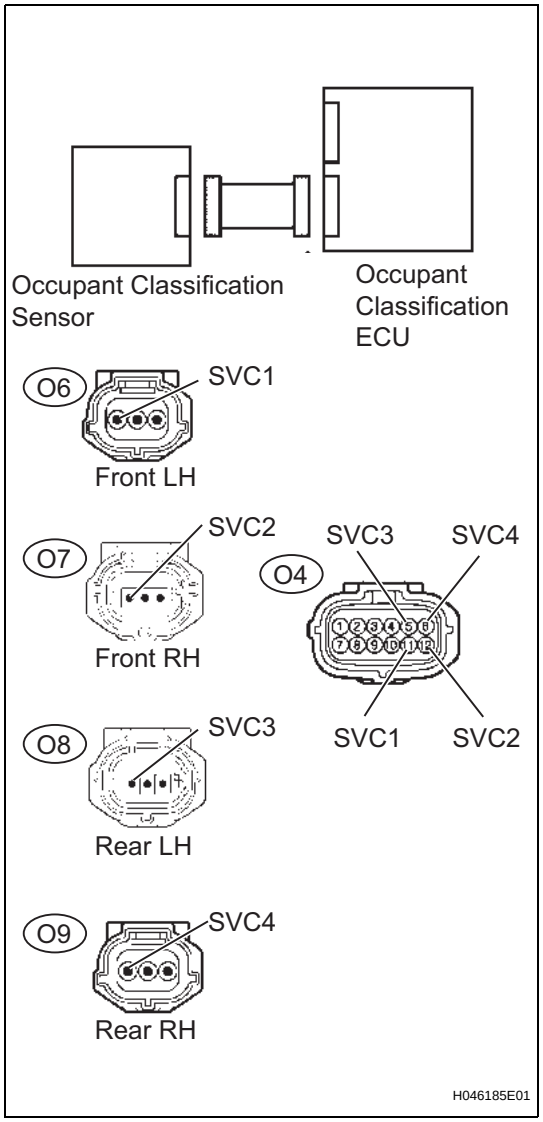
Tester Connection	Condition	Specified Condition
O4-11 (SVC1) - Body ground	Always	1 MΩ or higher
O4-12 (SVC2) - Body ground	Always	1 MΩ or higher
O4-5 (SVC3) - Body ground	Always	1 MΩ or higher
O4-6 (SVC4) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

6 CHECK NO. 1 SEAT WIRE (FOR OPEN)



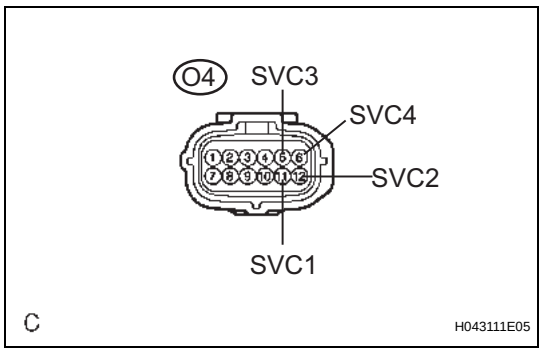
(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-11 (SVC1) - O6-1 (SVC1)	Always	Below 1 Ω
O4-12 (SVC2) - O7-1 (SVC2)	Always	Below 1 Ω
O4-5 (SVC3) - O8-1 (SVC3)	Always	Below 1 Ω
O4-6 (SVC4) - O9-1 (SVC4)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

7 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-5 (SVC3) - O4-6 (SVC4)	Always	1 MΩ or higher
O4-6 (SVC4) - O6-11 (SVC1)	Always	1 MΩ or higher
O4-11 (SVC1) - O4-12 (SVC2)	Always	1 MΩ or higher
O4-12 (SVC2) - O4-5 (SVC3)	Always	1 MΩ or higher
O4-12 (SVC2) - O4-6 (SVC4)	Always	1 MΩ or higher

RS

Tester Connection	Condition	Specified Condition
O4-11 (SVC1) - O4-5 (SVC3)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

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 ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1793 is not output.

HINT:
DTCs other than B1793 may be output at this time, but they are not related to this check.

OK → USE SIMULATION METHOD TO CHECK

NG

9 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

HINT:
Perform the inspection using parts from a normal vehicle when 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 ignition switch to the ON position.

RS

(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

11	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

USE SIMULATION METHOD TO CHECK

DTC	B1794	Open in Occupant Classification ECU Battery Positive Line

DESCRIPTION

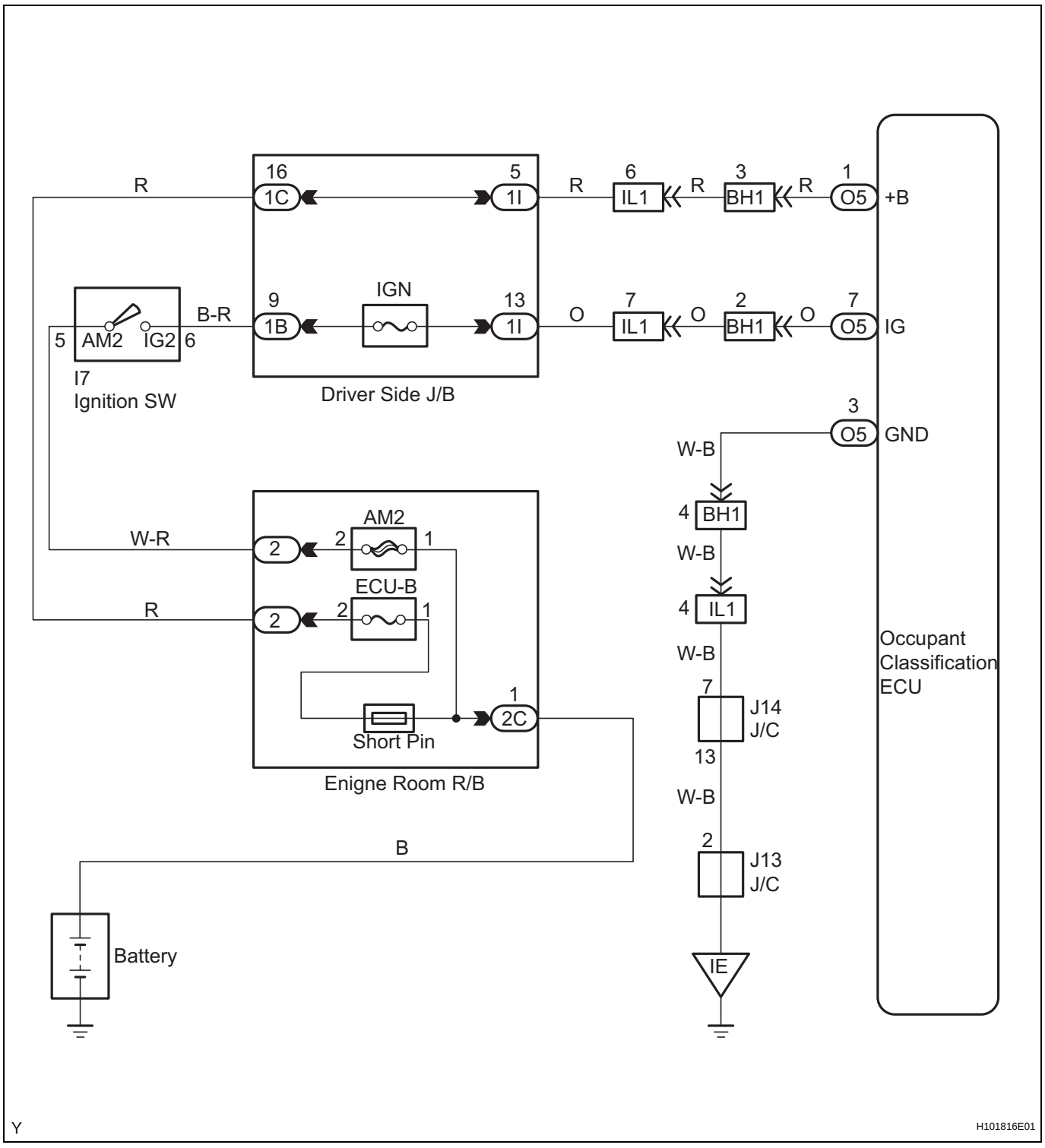
DTC B1794 is set when a malfunction is detected in the occupant classification ECU.

DTC No.	DTC Detections Conditions	Trouble Areas
B1794	• Occupant classification ECU circuit malfunction • Occupant classification ECU malfunction • The occupant classification ECU receives a short circuit to ground signal in the passenger side buckle switch circuit for 2 seconds	• Wire harness • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1794 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

RS

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position, and wait for at least 10 seconds.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1794 is not output.

HINT:
DTCs other than B1794 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECTION OF CONNECTORS**

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

NG	**CONNECT CONNECTORS**

OK

3	**CHECK CONNECTORS**

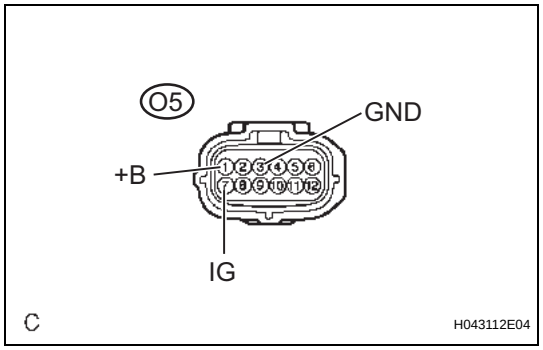
(a) Check that the connectors (on the occupant classification ECU side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG	**REPAIR OR REPLACE WIRE HARNESS**

OK

RS

4 CHECK WIRE HARNESS (SOURCE VOLTAGE)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the O5 connector from the occupant classification ECU.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage and resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
O5-3 (GND) - Body ground	Always	Below 1 Ω

Standard voltage

Tester Connection	Condition	Specified Condition
O5-1 (+B) - Body ground	Ignition switch ON	10 to 14 V
O5-7 (IG) - Body ground	Ignition switch ON	10 to 14 V

NG → **REPAIR OR REPLACE WIRE HARNESS OR BATTERY**

OK

5 CHECK DTC

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Connect the connectors to the occupant classification ECU.
(d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Clear any DTCs stored in the memory (See page RS-365).

HINT:
- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(g) Turn the ignition switch to the LOCK position, and wait for at least 10 seconds.
(h) Turn the ignition switch to the ON position.
(i) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

OK:
DTC B1794 is not output.

RS

HINT:
DTCs other than B1794 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

6	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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

NEXT

7	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

8	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
27 to 33 kg (59.52 to 72.75 lb)

RS

NEXT

END

DTC	B1795	Occupant Classification ECU Malfunction

DESCRIPTION

DTC B1795 is set when a malfunction is detected in the occupant classification ECU.
Troubleshoot DTC B1771 first when both DTCs B1771 and B1795 are present.

DTC No.	DTC Detections Conditions	Trouble Areas
B1795	Occupant classification ECU malfunction	Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1795 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

1 CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly .
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position, and wait for at least 10 seconds.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).

OK:

DTC B1795 is not output.

HINT:

DTCs other than B1795 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2 REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

HINT:

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

NEXT

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

4	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
Standard value: 27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

DTC	B1796	Sleep Operation Failure of Occupant Classification ECU

DESCRIPTION

During sleep mode, the occupant classification ECU monitors the condition of each sensor while the ignition switch is off. In this mode, if the occupant classification ECU detects an internal malfunction, DTC B1796 is set.

DTC No.	DTC Detections Conditions	Trouble Areas
B1796	Occupant classification ECU malfunction	Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, perform troubleshooting for DTC B1796 of the occupant classification system.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-365).

HINT:

- First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
- Use the intelligent tester to clear the DTCs of the occupant classification ECU, otherwise the DTCs cannot be cleared.

(c) Turn the ignition switch to the LOCK position, and wait for at least 10 seconds.
(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, check for DTCs of the occupant classification ECU (See page RS-365).
OK:
DTC B1796 is not output.

HINT:
DTCs other than B1796 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

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

RS

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

4	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard :
Standard value: 27 to 33 kg (59.52 to 72.75 lb)

NEXT

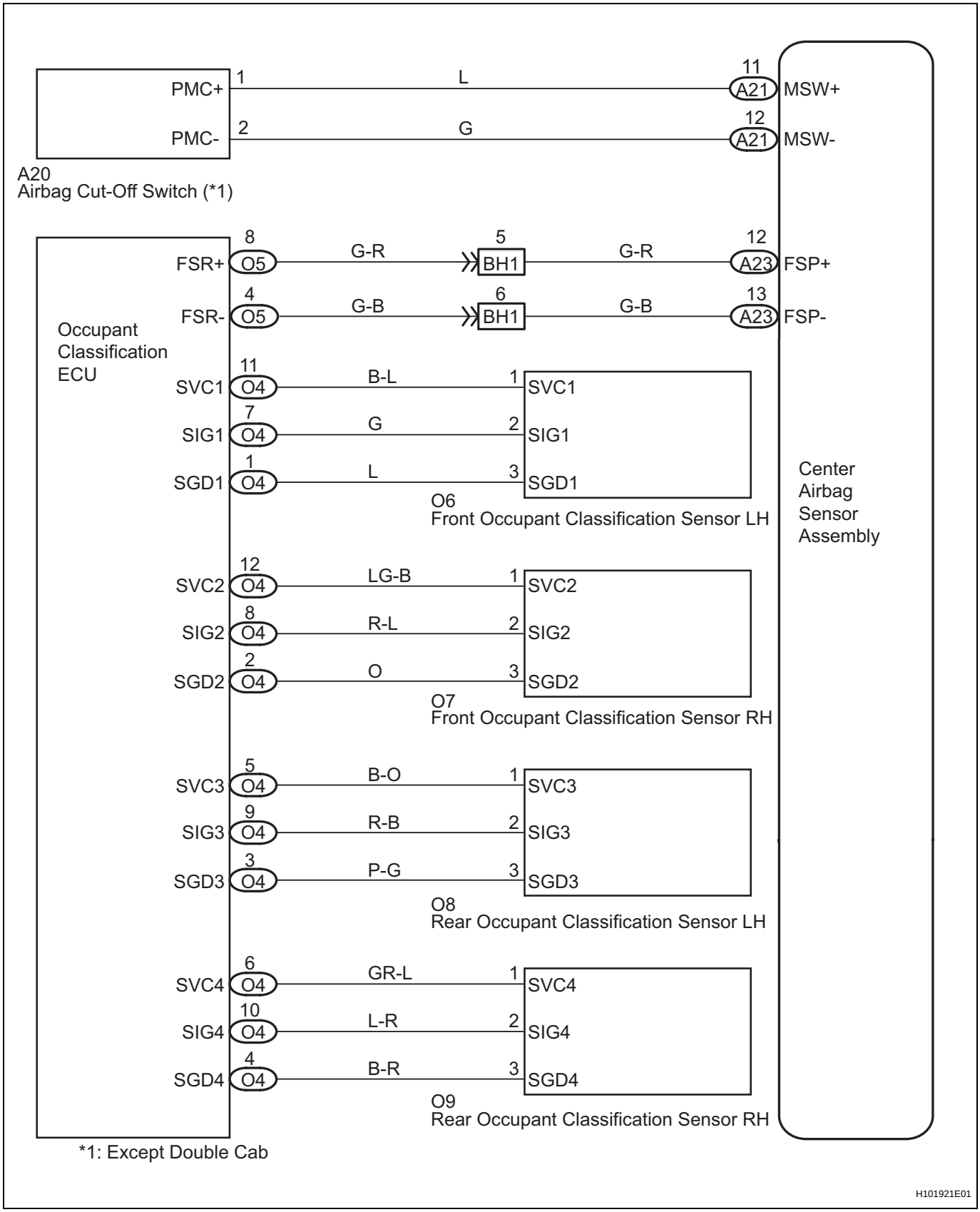
END

Trouble in Passenger Airbag ON / OFF Indicator

DESCRIPTION

The passenger airbag ON/OFF indicator consists of the center airbag sensor assembly, occupant classification ECU, hazard warning switch assembly, and 4 occupant classification sensors. This system controls the passenger airbag deployment according to the occupancy condition of the front passenger seat, and also displays those detected conditions.

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad assembly.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.
(g) Disconnect the connector from the front seat outer belt assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the front seat airbag assembly LH.
(i) Disconnect the connector from the front seat airbag assembly RH.
(j) Disconnect the connector from the curtain shield airbag assembly LH.
(k) Disconnect the connector from the curtain shield airbag assembly RH.

1	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.
Result:
Double cab

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF

Except double cab

Front Seat Passenger	Airbag Cut-Off Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF
Passenger occupant classification system failure	AUTO	OFF	ON	ON
Passenger occupant classification system failure	OFF	OFF	ON	ON

OK → USE SIMULATION METHOD TO CHECK

NG

2	CHECK DTC

(a) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
(b) Check for DTCs (See page RS-365).
OK:
DTC is not output.

NG → GO TO DTC CHART

OK

3	CHECK VEHICLE TYPE

(a) Proceed to the appropriate step according to the seat type.

Result

Vehicle Type	Proceed to
Double cab	A
Except Double Cab	B

B → Go to step 14

A

4	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

RS

Result

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF

OK → USE SIMULATION METHOD TO CHECK

NG

5	CHECK CONNECTION OF CONNECTORS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the center airbag sensor assembly, occupant classification ECU, and 4 occupant classification sensors.
OK:
The connectors are connected.

NG → **CONNECT CONNECTORS**

OK ↓

6	CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side, occupant classification ECU side and 4 occupant classification sensors side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

OK ↓

7	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 10**

OK ↓

8	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NG → **Go to step 10**

OK ↓

RS

9	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

Result

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF

OK → END

NG

10	REPAIR FRONT SEAT ASSEMBLY (PASSENGER SEAT)

(a) Loosen the 4 installation bolts fixing the front passenger seat, and then re-tighten them to the specified torque.
Torque:
37 N*m (375 kgf*cm, 27 ft.*lbf)

NEXT

11	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 31**

OK

12	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

RS

NG → Go to step 31

OK

13 PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

Result

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF

NG → Go to step 31

OK

END

14 CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

RS

Result

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF

OK → Go to step 22

NG

15	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

16	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

17	CHECK PASSENGER AIRBAG ON/OFF INDICATOR OPERATION

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

Result

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF

OK → END

NG

RS

18	REPAIR FRONT SEAT ASSEMBLY (PASSENGER SEAT)

(a) Loosen the 4 installation bolts fixing the front passenger seat, and then re-tighten them to the specified torque.
Torque:
37 N*m (375 kgf*cm, 27 ft.*lbf)

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 ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 22**

OK

20	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).

NG → **Go to step 22**

OK

21	PASSENGER AIRBAG ON/OFF INDICATOR

(a) Turn the ignition switch to the ON position.
(b) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(c) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.

RS

Result

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF

Front Seat Passenger	Passenger Airbag Manual ON/OFF Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF

OK → END

NG

22 CHECK CONNECTION OF CONNECTORS

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

NG → CONNECT CONNECTORS

OK

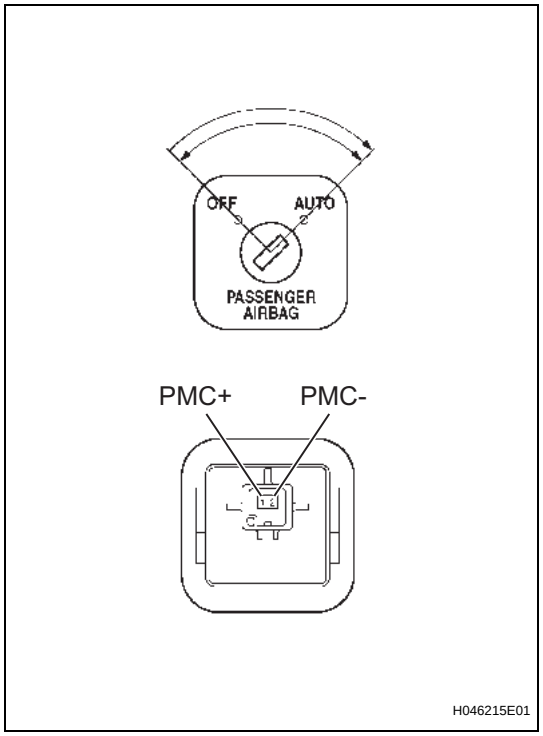
23 CHECK CONNECTORS

(a) Check that the connectors (on the center airbag sensor assembly side and airbag cut-off switch side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → REPAIR OR REPLACE WIRE HARNESS

OK

24 INSPECT AIRBAG CUT-OFF SWITCH



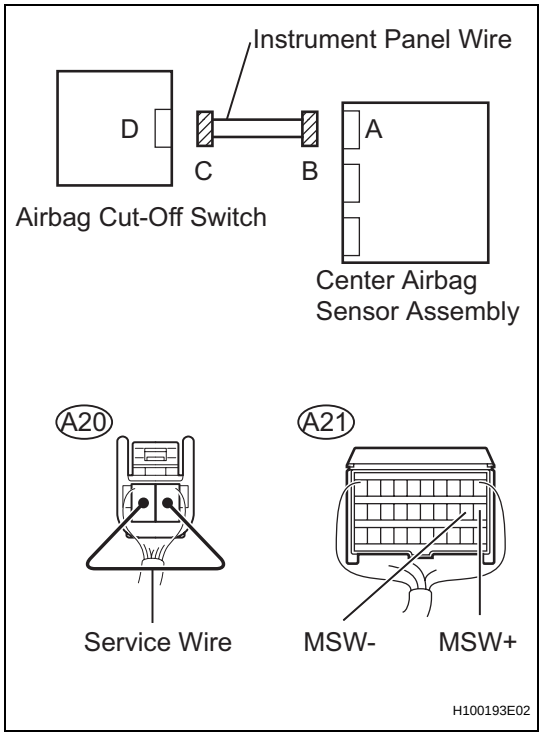
(a) Disconnect the A20 airbag cut-off switch connector.
(b) Check the resistance.
Standard resistance

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

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

OK

25 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



(a) Disconnect the instrument panel wire connector from the airbag cut-off switch.
(b) Using a service wire, connect A20-1 (PMC+) and A20-2 (PMC-) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(c) Measure the resistance.
Standard resistance

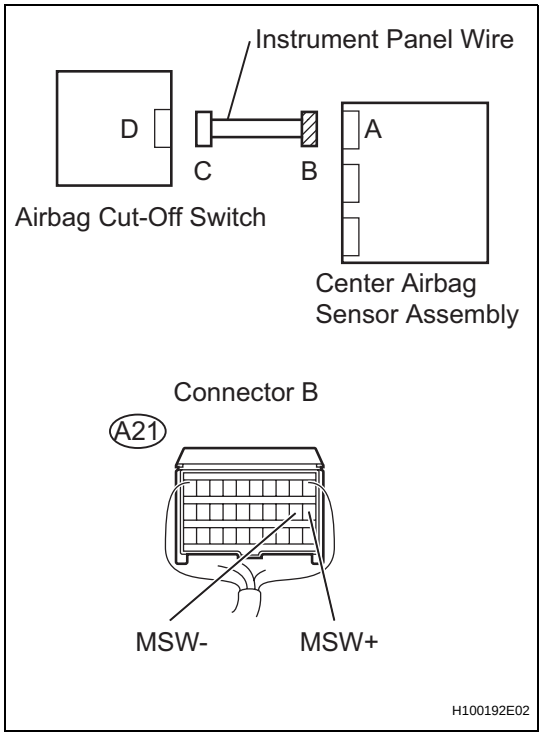
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - A21-12 (MSW-)	Always	Below 1Ω

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

OK

RS

26 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



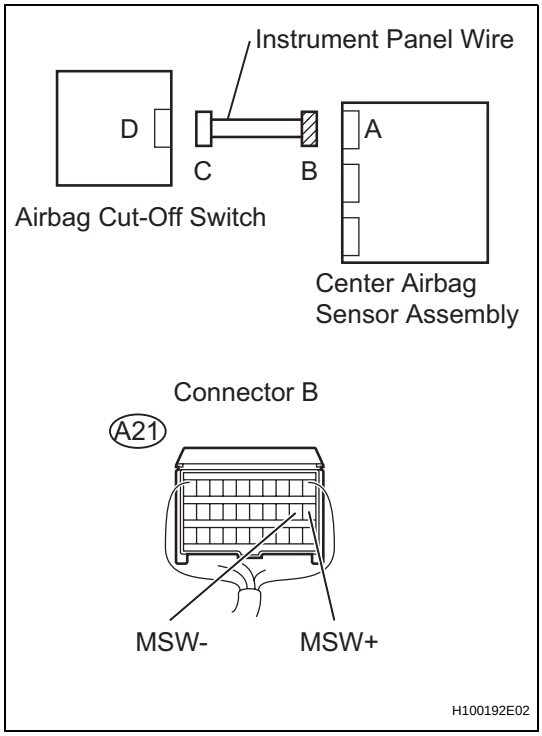
(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

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

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

OK

27 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

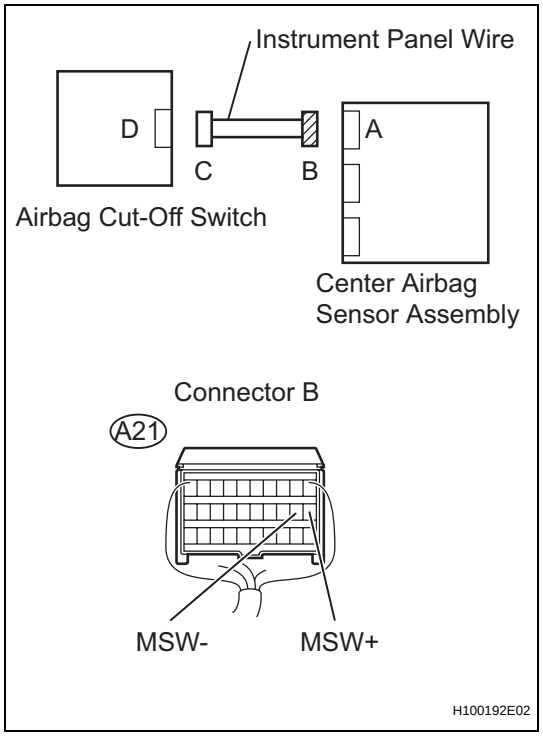
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - Body ground	Always	1 MΩ Higher
A21-12 (MSW-) - Body ground	Always	1 MΩ Higher

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

OK

RS

28 CHECK INSTRUMENT PANEL WIRE (TO B+)



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

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

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

OK

29 CHECK CONNECTION OF CONNECTORS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and 4 occupant classification sensors.
OK:
The connectors are connected.

NG → **CONNECT CONNECTORS**

OK

30 CHECK CONNECTORS

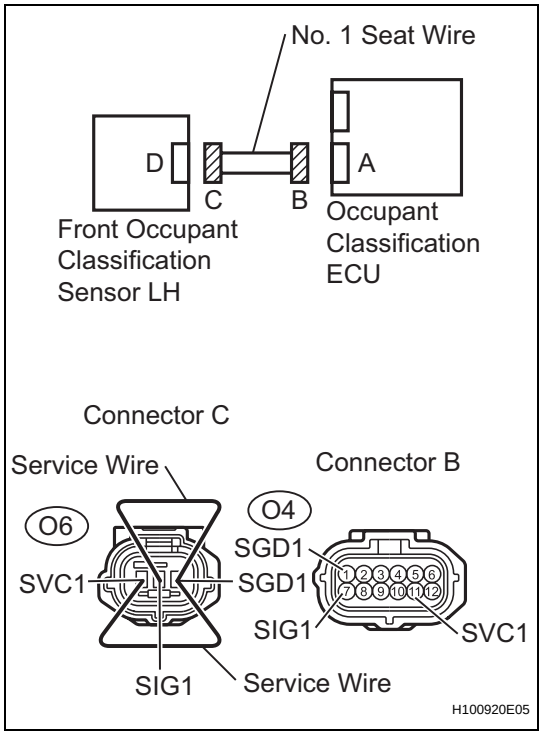
(a) Check that the connectors (on the occupant classification ECU side and 4 occupant classification sensors side) are not damaged (See page IN-34).
OK:
The connectors are not deformed or damaged.

NG → **REPAIR OR REPLACE WIRE HARNESS**

RS

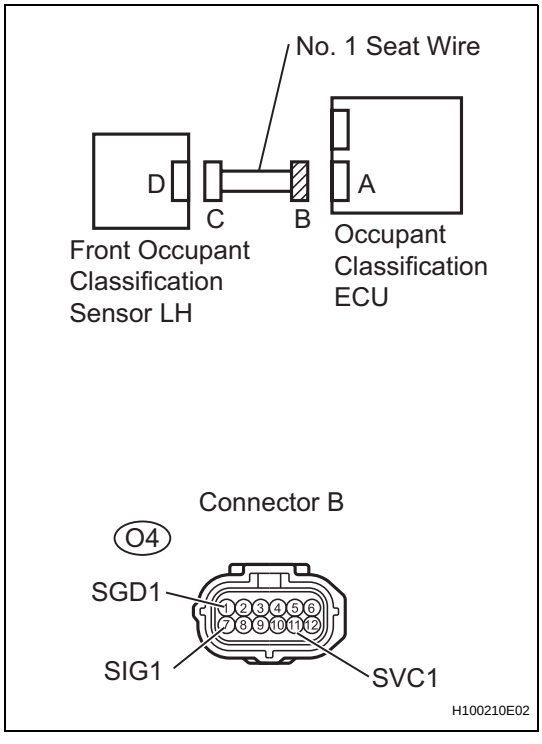
OK

31	CHECK NO. 1 SEAT WIRE (OCCUPANT CLASSIFICATION SENSOR FRONT LH CIRCUIT)



(a) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor front LH.
(b) Using service wires, connect O6-1 (SVC1) and O6-3 (SGD1), and connect O6-2 (SIG1) and O6-3 (SGD1) of connector C.
NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.
(c) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-7 (SIG1) - O4-1 (SGD1)	Always	Below 1 Ω
O4-11 (SVC1) - O4-1 (SGD1)	Always	Below 1 Ω



(d) Disconnect the service wires from connector C.
(e) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-7 (SIG1) - O4-1 (SGD1))	Always	1MΩ or Higher
O4-11 (SVC1) - O4-1 (SGD1)	Always	1MΩ or Higher
O4-7 (SIG1) - O4-11 (SVC1)	Always	1MΩ or Higher
O4-1 (SGD1) - Body ground	Always	1MΩ or Higher
O4-7 (SIG1) - Body ground)	Always	1MΩ or Higher
O4-11 (SVC1) - Body ground	Always	1MΩ or Higher

(f) Connect the negative (-) terminal cable to the battery.
(g) Turn the ignition switch to the ON position.
(h) Measure the voltage.
Standard voltage

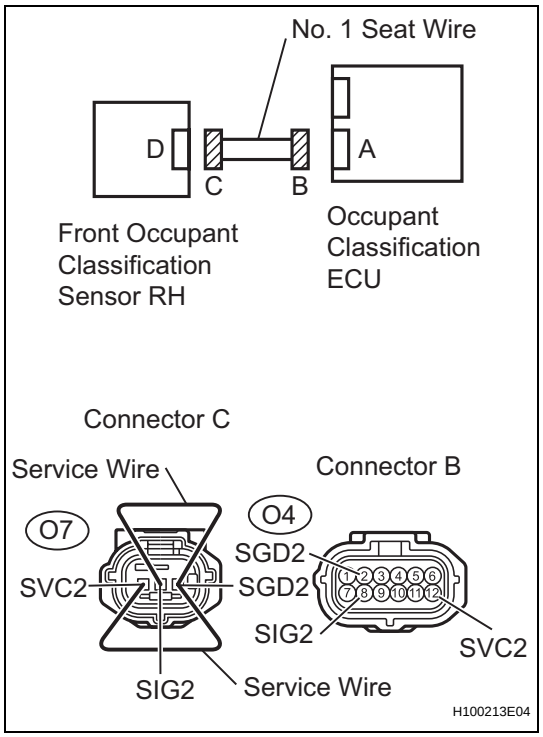
Tester Connection	Condition	Specified Condition
O4-1 (SGD1) - Body ground	Ignition switch ON	Below 1 V
O4-7 (SIG1) - Body ground	Ignition switch ON	Below 1 V
O4-11 (SVC1) - Body ground	Ignition switch ON	Below 1 V

RS

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

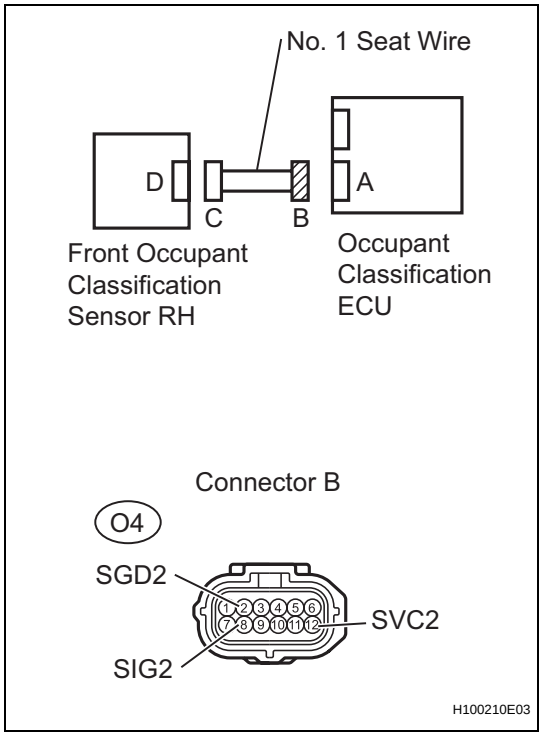
OK

32 CHECK NO. 1 SEAT WIRE (OCCUPANT CLASSIFICATION SENSOR FRONT RH CIRCUIT)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor front RH.
(d) Using service wires, connect O7-1 (SVC2) and O7-3 (SGD2), and connect O7-2 (SIG2) and O7-3 (SGD2) of connector C.
NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.
(e) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-8 (SIG2) - O4-2 (SGD2)	Always	Below 1 Ω
O4-12 (SVC2) - O4-2 (SGD2)	Always	Below 1 Ω



(f) Disconnect the service wires from connector C.
(g) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-8 (SIG2) - O4-2 (SGD2)	Always	1MΩ or Higher
O4-12 (SVC2) - O4-2 (SGD2)	Always	1MΩ or Higher
O4-8 (SIG2) - O4-12 (SVC2)	Always	1MΩ or Higher
O4-2 (SGD2) - Body ground	Always	1MΩ or Higher
O4-8 (SIG2) - Body ground	Always	1MΩ or Higher
O4-12 (SVC2) - Body ground	Always	1MΩ or Higher

(h) Connect the negative (-) terminal cable to the battery.
(i) Turn the ignition switch to the ON position.
(j) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O4-2 (SGD2) - Body ground	Ignition switch ON	Below 1 V
O4-8 (SIG2) - Body ground	Ignition switch ON	Below 1 V

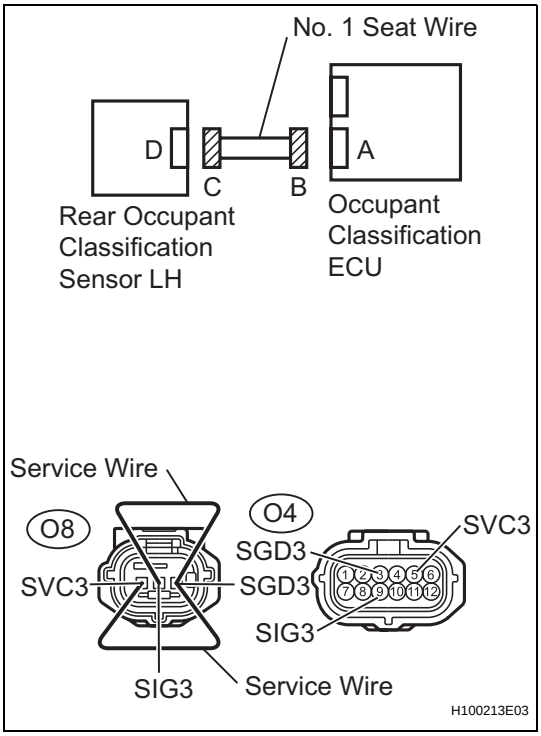
RS

Tester Connection	Condition	Specified Condition
O4-12 (SVC2) - Body ground	Ignition switch ON	Below 1 V

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

33 CHECK NO. 1 SEAT WIRE (OCCUPANT CLASSIFICATION SENSOR REAR LH CIRCUIT)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor rear LH.
(d) Using service wires, connect O8-1 (SVC3) and O8-3 (SGD3), and connect O8-2 (SIG3) and O8-3 (SGD3) of connector C.

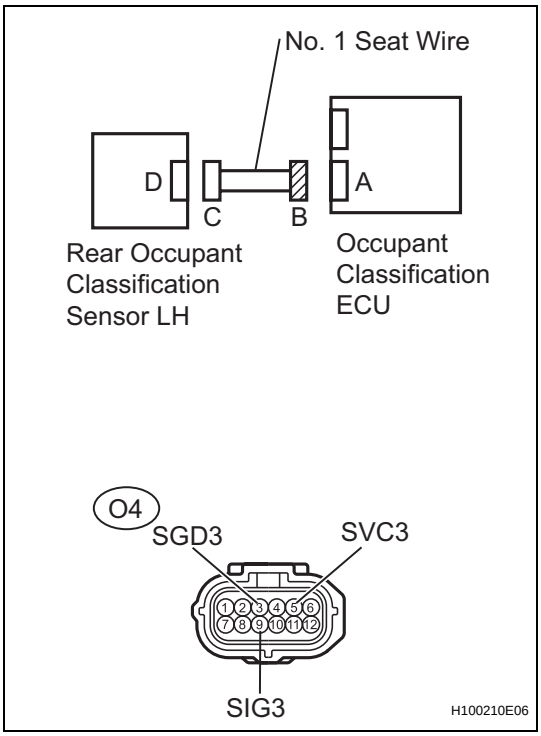
NOTICE:

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

(e) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
O4-5 (SVC3) - O4-3 (SGD3)	Always	Below 1 Ω
O4-9 (SIG3) - O4-3 (SGD3)	Always	Below 1 Ω



(f) Disconnect the service wires from connector C.
(g) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
O4-5 (SVC3) - O4-3 (SGD3)	Always	1MΩ or Higher
O4-9 (SIG3) - O4-3 (SGD3)	Always	1MΩ or Higher
O4-5 (SVC3) - O4-9 (SIG3)	Always	1MΩ or Higher
O4-3 (SGD3) - Body ground	Always	1MΩ or Higher
O4-5 (SVC3) - Body ground	Always	1MΩ or Higher
O4-9 (SIG3) - Body ground	Always	1MΩ or Higher

(h) Connect the negative (-) terminal cable to the battery.
(i) Turn the ignition switch to the ON position.
(j) Measure the voltage.

RS

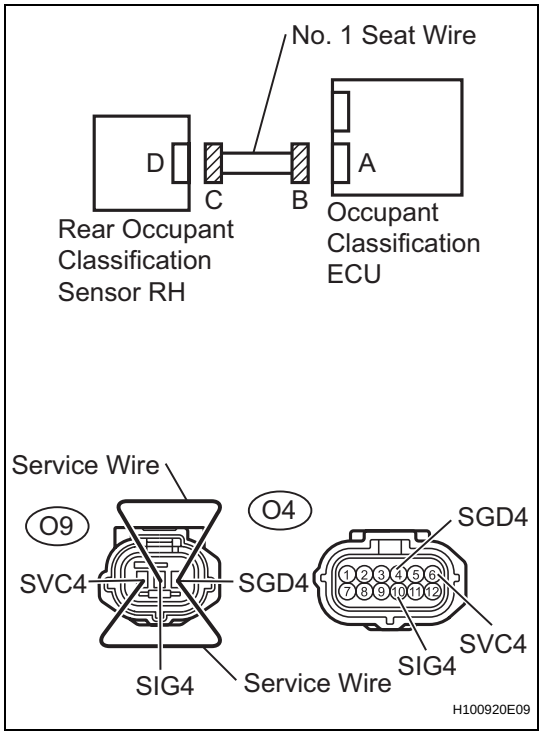
Standard voltage

Tester Connection	Condition	Specified Condition
O4-3 (SGD3) - Body ground	Ignition switch ON	Below 1 V
O4-5 (SVC3) - Body ground	Ignition switch ON	Below 1 V
O4-9 (SIG3) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

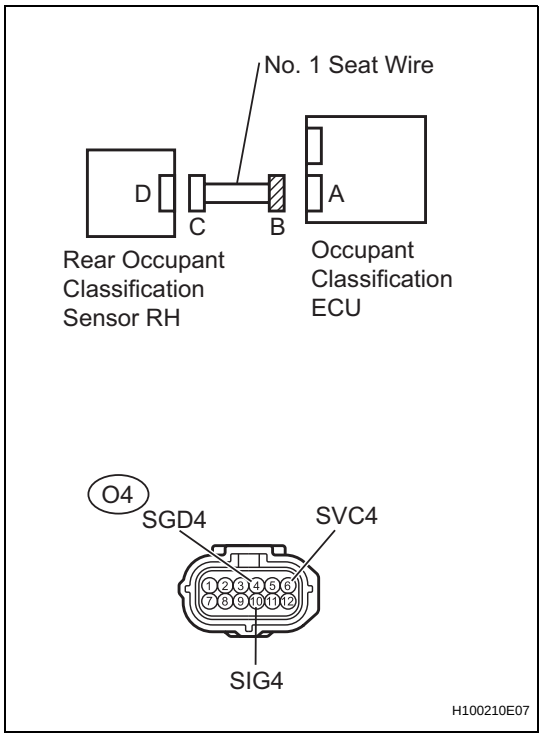
34 CHECK NO. 1 SEAT WIRE (OCCUPANT CLASSIFICATION SENSOR REAR RH CIRCUIT)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor rear LH.
(d) Using service wires, connect O9-1 (SVC4) and O9-3 (SGD4), and connect O9-2 (SIG4) and O9-3 (SGD4) of connector C.
NOTICE:
Do not forcibly insert the service wires into the terminals of the connector when connecting.
(e) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-6 (SVC4) - O4-4 (SGD4)	Always	Below 1 Ω
O4-10 (SIG4) - O4-4 (SGD4)	Always	Below 1 Ω

RS



(f) Disconnect the service wires from connector C.
(g) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O4-6 (SVC4) - O4-4 (SGD4)	Always	1MΩ or Higher
O4-10 (SIG4) - O4-4 (SGD4)	Always	1MΩ or Higher
O4-6 (SVC4) - O4-10 (SIG4)	Always	1MΩ or Higher
O4-4 (SGD4) - Body ground	Always	1MΩ or Higher
O4-6 (SVC4) - Body ground	Always	1MΩ or Higher
O4-10 (SIG4) - Body ground	Always	1MΩ or Higher

(h) Connect the negative (-) terminal cable to the battery.
(i) Turn the ignition switch to the ON position.
(j) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O4-4 (SGD4) - Body ground	Ignition switch ON	Below 1 V
O4-6 (SVC4) - Body ground	Ignition switch ON	Below 1 V
O4-10 (SIG4) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

35 PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

36 PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

RS

37 CHECK CENTER AIRBAG SENSOR ASSEMBLY

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).
HINT:
Perform the inspection using parts from a normal vehicle when possible.
(d) Connect the connectors to the center airbag sensor assembly.
(e) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
(f) Turn the ignition switch to the ON position.
(g) The passenger airbag ON/OFF indicator (ON and OFF) comes on for approximately 4 seconds, then turns off for approximately 2 seconds.
(h) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON/OFF according to the condition listed below.
Result:
Double cab

Front Seat Passenger	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	ON	OFF	OFF
Child seated / Child restrain system set	OFF	ON	OFF
Vacant	OFF	OFF	OFF

Except double cab

Front Seat Passenger	Airbag Cut-Off Switch	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF

OK → END

NG

38 REPLACE OCCUPANT DETECTION ECU

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the occupant classification ECU (See page RS-631).

RS

NEXT

39	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NG → **Go to step 41**

OK

40	PERFORM SENSITIVITY CHECK

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

OK → **END**

NG

41	REPLACE FRONT SEAT WITH ADJUSTER FRAME ASSEMBLY RH

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat with adjuster frame assembly RH (See page SE-38).

NEXT

RS

42	PERFORM ZERO POINT CALIBRATION

(a) Connect the negative (-) terminal cable to the battery.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Using the intelligent tester, perform the zero point calibration (See page RS-357).
OK:
COMPLETED is displayed on the tester.

NEXT

43	**PERFORM SENSITIVITY CHECK**

(a) Using the intelligent tester, perform the sensitivity check (See page RS-357).
Standard value:
27 to 33 kg (59.52 to 72.75 lb)

NEXT

END

OCCUPANT CLASSIFICATION SYSTEM (for Bench Seat Type)

PRECAUTION

1. INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

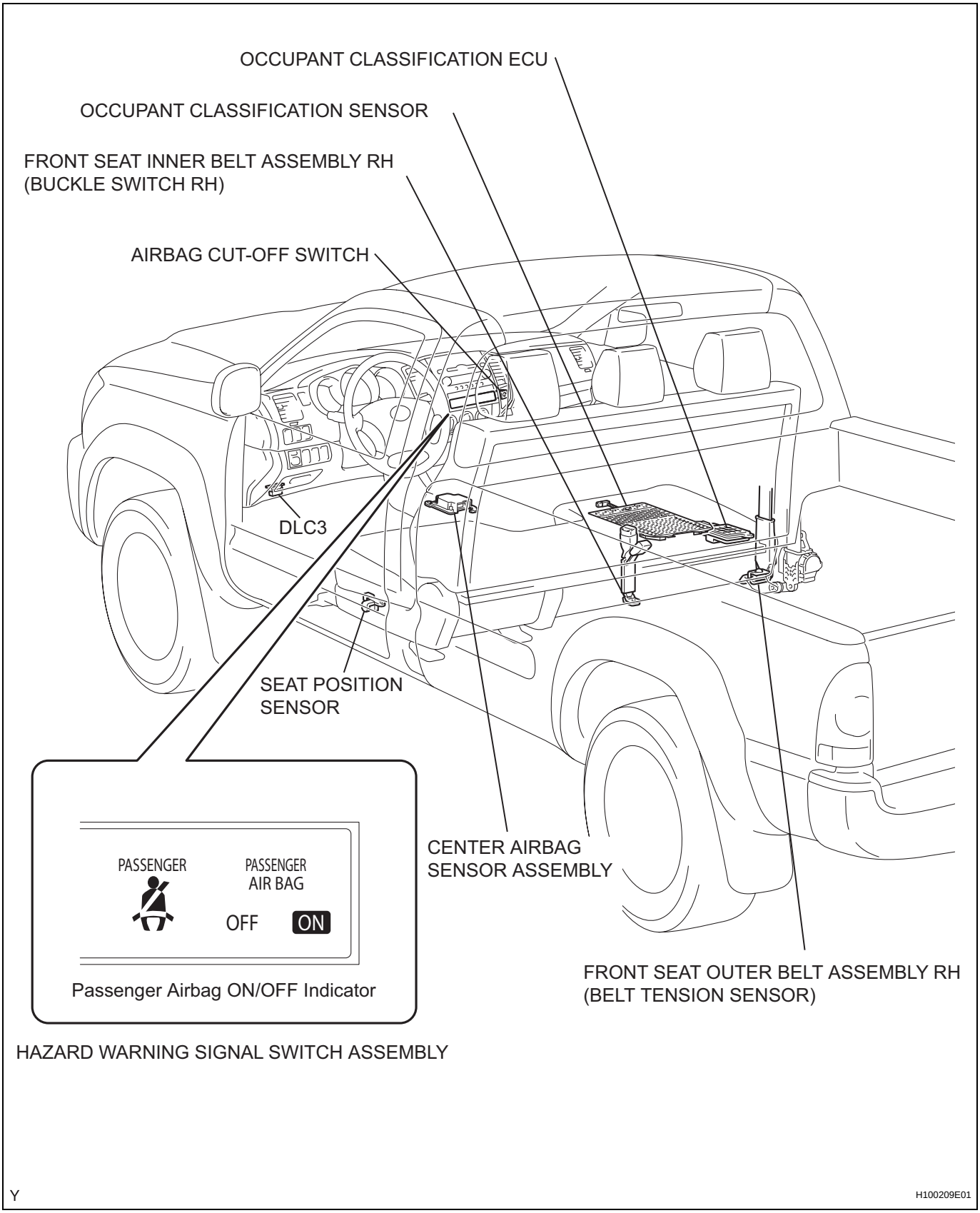
(a) Perform the zero point calibration and sensitivity check if any of the following conditions apply.

- 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 indicates OFF 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 floor where the front passenger seat is mounted. If the flatness is not within +- 3.0 mm (0.118 in.), adjust it to the specified range.

PARTS LOCATION

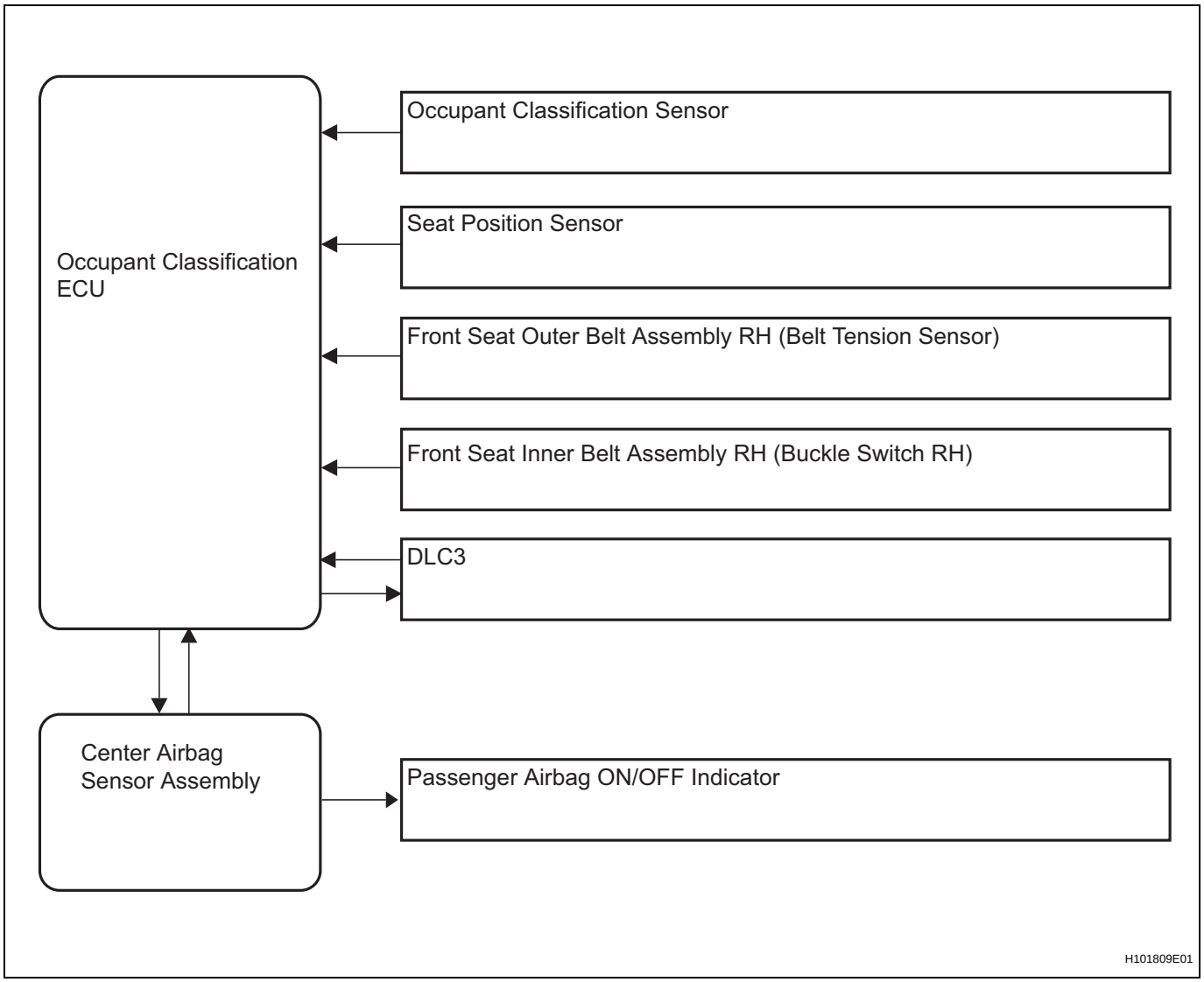


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SYSTEM DIAGRAM



SYSTEM DESCRIPTION

1. GENERAL DESCRIPTION

(a) In the occupant classification system, the occupant classification ECU calculates the weight of the front passenger based on a signal from the occupant classification sensor. This system judges the occupant to be a child when it detects a weight of less than 25kg (55.1 lb), and disables the front passenger side airbag and front passenger side - side airbag (*1).
HINT:
*1: For vehicles equipped with the side and curtain shield airbags.

(b) This system is mainly comprised of the occupant classification sensor that detects 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 assembly and front passenger side - side airbag assembly (*1).
HINT:
*1: For vehicles equipped with the side and curtain shield airbags.

2. OCCUPANT CLASSIFICATION SENSOR

(a) The occupant classification sensor is installed between the seat cushion frame and seat cushion pad. The pressure sensor is installed on the seat frame.

(b) The pressure sensor detects the pressure applied to the front passenger seat by the seated passenger. The occupant classification ECU determines whether the front passenger side airbag and front passenger side - side airbag (*1) are deployed or not based on signals from the pressure sensor.
HINT:
*1: For vehicles equipped with the side and curtain shield airbags.

3. SEAT BELT TENSION SENSOR

(a) The seat belt tension sensor is installed on the front seat outer belt to detect a CRS (Child Restraint System).

4. SEAT POSITION SENSOR (FOR FRONT PASSENGER SIDE)

(a) The seat position sensor (for front passenger side) is installed on the driver seat side - side slider rail to detect the position of the front passenger side seat.

HOW TO PROCEED WITH TROUBLESHOOTING

1	VEHICLE BROUGHT TO WORKSHOP

NEXT

2	CUSTOMER PROBLEM ANALYSIS (See page IN-26)

NEXT

3	PASSENGER AIRBAG ON/OFF INDICATOR CHECK (See page RS-484)

NEXT

4	DTCs CHECK (Present and Past DTCs) (See page RS-487)

(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 (See page RS-489)

NEXT

6	CIRCUIT INSPECTION

NEXT

7	REPAIR OR REPLACEMENT

NEXT

8	DTC CLEARANCE (Present and Past DTCs) (See page RS-487)

(a) Clear the DTCs.

RS

NEXT

9	DTC CHECK (Present and Past DTCs) (See page RS-487)

(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 (See page RS-484).

Result

Result	Proceed to
Passenger airbag ON/OFF indicator is operating 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

REGISTRATION

1. REGISTRATION

NOTICE:

- **If any DTCs related to the occupant classification ECU are output, troubleshoot those DTCs by referring to the DIAGNOSTIC TROUBLE CODE CHART.**
- **When ECU data saving or loading operations cannot be performed, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).**

HINT:

- When the occupant classification ECU for a bench seat type is replaced, the previous ECU data must be saved in the intelligent tester and loaded into the new ECU by following the flowchart below.
- Until the data from the previous ECU are loaded into the new occupant classification ECU, these data are not erased even when the tester is turned off.
- ECU EXCHANGE PROCEDURE (Before Exchange) describes the procedure to save the data in the intelligent tester from the occupant classification ECU which has been installed on the vehicle. ECU EXCHANGE PROCEDURE (After Exchange) describes the procedure to load the data from the previous ECU, stored in the intelligent tester, into the new ECU.

(a) Connect the intelligent tester to the DLC3.

(b) Turn the ignition switch to the ON position.

(c) Store the occupant classification ECU data into the intelligent tester by following the prompts on the tester screen.

HINT:

If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).

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

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

(f) Replace the occupant classification ECU (See page RS-634).

(g) Connect the negative (-) terminal cable to the battery.

(h) Turn the ignition switch to the ON position.

(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU by following the prompts on the tester screen.

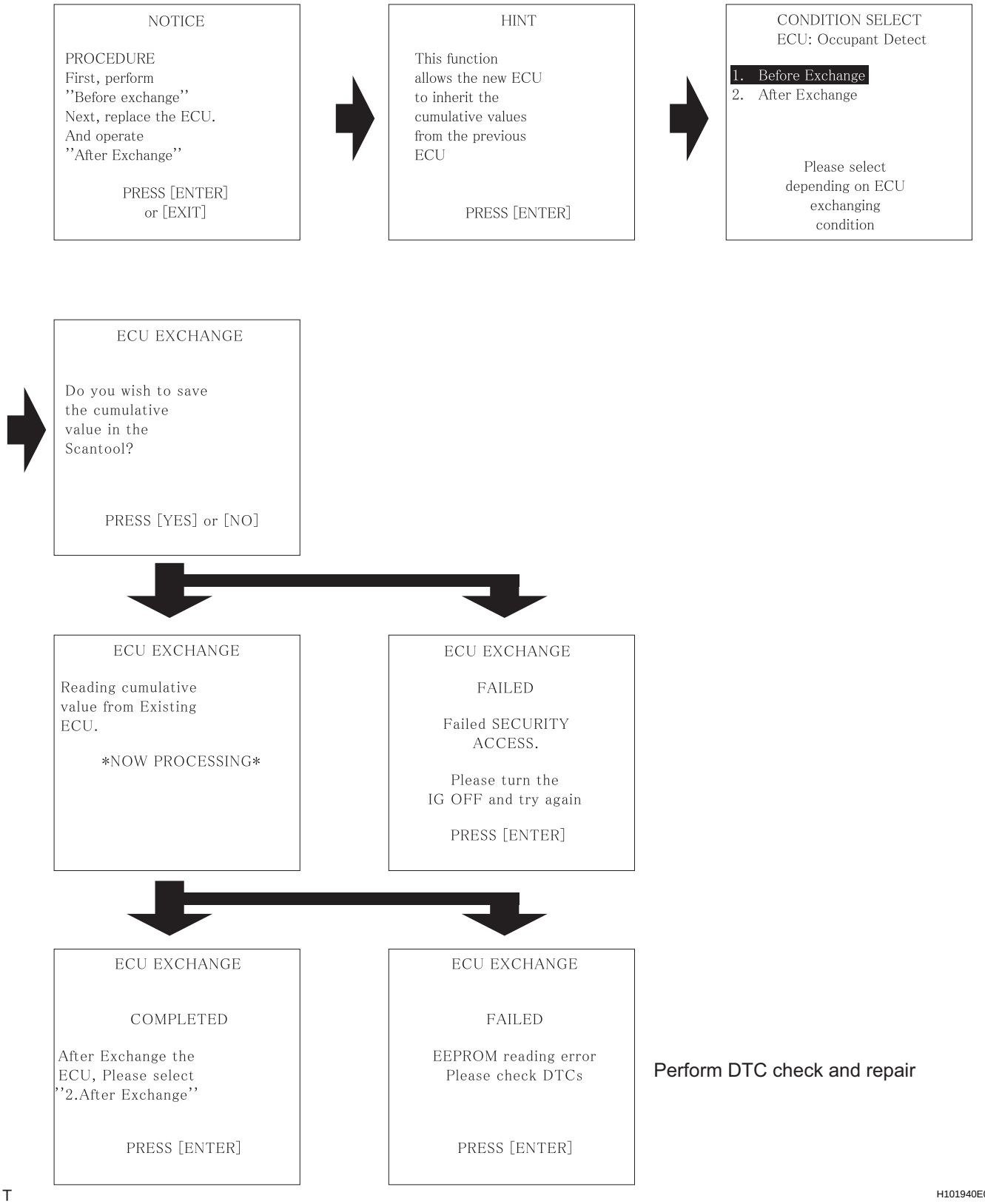
(j) Turn the ignition switch to the LOCK position.

(k) Turn the ignition switch to the ON position.

(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

ECU EXCHANGE PROCEDURE (Before Exchange):

1: DIAGNOSIS - 1: OBD/MOBD - MODEL YEAR - MODEL SELECTION - 9: OCCUPANT DETECT
Refer to the following screen flow.



Perform DTC check and repair

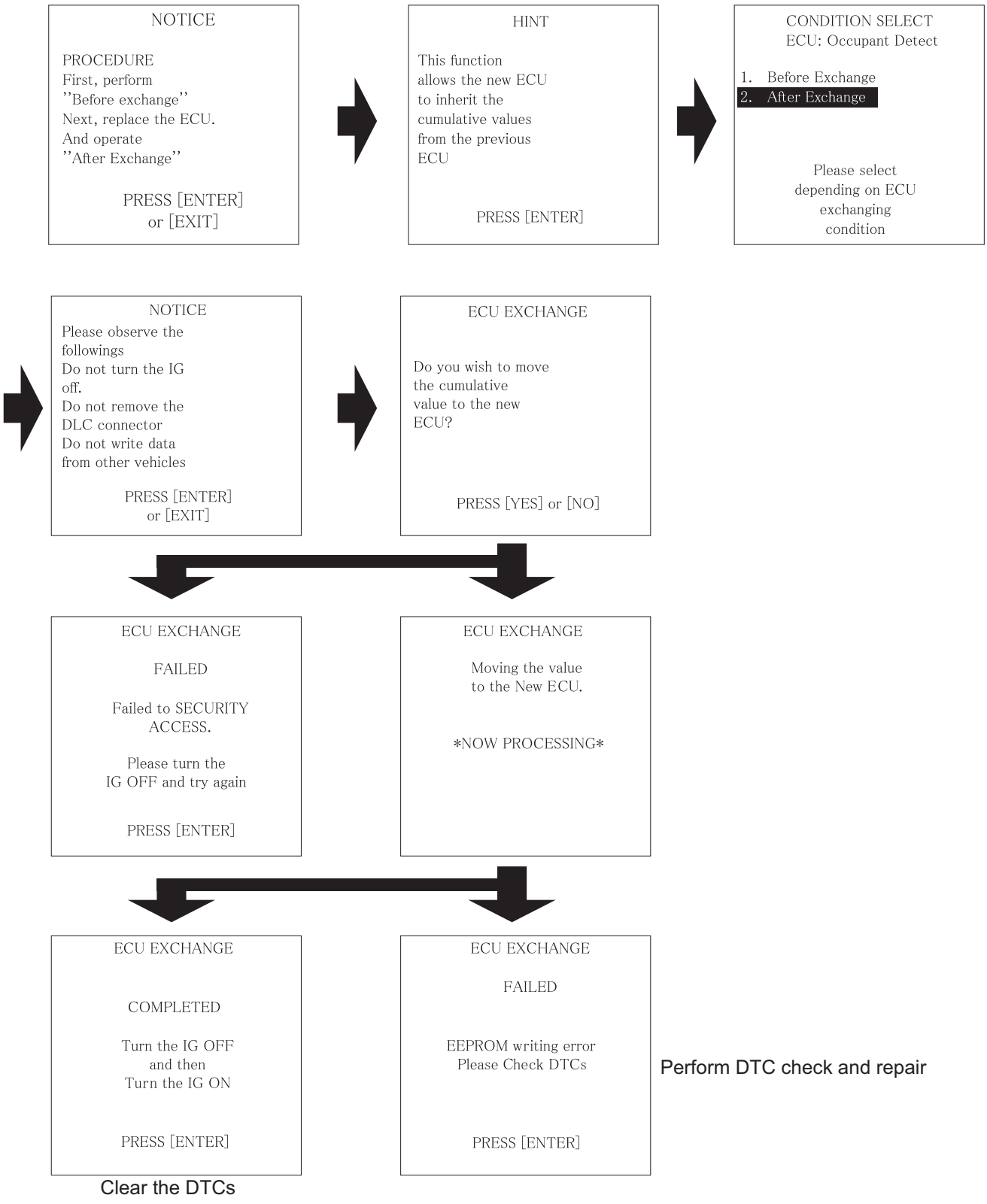
RS

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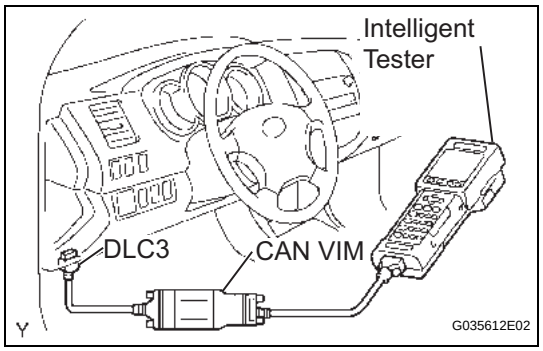
ECU EXCHANGE PROCEDURE (After Exchange):

1: DIAGNOSIS - 1: OBD/MOBD - MODEL YEAR - MODEL SELECTION - 9: OCCUPANT DETECT
Refer to the following screen flow.



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INITIALIZATION

NOTICE:

Make sure that the front passenger seat is not occupied before performing the operation.

HINT:

Perform the zero point calibration if any of the following conditions apply.

- 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 indicates OFF when the front passenger seat is not occupied.
- The vehicle is brought to the workshop for repair due to an accident or a collision.

1. ZERO POINT CALIBRATION

(a) Zero point calibration procedures

(1) Check that all of the following conditions are met:

- The vehicle is parked on a flat surface.
- No objects are placed on the front passenger seat.
- The front passenger seat belt buckle switch is OFF.

(2) Adjust the seat position according to the table below.

Adjustment Item	Position
Slide Direction	Rearmost position
Reclining Angle	Upright position
Headrest Height	Lowest position
Lifter Height	Lowest position

(3) Connect the intelligent tester to the DLC3.

(4) Turn the ignition switch to the ON position.

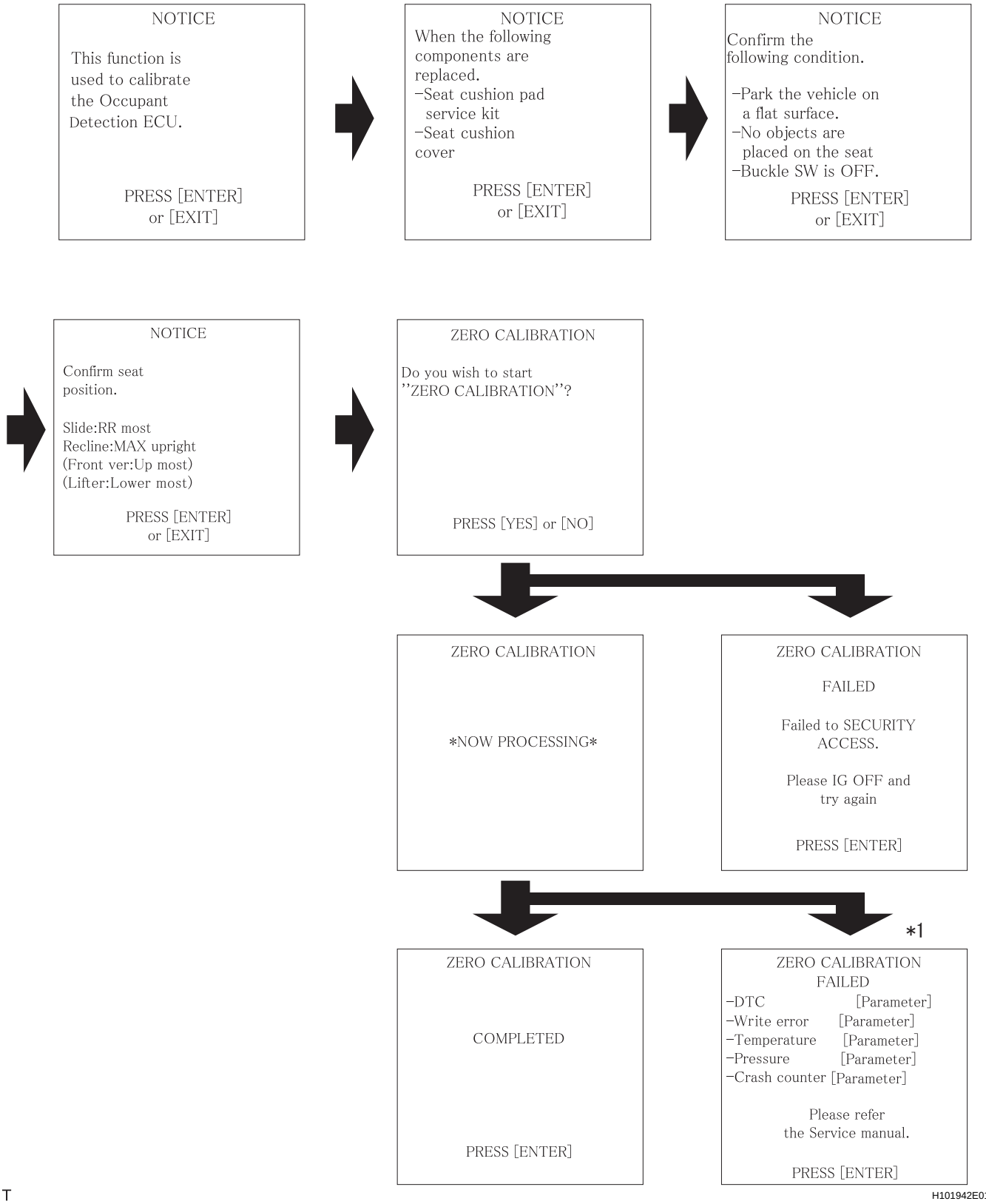
(5) Perform the zero point calibration by following the prompts on the tester screen.

HINT:

- Refer to the intelligent tester operator's manual for further details.
- If the zero point calibration is performed when the calibration conditions are not satisfied, DTC B1797 is output.
- If the zero point calibration has failed, DTC B1797 is output.

ZERO POINT CALIBRATION PROCEDURE:

1: DIAGNOSIS - 1: OBD/MOBD - MODEL YEAR - MODEL SELECTION - 9: OCCUPANT DETECT
Refer to the following screen flow.



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RS

T

HINT:
*1: If After Exchange is selected before the previous ECU data are stored in the intelligent tester, the display screen returns to CONDITION SELECT ECU: Occupant Detect.

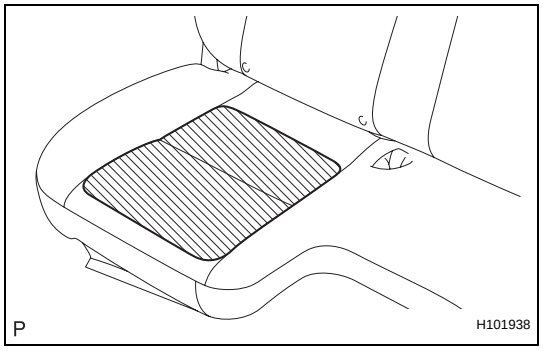
Item	Procedure
DTC	Perform DTC check and repair
Write error	Replace front seat cushion assembly (with occupant classification ECU and occupant classification sensor)
Temperature	Check value of THERMISTOR TEMP in ECU DATA LIST
Pressure	Check value of FILTERED PRESS in ECU DATA LIST
Crash counter	-

2. SENSITIVITY CHECK

(a) Sensitivity check procedures

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

(2) Turn the airbag cut-off switch to the AUTO position.



(3) Place a weight of 20 kg (44.0 lb) on the front passenger seat.
NOTICE:
- **Do not let the weight come into contact with the seat back when placing it on the seat cushion.**
- **Place the weight in the area shown in the illustration.**

(4) Turn the ignition switch to the ON position, and wait for at least 6 seconds.

(5) Check that the passenger airbag ON/OFF indicator indicates OFF.
OK:
The passenger airbag ON/OFF indicator indicates OFF.

(6) Add a weight of 30kg (66.1 lb) to the front passenger seat (total 50 kg (110.2 lb)).
NOTICE:
- **Do not let the weight come into contact with the seat back when placing it on the seat cushion.**
- **Place the weight in the area shown in the illustration.**

(7) Check that the passenger airbag ON/OFF indicator indicates ON.
OK:
The passenger airbag ON/OFF indicator indicates ON.

RS

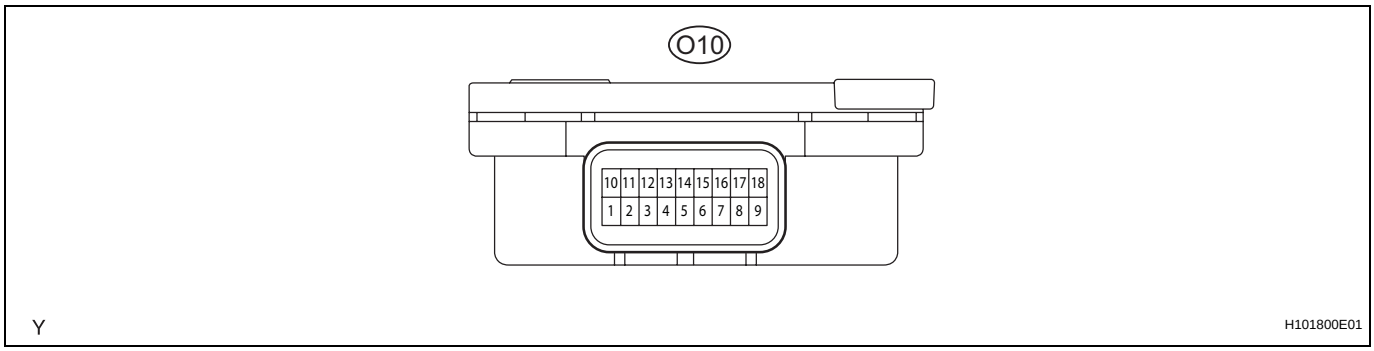
PROBLEM SYMPTOMS TABLE

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

Symptom	Suspected area	See page
Passenger airbag ON/OFF indicator display does not correspond to airbag cut-off switch position	Trouble in Passenger Airbag ON/OFF Indicator	RS-545

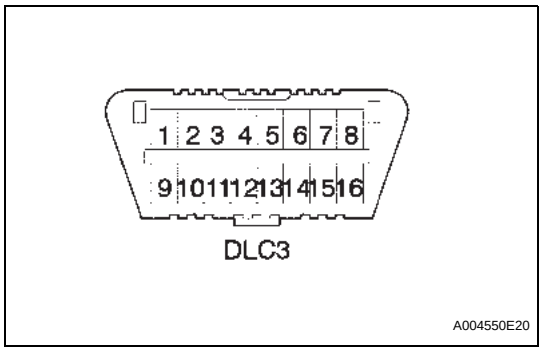
TERMINALS OF ECU

1. OCCUPANT CLASSIFICATION ECU



Standard:

Terminal No. (Symbols)	Wiring Color	Terminal Description	Condition	Specified Condition
O10-1 (GSW4) - O10-5 (GND)	P - W-B	Collision detection signal	Ignition switch ON	Pulse generation
O10-3 (GSP) - O10-5 (GND)	L - W-B	Seat position sensor (for front passenger side) ground line	Always	Below 1 V
O10-4 (SP) - O10-3 (GSP)	GR - L	Seat position sensor (for front passenger side) signal line	Ignition switch ON	Low: 4.7 to 7.3 mA Hi: 11.4 to 17.9 mA
O10-5 (GND) - Body ground	W-B - Body ground	Occupant classification ECU ground line	Always	Below 1 V
O10-6 (PS) - O10-15 (GPS)	R-B - LG-B	Pressure sensor signal line	Ignition switch ON	0.6 to 4.9 V
O10-7 (VPS) - O10-5 (GND)	L-W - W-B	Pressure sensor +B line	Ignition switch ON	4.75 to 5.25 V
O10-8 (GBT) - O10-5 (GND)	G - W-B	Belt tension sensor ground line	Always	Below 1 V
O10-9 (IG) - O10-5 (GND)	O - W-B	Occupant classification ECU +B line	Ignition switch ON	10 to 14 V
O10-10 (DIA) - O10-5 (GND)	W - W-B	Diagnosis (DLC3)	Ignition switch ON	Pulse generation
O10-11 (FSR+) - O10-12 (FSR-)	G-R - G-B	Center airbag sensor assembly communication line	Ignition switch ON	Pulse generation
O10-12 (FSR-) - O10-5 (GND)	G-B - W-B	Center airbag sensor assembly communication line (-)	Always	Below 1 V
O10-13 (BSW) - O10-14 (BGND)	B - P-G	Passenger side buckle switch line	Ignition switch ON	Low: 4 to 7 mA Hi: 12 to 18 mA
O10-14 (BGND) - O10-5 (GND)	P-G - W-B	Passenger side buckle switch ground line	Always	Below 1 V
O10-15 (GPS) - O10-5 (GND)	LG-B - W-B	Pressure sensor ground line	Always	Below 1 V
O10-16 (BT) - O10-5 (GND)	LG - W-B	Belt tension sensor signal line	Ignition switch ON	0.75 to 4.25 V
O10-17 (VBT) - O10-5 (GND)	V - W-B	Belt tension sensor +B line	Ignition switch ON	10 to 14 V



DIAGNOSIS SYSTEM

1. CHECK DLC3

(a) The vehicle's ECU uses the ISO 9141-2 for communication protocol. 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
BAT (16) - Body ground	Battery positive	Always	11 to 14 V

HINT:

If the display shows a communication error message when the intelligent tester is connected to the DLC3, the ignition switch is turned to the ON position and the intelligent tester is operated, there is a problem on the vehicle side or tool side.

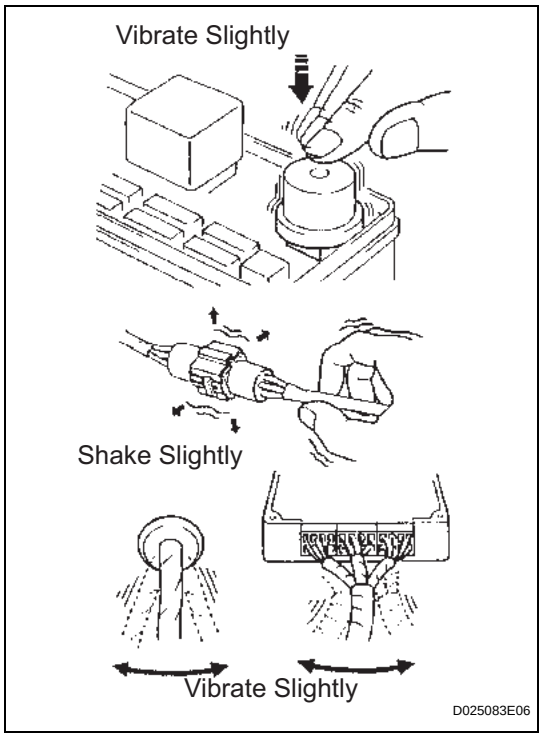
- If communication is normal when the tool is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tool itself. Consult the Service Department listed in the tool's 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. Regardless of the technician's experience or skill, if troubleshooting proceeds without confirmation of the problem symptoms, something important is likely to be overlooked and incorrect assumptions may be made 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 ignition switch is turned to the ON position).
(1) Slightly vibrate the part of the sensor considered to be the cause of the problem 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 main areas that should be checked thoroughly.

3. FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

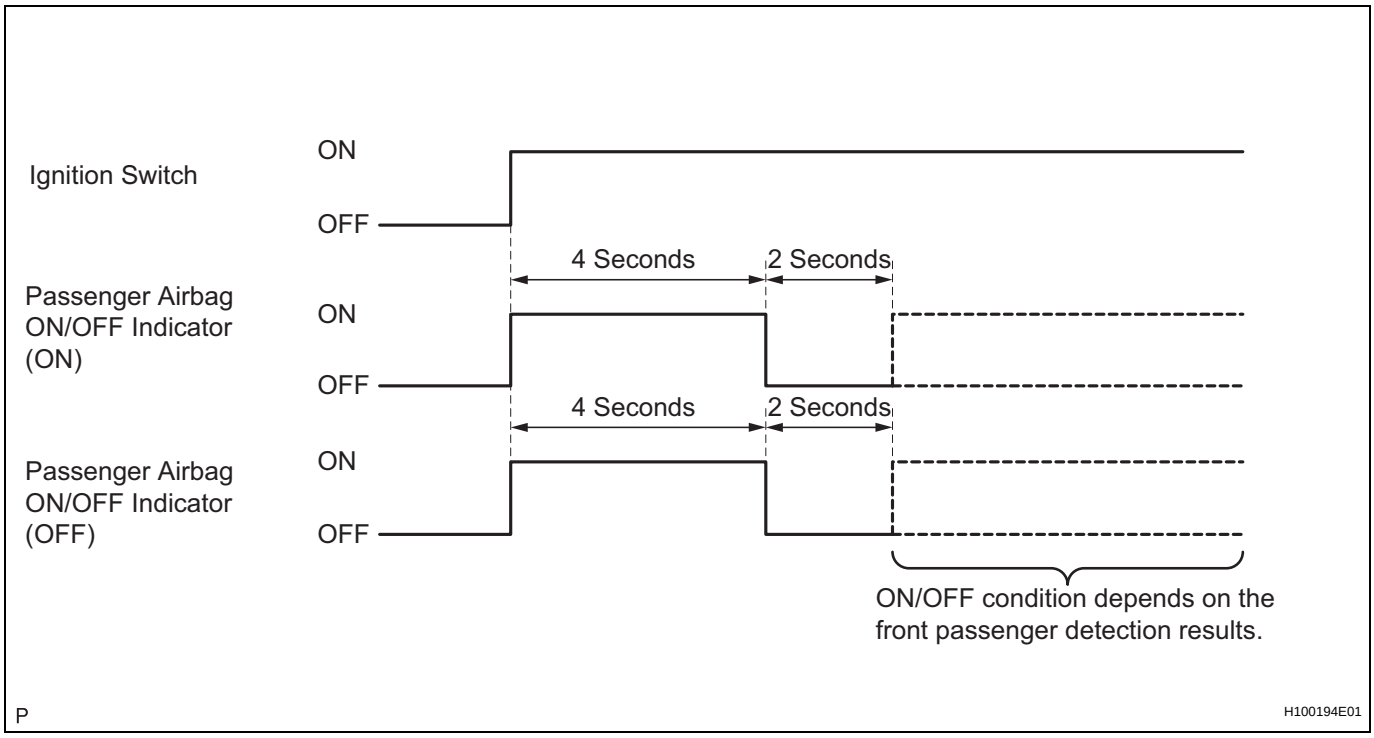
(a) Initial check
(1) Turn the ignition switch to the ON position.
(2) The passenger airbag ON/OFF indicator illuminates ON and OFF for approximately 4 seconds, and then turns them off for approximately 2 seconds.
(3) Approximately 6 seconds after the ignition switch is turned to the ON position, the passenger airbag ON/OFF indicator indicates ON or OFF depending on the conditions listed below.

Front Seat Passenger	Airbag Cut-off Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Adult seated	AUTO	ON	OFF	OFF
Adult seated	OFF	OFF	ON	OFF
Adult seated	Airbag cut off switch system failure	OFF	ON	ON
Child seated / Child restrain system set	AUTO	OFF	ON	OFF
Child seated / Child restrain system set	OFF	OFF	ON	OFF
Child seated / Child restrain system set	Airbag cut off switch system failure	OFF	ON	ON
Vacant	AUTO	OFF	OFF	OFF
Vacant	OFF	OFF	ON	OFF
Vacant	Airbag cut off switch system failure	OFF	ON	ON
Passenger occupant classification system failure	AUTO	OFF	ON	ON
Passenger occupant classification system failure	OFF	OFF	ON	ON

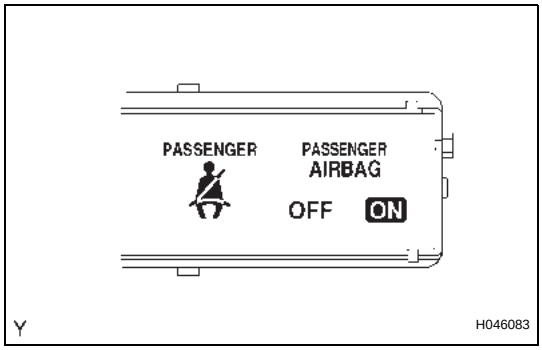
Front Seat Passenger	Airbag Cut-off Switch Position	ON Indicator	OFF Indicator	SRS Warning Light
Passenger occupant classification system failure	Airbag cut off switch system failure	OFF	ON	ON

HINT:

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



- When the occupant classification system malfunctions, the SRS warning light comes on and the passenger airbag ON/OFF indicator indicates OFF. In this case, check the DTCs in the airbag system first.



4. PASSENGER AIRBAG ON/OFF INDICATOR CHECK

(a) Turn the ignition switch to the ON position.

(b) Check that the passenger airbag ON/OFF indicator illuminates ON and OFF for approximately 4 seconds, and then turns them off for approximately 2 seconds.

HINT:

Refer to the table in the previous step regarding the passenger airbag ON/OFF indicator when approximately 6 seconds have elapsed after the ignition switch is turned to the ON position.

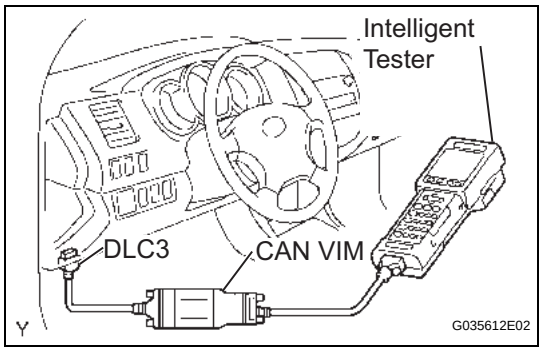
RS

DTC CHECK / CLEAR

1. DTC CHECK

HINT:

- When DTC B1650/23 is detected as a result of troubleshooting the airbag system, troubleshoot the occupant classification system.
- Use the intelligent tester to read and clear DTCs, otherwise the DTCs cannot be read and cleared.



(a) Check for DTCs.

(1) Connect the intelligent tester to the DLC3.

(2) Turn the ignition switch to the ON position.

(3) Check for DTCs by following the prompts on the tester screen.

HINT:

When checking the DTCs of the occupant classification ECU, select the OCCUPANT DETECT on the tester screen.

(b) Clear the DTCs.

(1) Connect the intelligent tester to the DLC3.

(2) Turn the ignition switch to the ON position.

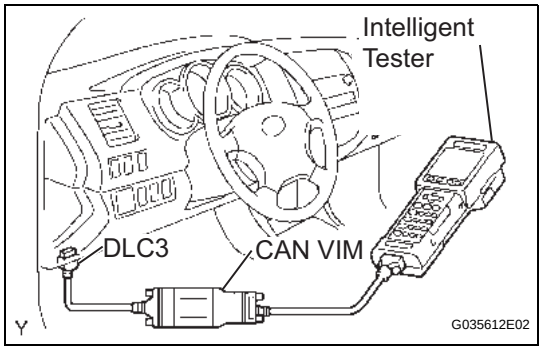
(3) Clear the DTCs by following the prompts on the tester screen.

HINT:

When clearing the DTCs of the occupant classification ECU, select the OCCUPANT DETECT on the tester screen.

DATA LIST / ACTIVE TEST

HINT:
By accessing the DATA LIST displayed by the intelligent tester, values of switches and sensors can be checked without removing any parts. Reading the DATA LIST as the first step of troubleshooting is one method to shorten diagnostic time.



1. DATA LIST FOR OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Following the display on the tester screen, read the DATA LIST.
HINT:
The Specified Condition for Zero Point Calibration in the table below must be satisfied when the zero point calibration is performed.

DATA LIST

Item	Measurement Item/ Range (Display)	Normal Condition	Specified Condition for Zero Point Calibration	Diagnostic Note
PASSENGER CLASS	Passenger classification/ NG: Data is not determined AM50: Adult is seated and seat is in rear position AF05: Adult is seated and seat is in front position CHILD: Child is seated OFF: Vacant	AF05/AM50/CHILD/OFF	OFF	-
P BUCKLE SW	Buckle switch (Passenger side)/ SET: Passenger side seat belt is fastened UNSET: Passenger side seat belt is unfastened NG: Data is not determined	UNSET/SET	UNSET	-
SEAT POSITION	Seat position/ ON: Seat is in front position OFF: Seat is in rear position NG: Data is not determined	ON/OFF	ON/OFF	-
RELATIVE PRESS	Pressure sensor output/ Min.: 0 Max.: 255	0 to 210	0 to 2	-
FILTERED PRESS	Filtered pressure sensor output/ Min.: 0 Max.: 255	38 to 240	38 to 75	If value outside range of Specified Condition for Zero Point Calibration, check whether any objects placed on seat cushion and that seat cushion fitted correctly.
THERMISTOR TEMP	Thermistor temperature output/ Min.: -40°C (-40°F) Max.: 90°C (194°F)	-40° to 85°C (-40° to185°F)	3° to 40°C (36° to 104°F)	If value outside range of Specified Condition for Zero Point Calibration, adjust temperature to proper range by using air conditioner, etc.

Item	Measurement Item/ Range (Display)	Normal Condition	Specified Condition for Zero Point Calibration	Diagnostic Note
WEIGHT THRESH	Weight threshold/ Min.: 0 Max.: 255	36 to 67 (reference value)	36 to 67 (reference value)	-
FILTERED TENSION	Filtered belt tension output/ Min.: 0 Max.: 255	39 to 229	39 to 64 (no load)	-
EMPTY THRESH	Empty threshold value from seat factory/ Min.: 0 Max.: 255	38 to 75	38 to 75	-
ALLOW THRESH	Threshold value for adult passenger or not from seat factory/ Min.: 0 Max.: 255	43 to 64 (reference value)	43 to 64 (reference value)	-
#PRESENT CODES	Number of present trouble codes/ Min.: 0 Max.: 255	0	0	-
#PAST CODES	Number of past trouble codes/ Min.: 0 Max.: 255	0	0	-

DIAGNOSTIC TROUBLE CODE CHART

HINT:
When DTC B1650/32 is detected as a result of troubleshooting the Supplemental Restraint System, perform troubleshooting for the occupant classification system by referring to the table below.

DTC No.	Detection Item	Trouble Area	Passenger Airbag ON/OFF Indicator (OFF Indicator)	See page
B1771	Passenger Side Buckle Switch Circuit Malfunction	1. No. 1 seat wire 2. Front seat inner belt assembly RH (Buckle switch RH) 3. Occupant classification ECU	ON	RS-490
B1772	Seat Position Sensor Circuit Malfunction	1. No. 1 seat wire 2. Seat position sensor 3. Occupant classification ECU	ON	RS-497
B1773	Belt Tension Sensor Circuit Malfunction	1. No. 1 seat wire 2. Front seat outer belt RH (Belt tension sensor) 3. Occupant classification ECU	ON	RS-504
B1774	Pressure Sensor Circuit Malfunction	1. No. 1 seat wire 2. Occupant classification sensor (Front seat cushion assembly) 3. Occupant classification ECU	ON	RS-510
B1775	Pressure Sensor Power Source Circuit Malfunction	1. No. 1 seat wire 2. Occupant classification sensor (Front seat cushion assembly) 3. Occupant classification ECU	ON	RS-510
B1776	Seat Belt Tension Sensor Power Source Circuit Malfunction	1. No. 1 seat wire 2. Front seat outer belt RH (Belt tension sensor) 3. Occupant classification ECU	ON	RS-504
B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction	1. No. 1 seat wire 2. Floor wire 3. Occupant classification ECU 4. Center airbag sensor assembly	ON	RS-517
B1791	Collision Detection Signal Line Malfunction	1. No. 1 seat wire 2. Floor wire 3. Instrument panel wire 4. Occupant classification ECU 5. Center airbag sensor assembly	ON	RS-527
B1795	Occupant Classification ECU Malfunction	1. Occupant classification ECU	ON	RS-539
B1797	Calibration Malfunction	1. There is no malfunction if this DTC does not recur after occupant classification system zero point calibration is performed. 2. Occupant classification sensor (Front seat cushion assembly)	ON	RS-541

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.

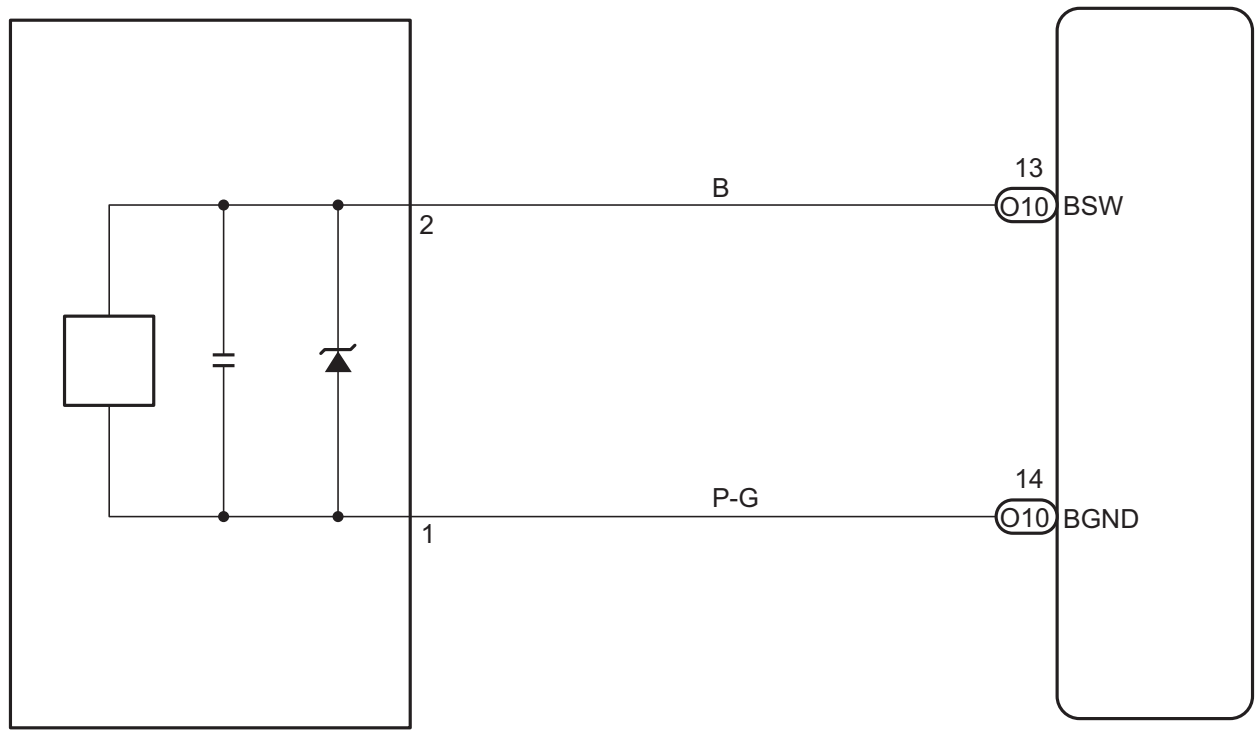
DTC B1771 is recorded when a malfunction is detected in the passenger side buckle switch circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1771	• Occupant classification ECU detects line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in passenger side buckle switch circuit for 2 seconds • Passenger side buckle switch malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Front seat inner belt assembly RH (Buckle switch RH) • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).

OK:

DTC B1771 is not output.

HINT:

DTCs other than B1771 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

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

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

(c) Check that the connectors are properly connected to the occupant classification ECU and the front seat inner belt assembly RH.

OK:

The connectors are properly connected.

(d) Disconnect the connectors from the occupant classification ECU and front seat inner belt assembly RH.

(e) Check that the terminals of connectors are not damaged.

OK:

The terminals are not deformed or damaged.

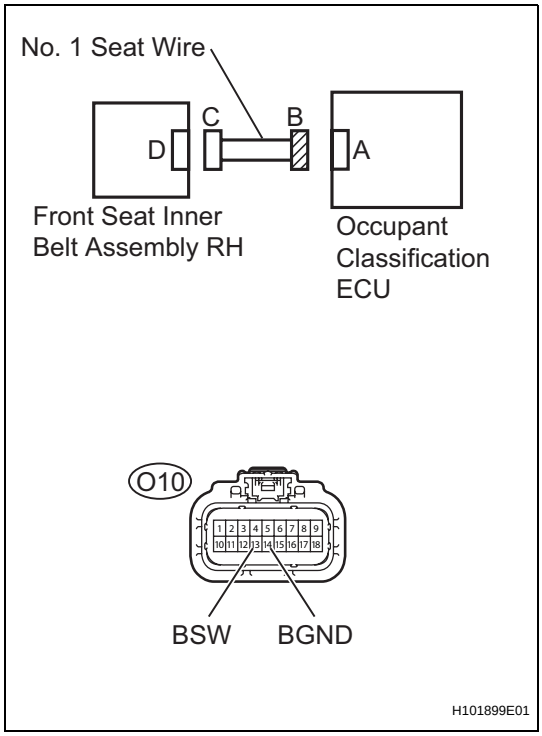
HINT:

If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE WIRE HARNESS OR CONNECTORS**

OK

3 CHECK NO. 1 SEAT WIRE (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 ignition switch to the ON position.
(d) Measure the voltage.

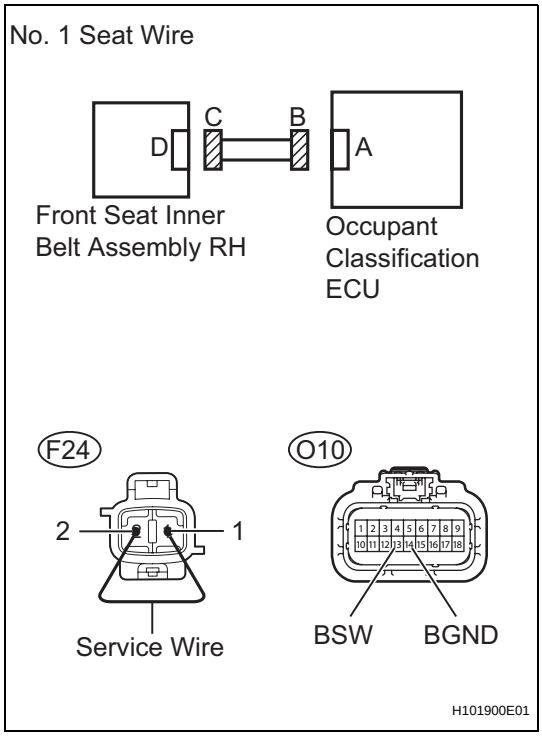
Standard voltage

Tester connection	Condition	Specified condition
O10-13 (BSW) - Body ground	Ignition switch ON	Below 1 V
O10-14 (BGND) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

4 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect F24-1 and F24-2 of connector C.

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

(d) Measure the resistance.

Standard resistance

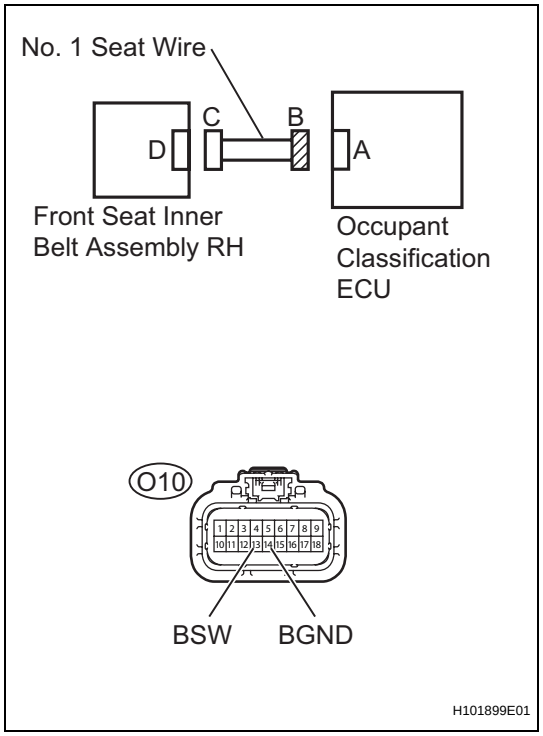
Tester connection	Condition	Specified condition
O10-13 (BSW) - O10-14 (BGND)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

5 CHECK NO. 1 SEAT WIRE (TO GROUND)



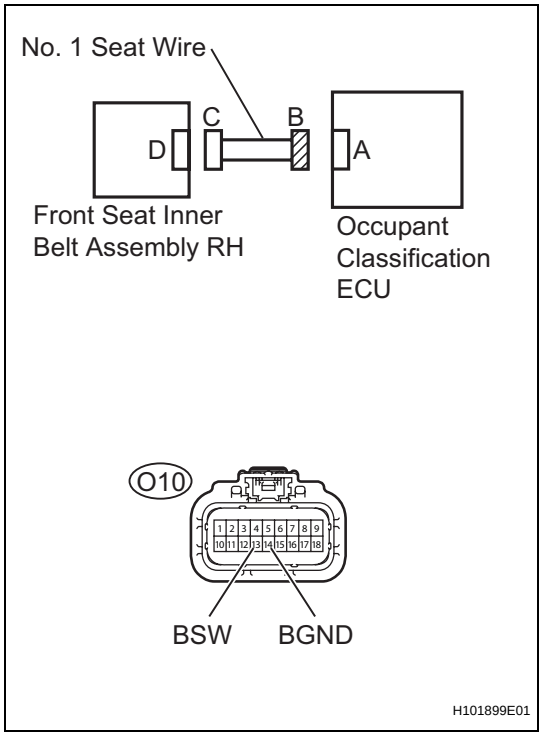
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester connection	Condition	Specified condition
O10-13 (BSW) - Body ground	Always	1 MΩ or higher
O10-14 (BGND) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester connection	Condition	Specified condition
O10-13 (BSW) - O10-14 (BGND)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

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 ignition switch to the ON position.
(d) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTC B1771 is not output.
HINT:
DTCs other than B1771 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

8	REPLACE BUCKLE SWITCH RH (WITH FRONT SEAT INNER BELT ASSEMBLY RH)

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat inner belt assembly RH (See page SB-12).
HINT:
Perform the inspection using parts from a normal vehicle if possible.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Check the DTCs (See page RS-487).
OK:
DTC B1771 is not output.
HINT:
DTCs other than B1771 may be output at this time, but they are not related to this check.

OK	END

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

DTC	B1772	Seat Position Sensor Circuit Malfunction

DESCRIPTION

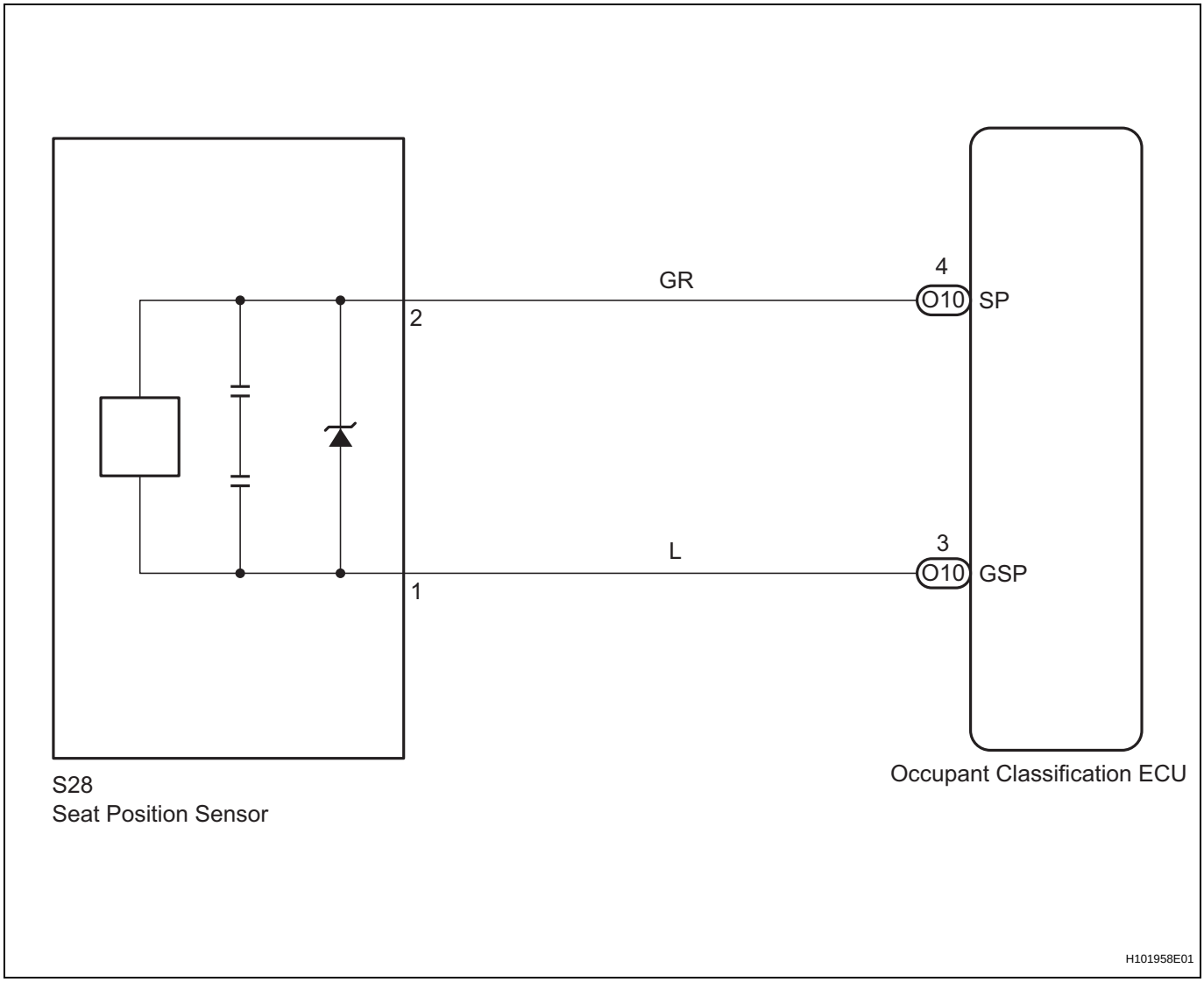
The seat position sensor circuit consists of the occupant classification ECU and the seat position sensor. The seat position sensor sends the seat position signal to the occupant classification ECU to control the dual stage deployment of the front passenger airbag assembly.
DTC B1772 is recorded when a malfunction is detected in the seat position sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1772	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in seat position sensor circuit for 2 seconds. • Seat position sensor malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Seat position sensor • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

RS

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).

OK:

DTC B1772 is not output.

HINT:

DTCs other than B1772 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

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

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

(c) Check that the connectors are properly connected to the occupant classification ECU and the seat position sensor.

OK:

The connectors are properly connected.

(d) Disconnect the connectors from the occupant classification ECU and the seat position sensor.

(e) Check that the terminals of the connectors are not damaged.

OK:

The terminals are not deformed or damaged.

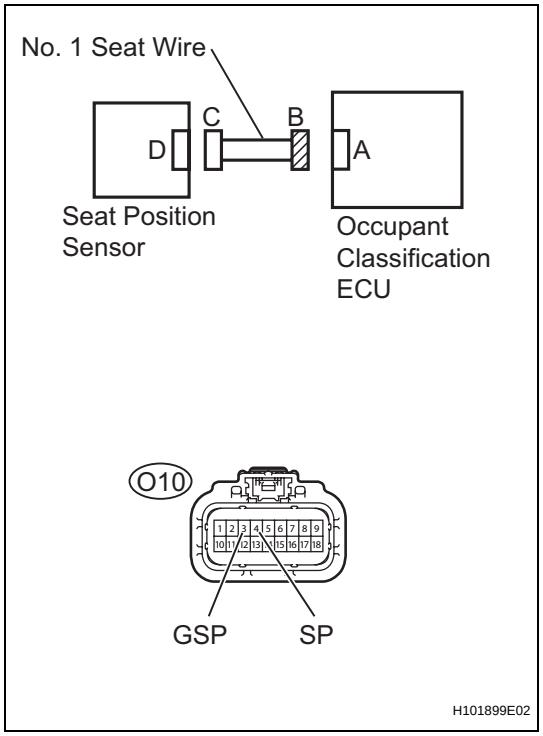
HINT:

If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE WIRE HARNESS OR CONNECTOR**

OK

3 CHECK NO. 1 SEAT WIRE (TO B+)



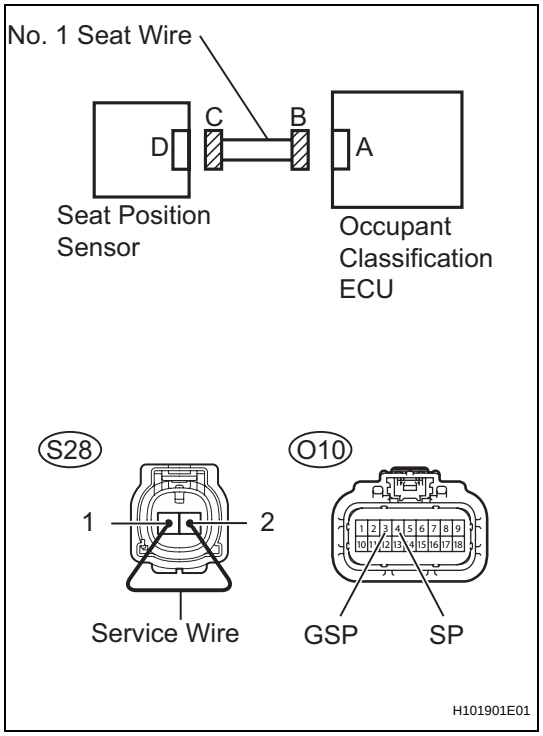
(a) Disconnect the connectors from the occupant classification ECU and the seat position sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O10-4 (SP) - Body ground	Ignition switch ON	Below 1 V
O10-3 (GSP) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

4 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect S28-2 (SP) and S28-1 (GSP) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(d) Measure the resistance.
Standard resistance

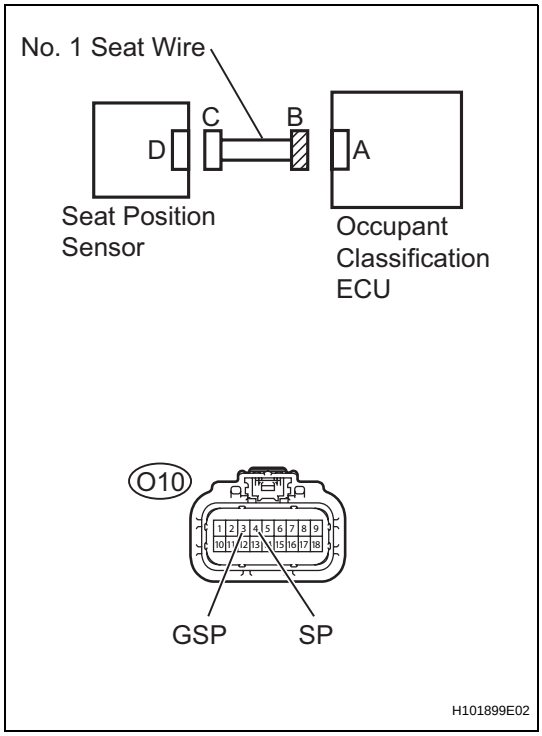
Tester Connection	Condition	Specified Condition
O10-4 (SP) - O10-3 (GSP)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

5 CHECK NO. 1 SEAT WIRE (TO GROUND)



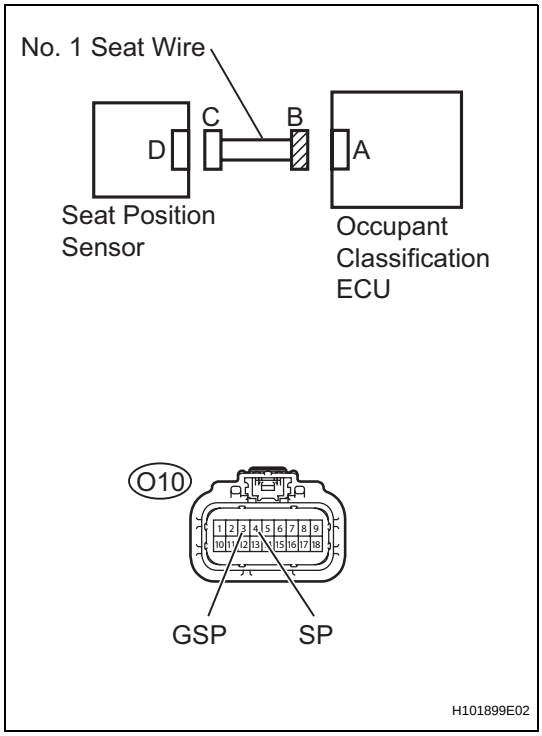
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-4 (SP) - Body ground	Always	1 MΩ or higher
O10-3 (GSP) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-4 (SP) - O10-3 (GSP)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

7	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the seat position sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTC B1772 is not output.
HINT:
DTCs other than B1772 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

8	REPLACE SEAT POSITION SENSOR

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the seat position sensor (See page RS-480).
HINT:
- Perform the inspection using parts from a normal vehicle if possible.
- The seat position sensor is installed on the driver side.

(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Check the DTCs (See page RS-487).
OK:
DTC B1772 is not output.
HINT:
DTCs other than B1772 may be output at this time, but they are not related to this check.

OK	END

NG

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

DTC	B1773	Belt Tension Sensor Circuit Malfunction

DTC	B1776	Seat Belt Tension Sensor Power Source Circuit Malfunction

DESCRIPTION

The belt tension sensor circuit consists of the occupant classification ECU and the belt tension sensor. The belt tension sensor sends the belt tension signal to the occupant classification ECU to control the occupant classification system.

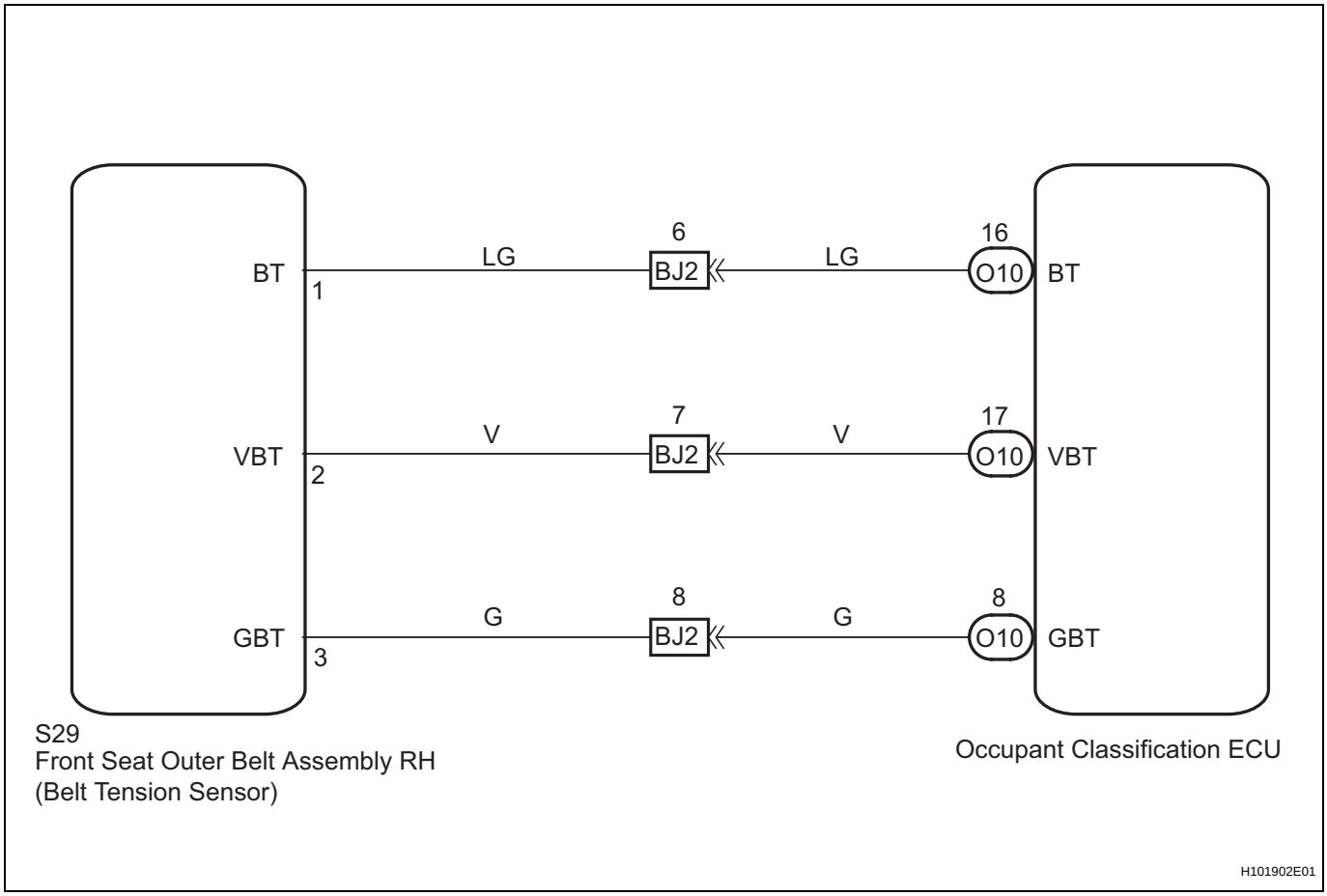
DTCs B1773 and B1776 are recorded when a malfunction is detected in the belt tension sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1773 B1776	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in belt tension sensor circuit for 2 seconds. • Belt tension sensor malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Front seat outer belt RH (Belt tension sensor) • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



RS

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1773 and B1776 are not output.
HINT:
DTCs other than B1773 and B1776 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

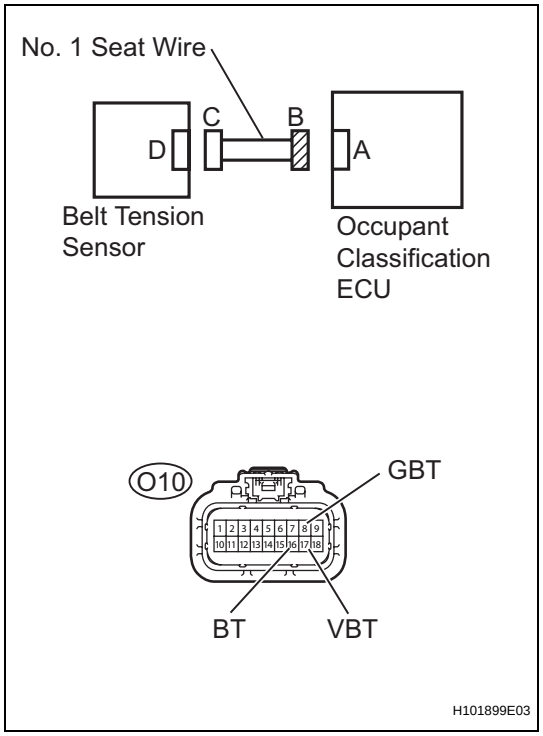
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the belt tension sensor.
OK:
The connectors are properly connected.
(d) Disconnect the connectors from the occupant classification ECU and the belt tension sensor.
(e) Check that the terminals of the connectors are not damaged.
OK:
The terminals are not deformed or damaged.
HINT:
If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

RS

3 CHECK NO. 1 SEAT WIRE (TO B+)



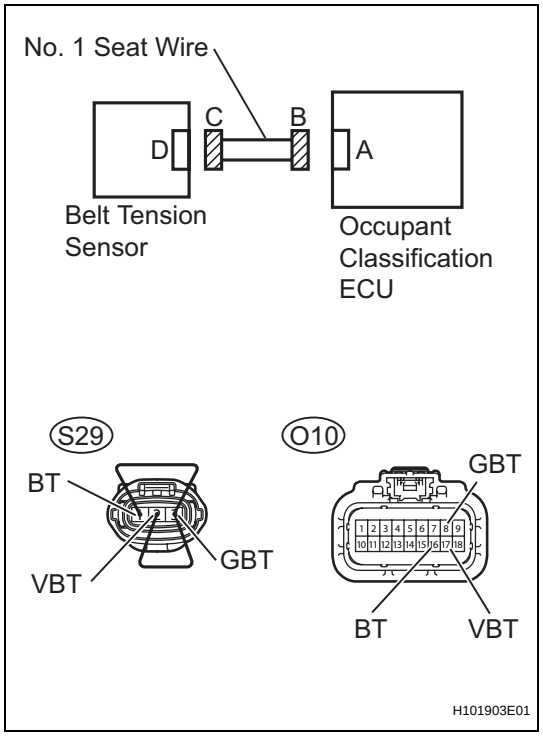
(a) Disconnect the connectors from the occupant classification ECU and belt tension sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O10-8 (GBT) - Body ground	Ignition switch ON	Below 1 V
O10-16 (BT) - Body ground	Ignition switch ON	Below 1 V
O10-17 (VBT) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

4 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect S29-1 (BT) and S29-3 (GBT), and connect S29-2 (VBT) and S29-3 (GBT) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(d) Measure the resistance.
Standard resistance

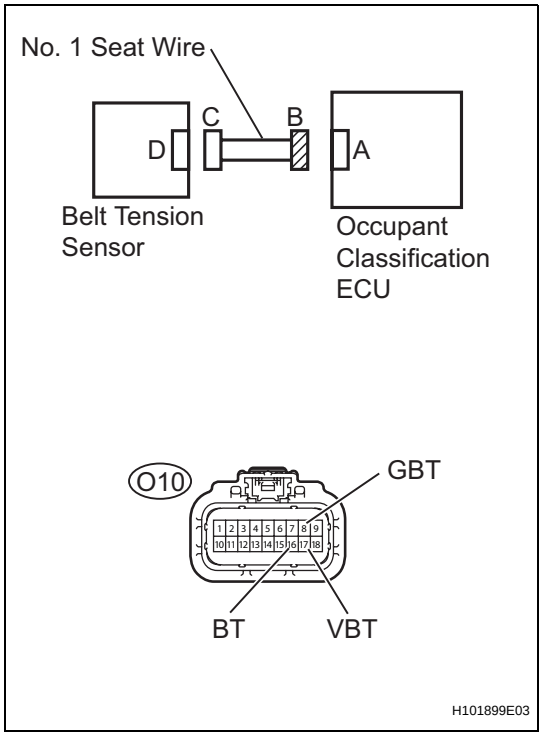
Tester Connection	Condition	Specified Condition
O10-16 (BT) - O10-8 (GBT)	Always	Below 1 Ω
O10-17 (VBT) - O10-8 (GBT)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

5 CHECK NO. 1 SEAT WIRE (TO GROUND)



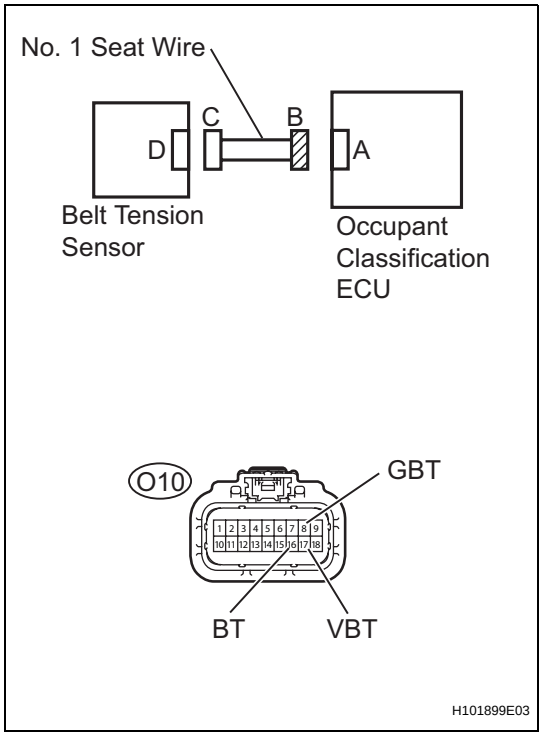
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-8 (GBT) - Body ground	Always	1 MΩ or higher
O10-16 (BT) - Body ground	Always	1 MΩ or higher
O10-17 (VBT) - Body ground	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-16 (BT) - O10-8 (GBT)	Always	1 MΩ or higher
O10-17 (VBT) - O10-8 (GBT)	Always	1 MΩ or higher

NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

RS

7	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the belt tension sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTCs B1773 and B1776 are not output.
HINT:
DTCs other than B1773 and B1776 may be output at this time, but they are not related to this check.

OK	USE SIMULATION METHOD TO CHECK

NG

8	REPLACE BELT TENSION SENSOR (FRONT SEAT OUTER BELT ASSEMBLY RH)

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the belt tension sensor (See page SB-27).
HINT:
Perform the inspection using parts from a normal vehicle if possible.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Check the DTCs (See page RS-487).
OK:
DTCs B1773 and B1776 are not output.
HINT:
DTCs other than B1773 and B1776 may be output at this time, but they are not related to this check.

OK	END

NG

RS

9	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

10	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

DTC	B1774	Pressure Sensor Circuit Malfunction

DTC	B1775	Pressure Sensor Power Source Circuit Malfunction

DESCRIPTION

The pressure sensor circuit consists of the occupant classification ECU and the occupant classification sensor.

The occupant classification sensor sends the pressure signal to the occupant classification ECU to control the occupant classification system.

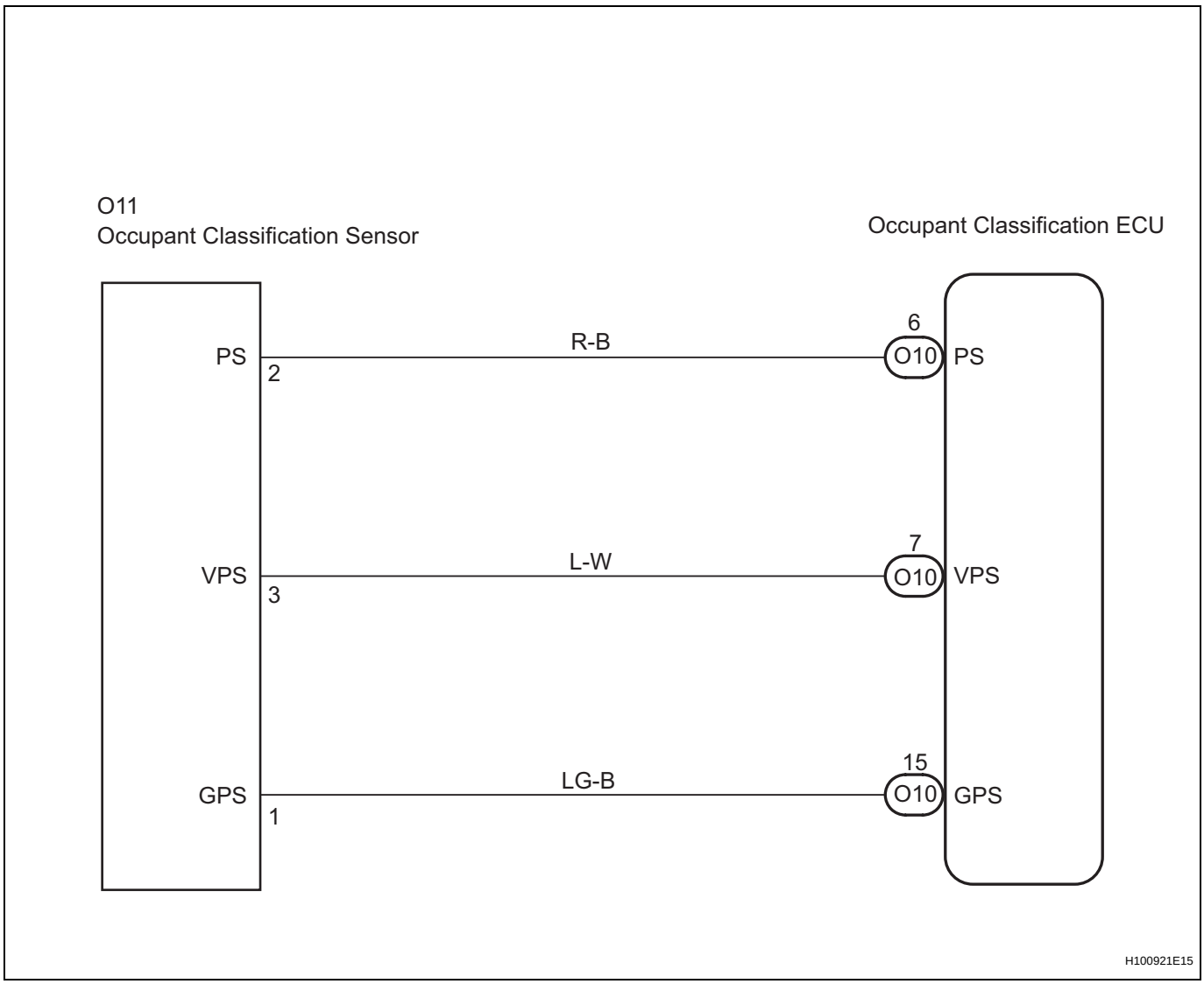
DTCs B1774 and B1775 are recorded when a malfunction is detected in the pressure sensor circuit.

DTC No.	DTC Detecting Condition	Trouble Area
B1774 B1775	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in pressure sensor circuit for 2 seconds. • Occupant classification sensor malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Occupant classification sensor • Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.
- After performing the zero point calibration, check for DTCs to confirm that the calibration is completed normally. (If it fails, DTC B1797 will be output.)

RS

1	**CHECK DTC**

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.

(e) Check the DTCs (See page RS-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

OK	**USE SIMULATION METHOD TO CHECK**

NG

2	**CHECK CONNECTORS**

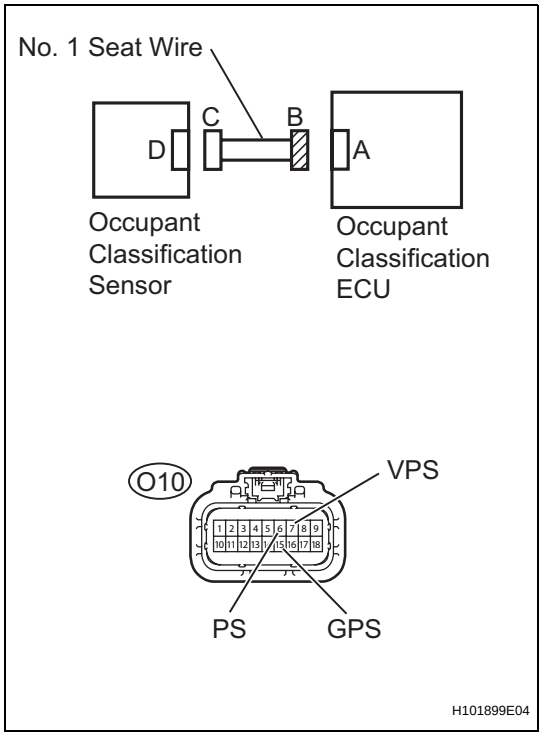
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the connectors are properly connected to the occupant classification ECU and the occupant classification sensor.
OK:
The connectors are properly connected.
(d) Disconnect the connectors from the occupant classification ECU and the occupant classification sensor.
(e) Check that the terminals of the connectors are not damaged.
OK:
The terminals are not deformed or damaged.
HINT:
If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG	**REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

RS

3 CHECK NO. 1 SEAT WIRE (TO B+)



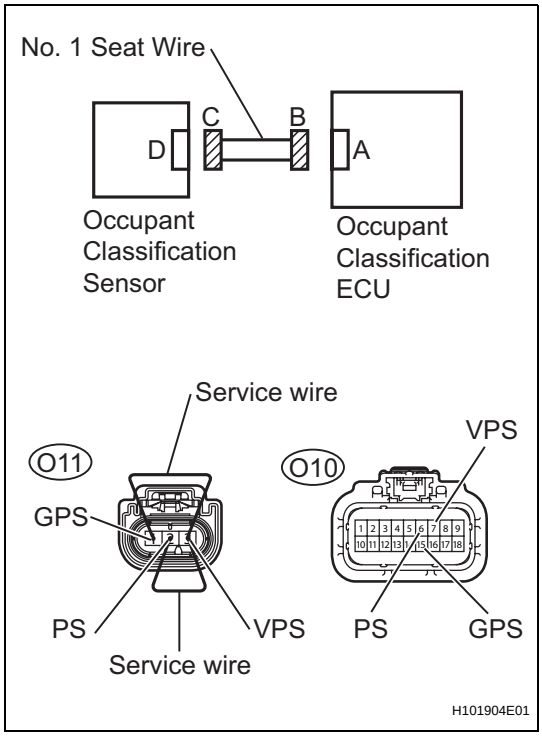
(a) Disconnect the connector from the occupant classification ECU and occupant classification sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Measure the voltage.
Standard voltage

Tester Connection	Condition	Specified Condition
O10-6 (PS) - Body ground	Ignition switch ON	Below 1 V
O10-7 (VPS) - Body ground	Ignition switch ON	Below 1 V
O10-15 (GPS) - Body ground	Ignition switch ON	Below 1 V

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

4 CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect O11-2 (PS) and O11-3 (VPS), and connect O11-3 (VPS) and O11-1 (GPS) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(d) Measure the resistance.
Standard resistance

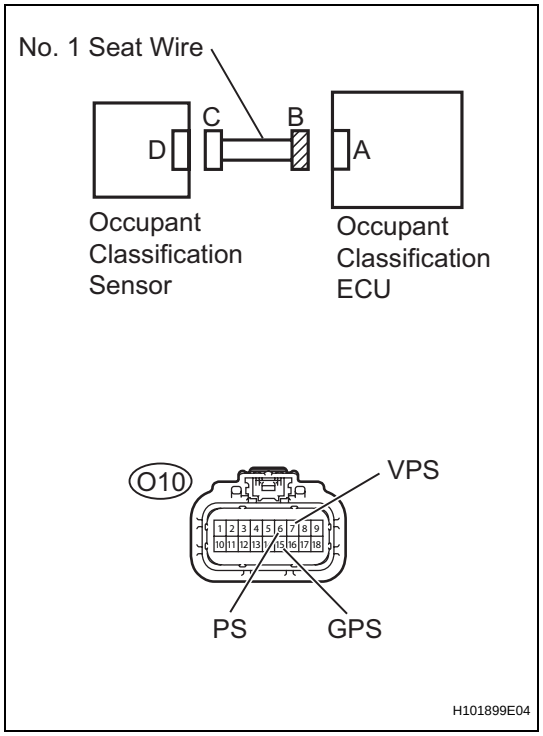
Tester Connection	Condition	Specified Condition
O10-6 (PS) - O10-7 (VPS)	Always	Below 1 Ω
O10-7 (VPS) - O10-15 (GPS)	Always	Below 1 Ω

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

RS

5 CHECK NO. 1 SEAT WIRE (TO GROUND)



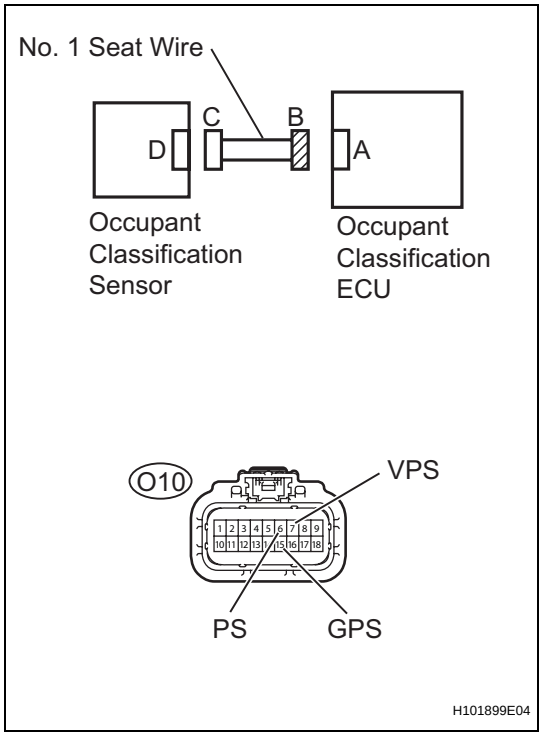
(a) Disconnect the service wire from connector C.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-6 (PS) - Body ground	Always	1 MΩ or higher
O10-7 (VPS) - Body ground	Always	1 MΩ or higher
O10-15 (GPS) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

6 CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
O10-6 (PS) - O10-15 (GPS)	Always	1 MΩ or higher
O10-7 (VPS) - O10-15 (GPS)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

RS

OK

7	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the occupant classification sensor.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

8	REPLACE OCCUPANT CLASSIFICATION SENSOR (FRONT SEAT CUSHION ASSEMBLY)

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor) (See page RS-626).
HINT:
Perform the inspection using parts from a normal vehicle if possible.
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Check the DTCs (See page RS-487).
OK:
DTCs B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

NEXT

9	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Using the intelligent tester, perform the zero point calibration (See page RS-480).
(d) Turn the ignition switch to the LOCK position.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

10	CHECK DTC

HINT:
Check that the zero point calibration is completed normally. If either of the following conditions is met, DTC B1797 will be output (Refer to INITIALIZATION: See page RS-480):
- Zero point calibration is performed when the conditions for the calibration are not satisfied.
- Zero point calibration has failed.

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1797 is not output.

NG → **GO TO DTC CHART**

OK

11	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

RS

DTC	B1790	Center Airbag Sensor Assembly Communication Circuit Malfunction

DESCRIPTION

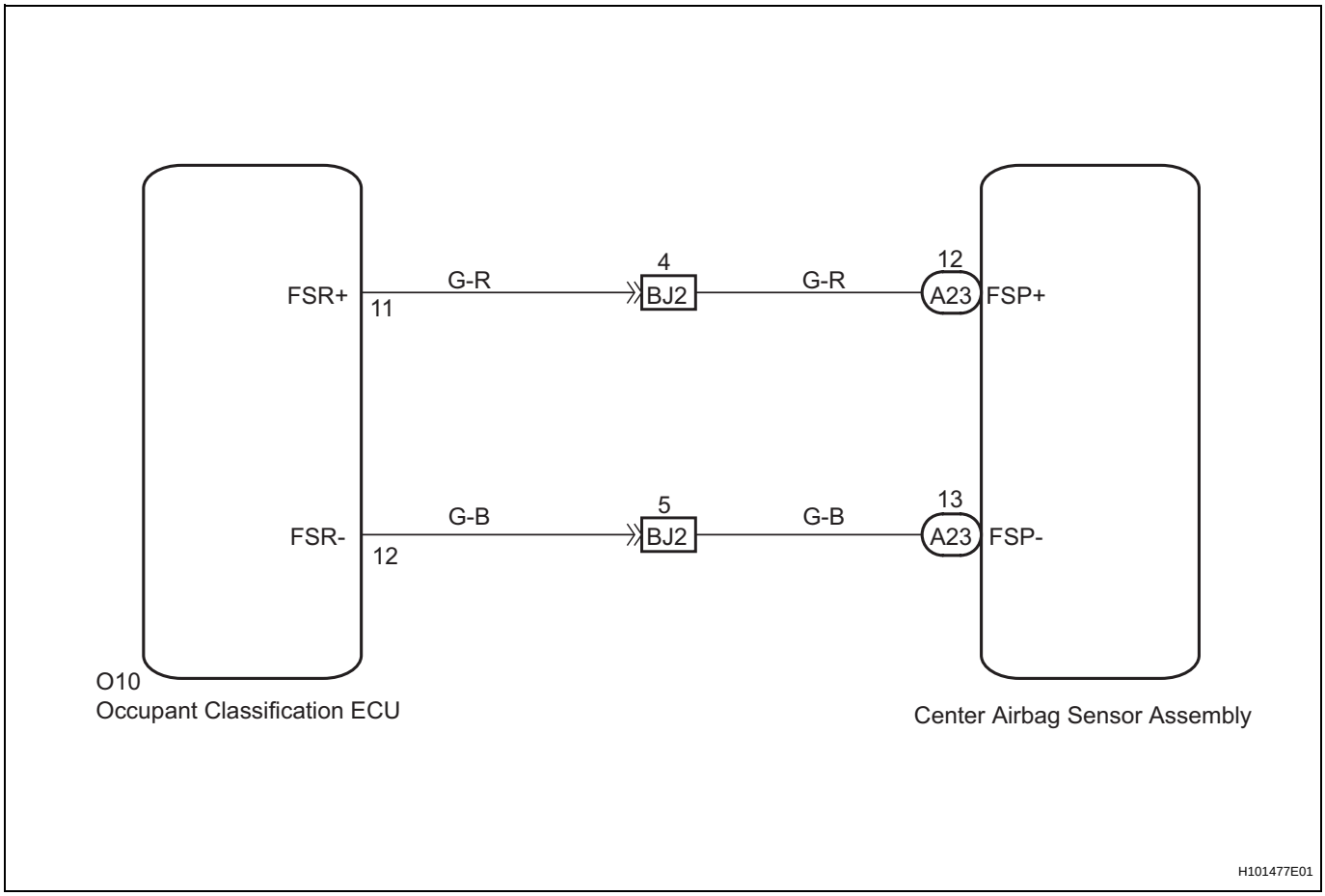
The center airbag sensor assembly communication circuit consists of the occupant classification ECU and the center airbag sensor assembly.
DTC B1790 is set when a malfunction is detected in the center airbag sensor assembly communication circuit.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1790	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in center airbag sensor assembly communication circuit for 2 seconds • Center airbag sensor assembly malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Floor wire • Occupant classification ECU • Center airbag sensor assembly

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad assembly.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.
(g) Disconnect the connector from the front seat outer belt assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the front seat side airbag assembly LH.
(i) Disconnect the connector from the front seat side airbag assembly RH.
(j) Disconnect the connector from the curtain shield airbag assembly LH.
(k) Disconnect the connector from the curtain shield airbag assembly RH.
HINT:
- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1790 is not output.
HINT:
DTCs other than B1790 may be output at this time, but they are not related to this check.

RS

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

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

OK:

The connectors are properly connected.

(d) Disconnect the connectors from the center airbag sensor assembly and occupant classification ECU.

(e) Check that the terminals of the connectors are not damaged.

OK:

The terminals are not deformed or damaged.

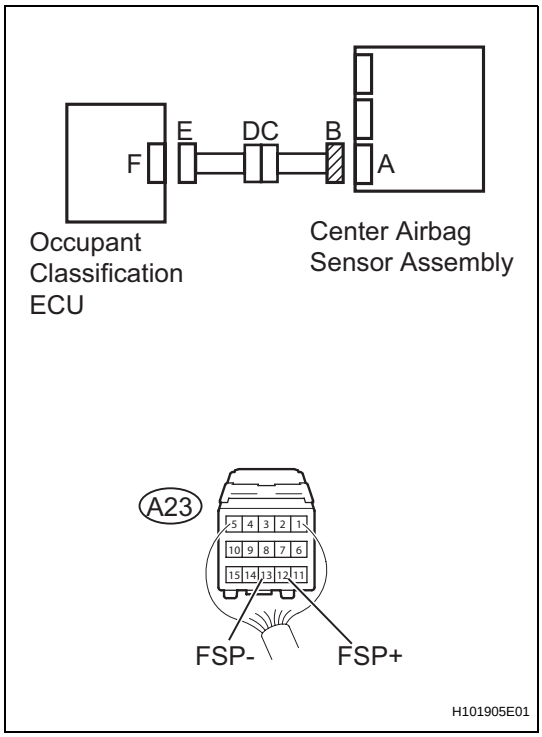
HINT:

If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

3 CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO B+)



(a) Disconnect the connectors from the occupant classification ECU and center airbag sensor assembly.

(b) Connect the negative (-) terminal cable to the battery.

(c) Turn the ignition switch to the ON position.

(d) Measure the voltage.

Standard voltage

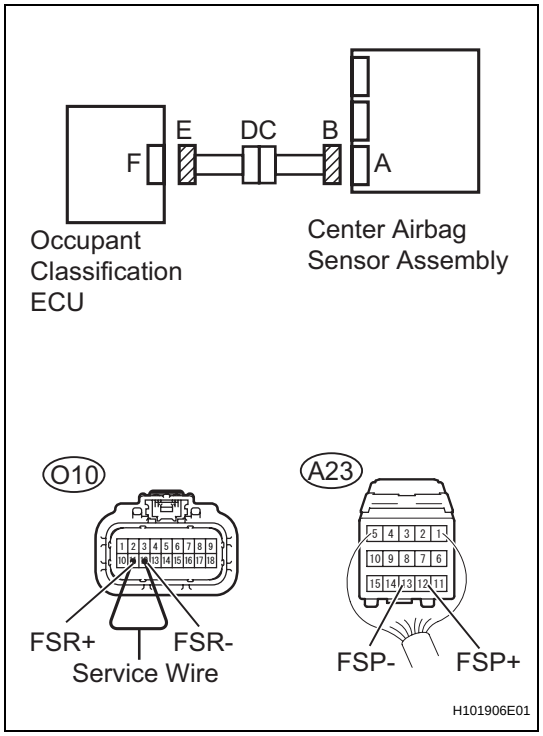
Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Ignition switch ON	Below 1 V
A23-13 (FSP-) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 12**

OK

RS

4 CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (FOR OPEN)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Using a service wire, connect O10-11 (FSR+) and O10-12 (FSR-) of connector E.

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

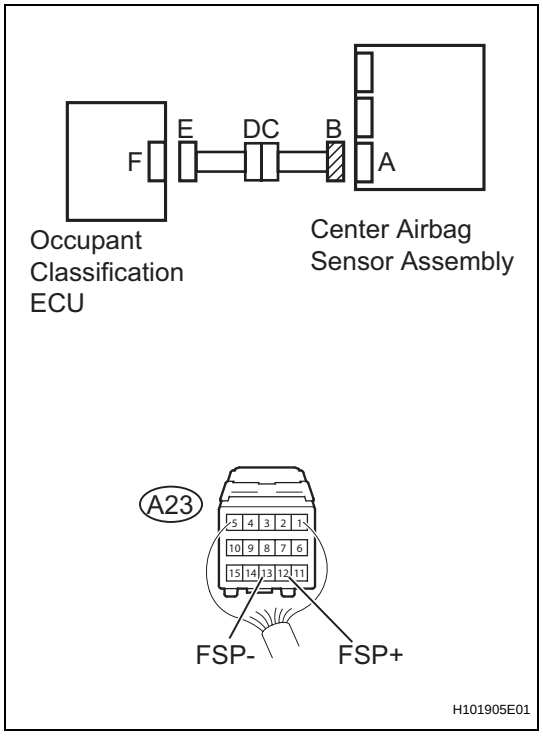
(d) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	Below 1 Ω

NG → **Go to step 13**

OK

5 CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO GROUND)



(a) Disconnect the service wire from connector E.
(b) Measure the resistance.
Standard resistance

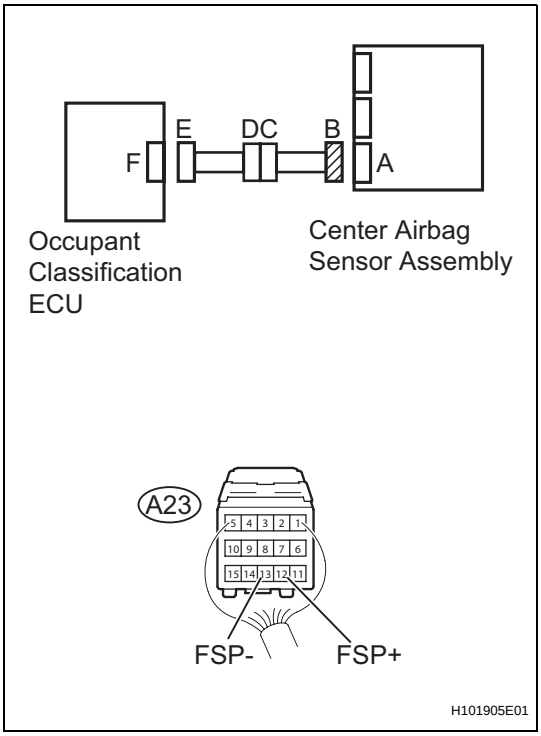
Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - Body ground	Always	1 MΩ or higher
A23-13 (FSP-) - Body ground	Always	1 MΩ or higher

NG → **Go to step 14**

RS

OK

6	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (FOR SHORT)



(a) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A23-12 (FSP+) - A23-13 (FSP-)	Always	1 MΩ or higher

NG → **Go to step 15**

OK

7	RECHECK DTC

(a) Connect the connectors to the occupant classification ECU and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-487).

HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.

(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTC B1790 is not output.

HINT:
DTCs other than B1790 may be output at this time, but they are not related to this check.

NG → **USE SIMULATION METHOD TO CHECK**

NG

RS

8	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

9	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1790 is not output.
HINT:
DTCs other than B1771 may be output at this time, but they are not related to this check.

OK	Go to step 11

NG

10	REPLACE CENTER AIRBAG SENSOR ASSEMBLY

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

RS

(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

NEXT

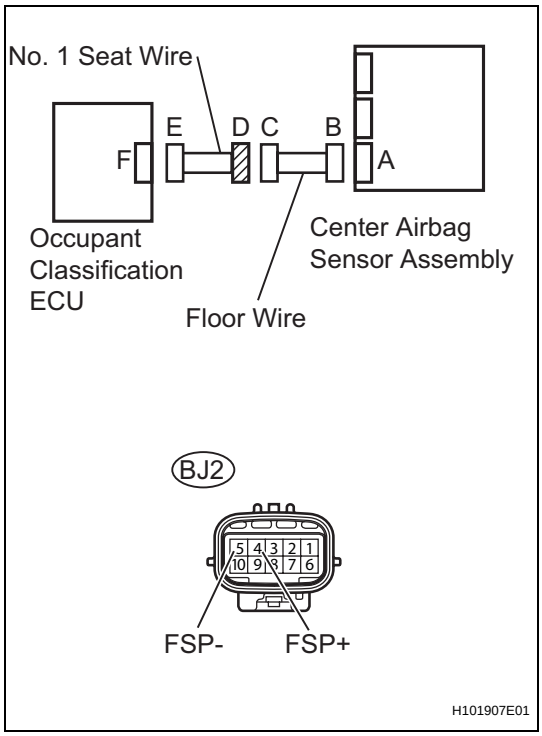
11	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

12	CHECK NO. 1 SEAT WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 1 seat wire connector from the floor wire.
(d) Connect the negative (-) terminal cable to the battery and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
BJ2-4 (FSP+) - Body ground	Ignition switch ON	Below 1 V
BJ2-5 (FSP-) - Body ground	Ignition switch ON	Below 1 V

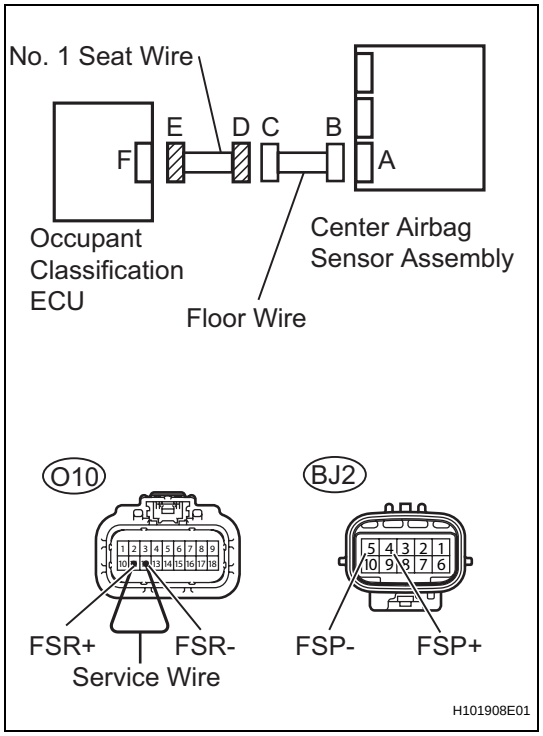
NG → REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

REPAIR OR REPLACE FLOOR WIRE

RS

13	CHECK NO. 1 SEAT WIRE (FOR OPEN)



(a) Disconnect the No. 1 seat wire connector from the floor wire.

HINT:

The service wire has already been inserted into connector E.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
BJ2-4 (FSP+) - BJ2-5 (FSP-)	Always	Below 1 Ω

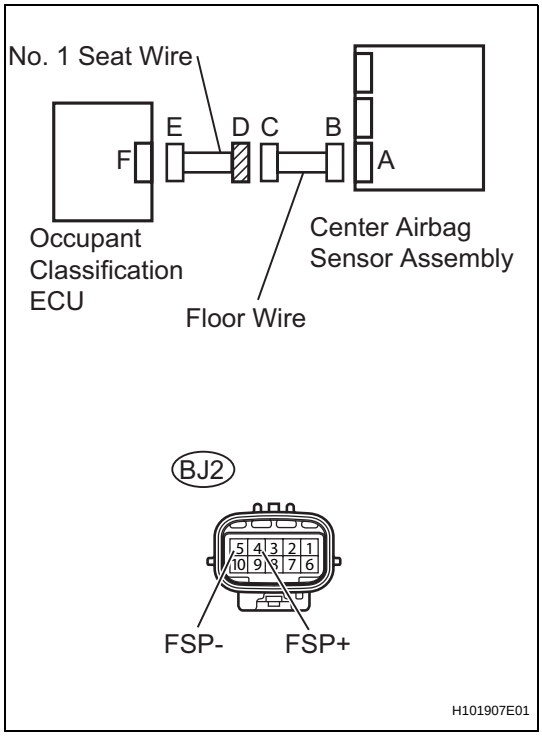
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

14	CHECK NO. 1 SEAT WIRE (TO GROUND)



(a) Disconnect the No. 1 seat wire connector from the floor wire.

(b) Measure the resistance.

Standard resistance

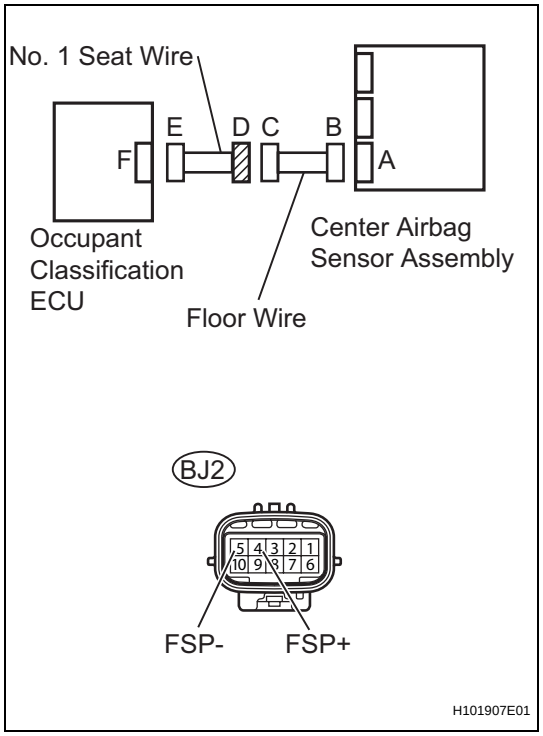
Tester Connection	Condition	Specified Condition
BJ2-4 (FSP+) - Body ground	Always	1 MΩ or higher
BJ2-5 (FSP-) - Body ground	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

15	CHECK NO. 1 SEAT WIRE (FOR SHORT)



(a) Disconnect the No. 1 seat wire connector from the floor wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
BJ2-4 (FSP+) - BJ2-5 (FSP-)	Always	1 MΩ or higher

NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

DTC	B1791	Collision Detection Signal Line Malfunction

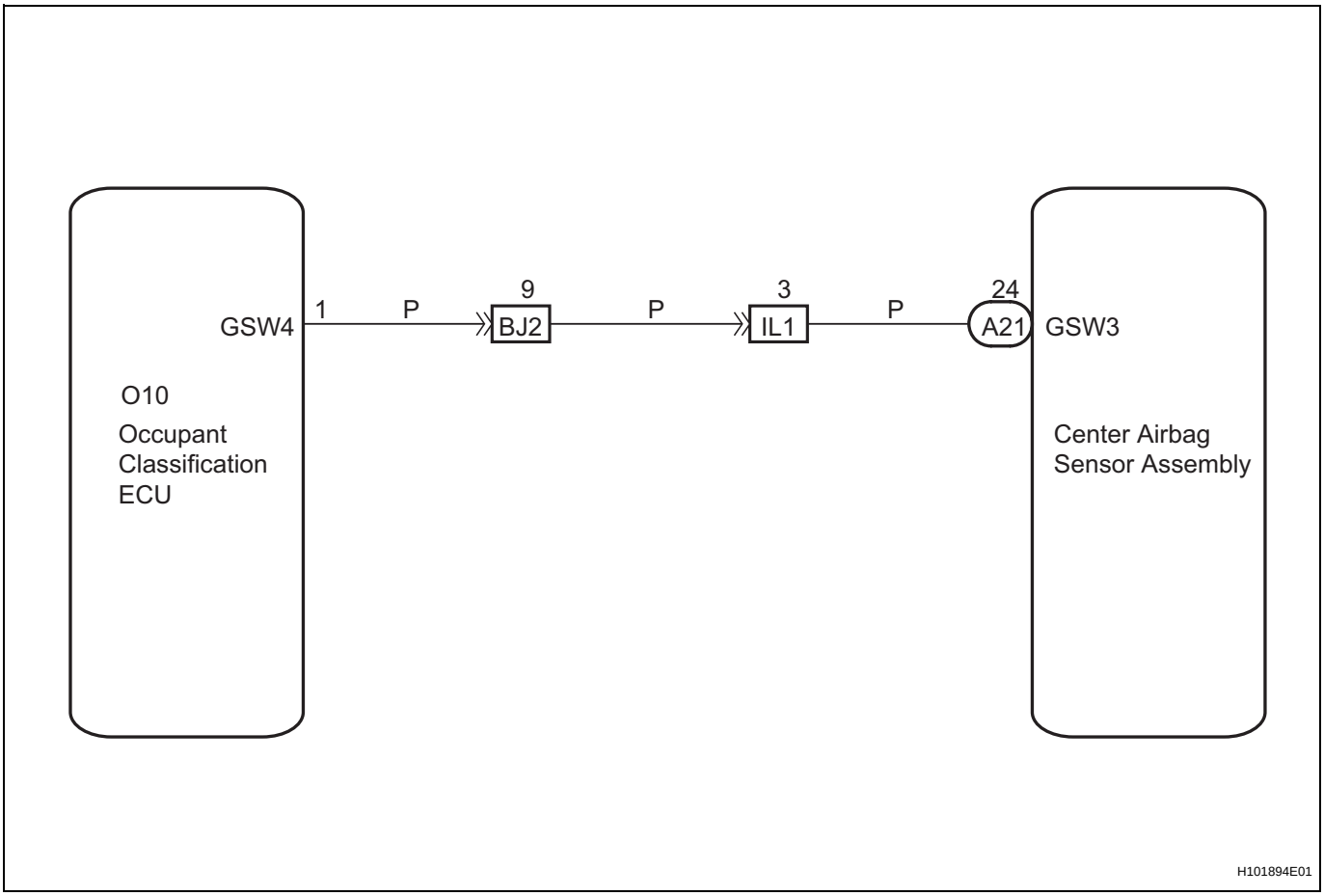
DESCRIPTION

The center airbag sensor assembly communication circuit consists of the occupant classification ECU and the center airbag sensor assembly.
DTC B1791 is set when a malfunction is detected in the center airbag sensor assembly communication circuit.

DTC No.	DTC Detections Conditions	Trouble Areas
B1791	• Occupant classification ECU receives line short circuit signal, open circuit signal, short circuit to ground signal or short circuit to B+ signal in center airbag sensor assembly communication circuit for 2 seconds • Center airbag sensor assembly malfunction • Occupant classification ECU malfunction	• No. 1 seat wire • Floor wire • Instrument panel wire • Occupant classification ECU • Center airbag sensor assembly

HINT:
- When DTC B1650/32 is detected as a result of troubleshooting for the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

WIRING DIAGRAM



RS

CAUTION:
In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.
(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the connectors from the center airbag sensor assembly.
(d) Disconnect the connectors from the steering pad assembly.
(e) Disconnect the connector from the front passenger airbag assembly.
(f) Disconnect the connector from the front seat outer belt assembly LH.
(g) Disconnect the connector from the front seat outer belt assembly RH.
HINT:
Skip the following steps if side and curtain shield airbags are not fitted.
(h) Disconnect the connector from the front seat side airbag assembly LH.
(i) Disconnect the connector from the front seat side airbag assembly RH.
(j) Disconnect the connector from the curtain shield airbag assembly LH.
(k) Disconnect the connector from the curtain shield airbag assembly RH.
HINT:
- If troubleshooting (wire harness inspection) is difficult to perform, remove the front RH seat assembly installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1791 is not output.
HINT:
DTCs other than B1791 may be output at this time, but they are not related to this check.

RS

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	CHECK CONNECTORS

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

OK:

The connectors are properly connected.

(d) Disconnect the connectors from the occupant classification ECU and center airbag sensor assembly.

(e) Check that the terminals of the connectors are not damaged.

OK:

The terminals are not deformed or damaged.

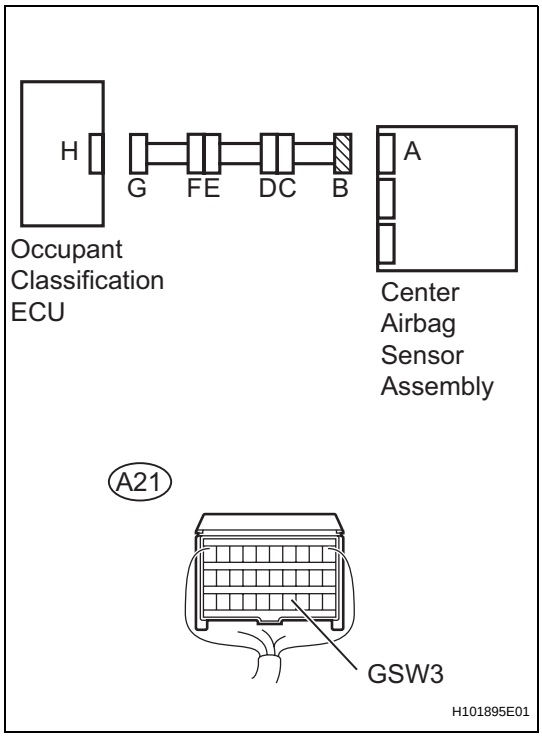
HINT:

If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE WIRE HARNESS OR CONNECTORS**

OK

3	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO B+)



(a) Disconnect the connectors from the occupant classification ECU and center airbag sensor assembly.

(b) Connect the negative (-) terminal cable to the battery.

(c) Turn the ignition switch to the ON position.

(d) Measure the voltage.

Standard voltage

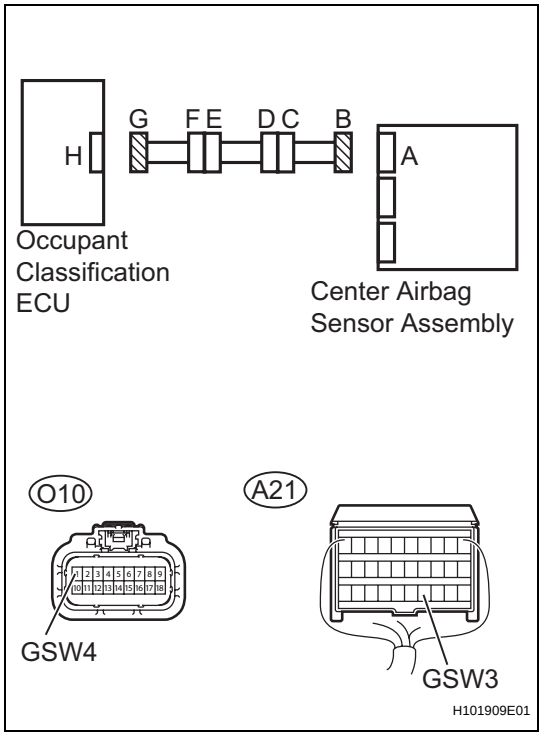
Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 11**

OK

RS

4	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (FOR OPEN)



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

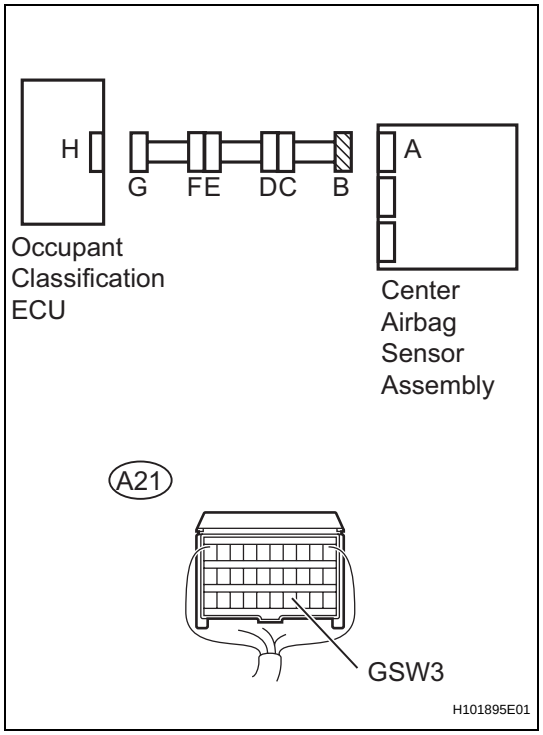
Standard resistance

Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - O10-1 (GSW4)	Always	Below 1 Ω

NG → **Go to step 12**

OK

5	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO GROUND)



(a) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Always	1 MΩor higher

NG → **Go to step 13**

RS

OK

6	CHECK DTC

(a) Connect the connectors to the occupant classification ECU and the center airbag sensor assembly.
(b) Connect the negative (-) terminal cable to the battery.
(c) Turn the ignition switch to the ON position.
(d) Clear any DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(e) Turn the ignition switch to the LOCK position.
(f) Turn the ignition switch to the ON position.
(g) Check the DTCs (See page RS-487).
OK:
DTC B1791 is not output.
HINT:
DTCs other than B1791 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

7	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

8	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1791 is not output.
HINT:
DTCs other than B1791 may be output at this time, but they are not related to this check.

OK	Go to step 10

NG

9	REPLACE CENTER AIRBAG SENSOR ASSEMBLY

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

NEXT

10	PERFORM SENSITIVITY CHECK

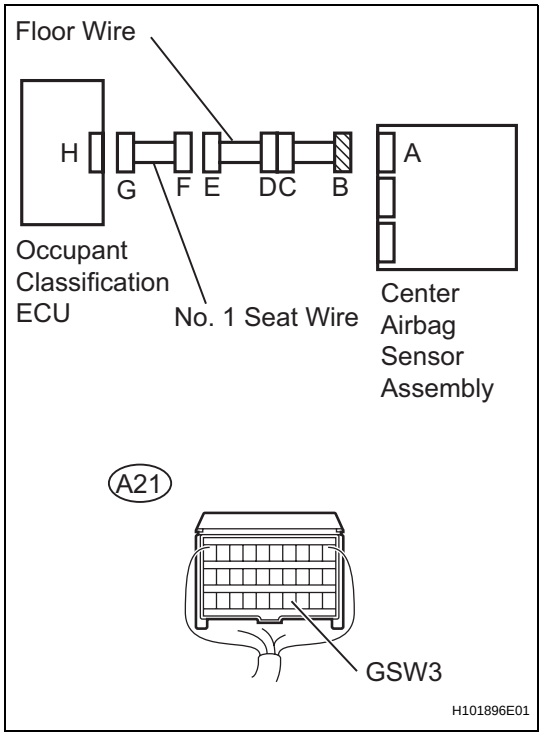
(a) Perform the sensitivity check (See page RS-480).

NEXT

RS

END

11	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the No. 1 seat wire connector from the floor wire.
(d) Connect the negative (-) terminal cable to the battery and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

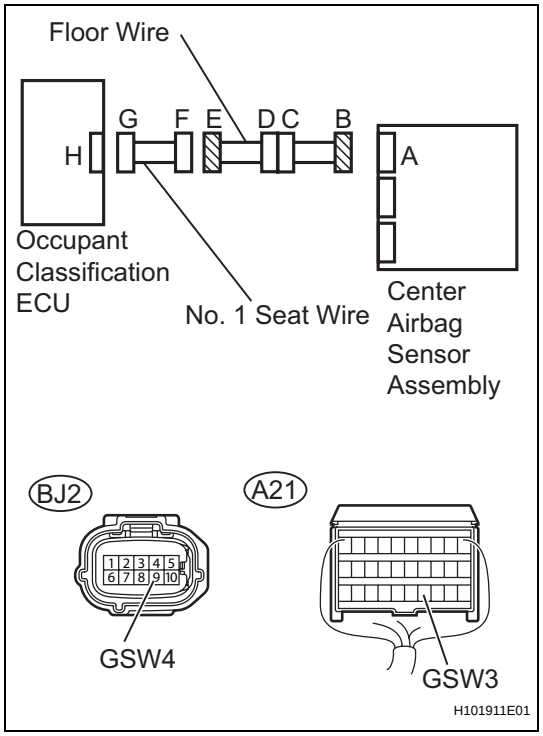
Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Ignition switch ON	Below 1 V

NG → **Go to step 14**

OK

REPLACE NO. 1 SEAT WIRE

12	CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (FOR OPEN)



(a) Disconnect the No. 1 seat wire connector from the floor wire.

(b) Measure the resistance.

Standard resistance

Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - BJ2-9 (GSW4)	Always	Below 1 Ω

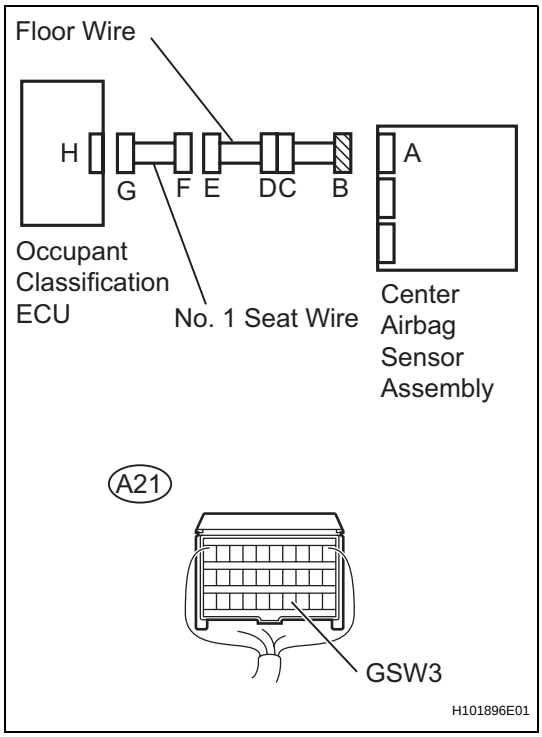
NG → **Go to step 15**

OK

REPLACE NO. 1 SEAT WIRE

RS

13	**CHECK CENTER AIRBAG SENSOR ASSEMBLY COMMUNICATION CIRCUIT (TO GROUND)**



(a) Disconnect the No. 1 seat wire connector from the floor wire.

(b) Measure the resistance.

Standard resistance

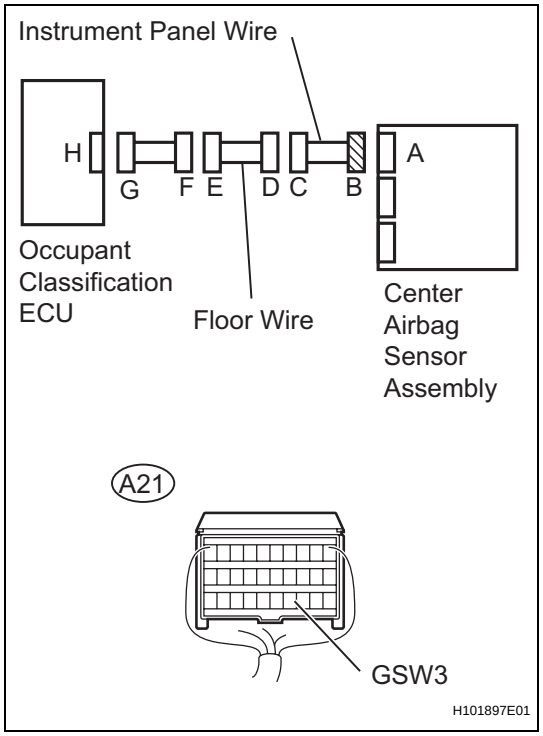
Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Always	1 MΩor higher

NG → **Go to step 16**

OK

REPLACE NO. 1 SEAT WIRE

14	CHECK INSTRUMENT PANEL WIRE (TO B+)



(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Disconnect the floor wire connector from the instrument panel wire.
(d) Connect the negative (-) terminal cable to the battery and wait for at least 2 seconds.
(e) Turn the ignition switch to the ON position.
(f) Measure the voltage.

Standard voltage

Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Ignition switch ON	Below 1 V

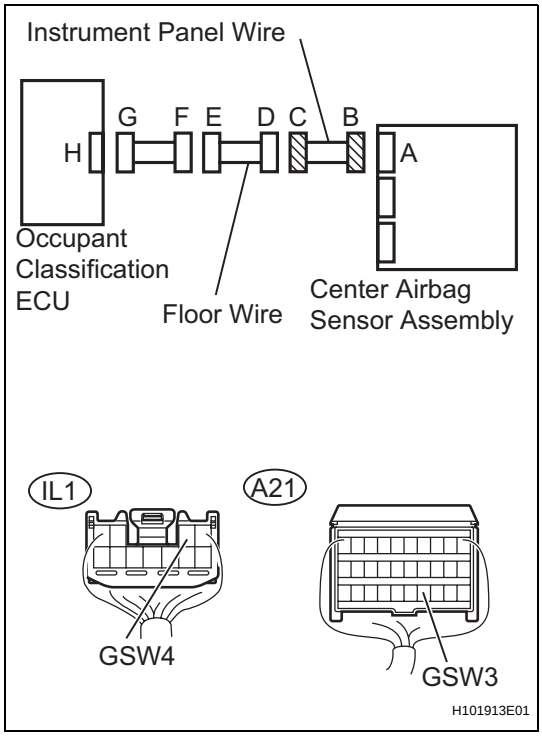
NG → **REPAIR OR REPLACE INSTRUMENT PANEL WIRE**

OK

REPAIR OR REPLACE FLOOR WIRE

RS

15	CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



(a) Disconnect the floor wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

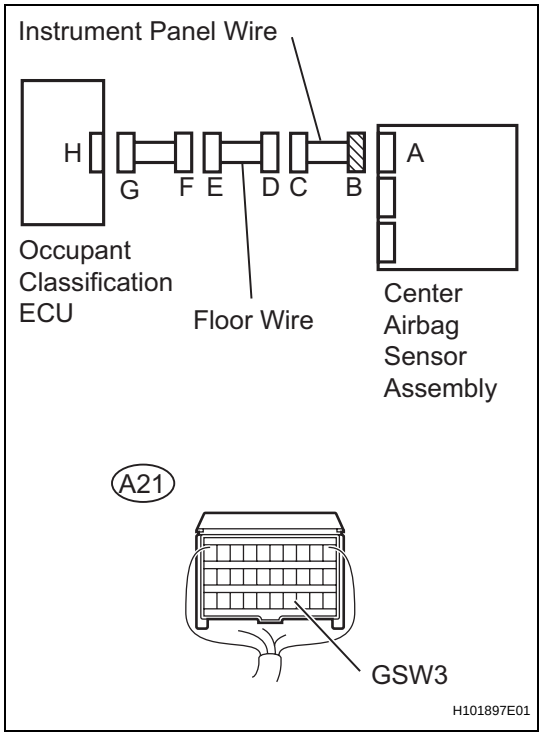
Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - IL1-3 (GSW4)	Always	Below 1 Ω

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

OK

REPAIR OR REPLACE FLOOR WIRE

16	CHECK INSTRUMENT PANEL WIRE (TO GROUND)



(a) Disconnect the floor wire connector from the instrument panel wire.
(b) Measure the resistance.
Standard resistance

Tester Connection	Condition	Specified Condition
A21-24 (GSW3) - Body ground	Always	1 MΩor higher

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

OK

REPAIR OR REPLACE FLOOR WIRE

RS

DTC	B1795	Occupant Classification ECU Malfunction

DESCRIPTION

DTC B1795 is set when a malfunction is detected in the occupant classification ECU.

DTC No.	DTC Detecting Conditions	Trouble Areas
B1795	Occupant classification ECU malfunction	Occupant classification ECU

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting the supplemental restraint system, check the DTCs stored in the occupant classification ECU, and perform troubleshooting for those DTCs first.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTCs cannot be read.

HINT:

- If troubleshooting (wire harness inspection) is difficult to perform, remove the front passenger seat installation bolts to see the under surface of the seat cushion.
- In the above case, hold the seat so that it does not tip over. Holding the seat up for a long period of time may cause problems, such as seat rail deformation. Hold the seat up only for as long as necessary.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear any DTCs stored in the memory (See page RS-487).

HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly .

(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position, and wait for at least 10 seconds.
(e) Check the DTCs (See page RS-487).

OK:
DTC B1795 is not output.

HINT:
DTCs other than B1795 may be output at this time, but they are not related to this check.

OK → **USE SIMULATION METHOD TO CHECK**

NG

2	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).

HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).

(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See pageRS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).
(j) Turn the ignition switch to the LOCK position.
(k) Turn the ignition switch to the ON position.
(l) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

3	PERFORM SENSITIVITY CHECK

(a) Perform the sensitivity check (See page RS-480).

NEXT

END

DTC	B1797	Calibration Malfunction

DESCRIPTION

DTC B1797 is output when the following condition is met:

– Zero point calibration is performed when the conditions for the calibration are not satisfied.
– Zero point calibration has failed.

Condition for the zero point calibration:

Item	Condition
DTC	Not recorded.
Front passenger seat occupant.	Vacant
Front passenger side buckle switch.	OFF (The seat belt is not fastened)
ECU temperature	0 to 46°C (32 to 114.8°F)
Filtered pressure	38 to 75 count

DTC No.	DTC Detecting Condition	Trouble Area
B1797	• Zero point calibration is performed when the conditions for the calibration are not satisfied. • Zero point calibration has failed.	• There is no malfunction if this DTC is not output again after performing occupant classification system zero point calibration. • Occupant classification sensor (front seat cushion assembly)

HINT:

- When DTC B1650/32 is detected as a result of troubleshooting for the supplemental restraint system, check the DTCs stored in the occupant classification ECU. When DTC B1797 is output, perform troubleshooting for the DTC.
- Use the intelligent tester to check for DTCs of the occupant classification ECU, otherwise the DTC cannot be read.

1	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position, and wait for at least 10 seconds.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1797 is output.
HINT:
DTCs other than B1797 may be output at this time, but they are not related to this check.

NO → END

YES

2	READ VALUE OF DATA LIST (SPECIFIED CONDITION FOR ZERO POINT CALIBRATION)

(a) Connect the intelligent tester to the DLC3.

(b) Turn the ignition switch ON position.
(c) Using the intelligent tester, read the DATA LIST (See page RS-487).

Item	Measurement Item/ Range (Display)	Normal Condition	Specified Condition for Zero Point Calibration
RELATIVE PRESS	Pressure sensor output/ Min.: 0 Max.: 255	0 to 210 (reference value)	0 to 2
THERMISTOR TEMP	Thermistor temperature output/ Min.: -40°C (-40°F) Max.: 90°C (194°F)	-40 to 85°C (-40 to185°F)	3 to 40°C (36 to 104°F)
#PRESENT CODES	Number of present trouble codes/ Min.: 0 Max.: 255	0	0
#PAST CODES	Number of past trouble codes/ Min.: 0 Max.: 255	0	0

RESULT

Result	Proceed to
All items correspond to the range of specified condition for zero point calibration.	**A**
THERMISTOR TEMP does not correspond to the range of specified condition for zero point calibration.	**B**

B → **Go to step 6**

A

3 CHECK DTC

HINT:
Check that the zero point calibration is completed normally. If either of the following condition is met, DTC B1797 will be output (Refer to INITIALIZATION: See page RS-480).
- Zero point calibration is performed when the the calibration conditions are not satisfied.
- Zero point calibration has failed.

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1797 is not output.

NEXT

4 PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.

RS

(c) Using the intelligent tester, perform the zero point calibration (See page RS-480).
(d) Turn the ignition switch to the OFF position.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
If DTC is not cleared at this time, past DTC will remain.

NEXT

5	CHECK DTC

(a) Turn the ignition switch to the ON position.
(b) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(c) Turn the ignition switch to the LOCK position.
(d) Turn the ignition switch to the ON position.
(e) Check the DTCs (See page RS-487).
OK:
DTC B1797 is not output.
HINT:
DTCs other than B1797 may be output at this time, but they are not related to this check.

NEXT

END

6	REPLACE FRONT SEAT CUSHION ASSEMBLY (WITH OCCUPANT CLASSIFICATION SENSOR AND SENSOR)

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat cushion assembly (with occupant classification sensor and ECU) (See page RS-626).
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Using the intelligent tester, check the DTCs of the occupant classification ECU (See page RS-487).
OK:
DTC is not output.

NEXT

END

Trouble in Passenger Airbag ON / OFF Indicator

DESCRIPTION

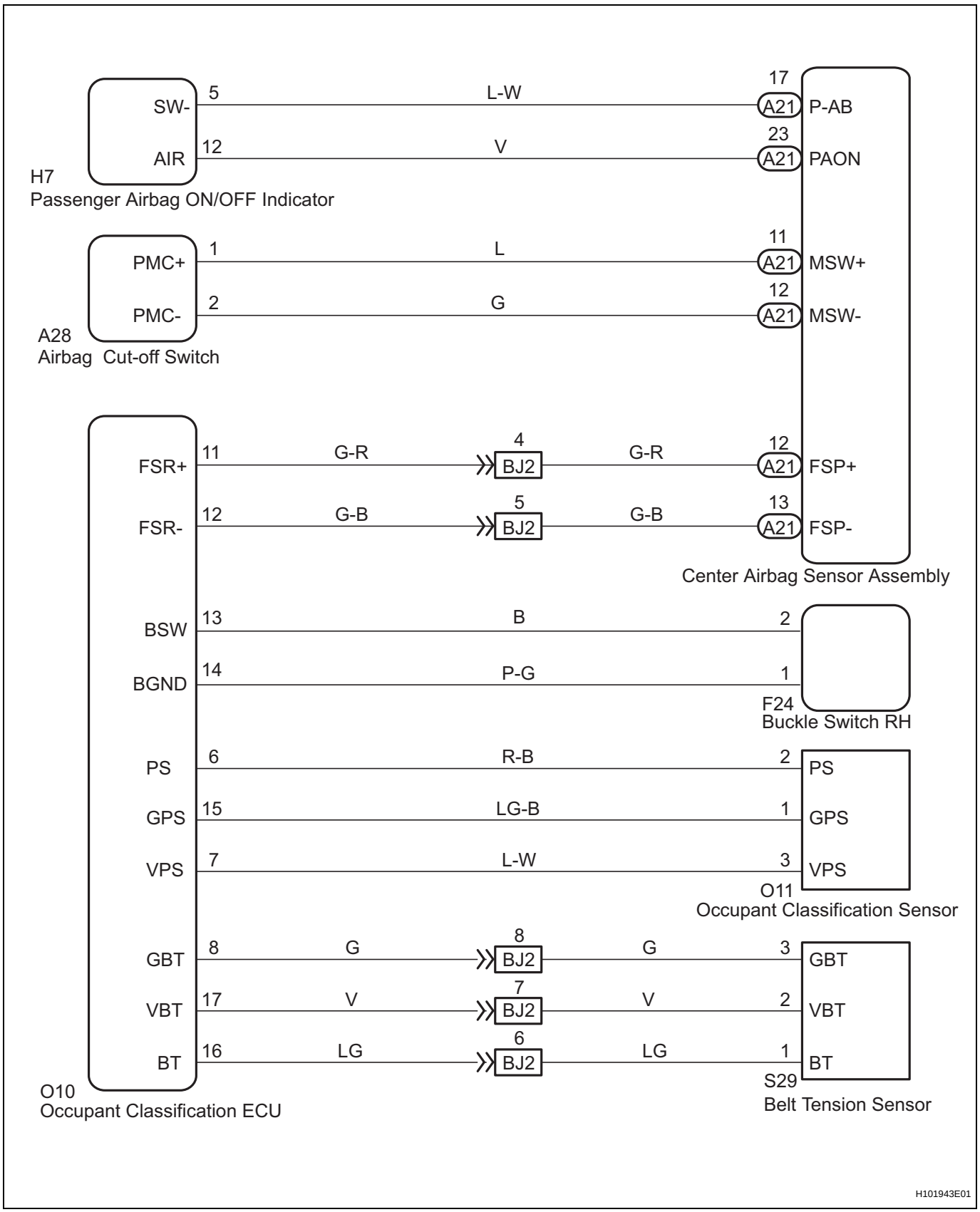
This circuit detects the airbag cut-off switch status and the passenger seat occupant classification status (detected by the occupant classification system). The passenger airbag ON/OFF indicator illuminates ON or OFF comes on to inform the passengers of the front passenger airbag assembly status (activated or deactivated).

HINT:

The table below shows the normal indication condition of the passenger airbag ON/OFF indicator and the front passenger seat condition.

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

WIRING DIAGRAM



RS

1	CHECK PASSENGER AIRBAG ON/OFF INDICATOR (PERFORM SENSITIVITY CHECK)

(a) Perform the sensitivity check (See page RS-480).

OK → Go to step 7

NG

2	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Using the intelligent tester, perform the zero point calibration (See page RS-480).

NEXT

3	CHECK PASSENGER AIRBAG ON/OFF INDICATOR (PERFORM SENSITIVITY CHECK)

(a) Perform the sensitivity check (See page RS-480).

OK → END

NG

4	READ VALUE OF DATA LIST (PASSENGER SIDE BUCKLE SWITCH)

(a) Turn the ignition switch to the ON position.
(b) Using the intelligent tester, read the the DATA LIST.
  (1) Read the the display when the passenger side buckle switch is operated.

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
P BUCKLE SW	Buckle switch (Passenger side)/ UNSET: The seat belt is not fastened SET: The seat belt is fastened NG: Data is not determined	UNSET/SET	-

OK:
The tester display changes correctly in accordance with the operation of the buckle switch.

NG → REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

OK

5	READ VALUE OF DATA LIST (SEAT BELT TENSION SENSOR)

(a) Fasten the passenger side seat belt.
(b) Turn the ignition switch to the ON position.

RS

(c) Using the intelligent tester, read the value of the DATA LIST.

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
FILTERED TENSION	Filtered belt tension output/ Min.: 0 N Max.: 255 N	39 to 64 (no load)	-

OK:

When there is no tension on the belt, 39 to 64 is displayed on the tester.

NG → **REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH**

OK

6 CHECK PASSENGER AIRBAG ON/OFF INDICATOR (PERFORM SENSITIVITY CHECK)

(a) Perform the sensitivity check (See page RS-480).

OK → **END**

NG

7 CHECK CONNECTORS

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Check that the following connectors are connected properly.
- Center airbag sensor assembly connector.
- Occupant classification ECU connector.
- Occupant classification sensor connector.
- Airbag cut-off switch connector.
- Belt tension sensor (front seat outer belt assembly RH) connector.
- Front seat inner belt assembly RH connector.
- Seat position sensor connector.

OK:

The connectors are properly connected.

(d) Disconnect the following connectors.
- Center airbag sensor assembly connector.
- Occupant classification ECU connector.
- Occupant classification sensor connector.
- Airbag cut-off switch connector.
- Belt tension sensor (front seat outer belt assembly RH) connector.
- Front seat inner belt assembly RH connector.
- Seat position sensor connector.

(e) Check that the terminals of the connectors are not damaged.

OK:

The terminals are not deformed or damaged.

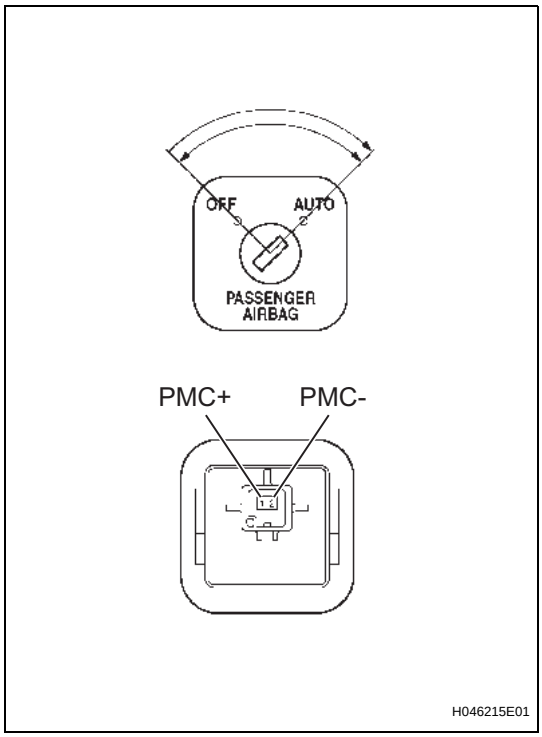
RS

NOTICE:
Perform the zero point calibration if wire harnesses or connectors are repaired or replaced (See page RS-480).
HINT:
If the connectors are not connected securely, reconnect the connectors and proceed to the next inspection.

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

8 INSPECT AIRBAG CUT-OFF SWITCH



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

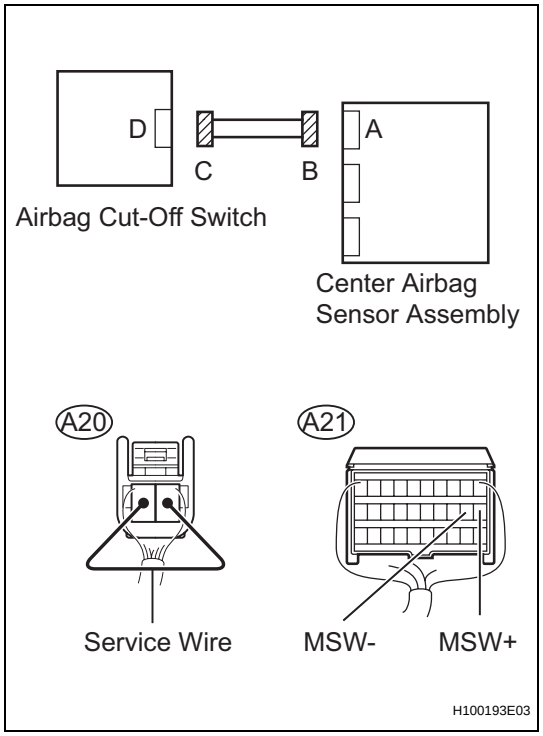
Switch Condition	Tester Condition	Specified Condition
OFF	1(PMC+) - 2(PMC-)	80 to 120 Ω
AUTO	1(PMC+) - 2(PMC-)	320 to 480 Ω

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

OK

RS

9 CHECK INSTRUMENT PANEL WIRE (FOR OPEN)



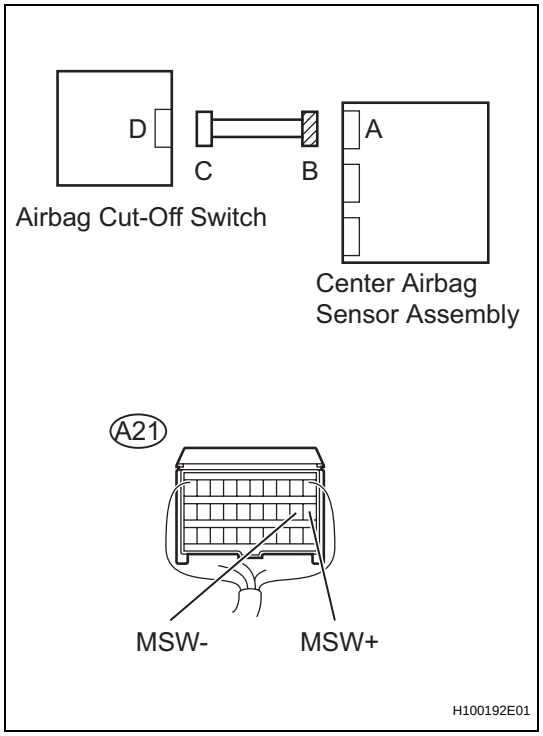
(a) Using a service wire, connect A20-1 (PMC+) and A20-2 (PMC-) of connector C.
NOTICE:
Do not forcibly insert the service wire into the terminals of the connector when connecting.
(b) Measure the resistance.
Standard resistance

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

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

OK

10 CHECK INSTRUMENT PANEL WIRE (FOR SHORT)



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

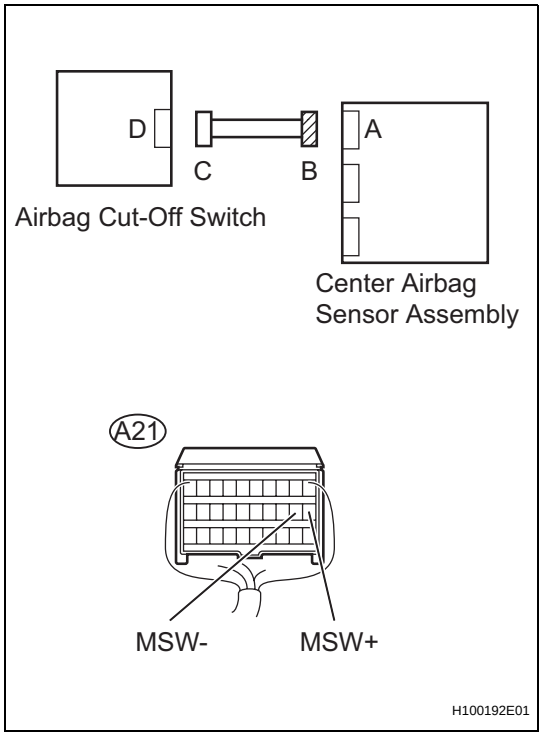
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - A21-12 (MSW-)	Always	1 MΩor Higher

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

OK

RS

11 CHECK INSTRUMENT PANEL WIRE (TO B+)



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

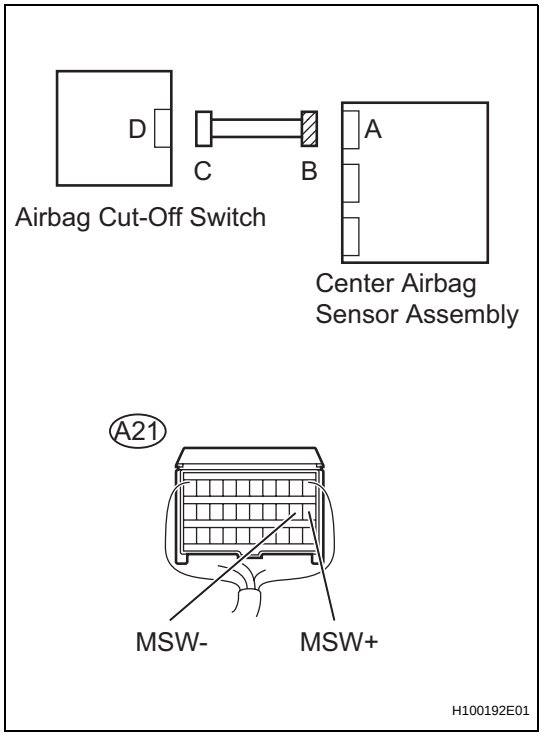
Standard voltage

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

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

OK

12 CHECK INSTRUMENT PANEL WIRE (TO GROUND)



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

Standard resistance

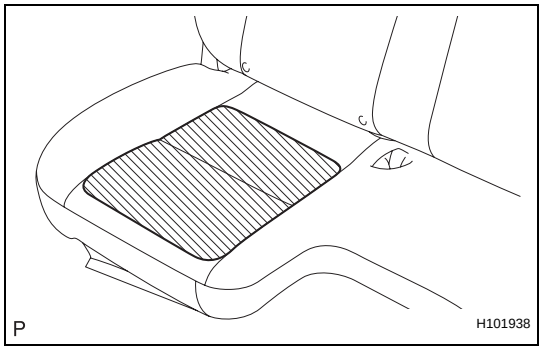
Tester Connection	Condition	Specified Condition
A21-11 (MSW+) - Body ground	Always	1 MΩor Higher
A21-12 (MSW-) - Body ground	Always	1 MΩor Higher

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

OK

RS

13 READ VALUE OF DATA LIST (PASSENGER CLASS)

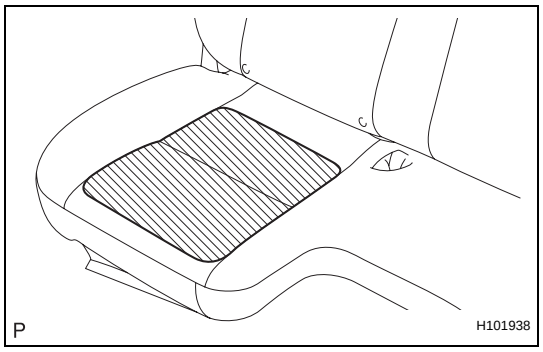


(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the LOCK position.
(c) Place a weight of 20 kg (44.0 lb) on the front passenger seat.
NOTICE:
- **Do not let the weight come into contact with the seat back when placing it on the seat cushion.**
- **Place the weight in the area shown in the illustration.**

(d) Turn the ignition switch to the ON position.
(e) Using the intelligent tester, read the value of the DATA LIST (See page RS-487).

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
PASSENGER CLASS	Passenger classification/ NG: Data is not determined AM50: Adult is seated and seat is rear position AF05: Adult is seated and seat is front position CHILD: Child is seated OFF: Vacant	AF05/AM50/CHILD/OFF	-

OK:
The tester displays CHILD.



(f) Turn the ignition switch to the LOCK position.
(g) Add 30 kg (66.1 lb) weight on the front passenger seat.
NOTICE:
- **Do not let the weight come into contact with the seat back when placing it on the seat cushion.**
- **Place the weight in the area shown in the illustration.**

(h) Turn the ignition switch to the ON position.
(i) Using the intelligent tester, read the value of the DATA LIST (See page RS-487).
HINT:
AF05 appears on the tester screen display when the seat is in the front position, and AM50 appears when the seat is in the rear position.

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
PASSENGER CLASS	Passenger classification/ NG: Data is not determined AM50: Adult is seated and seat is rear position AF05: Adult is seated and seat is front position CHILD: Child is seated OFF: Vacant	AF05/AM50/CHILD/OFF	-

OK:
The tester displays AM50 or AF50 according to the seat position.

NG	**Go to step 17**

OK

14	REPLACE CENTER AIRBAG SENSOR ASSEMBLY

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the center airbag sensor assembly (See page RS-602).

NEXT

15	CHECK PASSENGER AIRBAG ON/OFF INDICATOR (PERFORM SENSITIVITY CHECK)

(a) Perform the sensitivity check (See page RS-480).

OK → END

NG

16	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).
HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).
(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).

RS

NEXT

END

17	REPLACE OCCUPANT CLASSIFICATION ECU

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position.
(c) Store the occupant classification ECU data into the intelligent tester (See page RS-476).

HINT:
If the ECU data cannot be stored in the intelligent tester, replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor).

(d) Turn the ignition switch to the LOCK position.
(e) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(f) Replace the occupant classification ECU (See page RS-634).
(g) Connect the negative (-) terminal cable to the battery.
(h) Turn the ignition switch to the ON position.
(i) Load the data from the previous ECU stored in the tester, into the newly installed ECU (See page RS-476).

NEXT

18	CHECK PASSENGER AIRBAG ON/OFF INDICATOR (PERFORM SENSITIVITY CHECK)

(a) Perform the sensitivity check (See page RS-480).

OK → END

NG

19	REPLACE FRONT SEAT CUSHION ASSEMBLY (WITH OCCUPANT CLASSIFICATION ECU AND SENSOR)

(a) Turn the ignition switch to the LOCK position.
(b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
(c) Replace the front seat cushion assembly (with occupant classification ECU and occupant classification sensor) (See page RS-626).
(d) Connect the negative (-) terminal cable to the battery.
(e) Turn the ignition switch to the ON position.
(f) Clear the DTCs stored in the memory (See page RS-487).
HINT:
First clear DTCs stored in the occupant classification ECU and then in the center airbag sensor assembly.
(g) Turn the ignition switch to the LOCK position.
(h) Turn the ignition switch to the ON position.
(i) Check the DTCs (See page RS-487).
OK:
DTC B1774 and B1775 are not output.
HINT:
DTCs other than B1774 and B1775 may be output at this time, but they are not related to this check.

RS

NEXT

20	PERFORM ZERO POINT CALIBRATION

(a) Connect the intelligent tester to the DLC3.

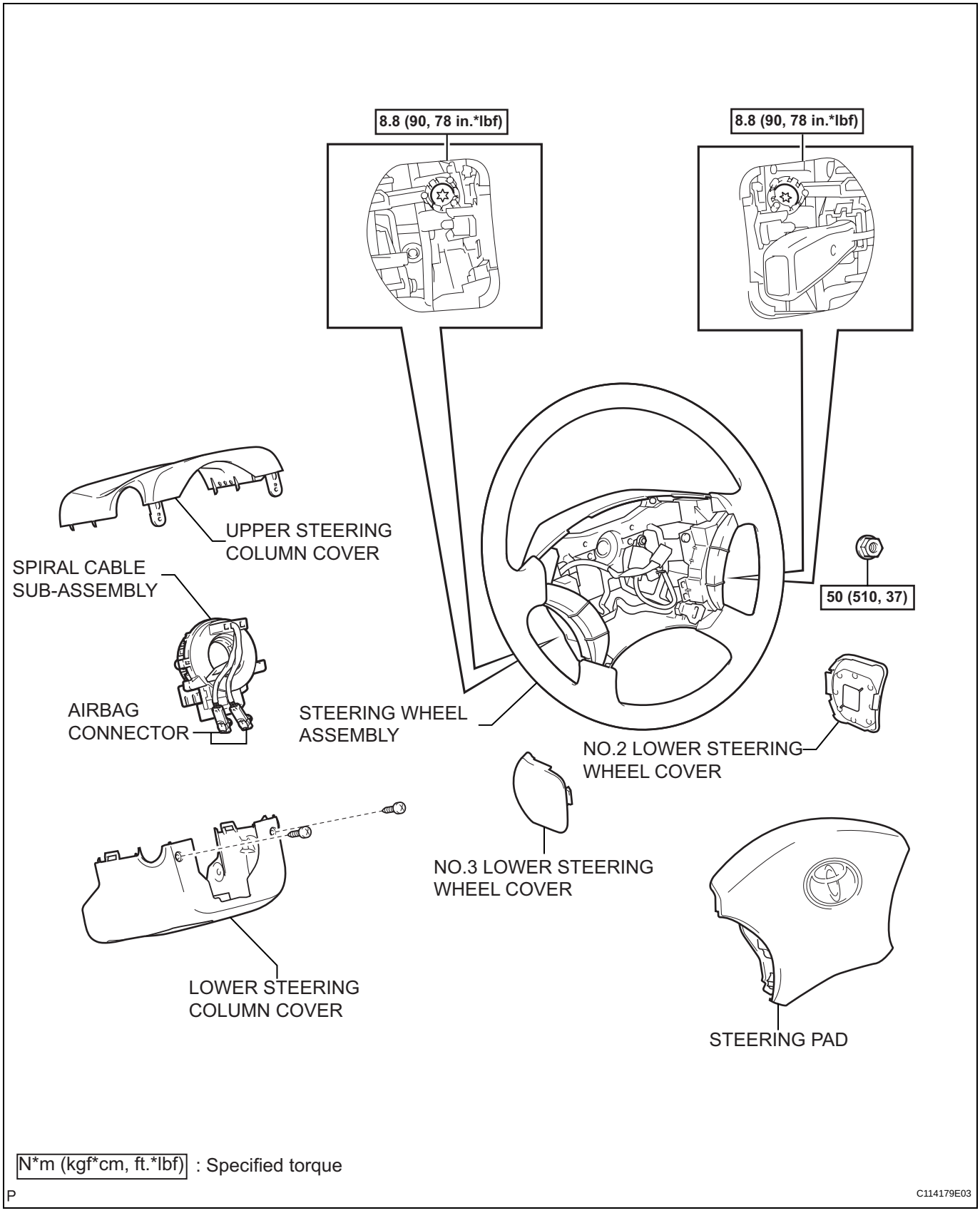
(b) Turn the ignition switch to the ON position.
(c) Using the intelligent tester, perform the zero point calibration (See page RS-480).

NEXT

END

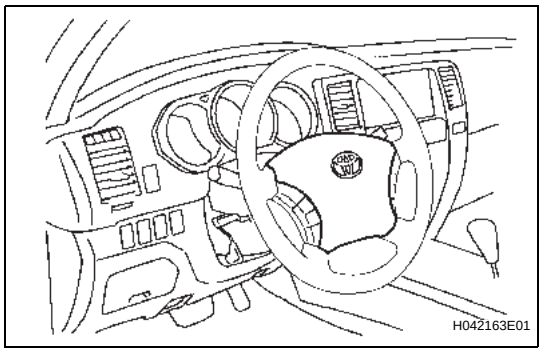
STEERING PAD

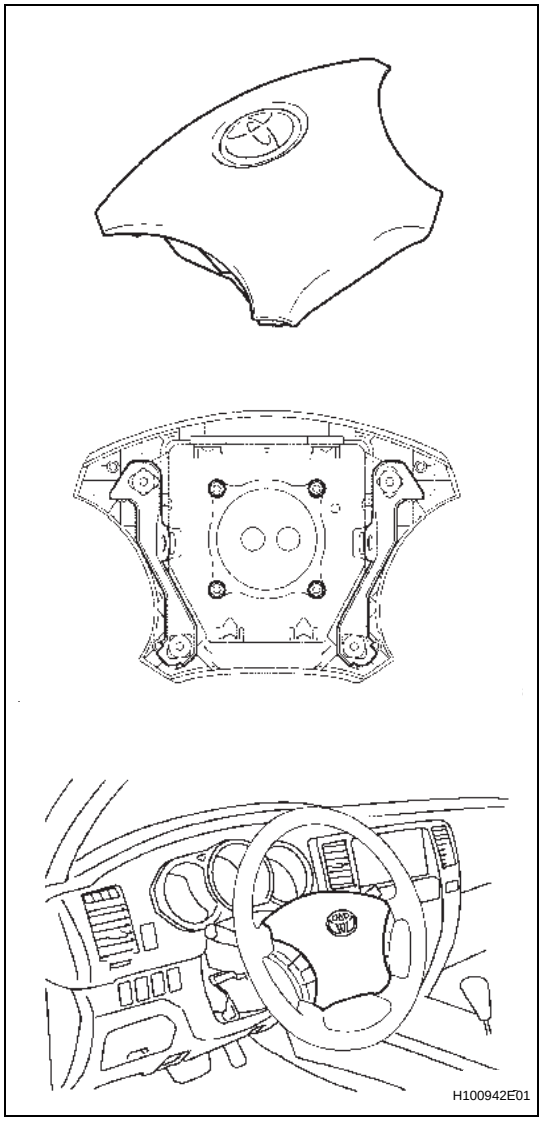
COMPONENTS



RS

ON-VEHICLE INSPECTION





1. INSPECT STEERING PAD (for Vehicle not Involved in Collision)

(a) Perform a diagnostic system check (see page RS-37).

(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 (for Vehicle Involved in Collision and Airbag not Deployed)

(a) Perform a diagnostic system check (see page RS-37).

(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 horn button assembly 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 plate 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.

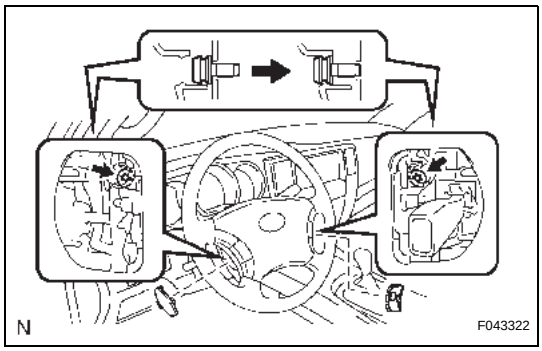
CAUTION:
For removal and installation procedures of the steering pad. Be sure to follow the correct procedure.

RS

REMOVAL

1. **PRECAUTION**
(See page RS-1)

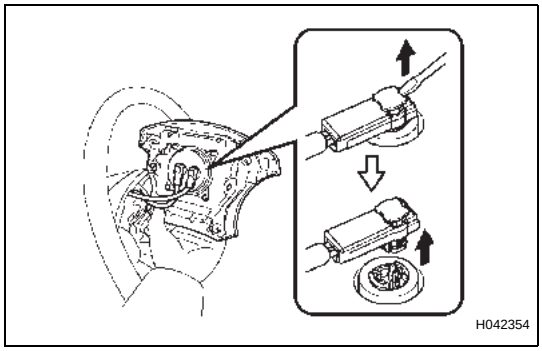
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
Wait for at least 90 seconds after disconnecting the cable to prevent the air bag from working.



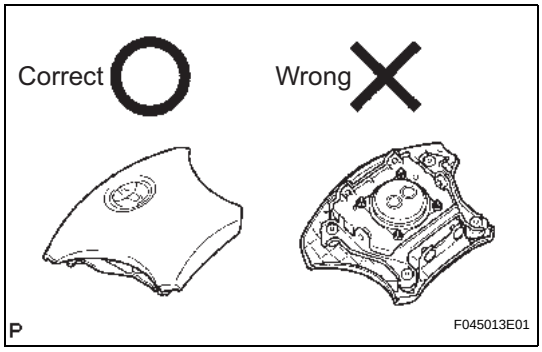
3. **REMOVE NO.2 LOWER STEERING WHEEL COVER**
(a) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws and remove the No. 2 lower steering wheel cover.

4. **REMOVE NO.3 LOWER STEERING WHEEL COVER**
(a) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws and remove the No. 3 lower steering wheel cover.

5. **REMOVE STEERING PAD**
(a) Using a "torx" socket wrench (T30), loosen the 2 "torx" screws until the groove along the screw circumference fits in the screw case.

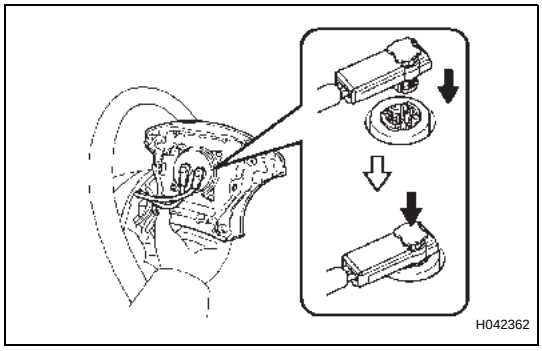


(b) Pull the steering pad out of the steering wheel assembly and support the steering pad with one hand, as shown in the illustration.
NOTICE:
When removing the steering pad, take care not to pull the airbag wire harness.
(c) Disconnect the horn ground harness from the steering pad.
(d) Using a screwdriver, disconnect the airbag connectors.



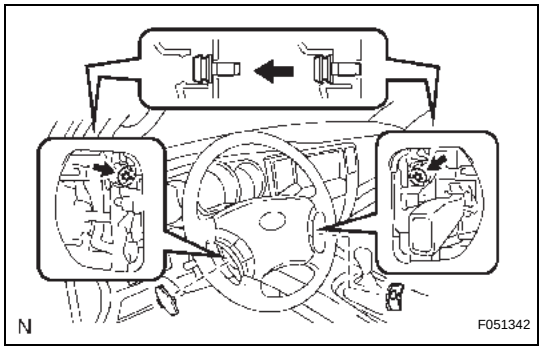
(e) Remove the steering pad.
CAUTION:
- **When placing the steering pad assembly, keep the upper surface of the steering pad facing upward.**
- **Never disassemble the steering pad.**

INSTALLATION



1. **INSTALL STEERING PAD**
NOTICE:
- **Never use airbag parts from a different vehicle. When replacing parts, replace them with new ones.**
- **Make sure the wheel pad is installed to the specified torque.**
- **If the wheel pad has been dropped, or there are cracks, dents or other defects in the case or connector, replace the wheel pad with a new one.**

RS



- **When installing the wheel pad, take care that the wiring does not interfere with other parts and is not pinched between other parts.**

(a) Support the steering pad with one hand, as shown in the illustration.
(b) Connect the 2 airbag connectors.
(c) Connect the horn ground harness to the steering pad.
(d) Confirm that the circumference groove of the "torx" screws fits in the screw case, and install the steering pad.
(e) Using a "torx" socket wrench (T30), install the 2 screws.
Torque: 8.8 N*m (90 kgf*cm, 78 in.*lbf)

2. **INSTALL NO.3 LOWER STEERING WHEEL COVER**
(a) Engage the 2 claws, install the No. 3 lower steering wheel cover to the steering wheel assembly.

3. **INSTALL NO.2 LOWER STEERING WHEEL COVER**
(a) Engage the 2 claws, install the No. 2 lower steering wheel cover to the steering wheel assembly.

4. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

5. **INSPECT STEERING PAD ASSEMBLY**

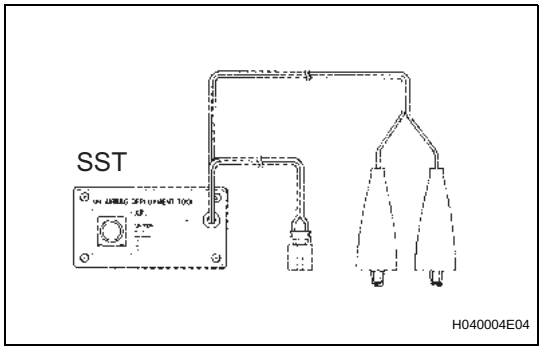
6. **INSPECT SRS WARNING LIGHT**
(See page RS-28)

DISPOSAL

HINT:
When scrapping a vehicle equipped with an SRS or disposing of a steering pad, always first deploy the airbag 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.

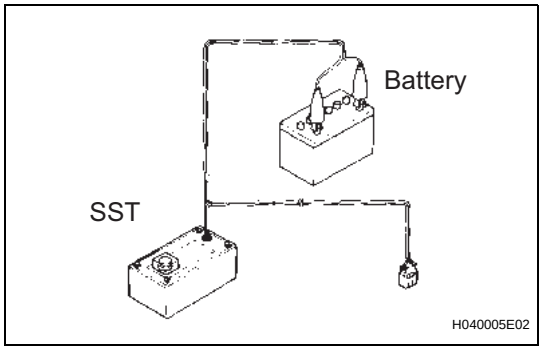
CAUTION:

- **Never dispose of a steering pad which has an undeployed airbag.**
- **The airbag produces a loud exploding sound when it deploys, so perform the operation outdoors and where it will not create 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 an airbag, perform the operation at least 10 m (33 ft) away from the steering pad.**
- **The steering pad is very 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 the deployed airbag.**
- **Always wash your hands with water after completing the operation.**



1. DISPOSE OF STEERING PAD ASSEMBLY (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

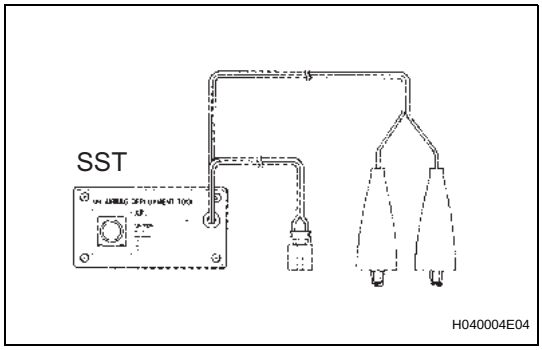
HINT:
Have a battery ready as the power source to deploy the airbag.

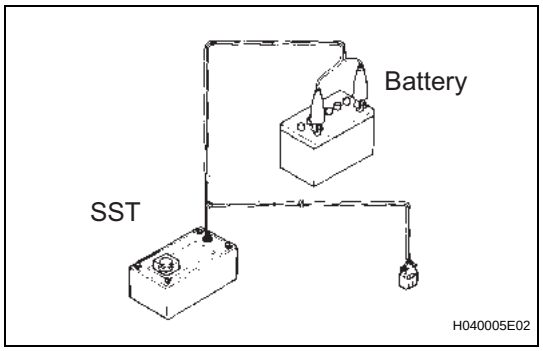


RS

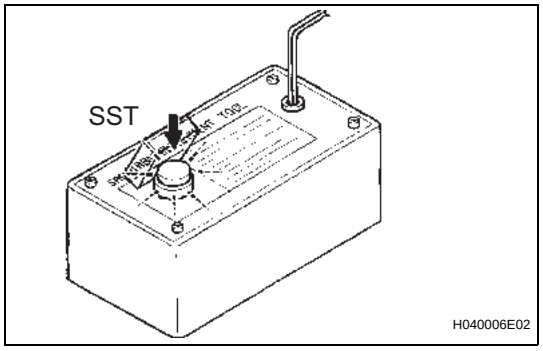
(a) Check the function of the SST.

CAUTION:
When deploying the airbag, always use the specified SST: SRS Airbag Deployment Tool.
SST 09082-00700



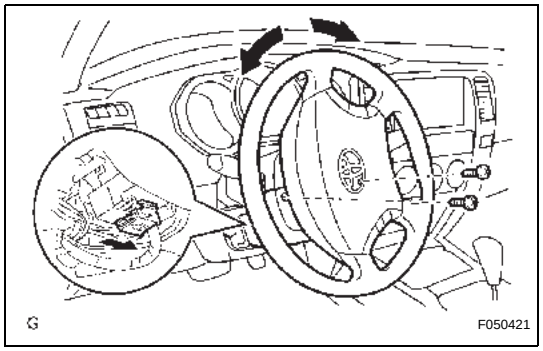


(1) Connect the SST to the battery.
Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.
HINT:
Do not connect the yellow connector of the SST which will be connected with the supplemental restraint system.



(2) Check the SST function.
Press the SST activation switch, and check that the LED of the SST activation switch comes on.
CAUTION:
If the LED lights up when the activation switch is not being pressed, SST malfunction is likely, so be sure not to use the SST.

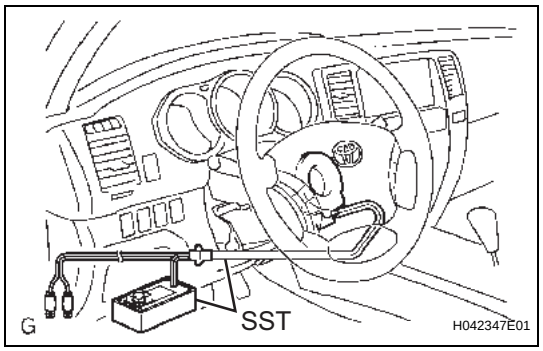
(3) Disconnect the SST from the battery.



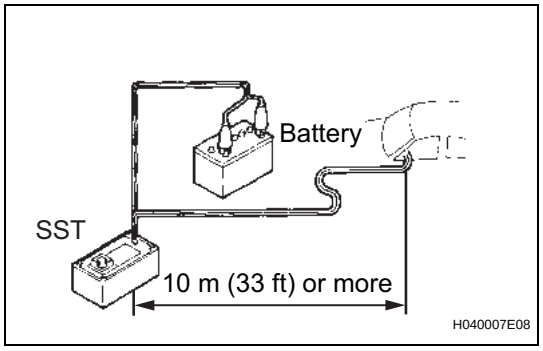
(b) Install the SST.
CAUTION:
Check that there is no slack in the steering wheel and steering pad.

(1) While turning the steering wheel right / left, remove the 2 screws and column lower cover.

(2) Disconnect the airbag connector of the spiral cable.



(3) Connect the connectors of the 2 SSTs to the airbag connector of the spiral cable.
SST 09082-00700, 09082-00780



(4) Move the SST at least 10 m (33 ft) away from the front of the vehicle.

(5) Close all the 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.

RS

(c) Deploy the airbag.
(1) Confirm that no one is inside the vehicle or within 10 m (33 ft) area around the vehicle.
(2) Press the activation switch of the SST and deploy the airbag.
HINT:
The airbag deploys as the LED of the SST activation switch comes on.

(d) Dispose of the steering pad.
CAUTION:
- **The steering pad is very hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **When moving a vehicle for scrapping which has a steering pad with deployed airbag, use gloves and safety glasses.**
- **Use gloves and safety glasses when handling a steering pad assembly with the deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a steering pad with a deployed airbag.**

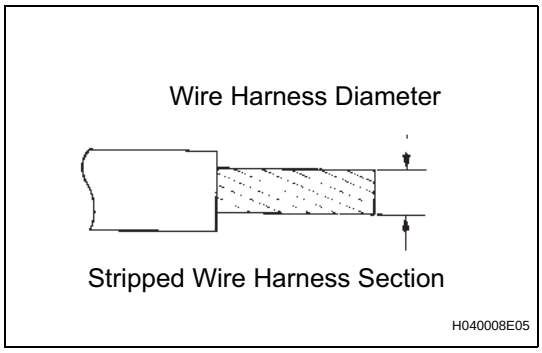
HINT:
When scrapping a vehicle, deploy the airbag and scrap the vehicle with the steering pad still installed.

2. DISPOSE OF STEERING PAD (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)
NOTICE:
- **When disposing of the steering pad only, never use the customers vehicle to deploy the airbag.**
- **Be sure to follow the procedure given below when deploying the airbag.**

HINT:
Have a battery ready as the power source to deploy the airbag.

(a) Remove the steering pad (See page RS-557).
CAUTION:
When storing the steering pad, keep the upper surface of the pad facing upward.

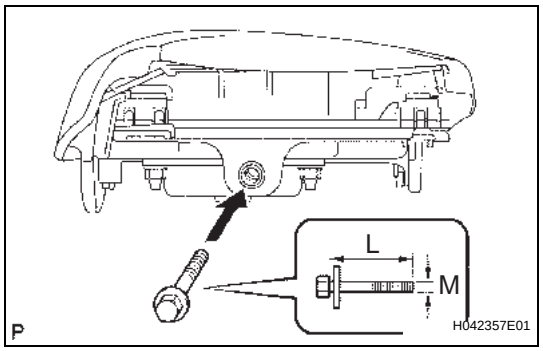
(b) Using a service-purpose wire harness for the vehicle, tie the steering pad assembly to the disc wheel.
Wire harness:
Stripped wire harness section 1.25 mm^2 or more (0.0019 in^2. or more)
CAUTION:
If a wire harness which is too thin or anything else is used to tie down the steering pad, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use which is at least 1.25 mm^2 (0.0019 in^2).



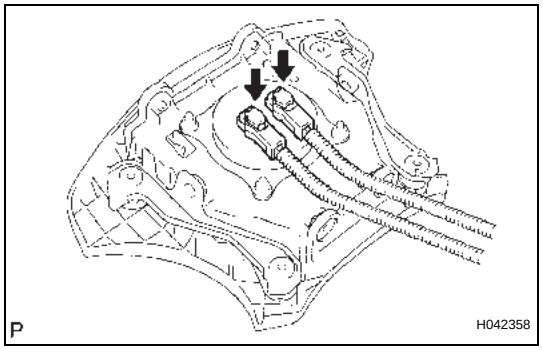
RS

HINT:
To calculate the square of the stripped wire harness section:
Square:

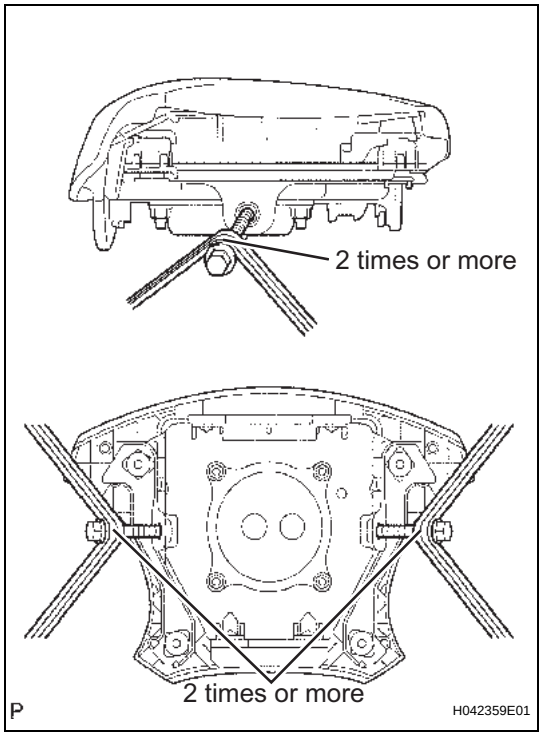
3.14 x (Diameter)^2 divided by 4



(1) Install the 2 bolts with washers in the 2 bolt holes in the steering pad.
Bolt:
L: 35.0 mm (1.387 in.)
M: 6.0 mm (0.236 in.)
Pitch: 1.0 mm (0.039 in.)
NOTICE:
- **Tighten the bolts by hand until the bolts become difficult to turn.**
- **Do not tighten the bolts excessively.**

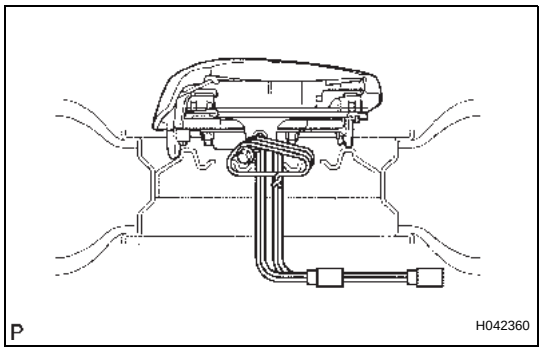


(2) After connecting the following to SST, connect them to the steering pad.
SST 09082-00802 (09082-10801, 09082-30801)



(3) Using 3 wire harnesses, wind each one at least 2 times around the bolts installed on the left and right sides of the steering pad.
CAUTION:
- **Tightly wind the wire harnesses around the bolts so that there is no slack.**
- **If there is slack in the wire harnesses, the steering pad may come loose due to the shock when the airbag is deployed. This is highly dangerous.**

RS



(4) Face the upper surface of the steering pad upward. Separately tie the left and right sides of the steering pad to the disc wheel through the hub nut holes. Position the steering pad connector so that it hangs downward through a hub hole in the disc wheel.

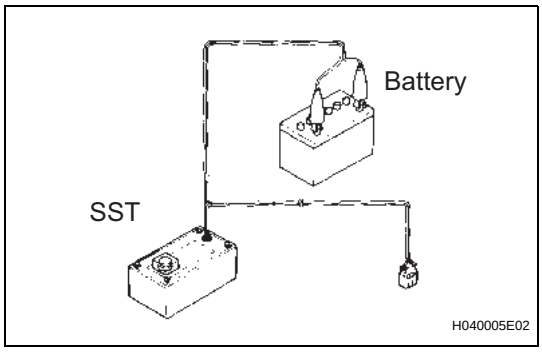
CAUTION:

- **Make sure that the wire harness is tight. It is very dangerous when slack in the wire harness results in the steering pad coming free through the shock from the airbag deploying.**
- **Always tie down the steering pad with the pad side facing upward. It is very dangerous if the steering pad is tied down with the metal surface facing upward as the wire harness will be cut by the shock caused by the airbag deployment and the steering pad will be thrown into the air.**

NOTICE:

The disc wheel will be marked by airbag deployment, so when disposing of the airbag use a redundant disc wheel.

(c) Check the function of the SST (See step 1-(a)).



(d) Install the SST.

CAUTION:

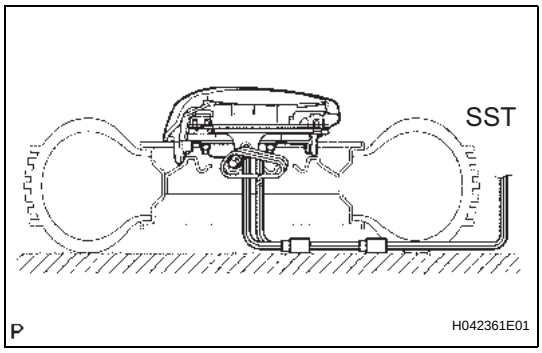
Place the disc wheel on level ground.

(1) Connect the connector of the SST.

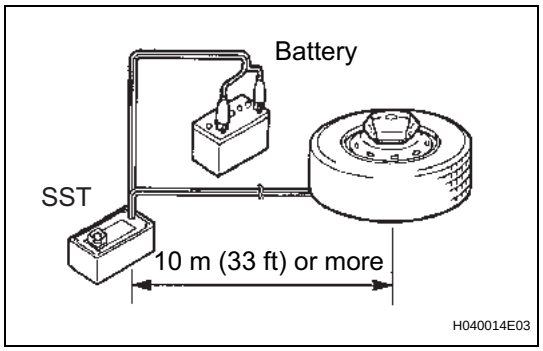
SST 09082-00700

NOTICE:

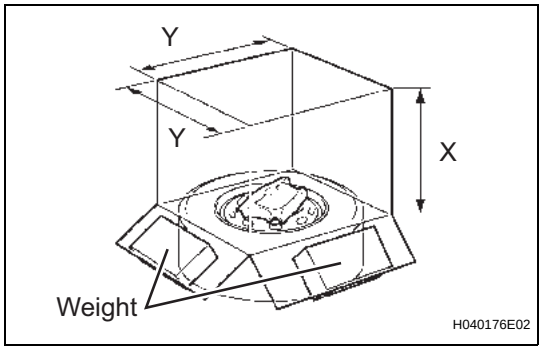
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for the SST wire harness inside the disc wheel.



RS



(2) Move the SST to at least 10 m (33 ft) away from the steering pad tied down on the disc wheel.



(e) Cover the steering pad with a cardboard box or tires.

Covering method using a cardboard box:

Cover the steering pad with the cardboard box and weigh the cardboard box down in 4 places with at least 190 N (20 kg, 44 lb).

Size of cardboard box:

Must exceed the following dimensions:

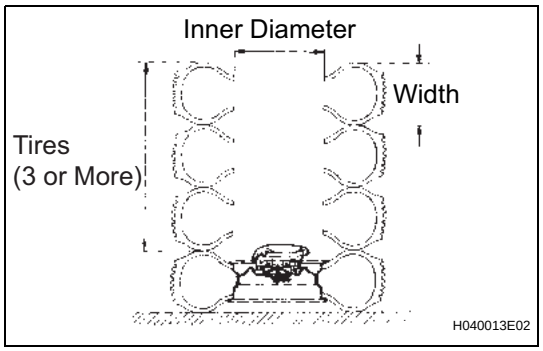
X = 460 mm (18.11 in.)

Y = 650 mm (25.59 in.)

NOTICE:

- **When dimension Y of the cardboard box exceeds the diameter of the disc wheel and tire to which the steering pad is tied, X should be the following size.**

  X = 460 mm (18.11 in.) + width of tire
- **If a cardboard box smaller than the specified size is used, the cardboard box will be broken by the shock of the airbag deployment.**



Covering method using tires:

Place at least 3 tires with no disc wheels on top of the tire and disc wheel to which the steering pad assembly is tied.

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.

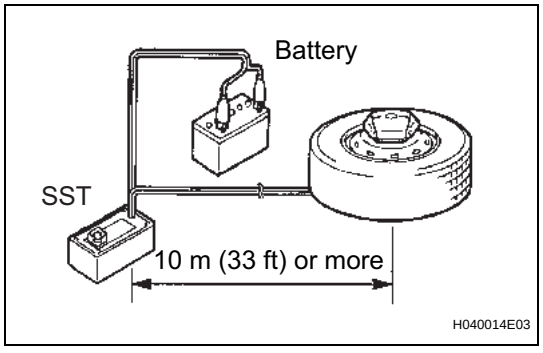
NOTICE:

The tires may be marked by the airbag deployment, so use redundant tires.

(f) Deploy the airbag.

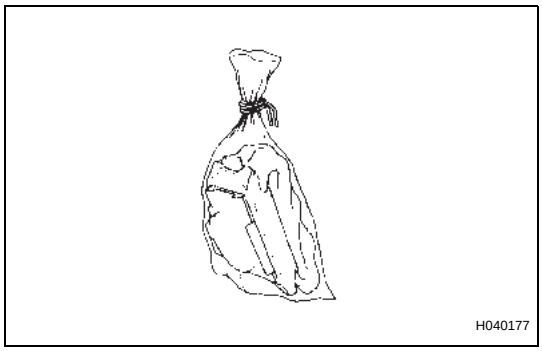
(1) Connect the red clip of the SST to the battery positive (+) terminal and the black clip of the SST to the battery negative (-) terminal.

(2) Check that no one is within 10 m (33 ft) area around the disc wheel which the steering pad is tied to.



RS

(3) Press the activation switch of the SST and deploy the airbag.
HINT:
The airbag deploys as the LED of the SST activation switch comes on.



(g) Dispose of the steering pad.
CAUTION:
- **The steering pad is very 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 the deployed airbag.**
- **Always wash your hands with water after completing the operation.**

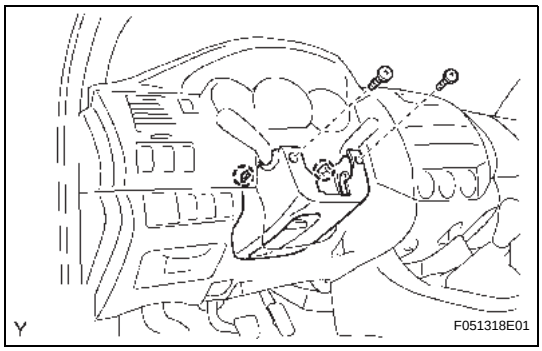
(1) Remove the steering pad from the disc wheel.
(2) Place the steering pad in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts disposal.

SPIRAL CABLE

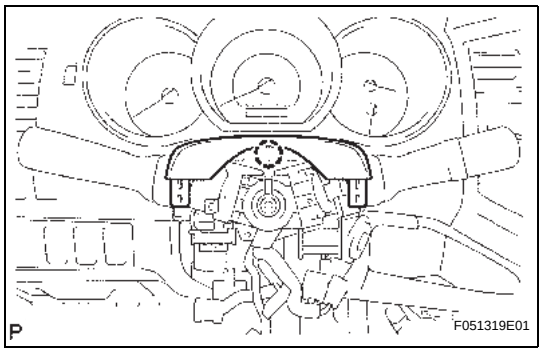
REMOVAL

HINT:
COMPONENTS: See page RS-556

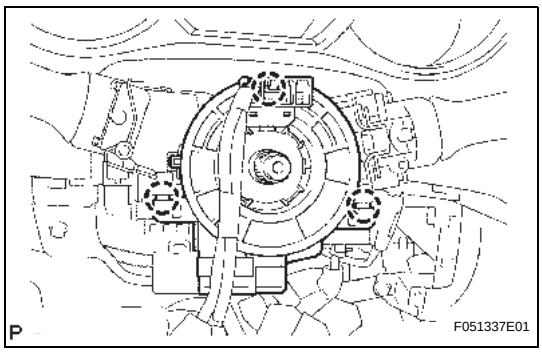
1. **PRECAUTION**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
4. **REMOVE NO.2 LOWER STEERING WHEEL COVER (See page SR-9)**
5. **REMOVE NO.3 LOWER STEERING WHEEL COVER (See page SR-9)**
6. **REMOVE STEERING PAD (See page RS-558)**
7. **REMOVE STEERING WHEEL ASSEMBLY (See page SR-9)**
8. **REMOVE LOWER STEERING COLUMN COVER**
   (a) Remove the 2 screws.
   (b) Disengage the 2 claws to remove the steering column cover lower.



9. **REMOVE UPPER STEERING COLUMN COVER**
   (a) Disengage the claw, then remove the upper steering column cover.



10. **REMOVE SPIRAL CABLE SUB-ASSEMBLY**
    (a) Disconnect the airbag connector and the connector from the spiral cable sub-assembly.
    NOTICE:
    When handling the airbag connector, take care not to damage the airbag with harness.
    (b) Disengage the 3 claws and remove the spiral cable sub-assembly.



RS

INSPECTION

1. INSPECT SPIRAL CABLE SUB-ASSEMBLY

(a) If any of the following conditions is identified, replace the spiral cable sub-assembly with a new one.

Condition:

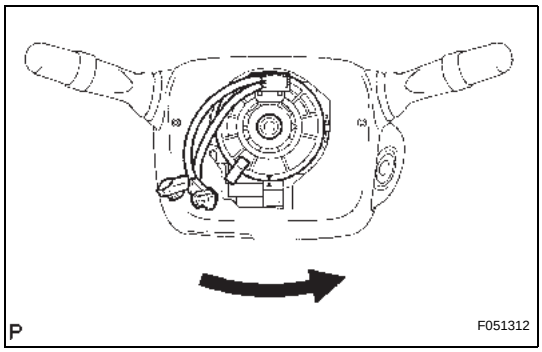
Scratches or cracks on the connector
Cracks, dents or chipping of the spiral cable sub-assembly

INSTALLATION

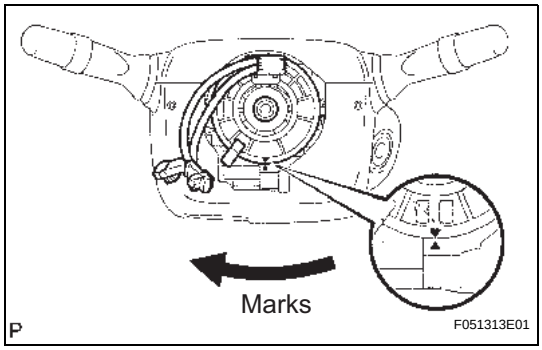
1. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
   (a) Check that the front wheels are facing straight ahead.

2. **INSTALL SPIRAL CABLE SUB-ASSEMBLY**
   (a) Set the turn signal switch in neutral position.
   NOTICE:
   Make sure of the neutral position since the pin of the turn signal switch may be snapped.
   (b) Install the spiral cable sub-assembly with the 4 screws.
   NOTICE:
   When replacing the spiral cable sub-assembly with a new one, remove the lock pin before installing the handle.
   (c) Connect the airbag connector and connector.
   (d) Install the steering column cover with the 3 screws.

3. **CENTER SPIRAL CABLE**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the negative battery terminal.
   NOTICE:
   Do not start the operation for 90 seconds after disconnecting the cable from the negative battery terminal.
   (c) Turn the cable counterclockwise by hand until it becomes harder to turn.



RS



   (d) Turn the cable clockwise about 2.5 turns to align the marks.
   HINT:
   The cable will rotate about 2.5 turns both left and right from the center.

4. **INSTALL UPPER STEERING COLUMN COVER**
   (a) Engage the claw, then install the upper steering column cover.

5. **INSTALL LOWER STEERING COLUMN COVER**
   (a) Engage the 2 claws.
   (b) Install the lower steering column cover with the 2 screws.

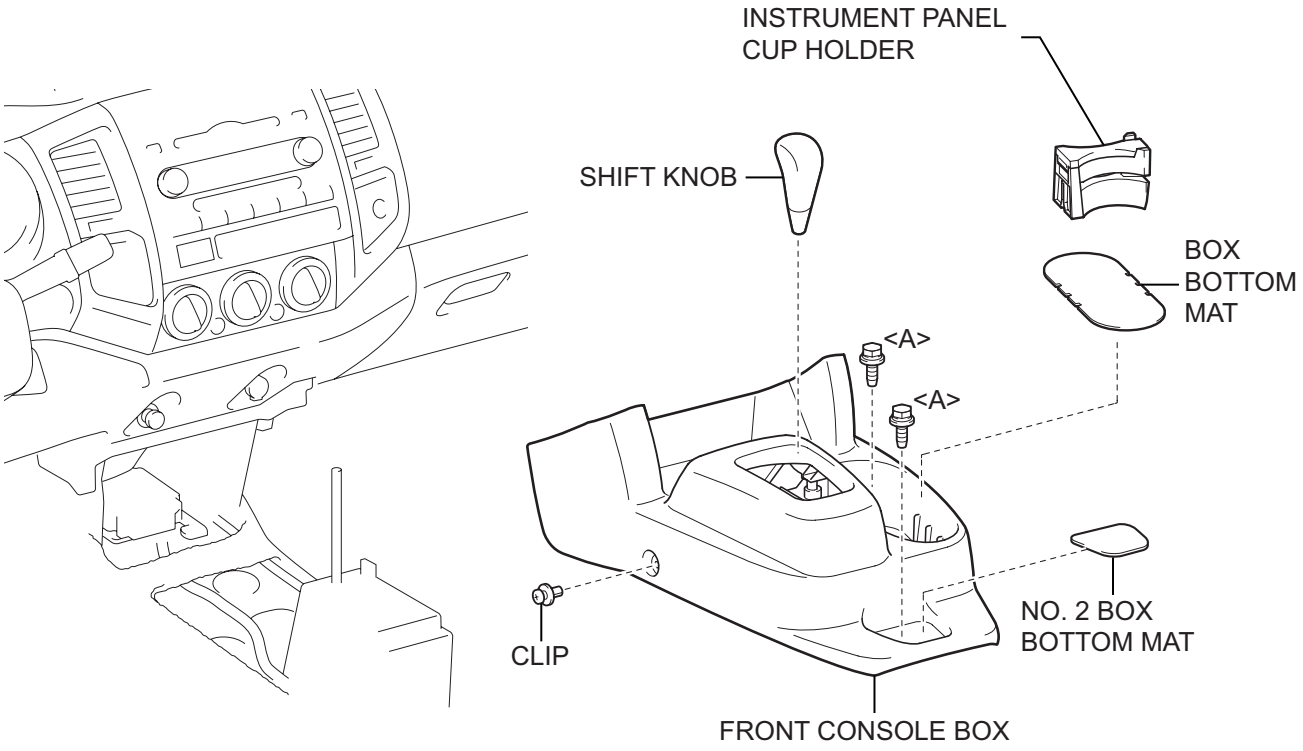
6. **INSTALL STEERING WHEEL ASSEMBLY (See page SR-18)**

7. **INSTALL STEERING PAD (See page RS-558)**
8. **INSTALL NO.3 LOWER STEERING WHEEL COVER (See page SR-18)**
9. **INSTALL NO.2 LOWER STEERING WHEEL COVER (See page SR-18)**
10. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
11. **INSPECT HORN BUTTON ASSEMBLY**
12. **INSPECT SRS WARNING LIGHT**
    (See page RS-28)

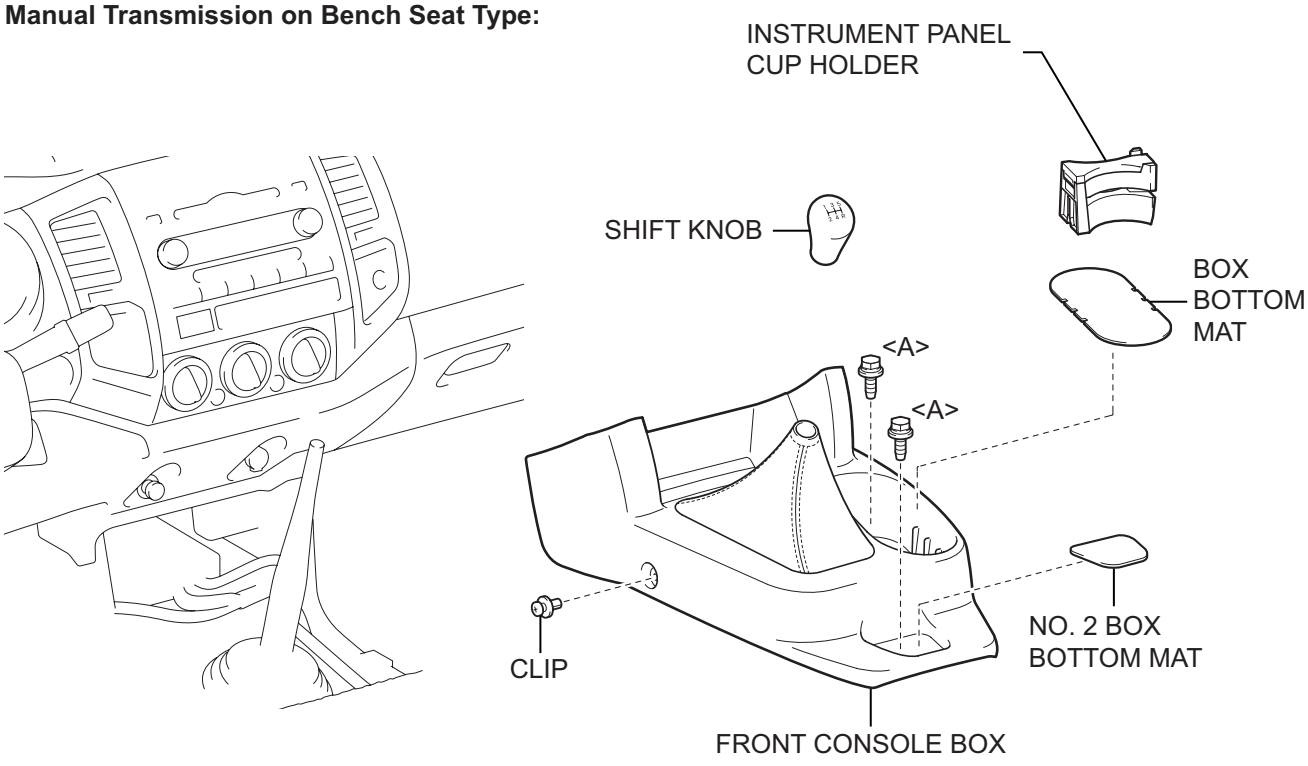
FRONT PASSENGER AIRBAG ASSEMBLY

COMPONENTS

for Automatic Transmission on Bench Seat Type:



for Manual Transmission on Bench Seat Type:

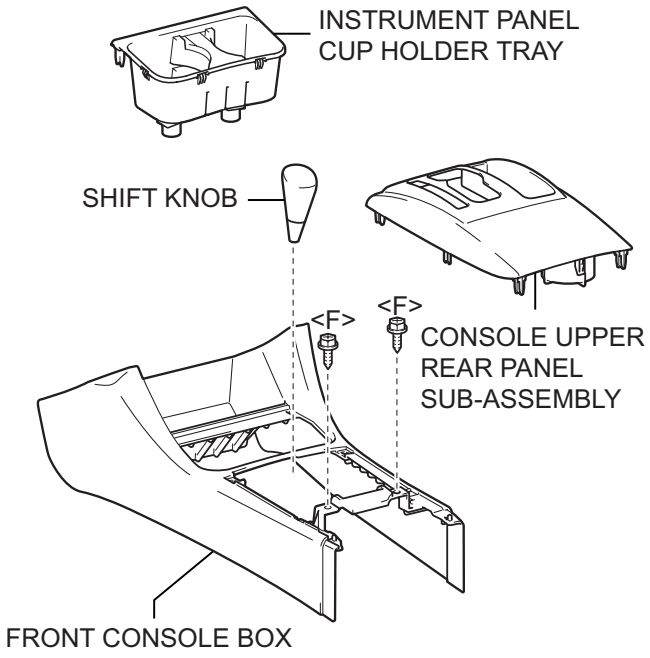


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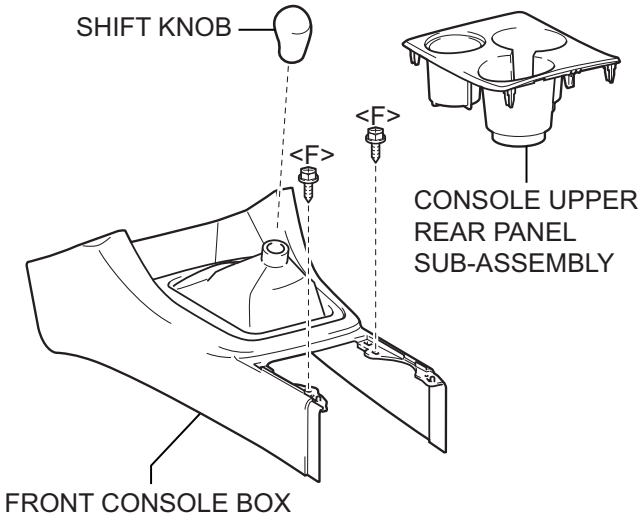
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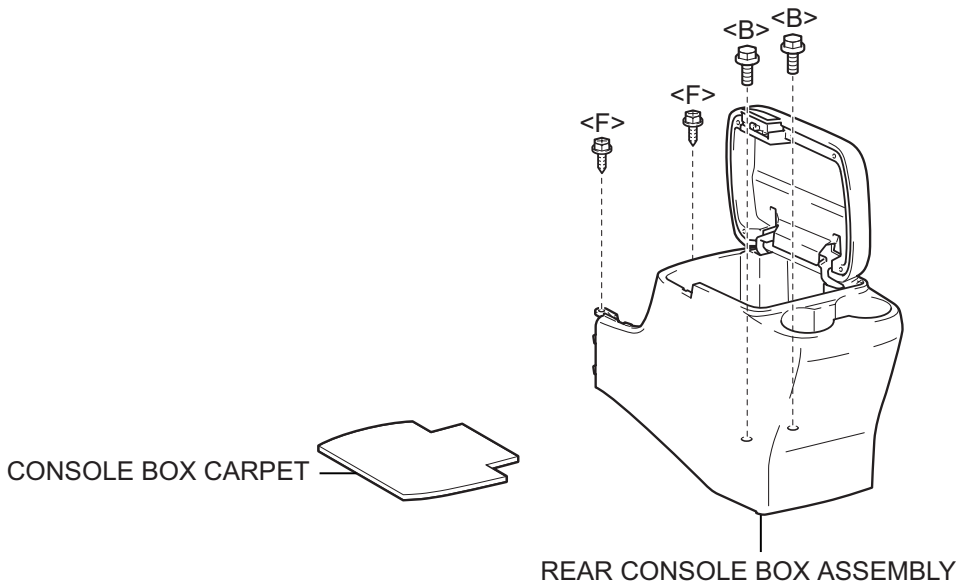
for Automatic Transmission on Separate Seat Type :



for Manual Transmission on Separate Seat Type:



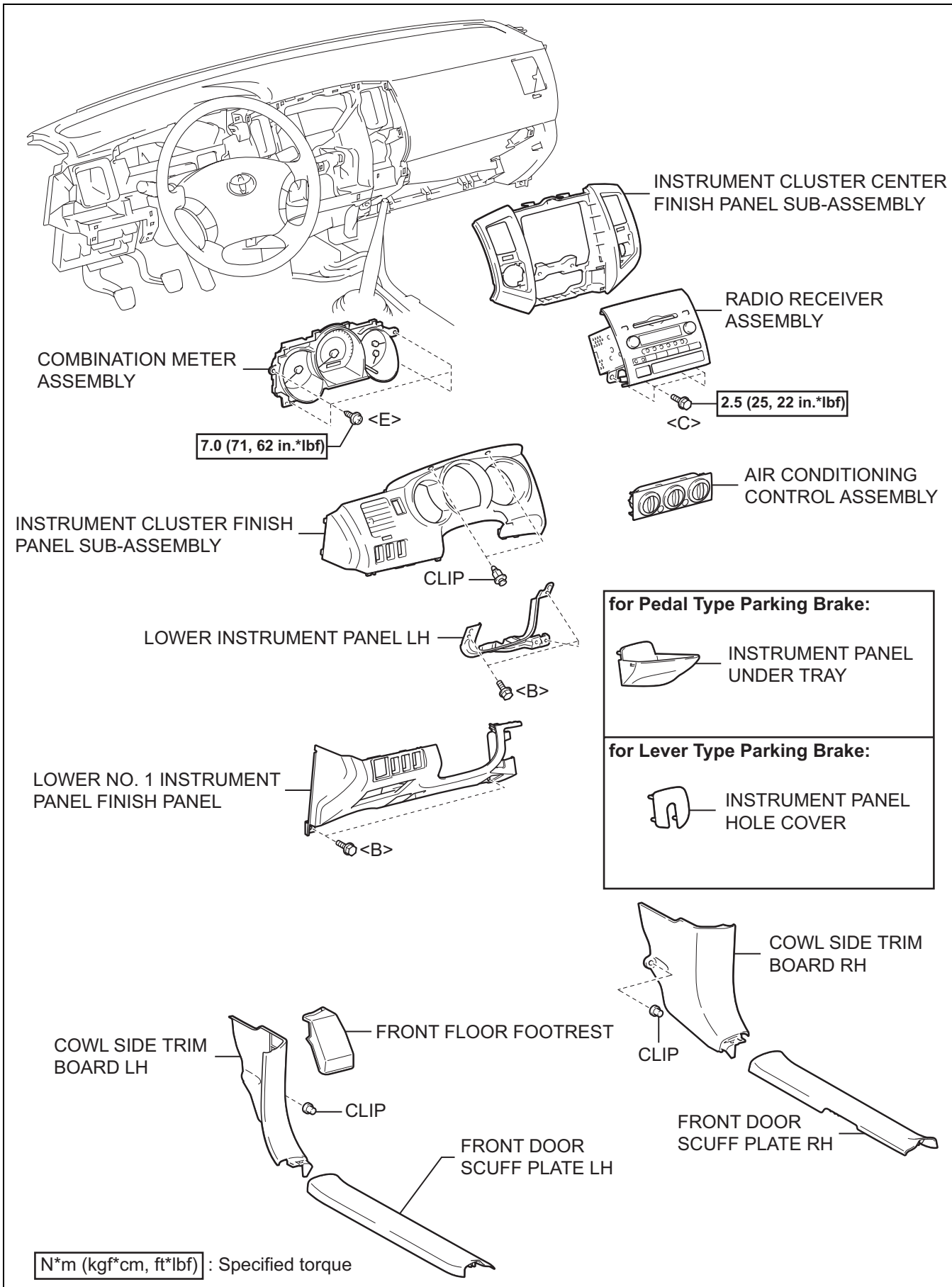
for Separate Seat Type:



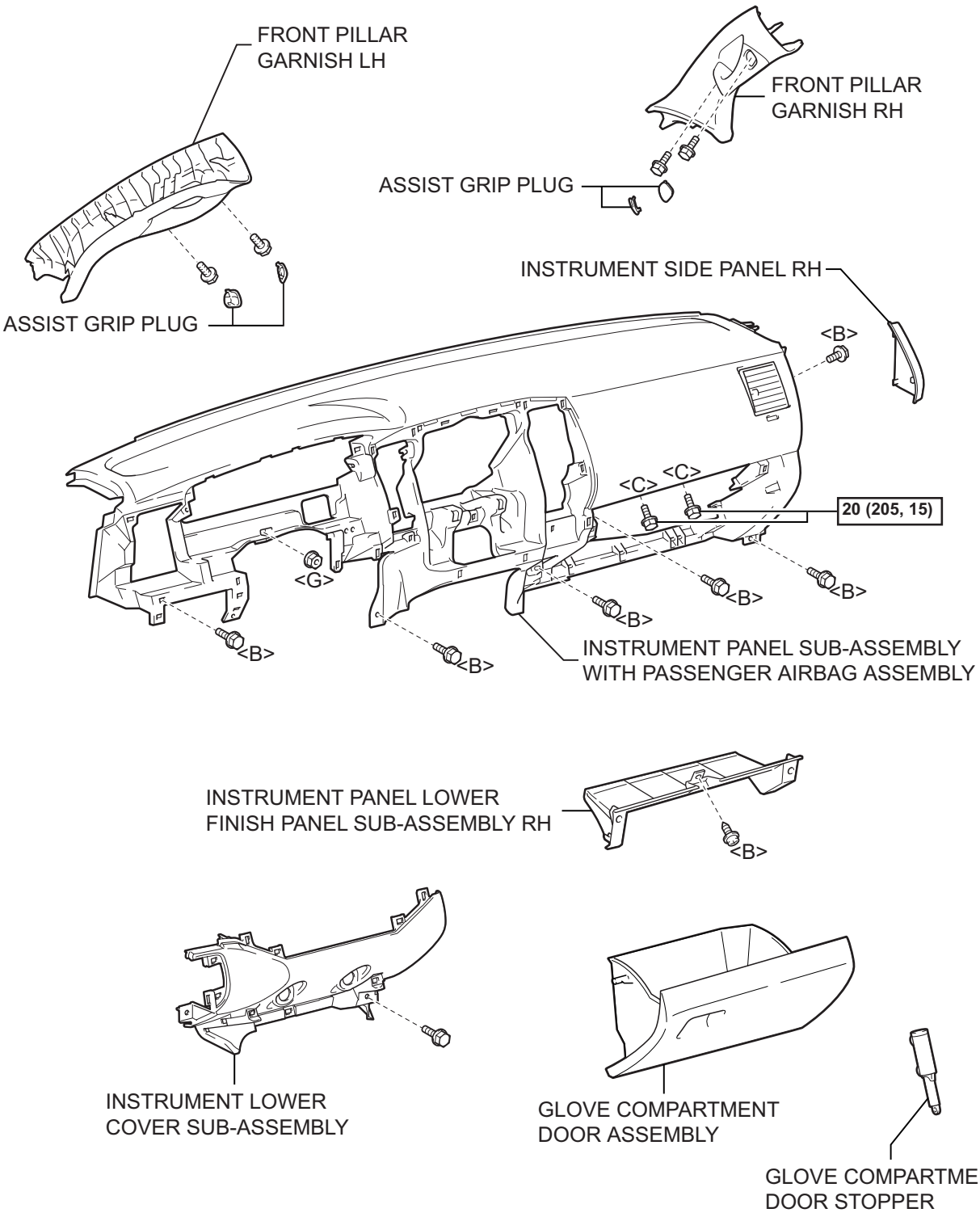
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INSTRUMENT CLUSTER CENTER FINISH PANEL SUB-ASSEMBLY
RADIO RECEIVER ASSEMBLY
COMBINATION METER ASSEMBLY
<E>
7.0 (71, 62 in.*lbf)
<C>
2.5 (25, 22 in.*lbf)
AIR CONDITIONING CONTROL ASSEMBLY
INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY
CLIP
LOWER INSTRUMENT PANEL LH
<B>
for Pedal Type Parking Brake:
INSTRUMENT PANEL UNDER TRAY
for Lever Type Parking Brake:
INSTRUMENT PANEL HOLE COVER
LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL
<B>
COWL SIDE TRIM BOARD RH
CLIP
FRONT FLOOR FOOTREST
COWL SIDE TRIM BOARD LH
CLIP
FRONT DOOR SCUFF PLATE RH
FRONT DOOR SCUFF PLATE LH
N*m (kgf*cm, ft*lbf) : Specified torque
P
B085800E01

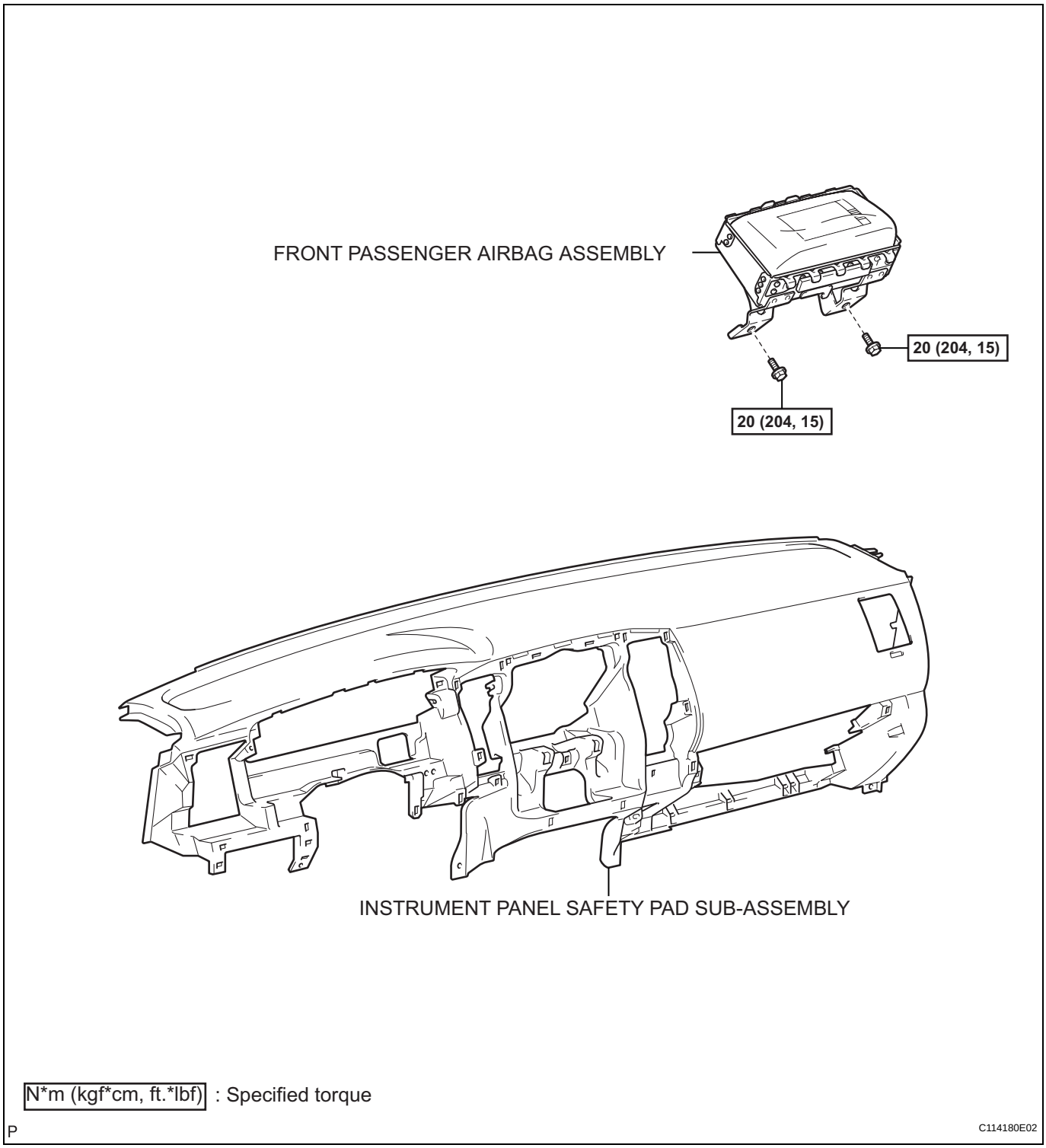
RS



N*m (kgf*cm, ft.*lbf) : Specified torque

P

B085801E01



N*m (kgf*cm, ft.*lbf) : Specified torque

P

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RS

ON-VEHICLE INSPECTION

1. **INSPECT FRONT PASSENGER AIRBAG ASSEMBLY (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-37)
   (b) With the front passenger airbag assembly installed on the vehicle, perform a visual check including the following: Cuts, minute cracks or marked discoloration on the instrument panel around the front passenger airbag assembly.

2. **INSPECT FRONT PASSENGER AIRBAG ASSEMBLY (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (See page RS-37)
   (b) With the front passenger airbag assembly removed from the vehicle, perform a visual check including the following:
   - Cuts, minute cracks or marked discoloration on the front passenger airbag assembly.
   - Cracks or other damage to the wire harness or connector.
   - Deformation or cracks on the instrument panel or instrument panel reinforcement.

   CAUTION:
   For removal and installation procedures of the front passenger airbag assembly, see Replacement on see page RS-574, and be sure to follow the correct procedure.
   HINT:
   If the instrument panel or instrument panel reinforcement is deformed or cracked, never repair it. Always replace it with a new one.

REMOVAL

1. **PRECAUTION**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE FRONT FLOOR FOOTREST (See page IR-1)**
4. **REMOVE FRONT DOOR SCUFF PLATE LH (for Regular Cab) (See page IR-40)**
5. **REMOVE FRONT DOOR SCUFF PLATE LH (for Access Cab) (See page IR-61)**
6. **REMOVE FRONT DOOR SCUFF PLATE LH (for Double Cab) (See page IR-12)**
7. **REMOVE FRONT DOOR SCUFF PLATE RH (for Regular Cab) (See page IR-41)**
8. **REMOVE FRONT DOOR SCUFF PLATE RH (for Access Cab) (See page IR-61)**
9. **REMOVE FRONT DOOR SCUFF PLATE RH (for Double Cab) (See page IR-12)**
10. **REMOVE COWL SIDE TRIM BOARD LH (for Regular Cab) (See page IR-40)**
11. **REMOVE COWL SIDE TRIM BOARD LH (for Access Cab) (See page IR-61)**
12. **REMOVE COWL SIDE TRIM BOARD LH (for Double Cab) (See page IR-12)**
13. **REMOVE COWL SIDE TRIM BOARD RH (for Regular Cab) (See page IR-40)**
14. **REMOVE COWL SIDE TRIM BOARD RH (for Access Cab) (See page IR-61)**
15. **REMOVE COWL SIDE TRIM BOARD RH (for Double Cab) (See page IR-12)**
16. **SEPARATE FRONT DOOR OPENING TRIM WEATHERSTRIP LH (See page IP-8)**
17. **SEPARATE FRONT DOOR OPENING TRIM WEATHERSTRIP RH (See page IP-8)**
18. **REMOVE FRONT PILLAR GARNISH LH (for Regular Cab) (See page IR-41)**
19. **REMOVE FRONT PILLAR GARNISH LH (for Access Cab) (See page IR-62)**
20. **REMOVE FRONT PILLAR GARNISH LH (for Double Cab) (See page IR-13)**
21. **REMOVE FRONT PILLAR GARNISH RH (for Regular Cab) (See page IR-41)**

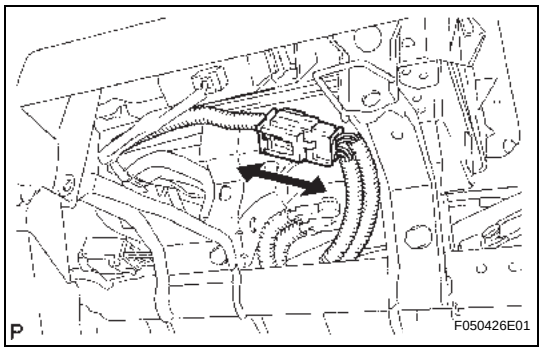
22. REMOVE FRONT PILLAR GARNISH RH (for Access Cab) (See page IR-63)
23. REMOVE FRONT PILLAR GARNISH RH (for Double Cab) (See page IR-14)
24. REMOVE INSTRUMENT PANEL UNDER TRAY (for Pedal Type Parking Brake) (See page IP-9)
25. REMOVE INSTRUMENT PANEL HOLE COVER (for Lever Type Parking Brake) (See page IP-9)
26. REMOVE CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Automatic Transmission on Separate Seat Type) (See page IP-9)
27. REMOVE CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Manual Transmission on Separate Seat Type) (See page IP-9)
28. REMOVE CONSOLE BOX ASSEMBLY REAR (for Separate Seat Type) (See page IP-10)
29. REMOVE INSTRUMENT PANEL CUP HOLDER TRAY (for Automatic Transmission on Separate Seat Type) (See page IP-10)
30. REMOVE FRONT CONSOLE BOX (for Automatic Transmission on Separate Seat Type) (See page IP-10)
31. REMOVE FRONT CONSOLE BOX (for Manual Transmission on Separate Seat Type) (See page IP-11)
32. REMOVE FRONT CONSOLE BOX (for Automatic Transmission on Bench Seat Type) (See page IP-11)
33. REMOVE FRONT CONSOLE BOX (for Manual Transmission on Bench Seat Type) (See page IP-11)
34. REMOVE AIR CONDITIONING CONTROL ASSEMBLY (See page IP-12)
35. REMOVE RADIO RECEIVER ASSEMBLY WITH BRACKET (See page AV-69)
36. SEPARATE HOOD LOCK CONTROL LEVER SUB-ASSEMBLY (See page ED-3)
37. REMOVE NO. 1 LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-12)
38. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-12)
39. REMOVE COMBINATION METER ASSEMBLY (See page IP-13)
40. REMOVE CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-13)
41. REMOVE GLOVE COMPARTMENT DOOR ASSEMBLY (See page IP-13)

42. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY RH (See page IP-14)**

43. **REMOVE LOWER INSTRUMENT PANEL LH (See page IP-14)**

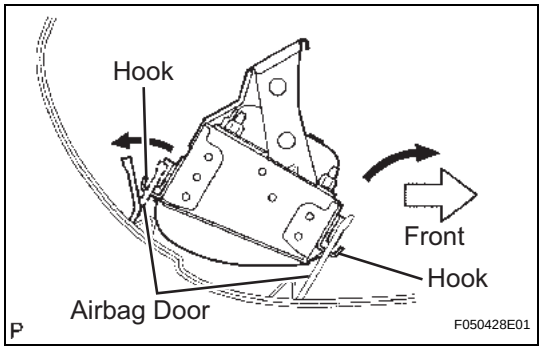
44. **REMOVE LOWER INSTRUMENT PANEL COVER SUB-ASSEMBLY (See page IP-14)**

45. **REMOVE INSTRUMENT SIDE PANEL RH (See page IP-14)**

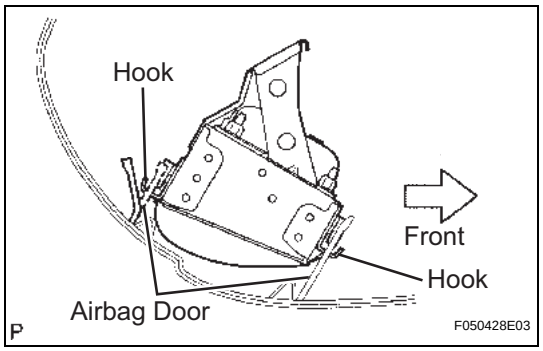


46. **DISCONNECT PASSENGER AIRBAG CONNECTOR**
    (a) Disconnect the airbag connector.

47. **REMOVE INSTRUMENT PANEL SUB-ASSEMBLY WITH PASSENGER AIRBAG ASSEMBLY (See page IP-14)**



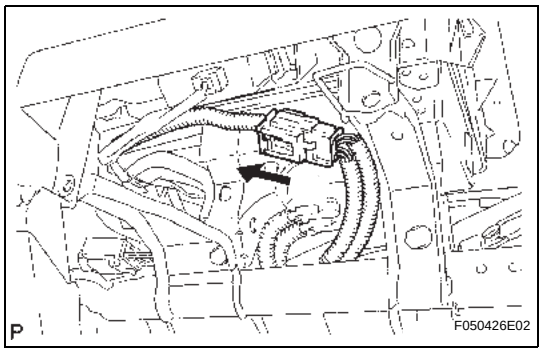
48. **REMOVE FRONT PASSENGER AIRBAG ASSEMBLY**
    (a) Disengage the 10 hooks and remove the front passenger airbag.
    (b) Release the front side wall of the airbag door from the other hook and remove the front passenger airbag assembly.



INSTALLATION

1. **INSTALL FRONT PASSENGER AIRBAG ASSEMBLY**
    (a) Engage the 10 hooks so that the connector side faces the outside of the vehicle, and install the front passenger airbag assembly.

2. **INSTALL INSTRUMENT PANEL SUB-ASSEMBLY WITH PASSENGER AIRBAG ASSEMBLY (See page IP-18)**



3. **CONNECT PASSENGER AIRBAG CONNECTOR**
    (a) Connect the passenger airbag connector and clamp.

4. **INSTALL INSTRUMENT SIDE PANEL RH (See page IP-20)**

5. **INSTALL LOWER INSTRUMENT COVER SUB-ASSEMBLY (See page IP-20)**

6. **INSTALL LOWER INSTRUMENT PANEL LH (See page IP-20)**

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7. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY RH (See page IP-20)
8. INSTALL GLOVE COMPARTMENT DOOR ASSEMBLY (See page IP-20)
9. INSTALL CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-21)
10. INSTALL COMBINATION METER ASSEMBLY (See page IP-21)
11. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-21)
12. INSTALL NO. 1 LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-22)
13. CONNECT HOOD LOCK CONTROL LEVER SUB-ASSEMBLY (See page ED-8)
14. INSTALL RADIO RECEIVER ASSEMBLY WITH BRACKET (See page AV-70)
15. INSTALL AIR CONDITIONING CONTROL ASSEMBLY (See page IP-22)
16. INSTALL FRONT CONSOLE BOX (for Manual Transmission on Bench Seat Type) (See page IP-22)
17. INSTALL FRONT CONSOLE BOX (for Automatic Transmission on Bench Seat Type) (See page IP-23)
18. INSTALL FRONT CONSOLE BOX (for Manual Transmission on Separate Seat Type) (See page IP-23)
19. INSTALL FRONT CONSOLE BOX (for Automatic Transmission on Separate Seat Type) (See page IP-24)
20. INSTALL INSTRUMENT PANEL CUP HOLDER TRAY (for Automatic Transmission on Separate Seat Type) (See page IP-24)
21. INSTALL REAR CONSOLE BOX ASSEMBLY (for Separate Seat Type) (See page IP-24)
22. INSTALL CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Manual Transmission on Separate Seat Type) (See page IP-25)
23. INSTALL CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Automatic Transmission on Separate Seat Type) (See page IP-25)
24. INSTALL INSTRUMENT PANEL HOLE COVER (for Lever Type Parking Brake) (See page IP-25)
25. INSTALL INSTRUMENT PANEL UNDER TRAY (for Pedal Type Parking Brake) (See page IP-25)
26. INSTALL FRONT PILLAR GARNISH LH (for Regular Cab) (See page IR-51)

27. **INSTALL FRONT PILLAR GARNISH LH (for Access Cab) (See page IR-74)**
28. **INSTALL FRONT PILLAR GARNISH LH (for Double Cab) (See page IR-28)**
29. **INSTALL FRONT PILLAR GARNISH RH (for Regular Cab) (See page IR-52)**
30. **INSTALL FRONT PILLAR GARNISH RH (for Access Cab) (See page IR-74)**
31. **INSTALL FRONT PILLAR GARNISH RH (for Double Cab) (See page IR-28)**
32. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH (for Regular Cab) (See page IR-52)**
33. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH (for Access Cab) (See page IR-74)**
34. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH (for Double Cab) (See page IR-29)**
35. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP RH (for Regular Cab) (See page IR-52)**
36. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP RH (for Access Cab) (See page IR-74)**
37. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP RH (for Double Cab) (See page IR-29)**
38. **INSTALL COWL SIDE TRIM BOARD LH (for Regular Cab) (See page IR-52)**
39. **INSTALL COWL SIDE TRIM BOARD LH (for Access Cab) (See page IR-75)**
40. **INSTALL COWL SIDE TRIM BOARD LH (for Double Cab) (See page IR-29)**
41. **INSTALL COWL SIDE TRIM BOARD RH (for Regular Cab) (See page IR-52)**
42. **INSTALL COWL SIDE TRIM BOARD RH (for Access Cab) (See page IR-75)**
43. **INSTALL COWL SIDE TRIM BOARD RH (for Double Cab) (See page IR-29)**
44. **INSTALL FRONT DOOR SCUFF PLATE LH (for Regular Cab) (See page IR-52)**
45. **INSTALL FRONT DOOR SCUFF PLATE LH (for Access Cab) (See page IR-75)**
46. **INSTALL FRONT DOOR SCUFF PLATE LH (for Double Cab) (See page IR-29)**

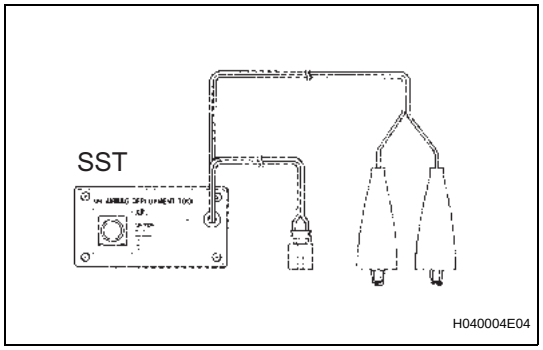
47. **INSTALL FRONT DOOR SCUFF PLATE RH (for Regular Cab) (See page IR-52)**
48. **INSTALL FRONT DOOR SCUFF PLATE RH (for Access Cab) (See page IR-75)**
49. **INSTALL FRONT DOOR SCUFF PLATE RH (for Double Cab) (See page IR-29)**
50. **INSTALL FRONT FLOOR FOOTREST (See page IR-1)**
51. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
52. **INSPECT SRS WARNING LIGHT**
    (See page RS-28)

DISPOSAL

HINT:
When scrapping a vehicle equipped with the SRS or disposing of a front passenger airbag assembly, always deploy the airbag first in accordance with the procedures described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of TOYOTA MOTOR SALES, U.S.A., INC.

CAUTION:

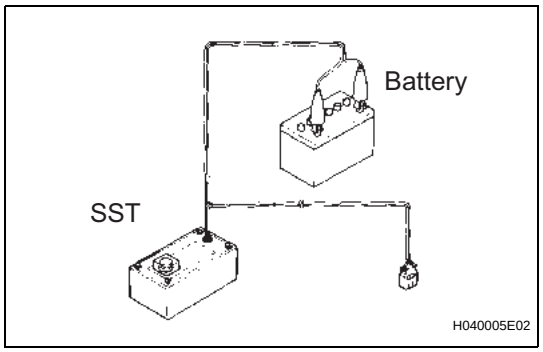
- **Never dispose of a front passenger airbag assembly which has an undeployed airbag.**
- **The airbag produces a loud exploding sound when it deploys, so perform the operation outdoors, where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying an 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 the deployed airbag.**
- **Always wash your hands with water after completing the operation.**



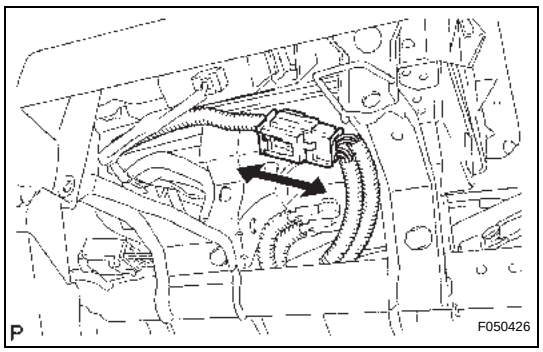
1. DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

HINT:
Have a battery as the power source to deploy the airbag.

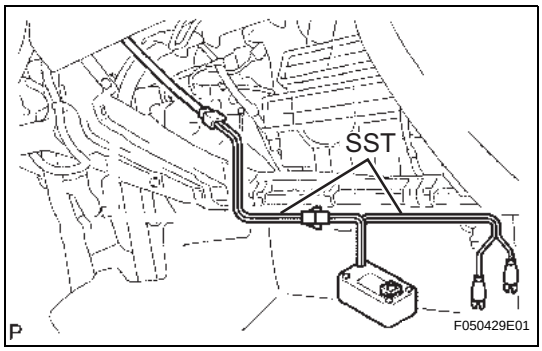
(a) Check functioning of SST (see step 1-(a) on page RS-559).

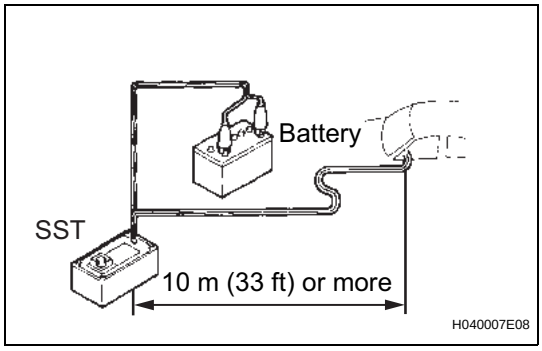


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(b) Disconnect the airbag connectors.
  (1) Remove the instrument panel under cover sub-assembly No.2.
  (2) Remove the glove compartment door assembly.
  NOTICE:
  When handling the airbag connector, take care not to damage the airbag wire harness.
  (3) Disconnect the airbag connectors.





(c) Install the SST.

(1) Connect the connector of SST to the front passenger airbag assembly connector.
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.

(2) Move SST to at least 10 m (33 ft) away from the front of the vehicle.

(3) Close all doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.

(4) Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the negative (-) terminal.

(d) Deploy the airbag.

(1) Check that no one is inside the vehicle, nor within a 10 m (33 ft) radius of the vehicle.

(2) Press the activation switch of SST and deploy the airbag.
HINT:
The airbag deploys as the LED of the SST activation switch comes on.

(e) 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.**
- **When moving a vehicle, which has a front passenger airbag assembly with a deployed airbag for scrapping, use gloves and safety glasses.**
- **Do not apply water, etc. to a front passenger airbag assembly with the deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:
When scrapping a vehicle, deploy the airbag and scrap the vehicle with the front passenger airbag assembly still installed.

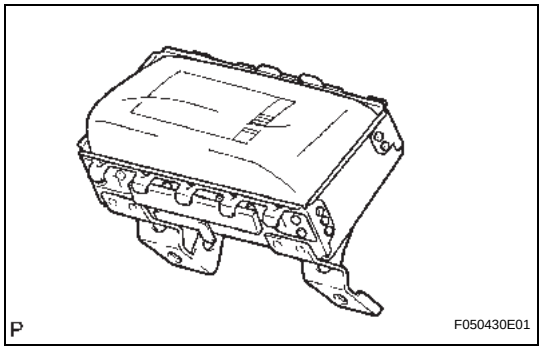
2. DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)

NOTICE:

- **When disposing of the front passenger airbag assembly only, never use the customers vehicle to deploy the airbag.**
- **Be sure to follow the procedures given below when deploying the airbag.**

HINT:

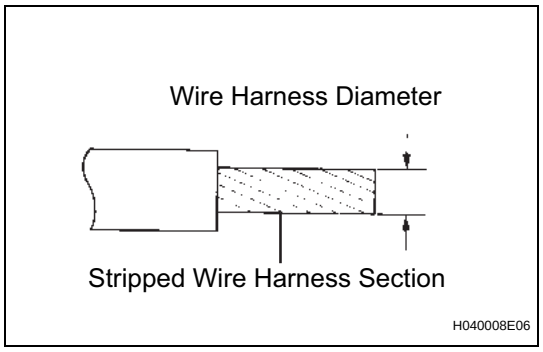
Prepare a battery as the power source to deploy the airbag.



(a) Remove the front passenger airbag assembly (see page RS-574).

CAUTION:

- **When removing the front passenger airbag assembly, work must be started 90 seconds after the ignition switch is turned to the LOCK position and the negative (-) terminal cable is disconnected from the battery.**
- **When placing the front passenger airbag assembly, keep the upper surface of the airbag deployment side facing upward.**



(b) Using a service-purpose wire harness for the vehicle, tie 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 a wire harness which is too thin or any other object is used to tie down the front passenger airbag assembly, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Always use a wire harness for vehicle use with the wire size of at least 1.25 mm^2 (0.0019 $in.^2$).

HINT:

To calculate the square of the stripped wire harness section:

Square:

3.14 x (Diameter)^2 divided by 4

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.)

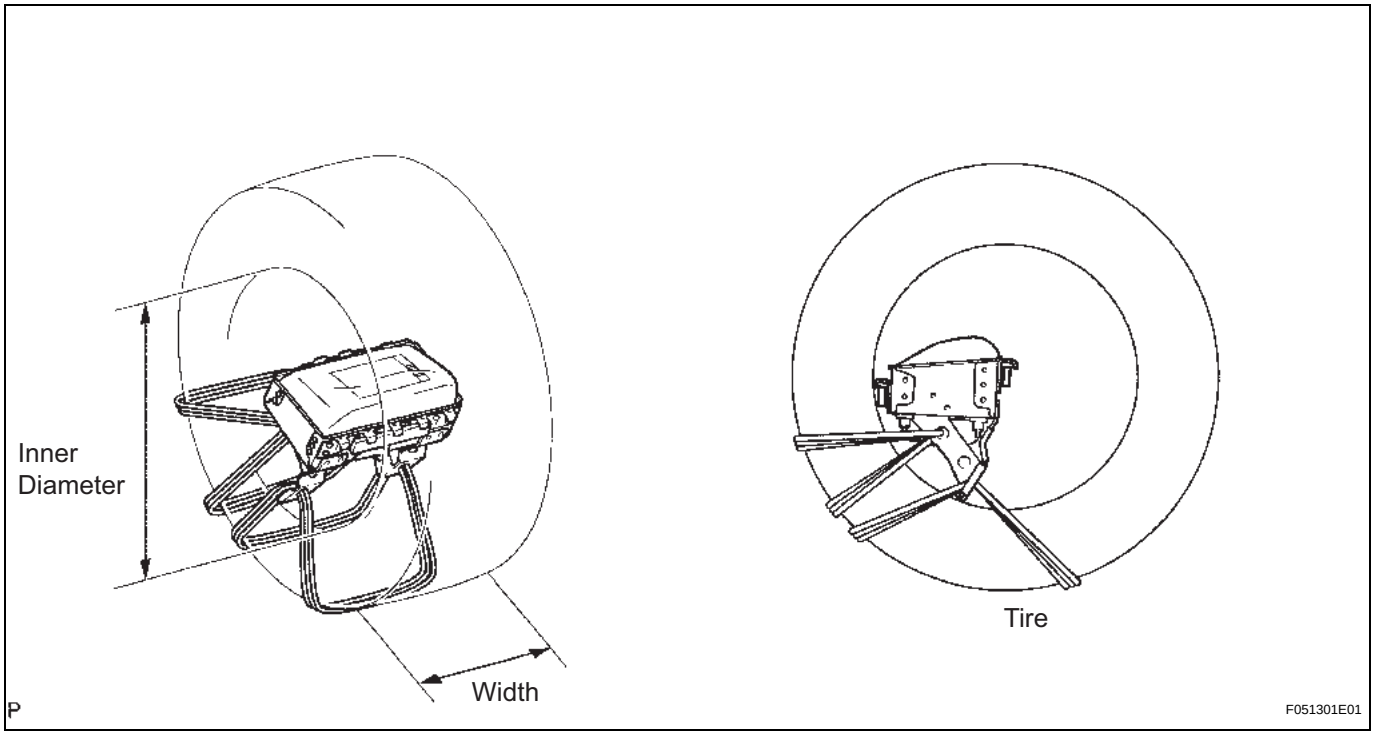
RS

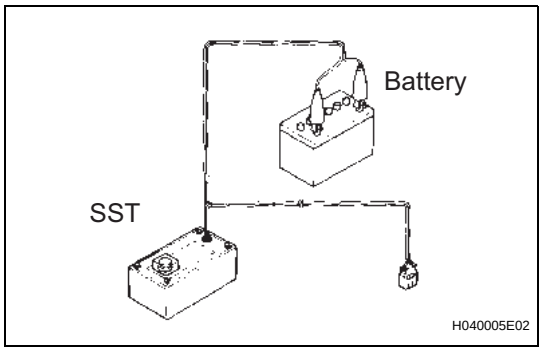
CAUTION:

- **Make sure that the wire harness is tight. It is very dangerous if it is loose, as this could cause the front passenger airbag assembly to come free due to the shock when the airbag is deployed.**
- **Always tie down the front passenger airbag assembly with the airbag deployment side facing inside.**

NOTICE:

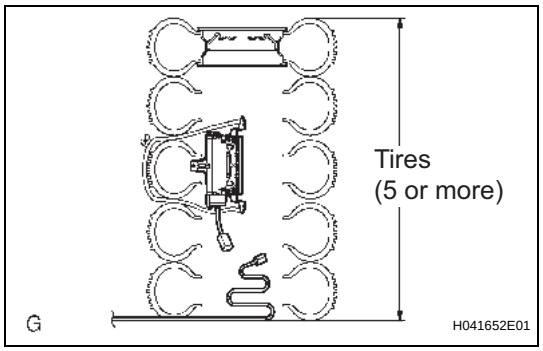
The tire will be marked by the airbag deployment, so use spare tires.



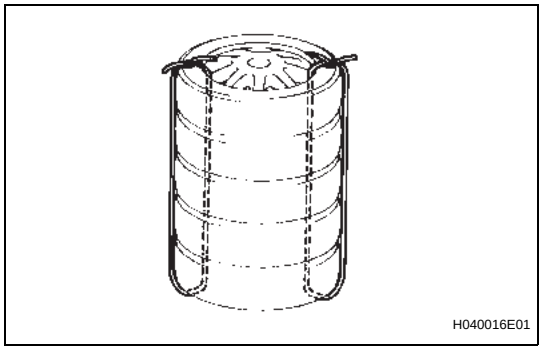


(c) Check the function of SST (see step 1-(a) on page RS-559).

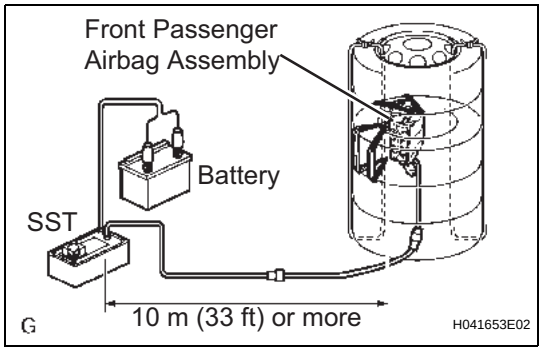
RS



(d) Place tires.
(1) Place at least 2 tires under the tire to which the front passenger airbag assembly is tied.
(2) Place at least 2 tires over the tire to which the front passenger airbag assembly is tied. The top tire should have the wheel installed.

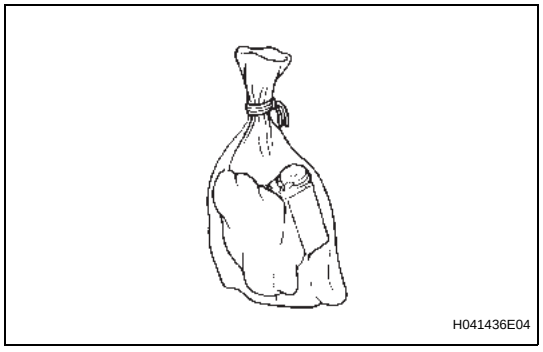


(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. It is very dangerous if it is loose, as this could cause the tires to come free due to the shock when the airbag is deployed.
HINT:
Place the SST connector and wire harness inside tires. Secure at least 1 m (3 ft) of slack for the wire harness.



(e) Install SST.
Connect the connectors of the SST to the front passenger airbag assembly connector.
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.

(f) Deploy the airbag.
(1) Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire to which the front passenger airbag assembly is tied.
(3) Press the activation switch of SST and deploy the airbag.
HINT:
The airbag deploys as the LED of the SST activation switch comes on.



(g) Dispose of the front passenger airbag assembly.
CAUTION:
- **The front passenger airbag assembly becomes 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 the deployed airbag.**

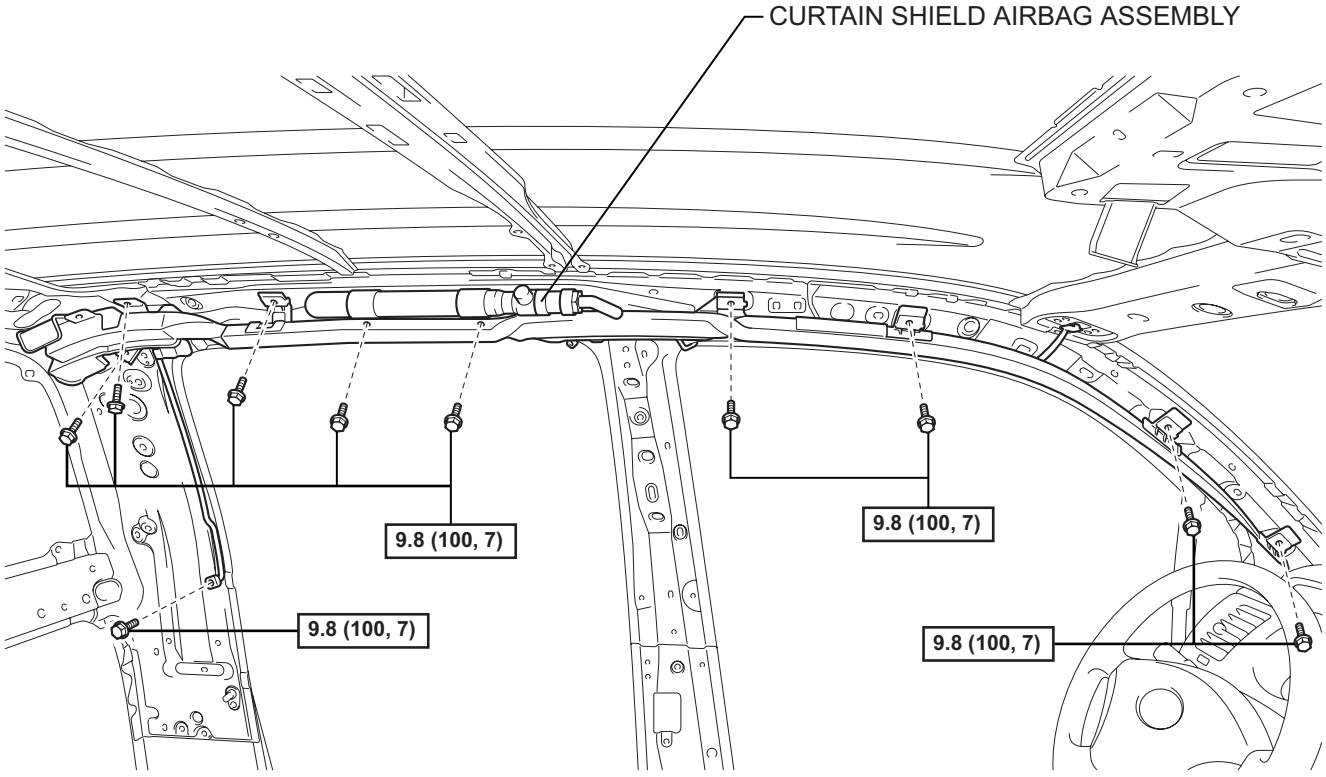
RS

- **Always wash your hands with water after completing the operation.**

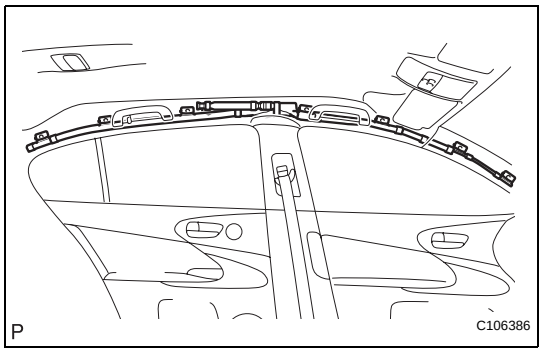
(1) Remove the front passenger airbag assembly from the tire.
(2) Place the front passenger airbag assembly in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts.

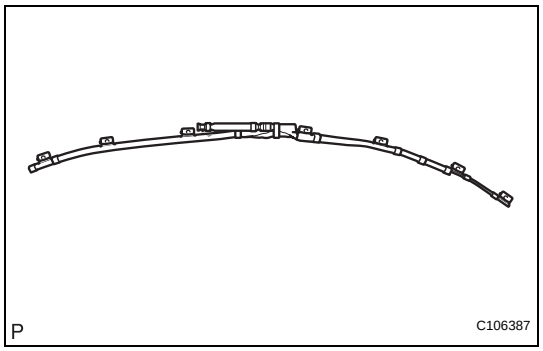
CURTAIN SHIELD AIRBAG ASSEMBLY

COMPONENTS



ON-VEHICLE INSPECTION





1. INSPECT CURTAIN SHIELD AIRBAG ASSEMBLY (for Vehicle not Involved in Collision)

(a) Perform a diagnostic system check (see page RS-37).

(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 (for Vehicle Involved in Collision and Airbag not Deployed)

(a) Perform a diagnostic system check (see page RS-37).

(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:
For removal and installation procedures of the curtain shield airbag assembly. Be sure to follow the correct procedure.

RS

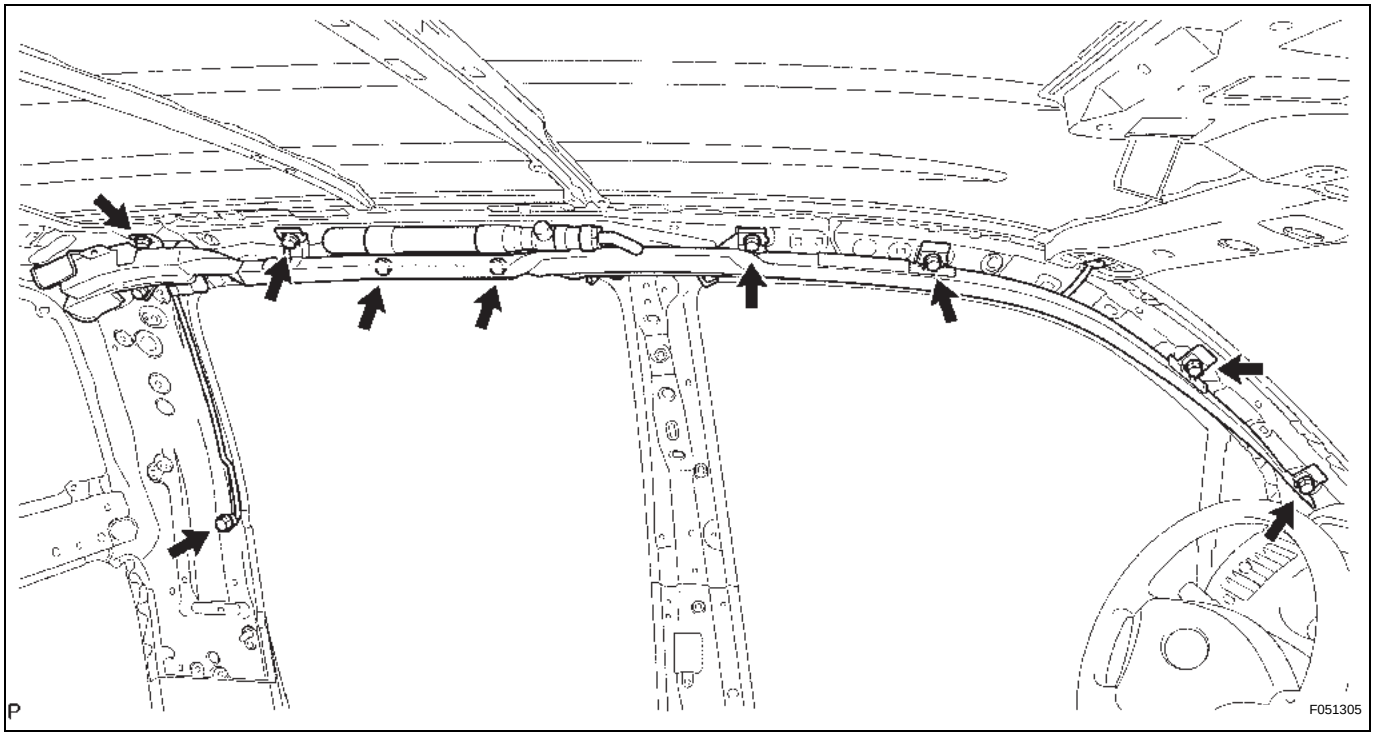
REMOVAL

1. **PRECAUTION**

2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.

3. **REMOVE ROOF HEADLINING ASSEMBLY**
   HINT:
   Double Cab (See page IR-11).

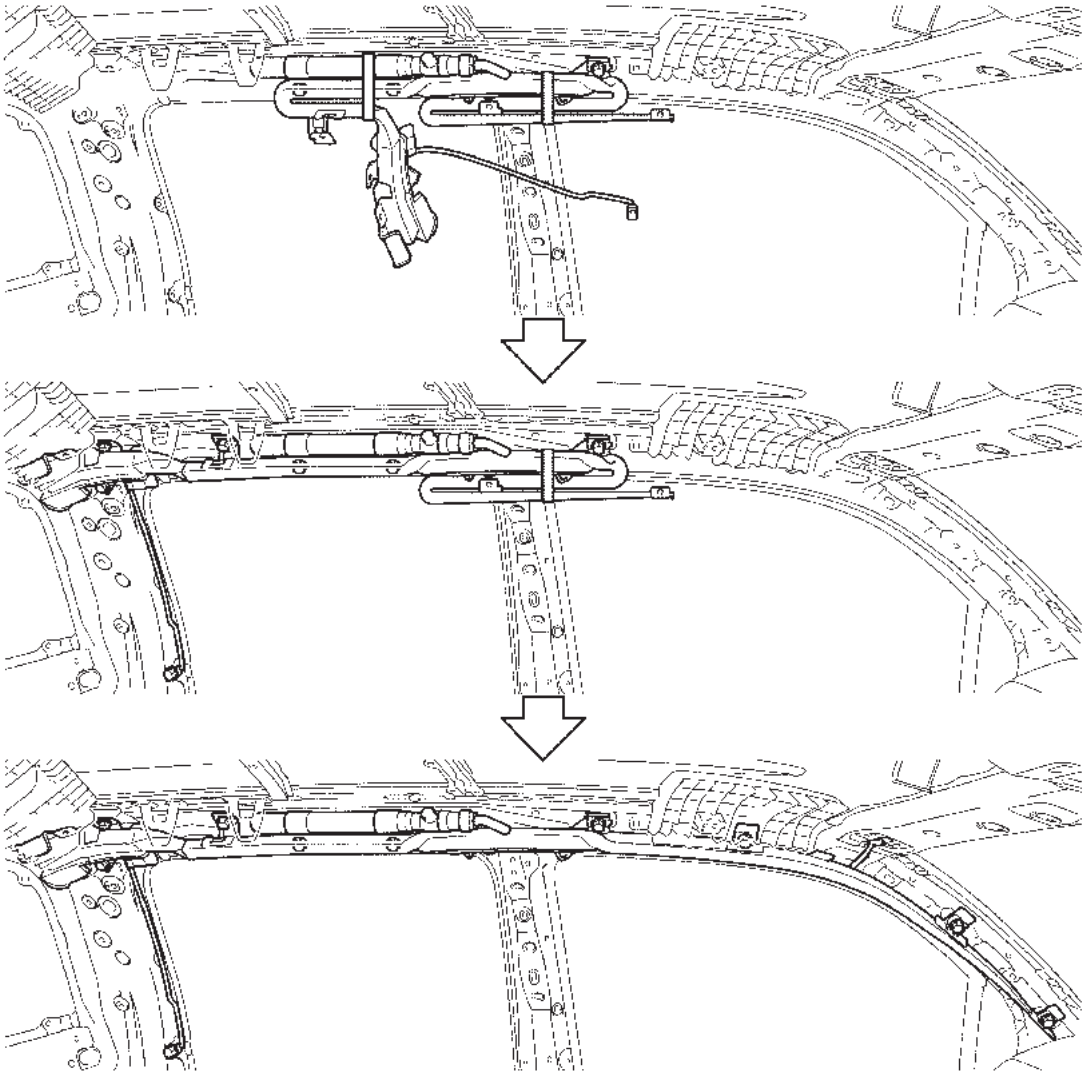
4. **REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY**
   (a) Disconnect the connector from the curtain shield airbag assembly .
   NOTICE:
   When handling the airbag connector, take care not to damage the airbag wire harness.
   (b) Remove the 10 bolts, clip and the curtain shield airbag assembly in the order show in the illustration.



INSTALLATION

1. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY

(a) Install the curtain shield assembly with the 10 bolts and clip in the order shown in the illustration.



F051334E01

Torque: 9.8 N*m (100 kgf*cm, 7 ft.*lbf)

NOTICE:

Do not twist the curtain shield airbag assembly.

RS

(b) Connect the connector to the curtain shield airbag assembly.
NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

2. **INSTALL ROOF HEADLINING ASSEMBLY**
HINT:
Double Cab (See page IR-21)

3. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

4. **INSPECT SRS WARNING LIGHT**
(See page RS-28)

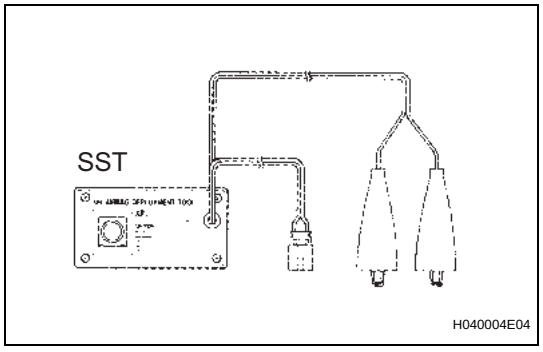
DISPOSAL

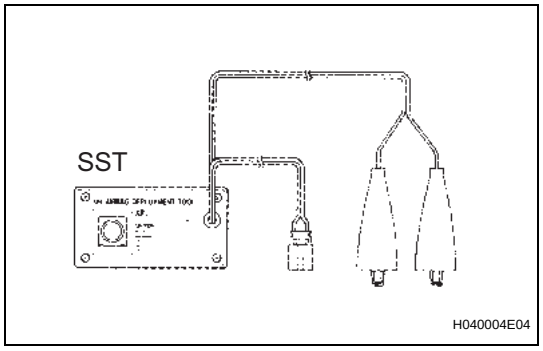
HINT:

- Use the same procedures for the RH and sides.
- When scrapping a vehicle equipped with the SRS or disposing of the front seat 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 create 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.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a curtain shield airbag assembly with a deployed airbag.**





1. DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Have a battery as the power source to deploy the airbag.

(a) Check the function of the SST (see step 1-(a) on page RS-559).

(b) Precaution (see page RS-1).

(c) Disconnect the cable from the battery negative terminal.

CAUTION:

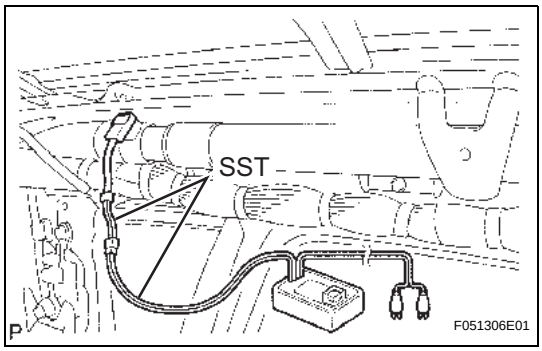
After disconnecting cable from the battery negative terminal, wait for at least 90 seconds before starting the operation.

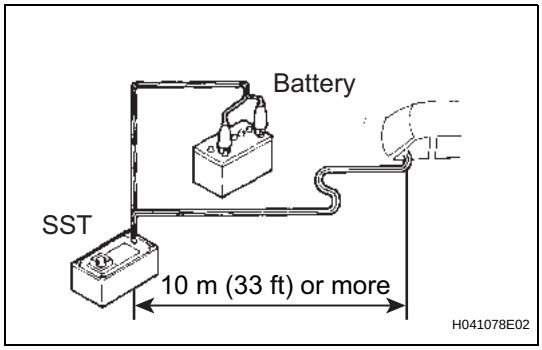
(d) Remove the roof headlining assembly.

HINT:

Double Cab (See page IR-11).

RS





(e) Install 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.

(2) After connecting SSTs 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 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 SST to the battery positive (+) terminal and the black clip of SST to 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 activation switch of the SST and deploy the airbag.

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.**
- **When deploying the airbag, make sure that no one is near the vehicle.**
- **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.

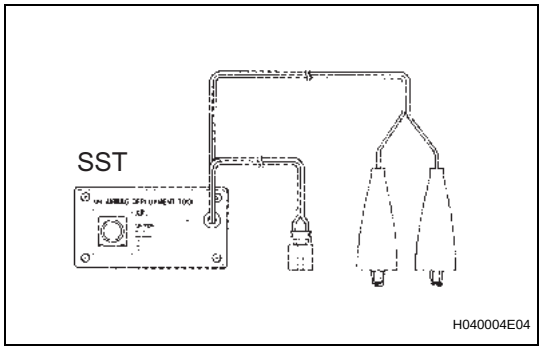
2. DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

- **When disposing of the curtain shield airbag assembly, never use the customers vehicle to deploy the airbag.**
- **Be sure to follow the procedures described below when deploying the airbag.**

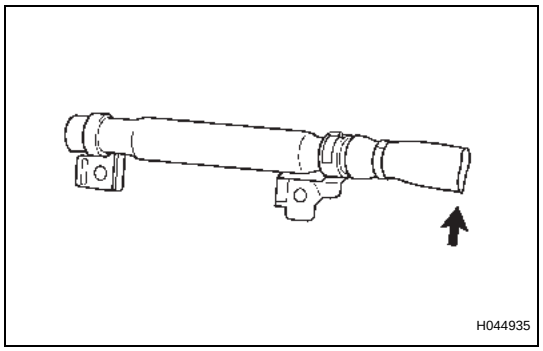
HINT:

Prepare a battery as the power source to deploy the airbag.

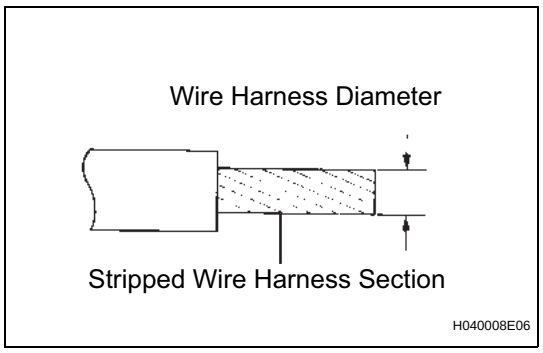


(a) Check the function of the SST (see step 1-(a) on page RS-559).

(b) Remove the curtain shield airbag assembly (see page RS-587).



(c) Cut off the deployment section of the curtain shield airbag assembly.



(d) Using a service-purpose wire harness for the vehicle, tie the curtain shield airbag assembly to the tire.

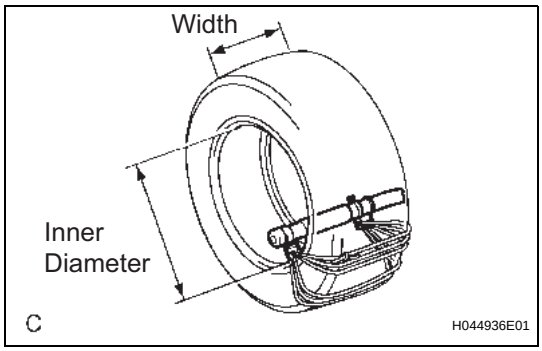
Wire harness:

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 any other 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 the wire size of at least 1.25 mm^2 (0.0019 $in.^2$).

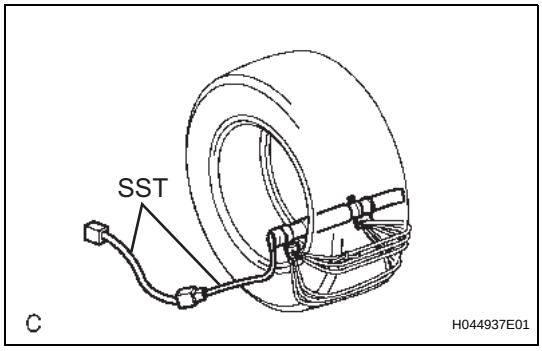
RS



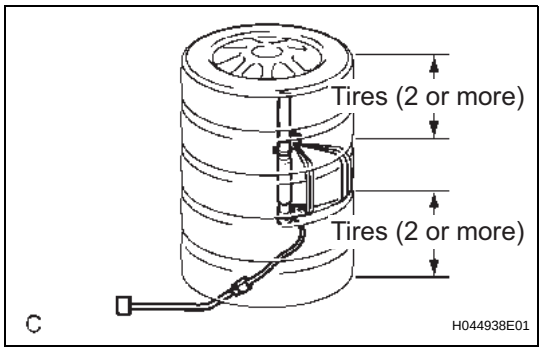
HINT:
To calculate the area of the stripped wire harness section:
Area:

3.14 x (Diameter)^2 divided by 4

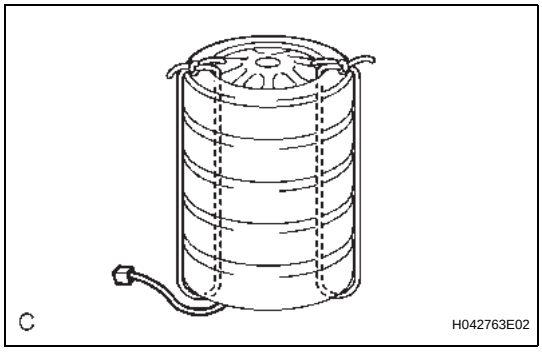
(1) Position the curtain shield airbag assembly inside the tire as shown in the illustration.
Tire size:
Must exceed the following dimensions:
Width: 185 mm (7.28 in.)
Inner diameter: 360 mm (14.17 in.)
CAUTION:
Make sure that the wire harness is tight. If the wire harness is loose, the curtain shield 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 spare tires.



(e) Install SST.
(1) After connecting SST below to each other, connect them to the curtain shield airbag assembly.
SST 09082-00802 (09082-10801, 09082-20801)

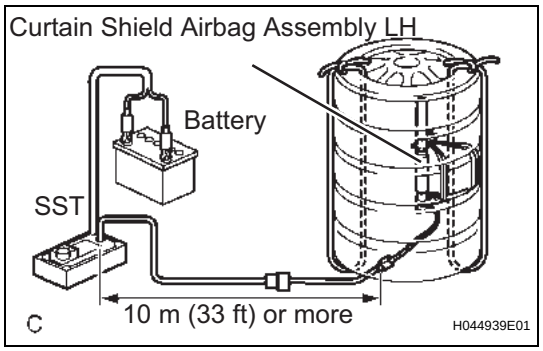


(f) Place the tires.
CAUTION:
Do not place the deployment side of the curtain shield airbag assembly facing toward the ground.
(1) Place at least 2 tires under the tire which the curtain shield airbag assembly is tied to.
(2) Place at least 2 tires over the tire which the curtain shield airbag assembly 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.



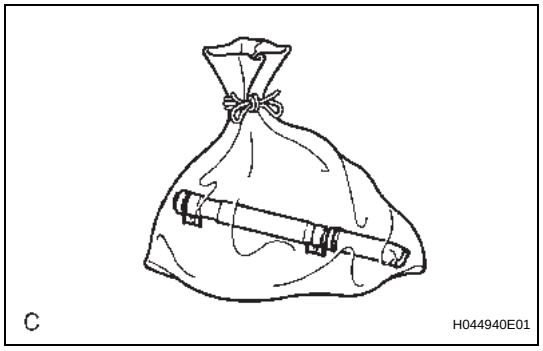
(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. A loose wire harness may cause the tires to come free due to the shock when the airbag is deployed.

RS



(g) Install the SST.
Connect the connector of SST.
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.

(h) Deploy the airbag.
(1) Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire to which the curtain shield airbag assembly is tied.
(3) Press the activation switch of SST 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.

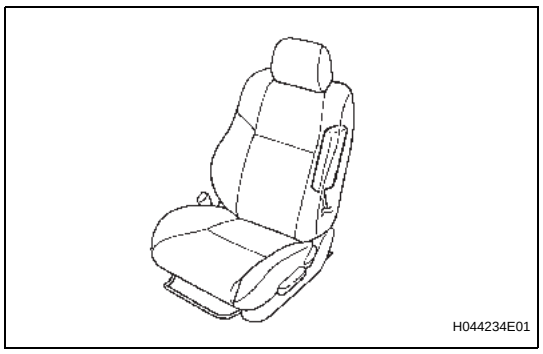


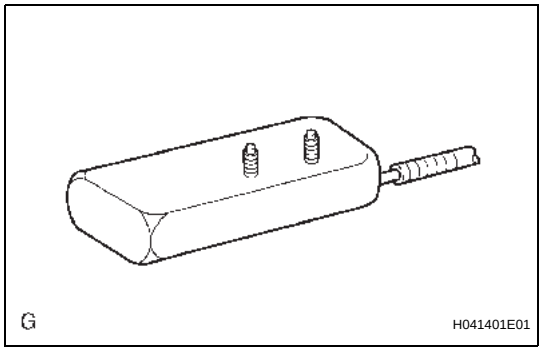
(i) Dispose of the curtain shield airbag assembly.
CAUTION:
- **The curtain shield airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag assembly with the deployed airbag.**
- **Do not apply water etc. to a curtain shield airbag assembly with the 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 the end tightly and dispose of it in the same way as other general parts.

FRONT SEAT SIDE AIRBAG ASSEMBLY

ON-VEHICLE INSPECTION





1. **FRONT SEAT SIDE AIRBAG ASSEMBLY (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (see page RS-37).
   (b) With the front seat 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 airbag assembly.

2. **FRONT SEAT SIDE AIRBAG ASSEMBLY (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (see page RS-37).
   (b) With the front seat airbag assembly removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front seat airbag assembly with a new one:
   - Cuts, minute cracks or marked discoloration on the front seat airbag assembly.
   - Cracks or other damage to the wire harness or connector.

   CAUTION:
   For removal and installation procedures of the front seat airbag assembly. Be sure to follow the correct procedure.

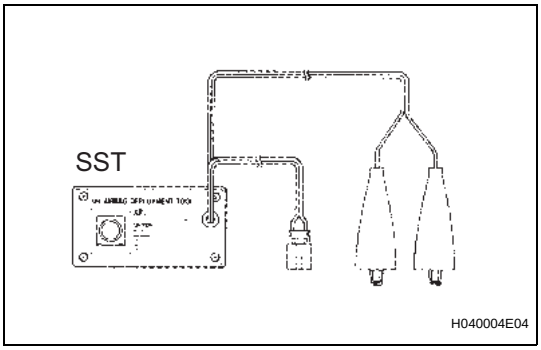
DISPOSAL

HINT:

- When scrapping a vehicle equipped with the SRS or disposing of the front seat side airbag assembly, be sure to deploy the airbag 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.
- When disposing of a front seat side airbag assembly with an airbag deployed in a collision, follow the procedure in step 1-(e) in DISPOSAL.

CAUTION:

- **Never dispose of a front seat side airbag assembly which has an undeployed airbag.**
- **The airbag produces a loud exploding sound when it deploys, so perform the operation outdoors, where it will not create 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 an airbag, perform the operation at least 10 m (33 ft) away from the 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.**
- **Always wash your hands with water after completing the operation.**
- **Do not apply water, etc. to a front seat side airbag assembly with the deployed airbag.**

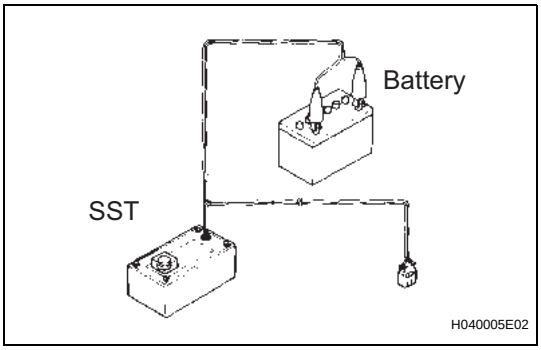


1. DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN SCRAPPING VEHICLE DEPLOYMENT METHOD)

HINT:

Have a battery as the power source to deploy the airbag.

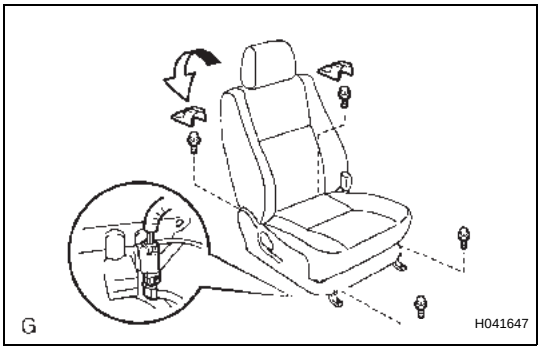
(a) Check the function of SST (see step 1-(a) on page RS-559).



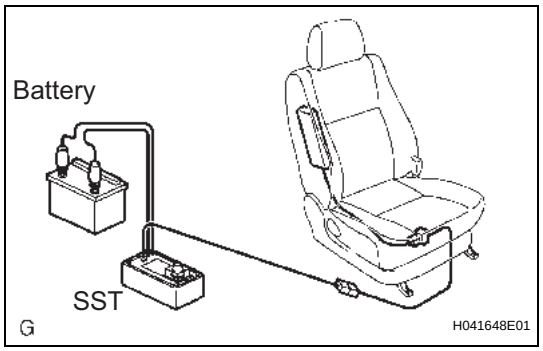
(b) Disconnect the front seat side airbag assembly connector.

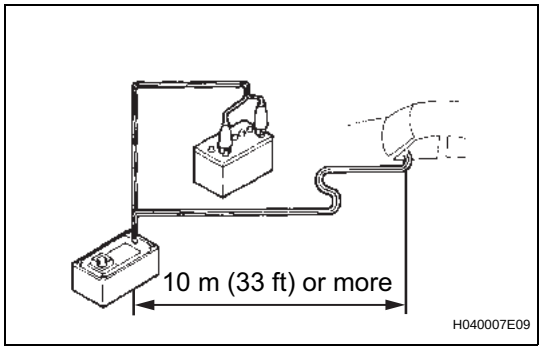
NOTICE:

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



RS





(c) Set SST.
(1) Connect the connectors of 2 SSTs 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.

(2) Move SST at least 10 m (33 ft) away from the front of the vehicle.
(3) Close all the doors and windows of the vehicle.
NOTICE:
Take care not to damage the SST wire harness.
(4) Connect the SST red clip to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

(d) 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.
HINT:
The airbag deploys simultaneously when the LED of the SST activation switch lights up.

(e) 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 a the deployed airbag.**
- **Do not apply water, etc. to a front seat side airbag assembly with the deployed airbag.**
- **Always wash your hands with water after completing the operation.**

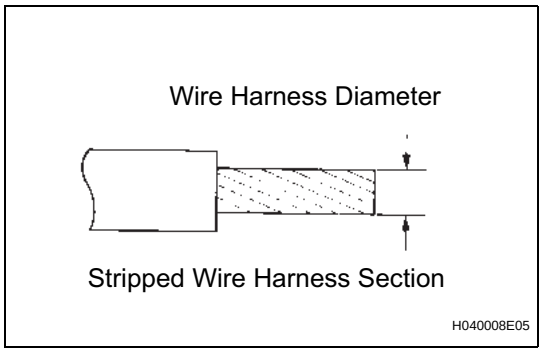
HINT:
When scrapping a vehicle, deploy the airbag and scrap the vehicle with the front seat side airbag assembly installed.

2. DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN DISPOSING OF AIRBAG ASSEMBLY DEPLOYMENT METHOD)
NOTICE:
- **When disposing of the front seat side airbag assembly only, never use the customers vehicle to deploy the airbag.**
- **Be sure to follow the procedure given below when deploying the airbag.**

RS

HINT:
Prepare a battery as the power source to deploy the airbag.

(a) Remove the front seat side airbag assembly.
  (1) Remove the 2 nuts and front seat side airbag assembly from the seatback assembly.
  CAUTION:
  Place the front seat side airbag assembly with the airbag deployment side facing upward.



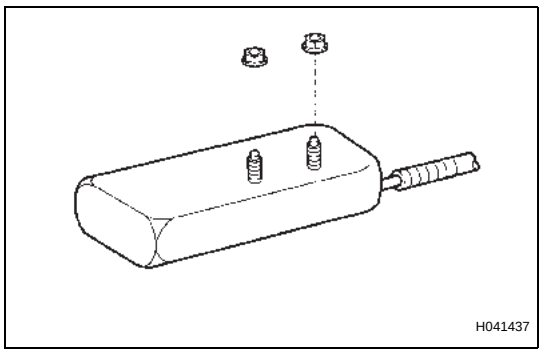
(b) Using a service-purpose wire harness, tie down the front seat side airbag assembly.
Wire harness:

Stripped wire harness section 1.25 mm^2 or more (0.0019 in^2 or more)

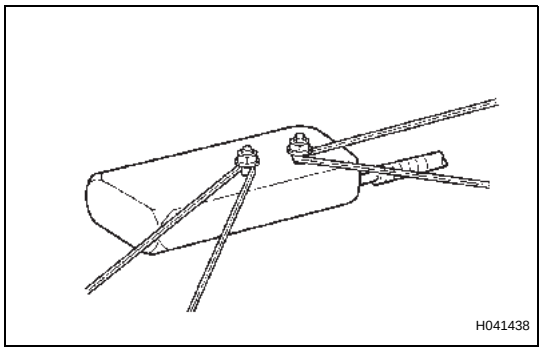
CAUTION:
If the wire harness is too thin or any other object is used to tie down the front seat side airbag assembly, it may be snapped by the shock when the airbag is deployed. This is highly dangerous. Be sure to use a wire harness for vehicle use with the wire size of at least 1.25 mm^2 (0.0019 in^2).

HINT:
To calculate the area of the stripped wire harness section :
Area:

3.14 x $(Diameter)^2$ divided by 4

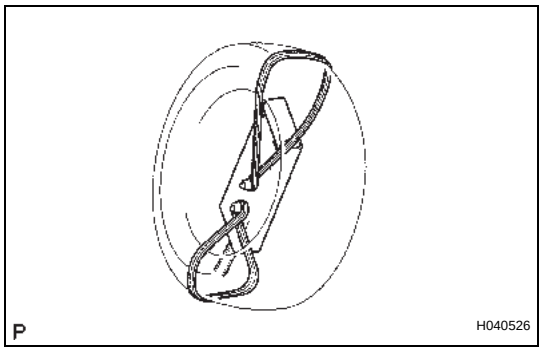


(1) Install the 2 nuts in the front seat side airbag assembly.



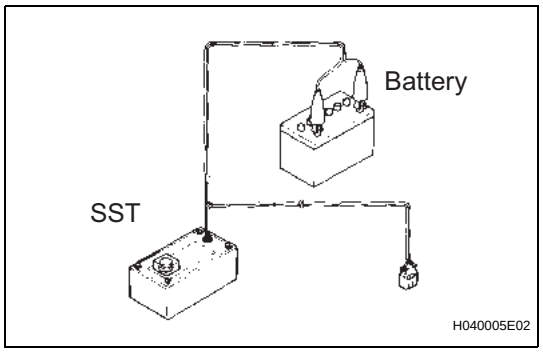
(2) Wind the wire harness around the stud bolts of the front seat side airbag assembly, as shown in the illustration.

RS

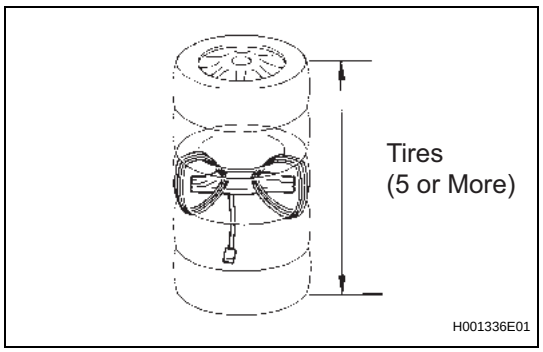


(3) Position the front seat side airbag assembly inside the tire with the airbag deployment side facing inside.
Tire size:
Must exceed the following dimensions:
Width: 185 mm (7.28 in.)
Inner diameter: 360 mm (14.17 in.)
CAUTION:
- **Make sure that the wire harness is tight. It is very dangerous if it is loose, as this could cause the front seat side airbag assembly to come free due to the shock when the airbag is deployed.**
- **Always tie down the front seat side airbag assembly with the airbag deployment side facing inside.**

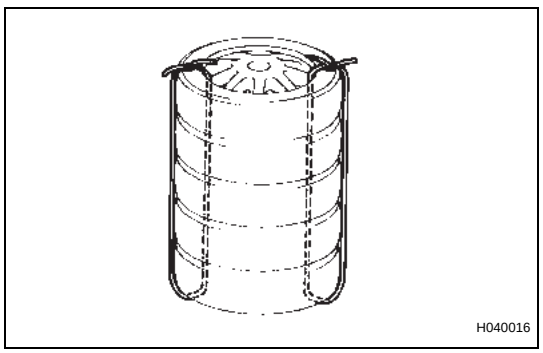
NOTICE:
The tires will be marked by the airbag deployment, so use spare tires.



(c) Check the function of SST (see step 1-(a) on page RS-559).

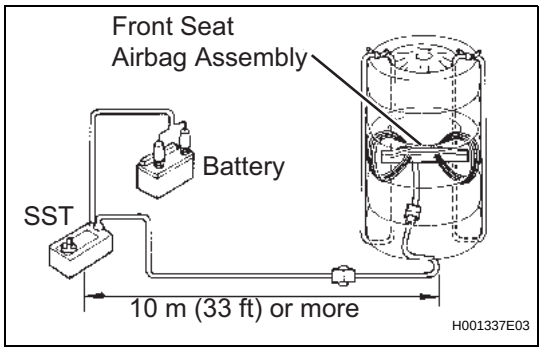


(d) Place tires.
(1) Place at least 2 tires under the tire to which the front seat side airbag assembly is tied.
(2) Place at least 2 tires over the tire to which the front seat side airbag assembly is tied. The top tire should have the wheel installed.



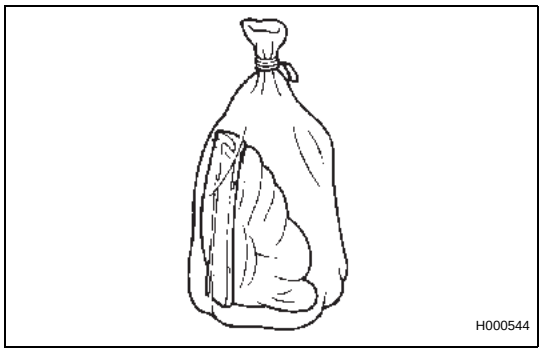
(3) Tie the tires together with 2 wire harnesses.
CAUTION:
Make sure that the wire harness is tight. It is very dangerous if it is loose, as this could cause the tires to come free due to the shock when the airbag is deployed.
HINT:
Place the SST connector and wire harness inside the tires. Secure at least 1 m (3 ft) of slack for the wire harness.

RS



(e) Set SST.
Connect the connectors of 2 SSTs to the front seat side airbag assembly connector.
NOTICE:
To avoid damaging the SST connector and wire harness, do not lock the secondary lock of the twin lock.

(f) Deploy the airbag.
(1) Connect the red clip of SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.
(2) Check that no one is within a 10 m (33 ft) radius of the tire to which the front seat side airbag assembly is tied.
(3) Press the SST activation switch and deploy the airbag.
HINT:
The airbag deploys simultaneously when the LED of the SST activation switch lights up.

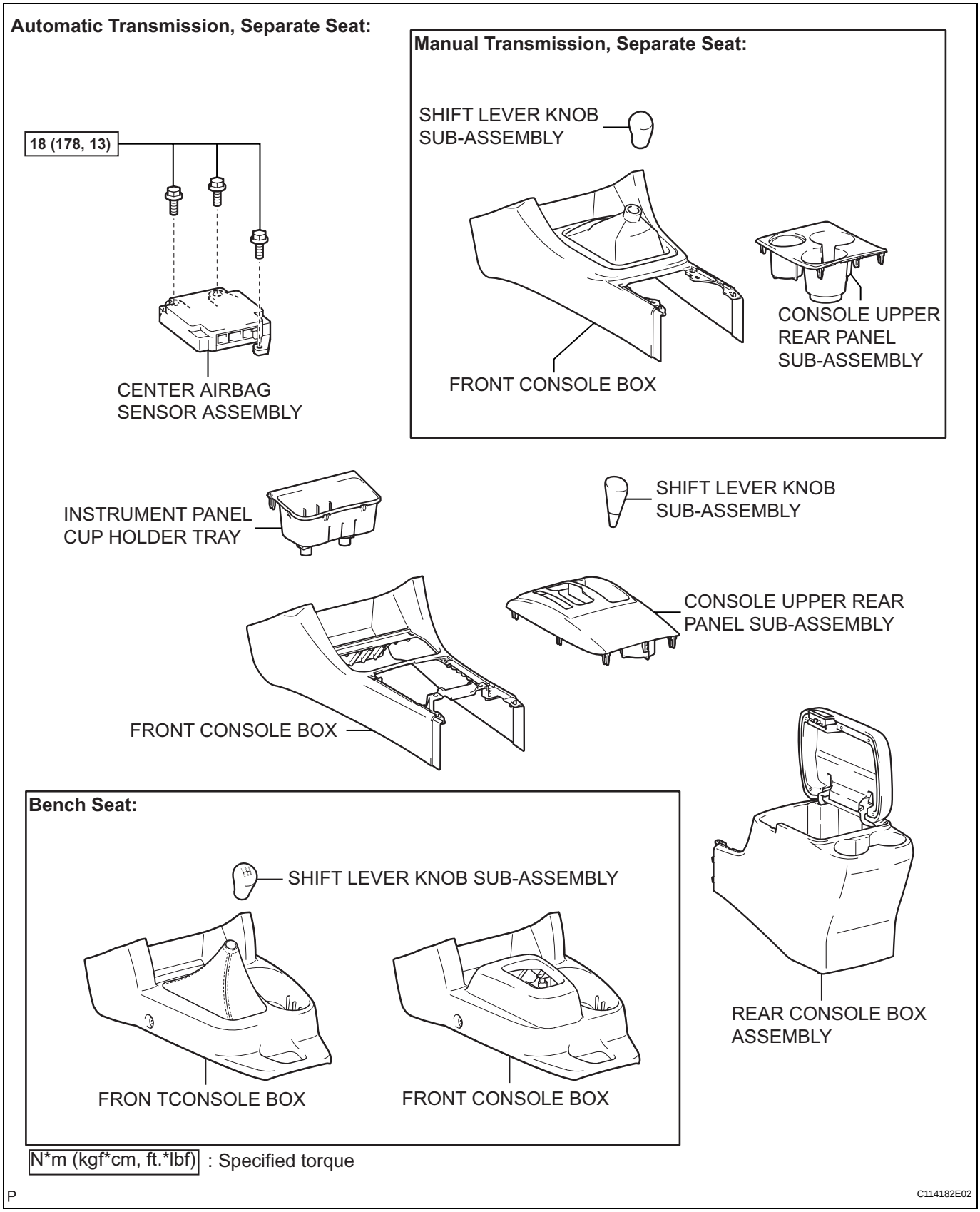


(g) Dispose of the front seat side airbag assembly.
CAUTION:
- **The front seat side airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag assembly with the deployed airbag.**
- **Do not apply water etc. to a front seat side airbag assembly with the deployed airbag.**
- **Always wash your hands with water after completing the operation.**

(1) Remove the front seat side airbag assembly from the tire.
(2) Place the front seat side airbag assembly in a vinyl bag, tie the end tightly and dispose of it in the same way as other general parts.

CENTER AIRBAG SENSOR ASSEMBLY

COMPONENTS



RS

ON-VEHICLE INSPECTION

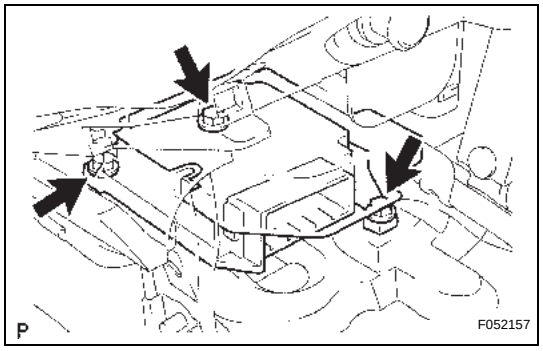
1. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (see page RS-37).

2. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (see page RS-37).

3. **INSPECT CENTER AIRBAG SENSOR ASSEMBLY (for Vehicle Involved in Collision)**
   (a) Replace the front airbag sensor.
   CAUTION:
   For removal and installation procedures of the front airbag sensor. Be sure to follow the correct procedure.
   HINT:
   The front airbag sensor should be replaced after any of the airbags has deployed, as it has been subjected to the impact.

REMOVAL

1. **PRECAUTION**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Automatic Transmission on Separate Seat Type) (See page IP-9)**
4. **REMOVE CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Manual Transmission on Separate Seat Type) (See page IP-9)**
5. **REMOVE REAR CONSOLE BOX ASSEMBLY (for Separate Seat Type) (See page IP-10)**
6. **REMOVE INSTRUMENT PANEL CUP HOLDER TRAY (for Automatic Transmission on Separate Seat Type) (See page IP-10)**
7. **REMOVE FRONT CONSOLE BOX (for Automatic Transmission on Separate Seat Type) (See page IP-10)**
8. **REMOVE FRONT CONSOLE BOX (for Manual Transmission on Separate Seat Type) (See page IP-11)**
9. **REMOVE FRONT CONSOLE BOX (for Automatic Transmission on Bench Seat Type) (See page IP-11)**
10. **REMOVE FRONT CONSOLE BOX (for Manual Transmission on Bench Seat Type) (See page IP-11)**
11. **REMOVE CENTER AIRBAG SENSOR ASSEMBLY**
    (a) Disconnect the holder (with connectors) from the center airbag sensor assembly.
    (b) Remove the 3 bolts and the center airbag sensor assembly.



RS

INSTALLATION

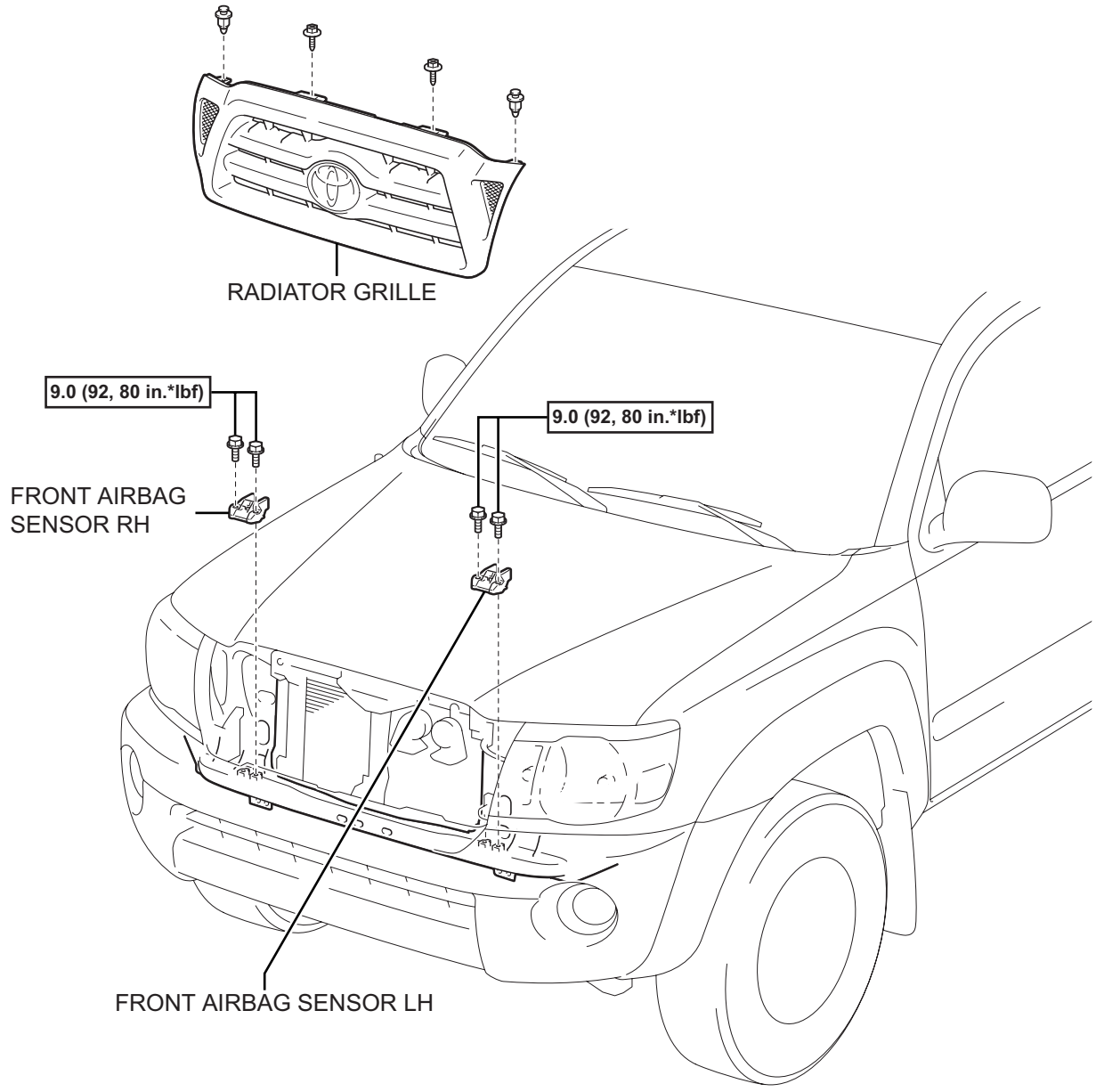
1. **INSTALL CENTER AIRBAG SENSOR ASSEMBLY**
   (a) Check that the ignition switch is turned to OFF.
   (b) Check that the cable is disconnected from the battery negative terminal.
   CAUTION:
   After removing the terminal, wait for at least 90 seconds before starting the operation.
   (c) Provisionally install the air bag sensor assembly center with the 3 bolts.
   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, make sure that the SRS wiring dose not interfere with any other parts and that it is not pinched between other parts.**

   (d) Tighten the 3 bolts to the specified torque.
   Torque: 17.5 N*m (179 kgf*cm, 13 ft.*lbf)
   (e) Check that there is no slack in the installation parts of the center airbag sensor assembly.
   (f) Connect the holder (with connectors) to the center airbag sensor assembly.
   (g) Check that the waterproof sheet is properly set.
2. **INSTALL FRONT CONSOLE BOX (for Manual Transmission on Bench Seat Type) (See page IP-22)**
3. **INSTALL FRONT CONSOLE BOX (for Automatic Transmission on Bench Seat Type) (See page IP-23)**
4. **INSTALL FRONT CONSOLE BOX (for Manual Transmission on Separate Seat Type) (See page IP-23)**
5. **INSTALL FRONT CONSOLE BOX (for Automatic Transmission on Separate Seat Type) (See page IP-24)**
6. **INSTALL INSTRUMENT PANEL CUP HOLDER TRAY (for Automatic Transmission on Separate Seat Type) (See page IP-24)**
7. **INSTALL REAR CONSOLE BOX ASSEMBLY (for Separate Seat Type) (See page IP-24)**
8. **INSTALL CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Manual Transmission on Separate Seat Type) (See page IP-25)**
9. **INSTALL CONSOLE UPPER REAR PANEL SUB-ASSEMBLY (for Automatic Transmission on Separate Seat Type) (See page IP-25)**
10. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

11. INSPECT SRS WARNING LIGHT
(See page RS-28)

FRONT AIRBAG SENSOR

COMPONENTS



N*m (kgf*cm, ft.*lbf) : Specified torque

P

C114183E02

RS

ON-VEHICLE INSPECTION

1. **INSPECT FRONT AIRBAG SENSOR (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (see page RS-37).

2. **INSPECT FRONT AIRBAG SENSOR (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (see page RS-37).
   (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 any of the front airbag sensor have defects as mentioned below, replace it 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.

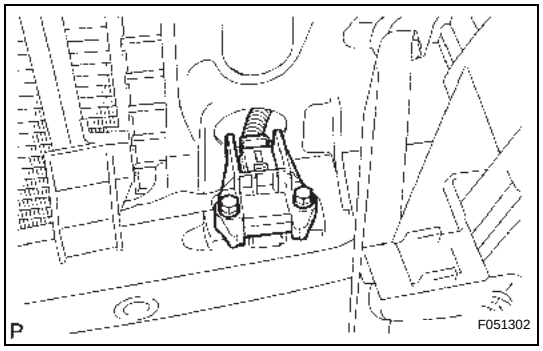
   CAUTION:
   For removal and installation procedures of the front airbag sensor. Be sure to follow the correct procedure.

3. **INSPECT FRONT AIRBAG SENSOR (for Vehicle Involved in Collision)**
   (a) Replace the front airbag sensor.
   CAUTION:
   For removal and installation procedures of the front airbag sensor. Be sure to follow the correct procedure.
   HINT:
   The front airbag sensor on the impacted side should be replaced after the steering pad, front passenger airbag assembly, driver side knee airbag assembly or front passenger side knee airbag assembly has deployed.

REMOVAL

HINT:
Use the same procedures for the RH side and LH side.

1. **PRECAUTION**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE RADIATOR GRILLE (See page ET-4)**
4. **REMOVE FRONT AIRBAG SENSOR**
   (a) Remove the 2 bolts and front airbag sensor.
   (b) Disconnect the connector from the sensor.



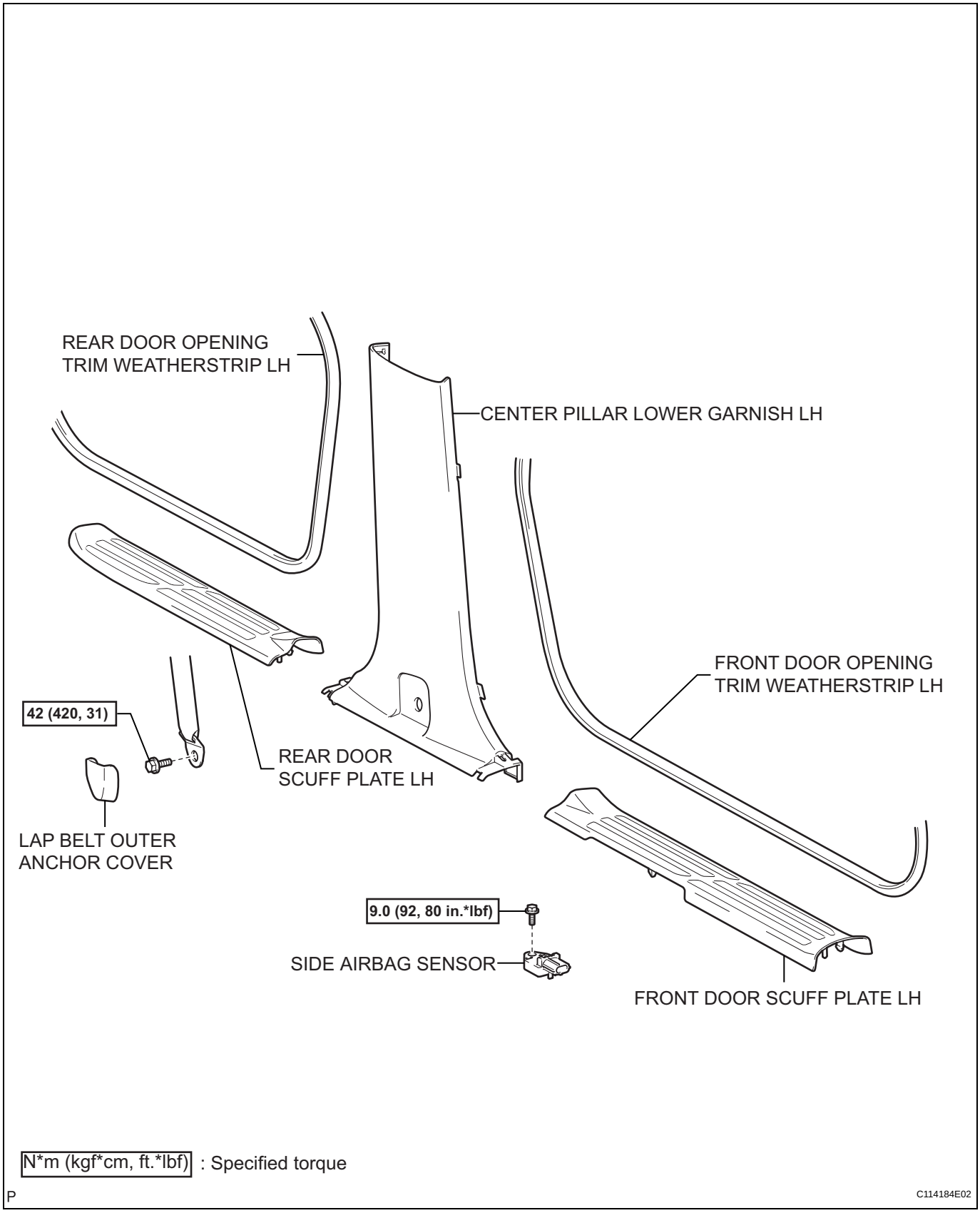
INSTALLATION

HINT:
Use the same procedures for the RH side and LH side.

1. **INSTALL FRONT AIRBAG SENSOR**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the battery negative (-) terminal.
   CAUTION:
   After disconnecting cable from the terminal, wait for at least 90 seconds before starting the operation.
   (c) Check that there is no slack in the installation parts of the front airbag sensor.
   (d) Connect the connector to the front airbag sensor.
   (e) Install the front airbag sensor with the bolt.
   Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
   NOTICE:
   - **If the front airbag sensor has been dropped, or there are any cracks, dents or other defects in the case or connector, replace it with a new one.**
   - **When installing the front airbag sensor, make sure that the SRS wiring does not interfere with any other parts and that it is not pinched between other parts.**
2. **INSTALL RADIATOR GRILLE (See page ET-11)**
3. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
   Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
4. **INSPECT SRS WARNING LIGHT**
   (See page RS-28)

SIDE AIRBAG SENSOR

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **INSPECT SIDE AIRBAG SENSOR (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (see page RS-37).

2. **INSPECT SIDE AIRBAG SENSOR (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (see page RS-37).
   (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.

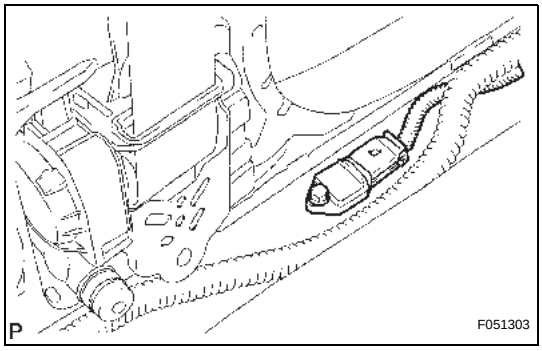
   CAUTION:
   For removal and installation procedures of the side airbag sensor. Be sure to follow the correct procedure.

3. **INSPECT SIDE AIRBAG SENSOR (for Vehicle Involved in Collision)**
   (a) Replace the side airbag sensor.
   CAUTION:
   For removal and installation procedures of the side airbag sensor. Be sure to follow the correct procedure.
   HINT:
   The side airbag sensor on the impacted side should be replaced after the front seat airbag assembly and curtain shield airbag assembly have deployed.

REMOVAL

HINT:
Use the same procedures for the RH side and LH side.

1. **PRECAUTION**
   (See page RS-1)
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE FRONT DOOR SCUFF PLATE LH (See page IR-12)**
4. **REMOVE REAR DOOR SCUFF PLATE LH (See page IR-13)**
5. **REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-13)**
6. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-13)**
7. **REMOVE LAP BELT OUTER ANCHOR COVER (See page IR-15)**
8. **REMOVE CENTER PILLAR LOWER GARNISH LH (See page IR-15)**
9. **REMOVE SIDE AIRBAG SENSOR**
   (a) Remove the bolt and the side airbag sensor.
   (b) Disconnect the connector from the side airbag sensor.



RS

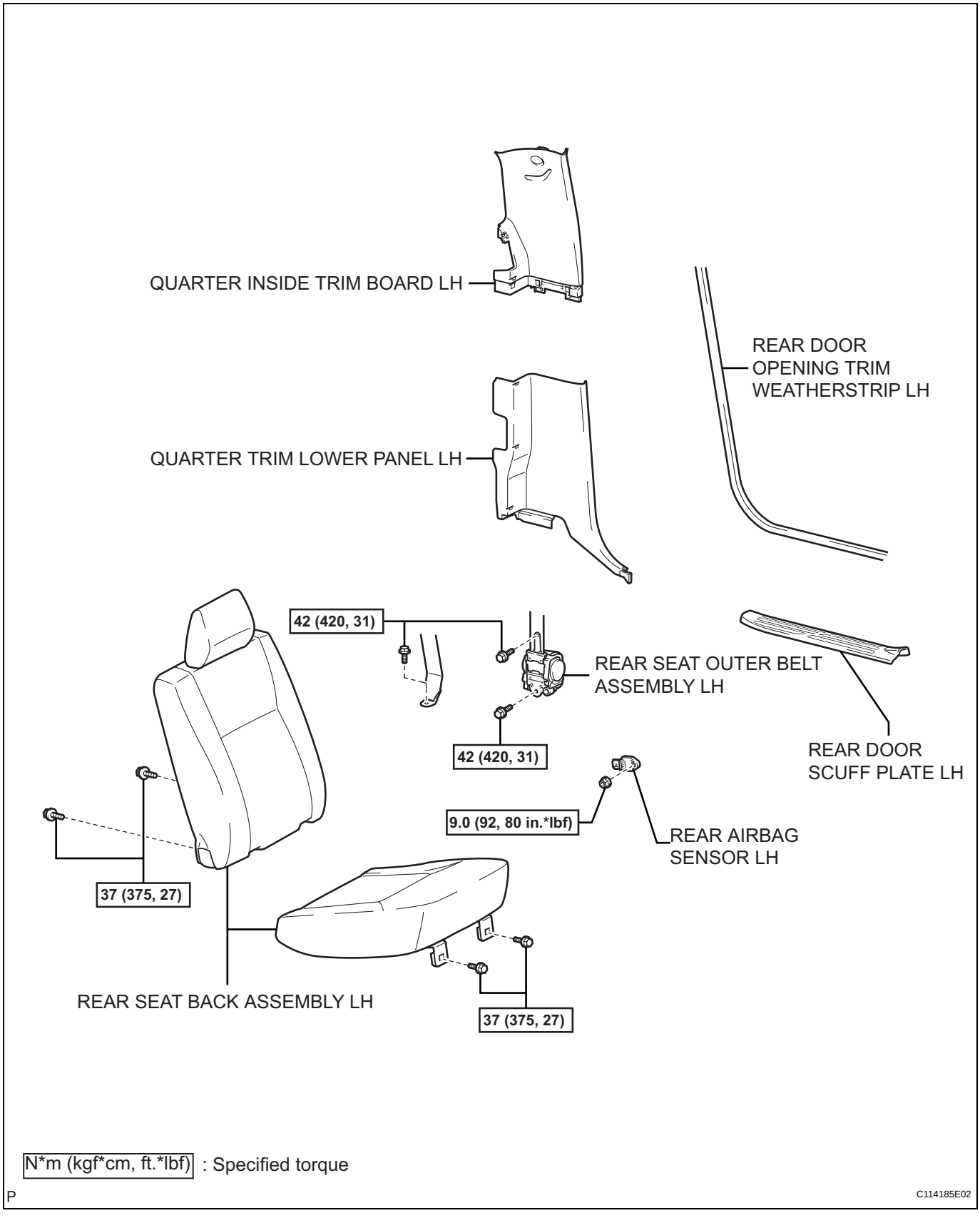
INSTALLATION

HINT:
Use the same procedures for the RH side and LH side.

1. **REMOVE SIDE AIRBAG SENSOR**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the battery negative (-) terminal.
   CAUTION:
   After disconnecting the cable from the terminal, wait for at least 90 seconds before starting the operation.
   (c) Install the side airbag sensor with the bolt.
   Torque:
   9.0 N*m (80 kgf*cm, 80 in.*lbf)
   NOTICE:
   - **Installation of the connector is done with the sensor assembly installed. Make sure that the sensor assembly is installed to the specified torque.**
   - **If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.**
   - **When installing the sensor assembly, make sure that the SRS wiring does not interfere with other parts and is not pinched between other parts.**
   - **After installation, shake the sensor assembly to check that it is not loose.**
   (d) Check that there is no slack in the installation parts of the side airbag sensor.
   (e) Connect the connector to the side airbag sensor.
2. **INSTALL CENTER PILLAR LOWER GARNISH LH (See page IR-26)**
3. **INSTALL LAP BELT OUTER ANCHOR COVER (See page IR-27)**
4. **INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-28)**
5. **INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH (See page IR-29)**
6. **INSTALL REAR DOOR SCUFF PLATE LH (See page IR-29)**
7. **INSTALL FRONT DOOR SCUFF PLATE LH (See page IR-29)**
8. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
   Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
9. **INSPECT SRS WARNING LIGHT**
   (See page RS-28)

REAR AIRBAG SENSOR

COMPONENTS



N*m (kgf*cm, ft.*lbf) : Specified torque

P

C114185E02

RS

ON-VEHICLE INSPECTION

1. **INSPECT REAR AIRBAG SENSOR (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (see page RS-37).

2. **INSPECT REAR AIRBAG SENSOR (for Vehicle Involved in Collision and Airbag not Deployed)**
   (a) Perform a diagnostic system check (see page RS-37).
   (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.

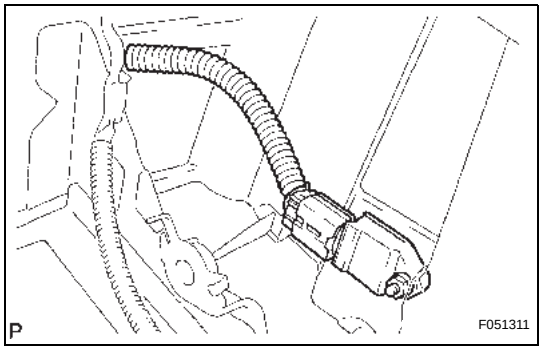
   CAUTION:
   For removal and installation procedures of the rear airbag sensor. Be sure to following the correct procedure.

3. **INSPECT REAR AIRBAG SENSOR (for Vehicle Involved in Collision)**
   (a) Replace the rear airbag sensor.
   CAUTION:
   For removal and installation procedures of the rear airbag sensor. Be sure to follow the correct procedure.
   HINT:
   The rear airbag sensor on the impacted side should be replaced after the curtain shield airbag assembly has deployed.

REMOVAL

HINT:
Use the same procedures for RH side and LH side.

1. **PRECAUTION**
   (See page RS-1)
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE REAR SEAT BACK HINGE COVER (See page SE-71)**
4. **REMOVE REAR SEAT BACK ASSEMBLY LH (See page SE-71)**
5. **REMOVE REAR SEAT BACK HINGE SUB-ASSEMBLY LH (See page SE-71)**
6. **REMOVE REAR DOOR SCUFF PLATE LH (See page IR-13)**
7. **REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH (See page SB-54)**
8. **REMOVE LUGGAGE COMPARTMENT SIDE TRAY (See page IR-16)**
9. **REMOVE QUARTER TRIM LOWER PANEL LH (See page IR-17)**
10. **REMOVE QUARTER INSIDE TRIM BOARD LH (See page SB-54)**
11. **REMOVE REAR SEAT OUTER BELT ASSEMBLY LH (See page SB-55)**
12. **REMOVE REAR AIRBAG SENSOR**
    (a) Disconnect the connector from the rear airbag sensor.
    (b) Remove the nut and the rear airbag sensor.



RS

INSTALLATION

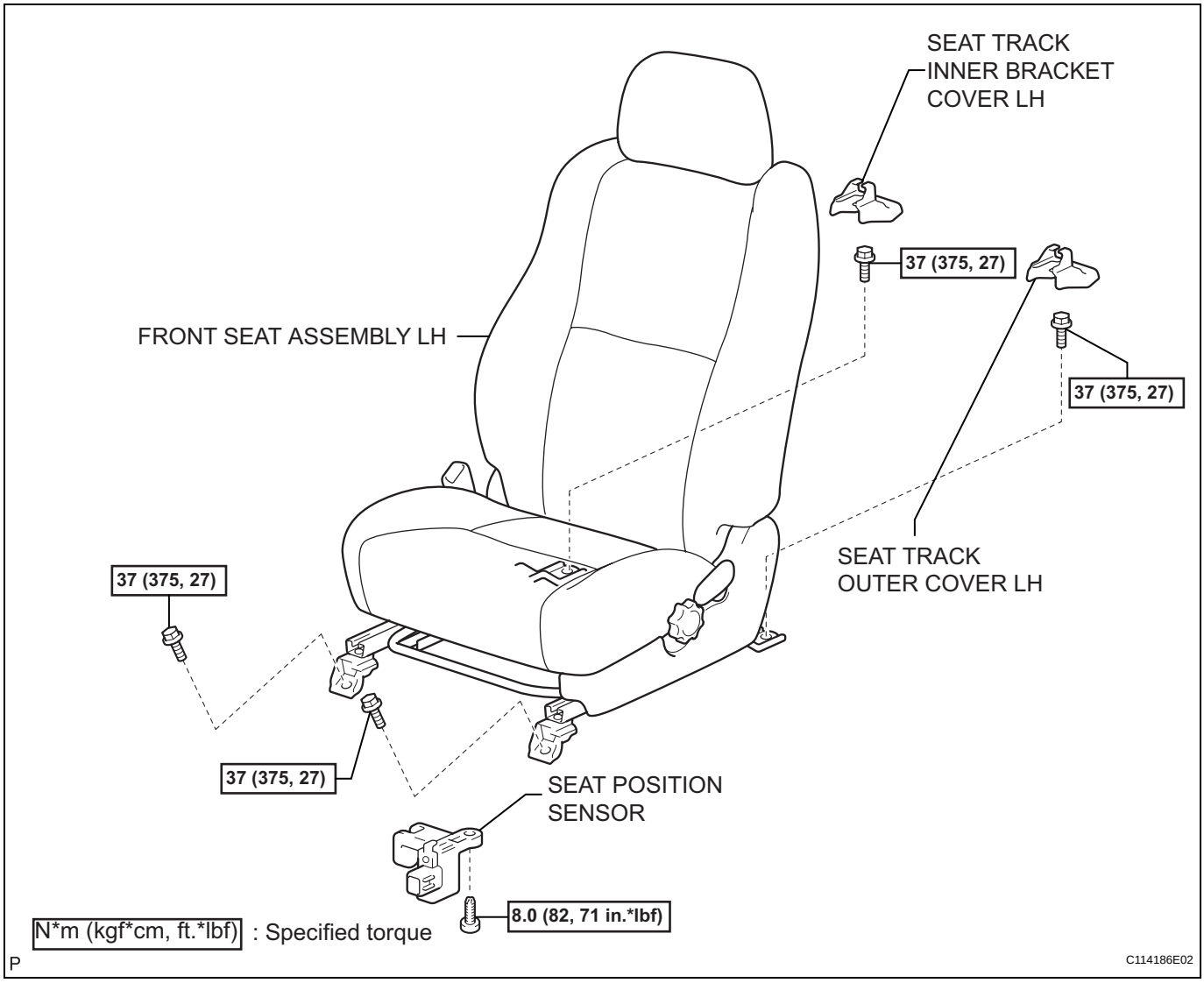
HINT:
Use the same procedures for the RH side and LH side.

1. **INSTALL REAR AIRBAG SENSOR**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the battery negative (-) terminal.
   CAUTION:
   After disconnecting the cable from the terminal, wait for at least 90 seconds before starting the operation.
   (c) Install the rear airbag sensor with the nut.
   Torque: 9.0 N*m (92 kgf*cm, 80 in.*lbf)
   NOTICE:
   - **Installation of the connector is done with the sensor assembly installed. Make sure the sensor assembly is installed to the specified torque.**
   - **If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.**
   - **When installing the sensor assembly, make sure that the SRS wiring does not interfere with any other parts and is not pinched between other parts.**
   - **After installation, shake the sensor assembly to check that it is not loose.**
2. **INSTALL REAR SEAT OUTER BELT ASSEMBLY LH (See page SB-55)**
3. **INSTALL QUARTER INSIDE TRIM BOARD LH (See page SB-56)**
4. **INSTALL QUARTER TRIM LOWER PANEL LH (See page IR-25)**
5. **INSTALL LUGGAGE COMPARTMENT SIDE TRAY (See page IR-25)**
6. **INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP LH (See page SB-57)**
7. **INSTALL REAR DOOR SCUFF PLATE LH (See page IR-29)**
8. **INSTALL REAR SEAT BACK HINGE SUB-ASSEMBLY LH (See page SE-77)**
9. **INSTALL REAR SEAT BACK ASSEMBLY LH (See page SE-77)**
10. **INSTALL REAR SEAT BACK HINGE COVER (See page SE-78)**
11. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

12. INSPECT SRS WARNING LIGHT

SEAT POSITION SENSOR (for Separate Seat Type)

COMPONENTS



RS

ON-VEHICLE INSPECTION

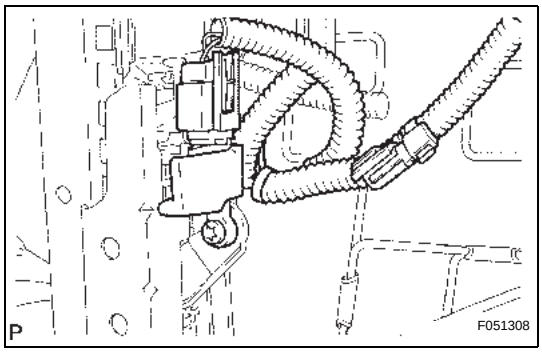
1. **SEAT POSITION SENSOR (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).

2. **SEAT POSITION SENSOR (for Vehicle Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).
   (b) Even if the airbag was not deployed, perform a visual check for 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 in the case.
   - Cracks or other damage to the connector.

   CAUTION:
   For removal and installation procedures of the seat position sensor, see page RS-617, RS-620, and be sure to follow the correct procedure.

REMOVAL

1. **PRECAUTION**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE SEAT TRACK COVER (See page SE-23)**
4. **REMOVE FRONT SEAT ASSEMBLY (See page SE-23)**
5. **REMOVE SEAT POSITION SENSOR**
   (a) Disconnect the connector from the seat position sensor.
   (b) Using a "torx" socket wrench (T30), remove the "torx" screw and the seat position sensor.



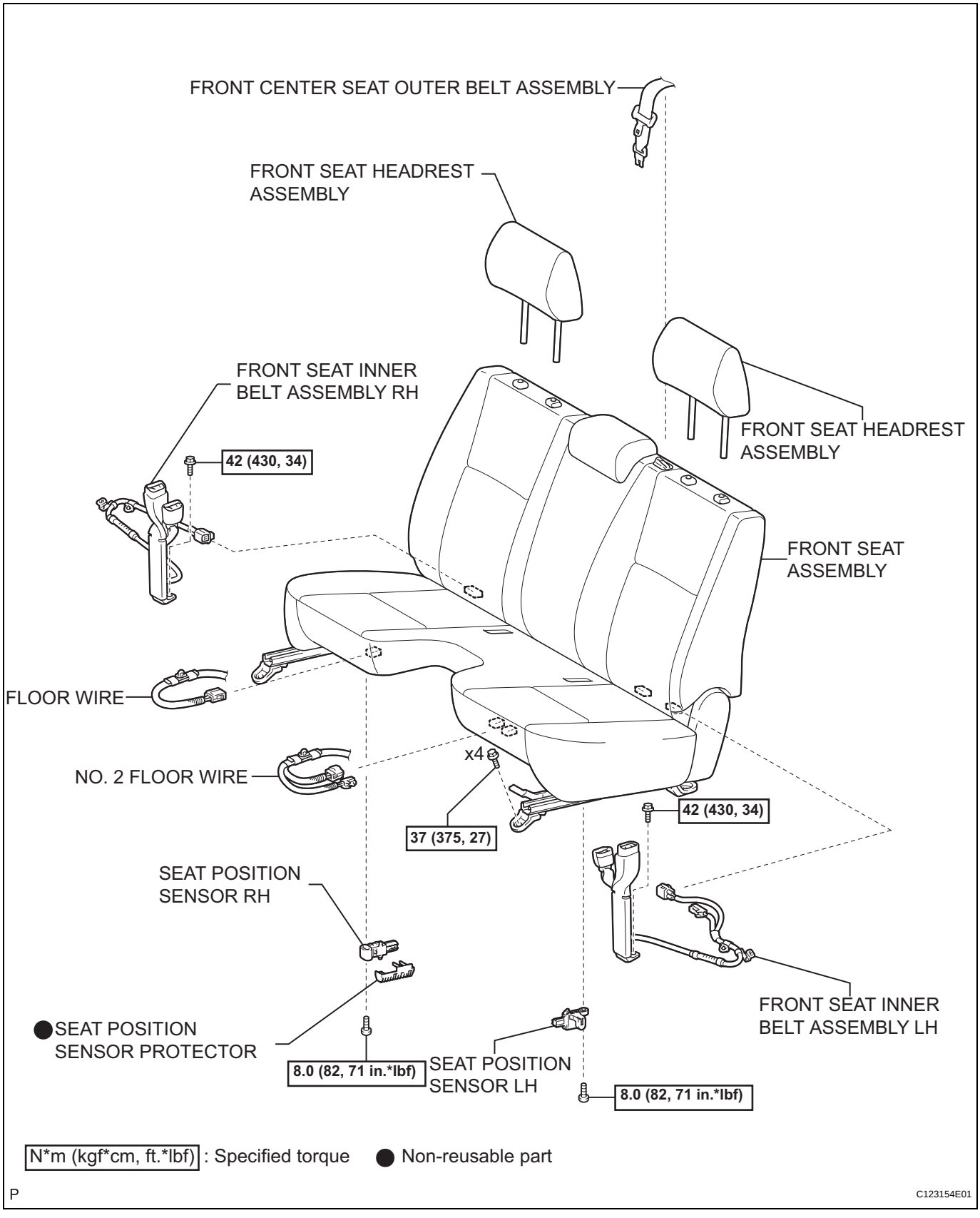
INSTALLATION

1. **INSTALL SEAT POSITION SENSOR**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the battery negative (-) terminal.
   CAUTION:
   After disconnecting the cable from the terminal, wait for at least 90 seconds before starting the operation.
   NOTICE:
   - **Installation of the connector is done with the sensor assembly installed. Make sure the sensor assembly is installed to the specified torque.**
   - **If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.**
   - **When installing the sensor assembly, make sure that the SRS wiring does not interfere with any other parts and is not pinched between other parts.**
   - **After installation, shake the sensor assembly to check that it is not loose.**

   (c) Using a "torx" socket wrench (T30), tighten the "torx" screw to install the seat position sensor.
   Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)
   (d) Make sure that the clearance between the seat position sensor and the seat rail is within 0.6 mm (0.023 in.) and 2 mm (0.079 in.).
   (e) Check that there is no slack in the installation parts of the seat position sensor.
   (f) Connect the connector to the seat position sensor.
2. **INSTALL FRONT SEAT ASSEMBLY (See page SE-34)**
3. **INSTALL SEAT TRACK COVER (See page SE-34)**
4. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
   Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
5. **INSPECT SRS WARNING LIGHT**
   (See page RS-28)

SEAT POSITION SENSOR (for Bench Seat Type)

COMPONENTS



RS

ON-VEHICLE INSPECTION

1. **REMOVE SEAT POSITION SENSOR (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).

2. **REMOVE SEAT POSITION SENSOR (for Vehicle Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).
   (b) Even if the airbag was not deployed, perform a visual check for damage to the seat position airbag sensor. If there are any defects as mentioned below, replace the seat position airbag sensor with a new one:
   - Cracks, dents or chips in the case.
   - Cracks or other damage to the connector.

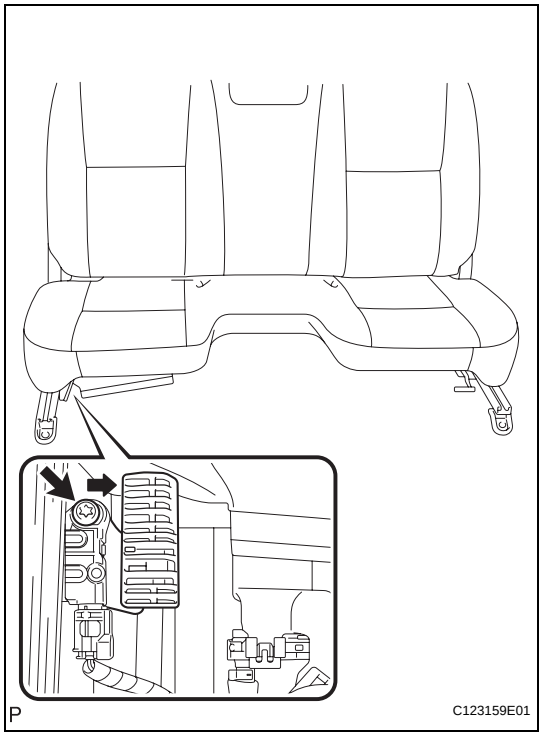
   CAUTION:
   For removal and installation procedures of the seat position airbag sensor, see pages RS-620 and RS-621, and be sure to follow the correct procedure.

REMOVAL

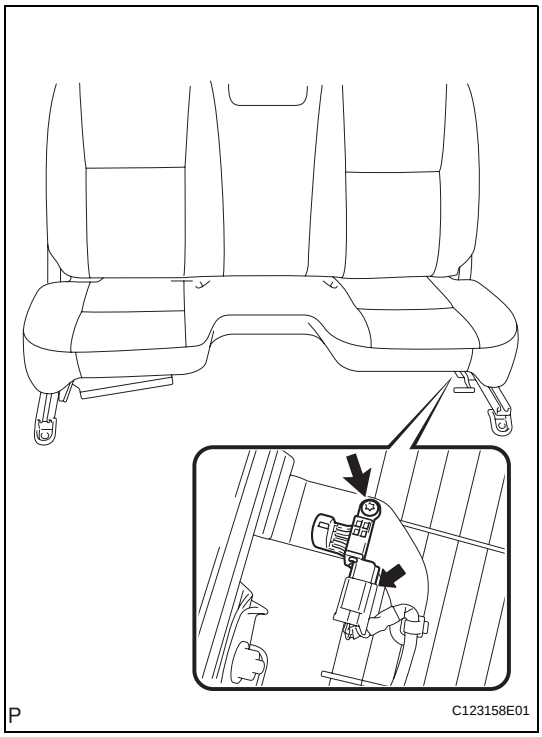
NOTICE:

- **If the wiring connector for the SRS is disconnected with the ignition switch in the ON position, DTCs will be recorded.**
- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse a seat position sensor if an airbag has previously deployed in a collision.**

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.
2. **REMOVE FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-12)**
3. **REMOVE FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-12)**
4. **REMOVE FRONT SEAT HEADREST ASSEMBLY (See page SE-53)**
5. **REMOVE FRONT SEAT ASSEMBLY (See page SE-53)**
6. **REMOVE SEAT POSITION SENSOR PROTECTOR (for RHD)**
   (a) Remove the seat slide position sensor protector from the seat position airbag sensor.
7. **REMOVE SEAT POSITION SENSOR (for RHD)**
   (a) Disconnect the connector from the seat position sensor.
   (b) Using "Torx" socket wrench T30, remove the "Torx" screw and the seat position sensor.



RS



8. REMOVE SEAT POSITION SENSOR (for LHD)

(a) Disconnect the connector from the seat position sensor.

(b) Using "Torx" socket wrench T30, remove the "Torx" screw and the seat position sensor.

INSTALLATION

1. INSTALL SEAT POSITION SENSOR (for RHD)

(a) Check that the ignition switch is OFF.

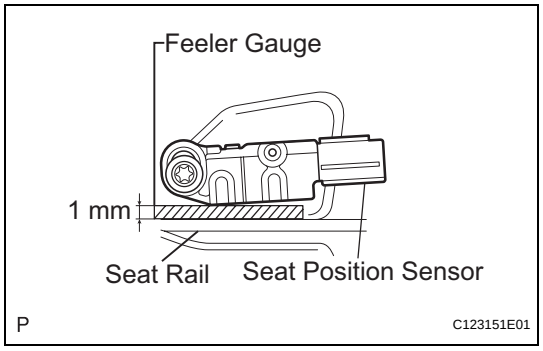
(b) Check that the cable is disconnected from the negative battery (-) terminal.

CAUTION:

After disconnecting the cable from the terminal, wait for at least 90 seconds before starting the operation.

NOTICE:

- **Installation of the connector is done with the sensor assembly installed. Make sure the sensor assembly is installed to the specified torque.**
- **If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.**
- **When installing the sensor assembly, make sure that the SRS wiring does not interfere with any other parts and is not pinched between other parts.**



(c) Using "Torx" socket wrench T30, tighten the "Torx" screw to install the seat position sensor.

Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)

(d) Make sure that the clearance between the seat position sensor and the seat rail is between 0.6 mm (0.023 in.) and 2 mm (0.079 in.). Check that there is no slack in the installation parts of the seat position sensor.

(e) Connect the connector to the seat position sensor.

2. INSTALL SEAT POSITION SENSOR PROTECTOR (for RHD)

(a) Install a new seat position protector onto the seat position sensor.

3. INSTALL SEAT POSITION SENSOR (for LHD)

(a) Check that the ignition switch is OFF.

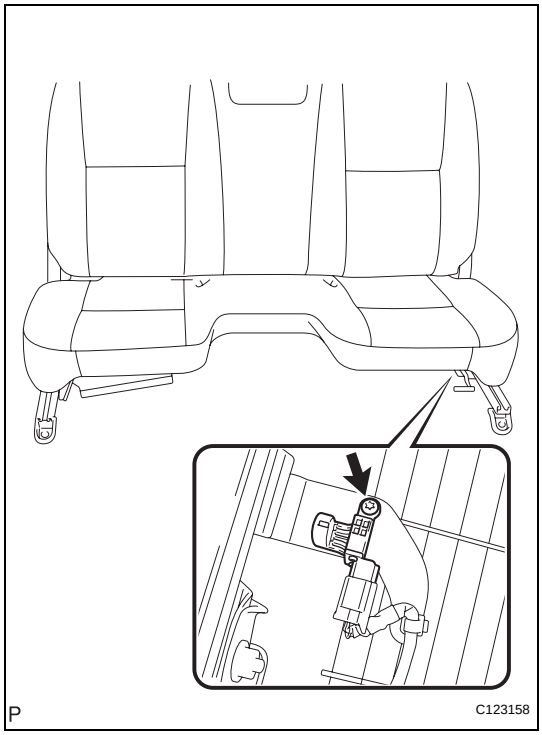
(b) Check that the cable is disconnected from the negative battery (-) terminal.

CAUTION:

After disconnecting the cable from the terminal, wait for at least 90 seconds before starting the operation.

NOTICE:

- **Installation of the connector is done with the sensor assembly installed. Make sure the sensor assembly is installed to the specified torque.**
- **If the sensor assembly has been dropped, or there are cracks, dents or other defects in the case, bracket or connector, replace the sensor assembly with a new one.**



- **When installing the sensor assembly, make sure that the SRS wiring does not interfere with any other parts and is not pinched between other parts.**
- **After installation, shake the sensor assembly to check that it is not loose.**

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

(d) Make sure that the clearance between the seat position sensor and the seat rail is within 0.6 mm (0.023 in.) and 2 mm (0.079 in.).

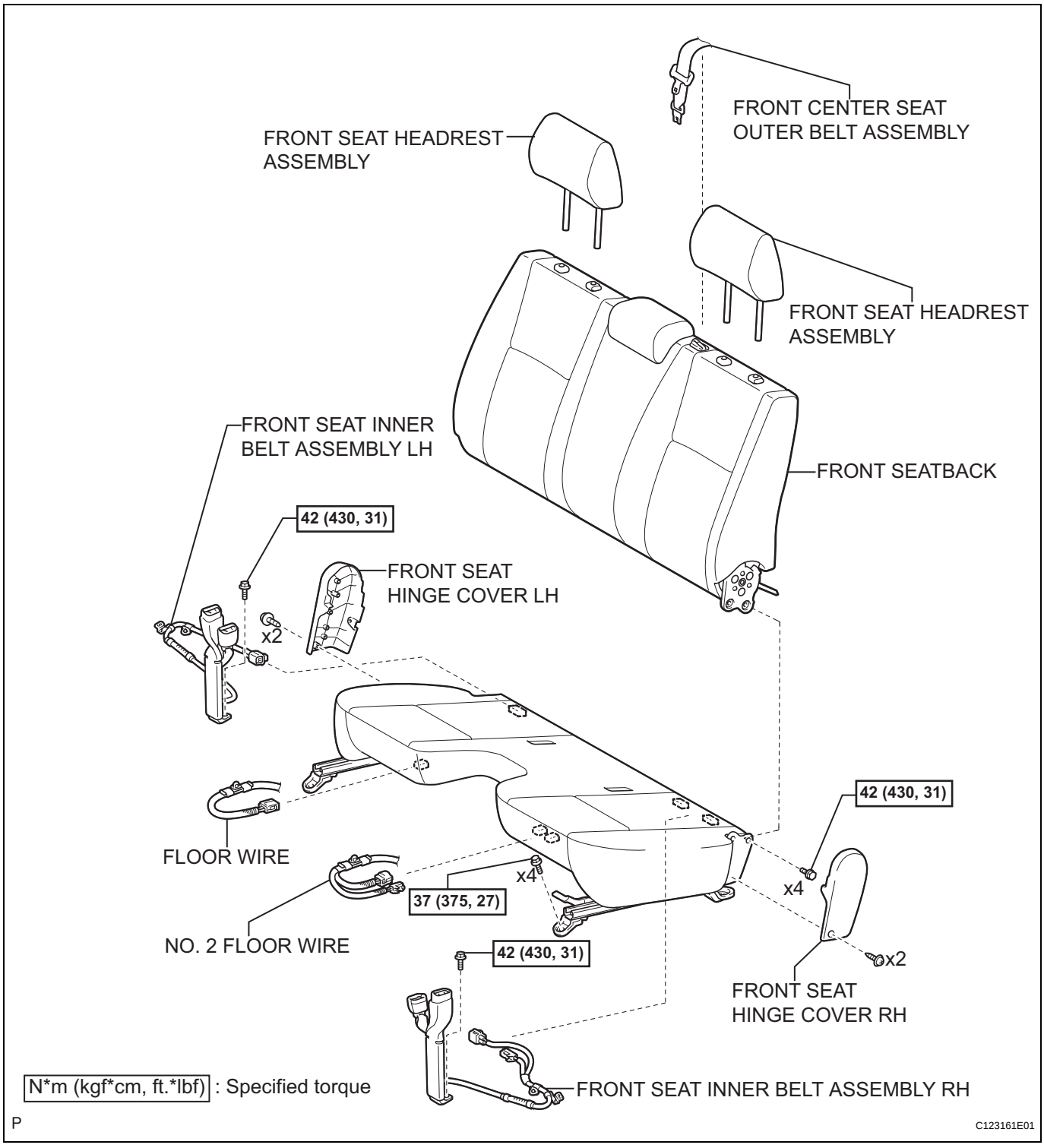
(e) Check that there is no slack in the installation parts of the seat position sensor.

(f) Connect the connector to the seat position sensor.

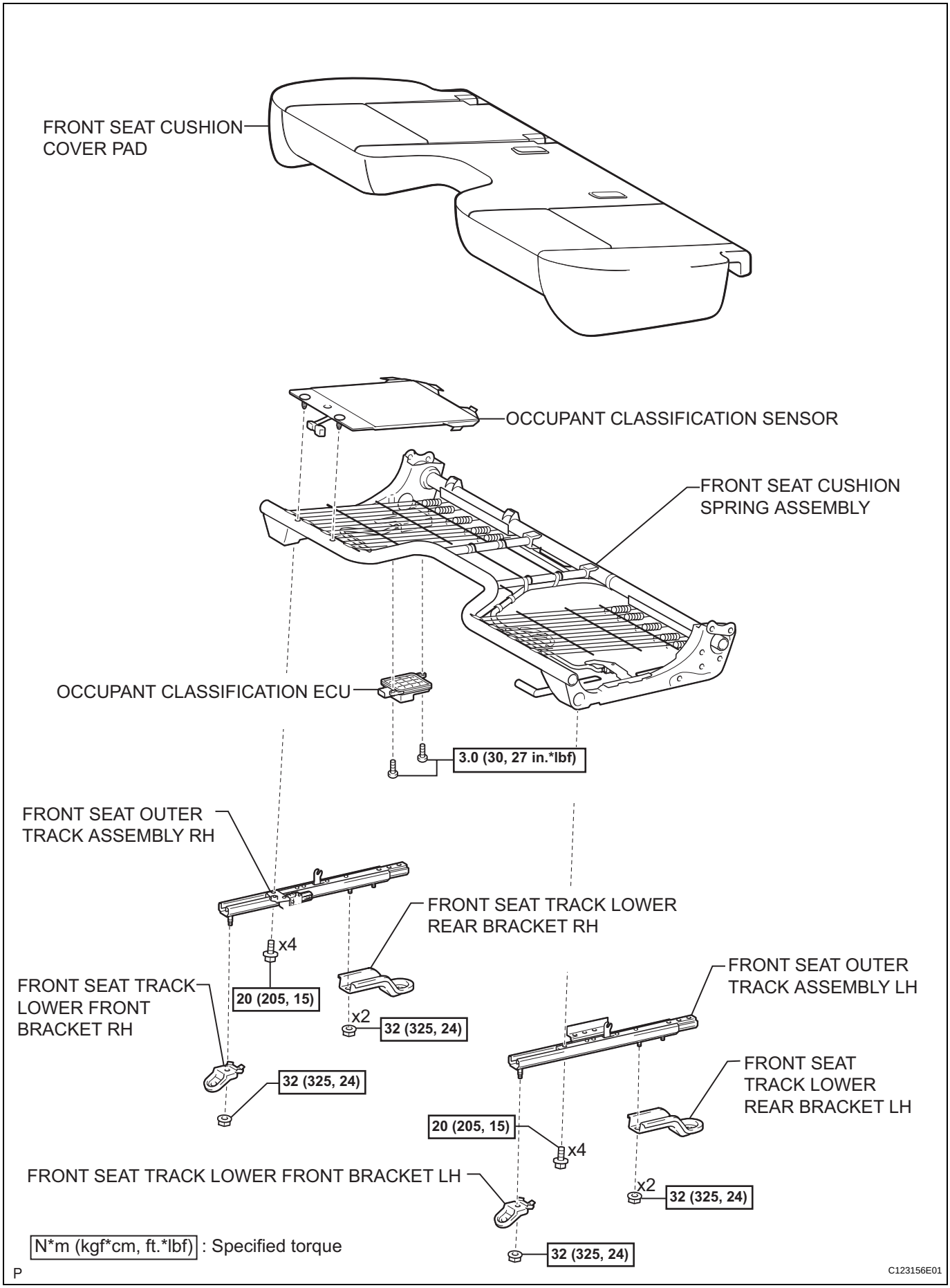
4. **INSTALL FRONT SEAT ASSEMBLY (See page SE-67)**
5. **INSTALL FRONT SEAT HEADREST ASSEMBLY (See page SE-68)**
6. **INSTALL FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-13)**
7. **INSTALL FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-14)**
8. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
9. **INSPECT SRS WARNING LIGHT**
(See page RS-28)

FRONT SEAT CUSHION ASSEMBLY (w/ Occupant Classification ECU, Occupant Classification Sensor)

COMPONENTS



RS


FRONT SEAT CUSHION COVER PAD
OCCUPANT CLASSIFICATION SENSOR
FRONT SEAT CUSHION SPRING ASSEMBLY
OCCUPANT CLASSIFICATION ECU
3.0 (30, 27 in.*lbf)
FRONT SEAT OUTER TRACK ASSEMBLY RH
FRONT SEAT TRACK LOWER REAR BRACKET RH
x4
20 (205, 15)
FRONT SEAT TRACK LOWER FRONT BRACKET RH
x2
32 (325, 24)
32 (325, 24)
FRONT SEAT OUTER TRACK ASSEMBLY LH
FRONT SEAT TRACK LOWER REAR BRACKET LH
20 (205, 15)
x4
FRONT SEAT TRACK LOWER FRONT BRACKET LH
x2
32 (325, 24)
32 (325, 24)
N*m (kgf*cm, ft.*lbf) : Specified torque
P
C123156E01

RS

ON-VEHICLE INSPECTION

1. **INSPECT FRONT SEAT CUSHION ASSEMBLY (w/ Occupant Classification ECU, Occupant Classification Sensor) (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-487).

2. **INSPECT FRONT SEAT CUSHION ASSEMBLY (w/ Occupant Classification ECU, Occupant Classification Sensor) (for Vehicle Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-487).
   (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.

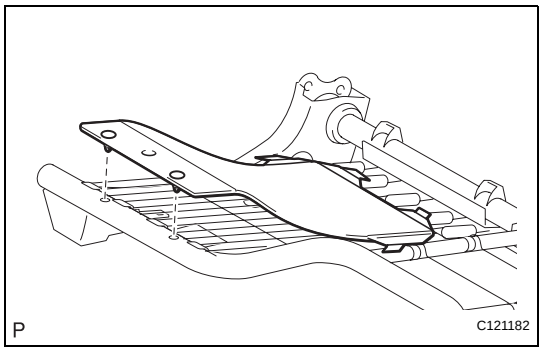
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

REMOVAL

NOTICE:

- **If the wiring connector of the SRS is disconnected with the ignition switch in the ON position, DTCs will be recorded.**
- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse an occupant classification sensor if an airbag has previously deployed in a collision.**
- **Remove the front seat cushion cover pad and front seat cushion cover together, in order to avoid occupant classification sensor malfunctions.**

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY**
   Wait for 90 seconds after disconnecting the cable to prevent the airbag from working.
2. **REMOVE FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-12)**
3. **REMOVE FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-12)**
4. **REMOVE FRONT SEAT ASSEMBLY (See page SE-53)**
5. **REMOVE OCCUPANT CLASSIFICATION ECU (See page RS-635)**
6. **REMOVE FRONT SEAT HINGE COVER LH (See page SE-55)**
7. **REMOVE FRONT SEAT HINGE COVER RH (See page SE-55)**
8. **REMOVE FRONT SEATBACK ASSEMBLY (See page SE-55)**
9. **REMOVE FRONT SEAT TRACK LOWER FRONT BRACKET LH (See page SE-57)**
10. **REMOVE FRONT SEAT TRACK LOWER FRONT BRACKET RH (See page SE-57)**
11. **REMOVE FRONT SEAT TRACK LOWER REAR BRACKET LH (See page SE-57)**
12. **REMOVE FRONT SEAT TRACK LOWER REAR BRACKET RH (See page SE-57)**
13. **REMOVE FRONT SEAT OUTER TRACK ASSEMBLY LH (See page SE-57)**
14. **REMOVE FRONT SEAT OUTER TRACK ASSEMBLY RH (See page SE-57)**
15. **REMOVE FRONT SEAT CUSHION SPRING ASSEMBLY (See page SE-57)**



16. REMOVE OCCUPANT CLASSIFICATION SENSOR

(a) Disconnect the connector from the occupant classification sensor.
(b) Remove the wiring harness clamp.
(c) Disengage the clamps from the seat cushion frame.
(d) Remove the 2 clips and the occupant classification sensor.

ON-VEHICLE INSPECTION

1. **INSPECT FRONT SEAT CUSHION ASSEMBLY (w/ Occupant Classification ECU, Occupant Classification Sensor) (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-487).

2. **INSPECT FRONT SEAT CUSHION ASSEMBLY (w/ Occupant Classification ECU, Occupant Classification Sensor) (for Vehicle Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-487).
   (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.

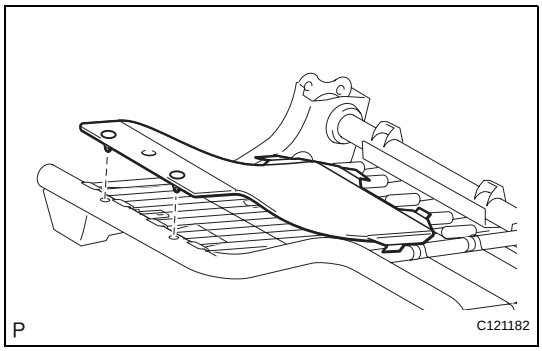
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

REMOVAL

NOTICE:

- **If the wiring connector of the SRS is disconnected with the ignition switch in the ON position, DTCs will be recorded.**
- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse an occupant classification sensor if an airbag has previously deployed in a collision.**
- **Remove the front seat cushion cover pad and front seat cushion cover together, in order to avoid occupant classification sensor malfunctions.**

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY**
   Wait for 90 seconds after disconnecting the cable to prevent the airbag from working.
2. **REMOVE FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-12)**
3. **REMOVE FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-12)**
4. **REMOVE FRONT SEAT ASSEMBLY (See page SE-53)**
5. **REMOVE OCCUPANT CLASSIFICATION ECU (See page RS-635)**
6. **REMOVE FRONT SEAT HINGE COVER LH (See page SE-55)**
7. **REMOVE FRONT SEAT HINGE COVER RH (See page SE-55)**
8. **REMOVE FRONT SEATBACK ASSEMBLY (See page SE-55)**
9. **REMOVE FRONT SEAT TRACK LOWER FRONT BRACKET LH (See page SE-57)**
10. **REMOVE FRONT SEAT TRACK LOWER FRONT BRACKET RH (See page SE-57)**
11. **REMOVE FRONT SEAT TRACK LOWER REAR BRACKET LH (See page SE-57)**
12. **REMOVE FRONT SEAT TRACK LOWER REAR BRACKET RH (See page SE-57)**
13. **REMOVE FRONT SEAT OUTER TRACK ASSEMBLY LH (See page SE-57)**
14. **REMOVE FRONT SEAT OUTER TRACK ASSEMBLY RH (See page SE-57)**
15. **REMOVE FRONT SEAT CUSHION SPRING ASSEMBLY (See page SE-57)**



16. REMOVE OCCUPANT CLASSIFICATION SENSOR

(a) Disconnect the connector from the occupant classification sensor.
(b) Remove the wiring harness clamp.
(c) Disengage the clamps from the seat cushion frame.
(d) Remove the 2 clips and the occupant classification sensor.

INSTALLATION

NOTICE:

- **Install new parts from prepared service kits.**
- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse an occupant classification sensor involved in a collision when the airbag has deployed.**
- **If the occupant classification 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 occupant classification sensor, make sure that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
- **After installing, shake the occupant classification sensor to check that there is no looseness.**
- **Remove the front seat cushion cover pad and front seat cushion cover together, in order to avoid occupant classification sensor malfunctions.**

1. INSTALL OCCUPANT CLASSIFICATION SENSOR

(a) Install the occupant classification sensor with the 2 clips.

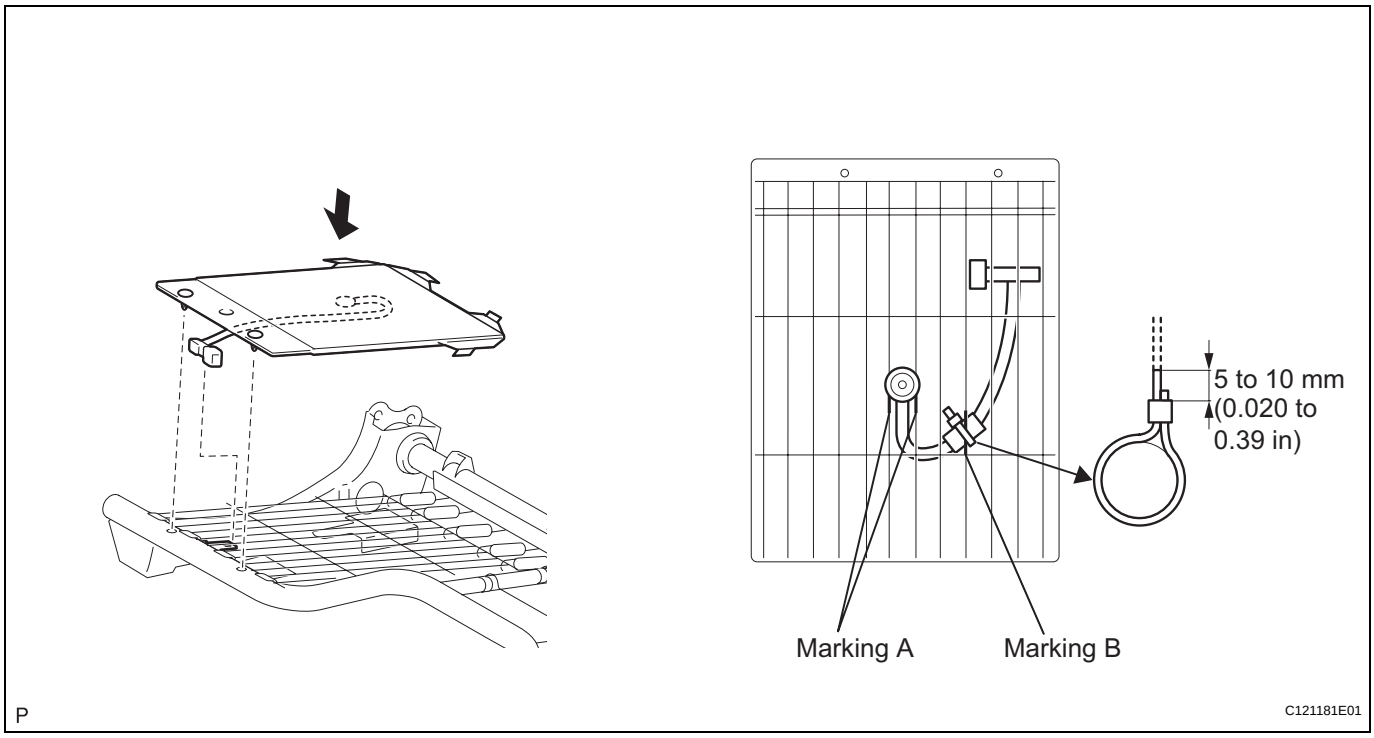
(b) Engage the clamps to the seat cushion frame.

(c) Pass the tube of the occupant classification sensor through marked portion A and then fix it at marked portion B on the front seat cushion spring assembly with the wiring harness clamp, as shown in the illustration on the following page.

HINT:

Cut the wiring harness clamp leaving 5 to 10 mm (0.20 to 0.39 in.) at the end.

(d) Connect the connector to the occupant classification sensor.



2. **INSTALL FRONT SEAT CUSHION SPRING ASSEMBLY (See page SE-62)**
3. **INSTALL FRONT SEAT OUTER TRACK ASSEMBLY LH (See page SE-62)**
4. **INSTALL FRONT SEAT OUTER TRACK ASSEMBLY RH (See page SE-62)**
5. **INSTALL FRONT SEAT TRACK LOWER REAR BRACKET LH (See page SE-63)**
6. **INSTALL FRONT SEAT TRACK LOWER REAR BRACKET RH (See page SE-63)**
7. **INSTALL FRONT SEAT TRACK LOWER FRONT BRACKET LH (See page SE-63)**
8. **INSTALL FRONT SEAT TRACK LOWER FRONT BRACKET RH (See page SE-63)**
9. **INSTALL OCCUPANT CLASSIFICATION ECU (See page RS-635)**
10. **INSTALL FRONT SEATBACK ASSEMBLY (See page SE-66)**
11. **INSTALL FRONT SEAT HINGE COVER LH (See page SE-66)**
12. **INSTALL FRONT SEAT HINGE COVER RH (See page SE-66)**
13. **INSTALL FRONT SEAT ASSEMBLY (See page SE-67)**

14. **INSTALL FRONT SEAT HEADREST ASSEMBLY (See page SE-68)**
15. **INSTALL FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-13)**
16. **INSTALL FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-14)**
17. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
18. **PERFORM ZERO POINT CALIBRATION AND SENSITIVITY CHECK**
    (See page RS-480)
19. **INSPECT SRS WARNING LIGHT**
    (See page RS-28)

OCCUPANT CLASSIFICATION ECU (for Separate Seat Type)

COMPONENTS



ON-VEHICLE INSPECTION

1. INSPECT OCCUPANT CLASSIFICATION ECU (for Vehicle not Involved in Collision)

(a) Perform a diagnostic system check (See page RS-34).

2. INSPECT OCCUPANT CLASSIFICATION ECU (for Vehicle Involved in Collision)

(a) Perform a diagnostic system check (See page RS-34).

(b) Even if the airbag was not deployed, perform a visual check for 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 in the case.
- Cracks or other damage to the connector.

CAUTION:
For removal and installation procedures of the occupant classification ECU, see page RS-631, and be sure to follow the correct procedure.

OCCUPANT CLASSIFICATION ECU (for Separate Seat Type)

COMPONENTS



ON-VEHICLE INSPECTION

1. INSPECT OCCUPANT CLASSIFICATION ECU (for Vehicle not Involved in Collision)

(a) Perform a diagnostic system check (See page RS-34).

2. INSPECT OCCUPANT CLASSIFICATION ECU (for Vehicle Involved in Collision)

(a) Perform a diagnostic system check (See page RS-34).

(b) Even if the airbag was not deployed, perform a visual check for 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 in the case.
- Cracks or other damage to the connector.

CAUTION:
For removal and installation procedures of the occupant classification ECU, see page RS-631, and be sure to follow the correct procedure.

REMOVAL

1. PRECAUTION

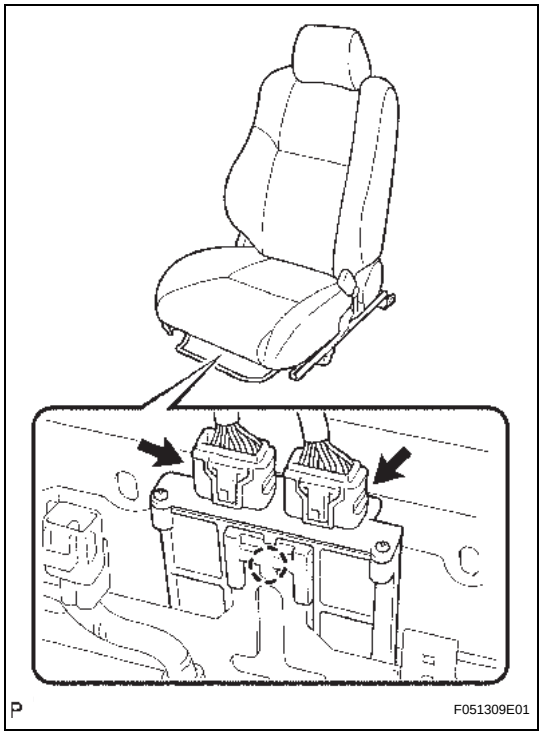
2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

Wait for at least 90 seconds after disconnecting the cable to prevent the airbag from working.

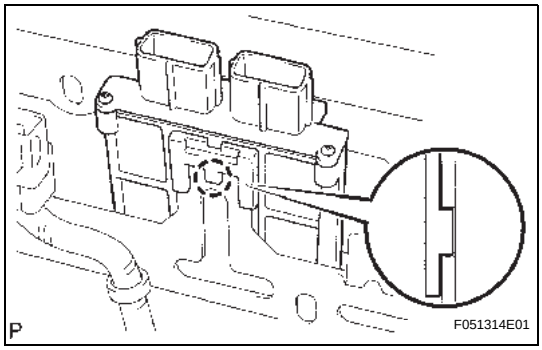
3. REMOVE FRONT SEAT ASSEMBLY RH

4. REMOVE OCCUPANT CLASSIFICATION ECU

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



(b) Disengage the claw and remove the occupant classification ECU.

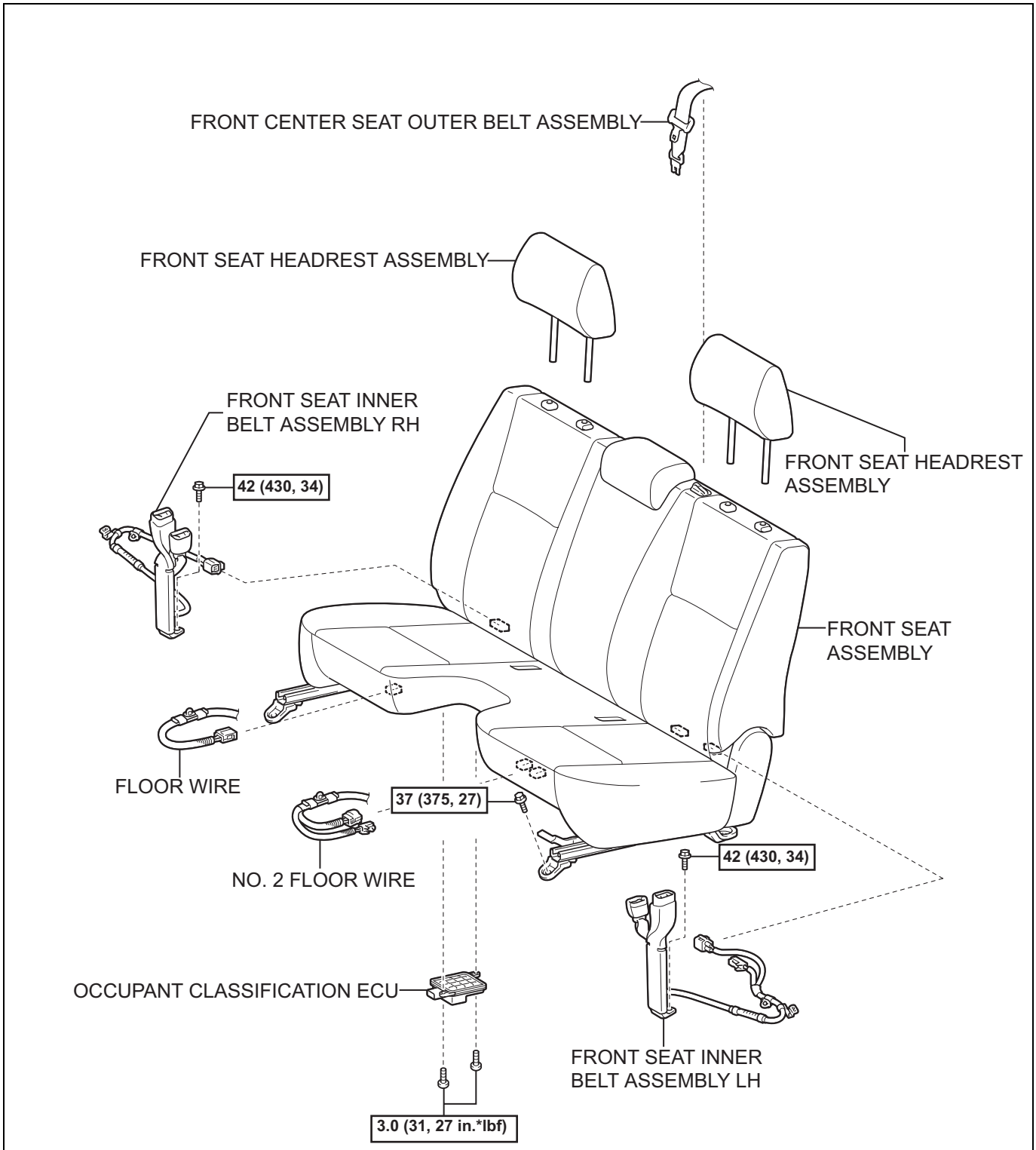


INSTALLATION

1. **INSTALL OCCUPANT CLASSIFICATION ECU**
   (a) Check that the ignition switch is OFF.
   (b) Check that the cable is disconnected from the battery negative (-) terminal is disconnected.
   CAUTION:
   After removing the cable from the terminal, wait for at least 90 seconds before starting the operation.
   (c) Engage the claw and install the occupant classification ECU.
   NOTICE:
   - **If the occupant classification ECU has been dropped, or there are cracks, dents or other defects in the case or connector, replace it with a new one.**
   - **When installing the occupant classification ECU, make sure that the SRS wiring does not interfere with any other parts and that it is not pinched between other parts.**
   (d) Connect the connector to the occupant classification ECU.
2. **INSTALL FRONT SEAT ASSEMBLY RH**
3. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
   Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
4. **OCCUPANT CLASSIFICATION ECU INITIALIZATION**
5. **INSPECT SRS WARNING LIGHT**
   (See page RS-28)

OCCUPANT CLASSIFICATION ECU (for Bench Seat Type)

COMPONENTS



N*m (kgf*cm, ft.*lbf) : Specified torque

P

C123155E01

RS

ON-VEHICLE INSPECTION

1. **INSPECT OCCUPANT CLASSIFICATION ECU (for Vehicle not Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).

2. **REMOVE OCCUPANT CLASSIFICATION ECU (for Vehicle Involved in Collision)**
   (a) Perform a diagnostic system check (See page RS-34).
   (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.

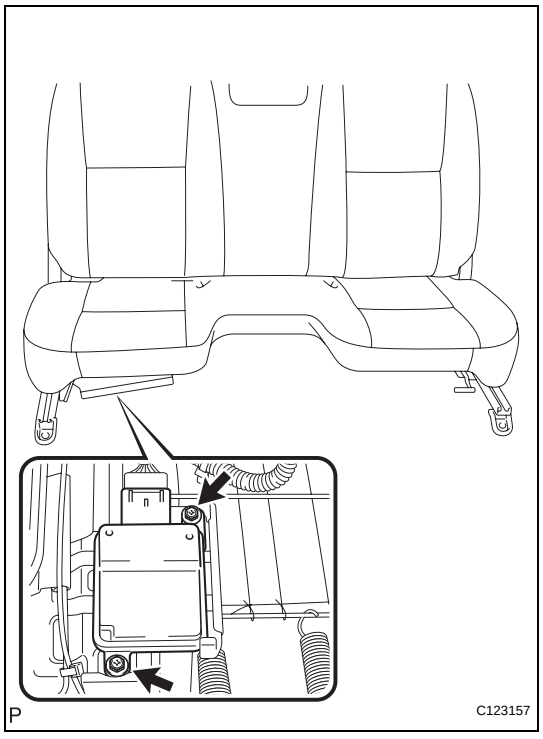
   CAUTION:
   Be sure to follow the correct removal and installation procedures.

REMOVAL

NOTICE:

- **If the wiring connector of the SRS is disconnected with the ignition switch in the ON position, DTCs will be recorded.**
- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse an occupant classification ECU if an airbag has previously deployed in a collision.**
- **Remove the front seat cushion cover pad and front seat cushion cover together, in order to avoid occupant classification sensor malfunctions.**

1. **READ IN OCCUPANT CLASSIFICATION ECU DATA (See page RS-476)**
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
   Wait for 90 seconds after disconnecting the cable to prevent the airbag from working.
3. **REMOVE FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-12)**
4. **REMOVE FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-12)**
5. **REMOVE FRONT SEAT HEADREST ASSEMBLY (See page SE-53)**
6. **REMOVE FRONT SEAT ASSEMBLY (See page SE-53)**
7. **REMOVE OCCUPANT CLASSIFICATION ECU**
   (a) Disconnect the connector from the the occupant classification ECU.
   (b) Remove the 2 bolts and the occupant classification ECU.

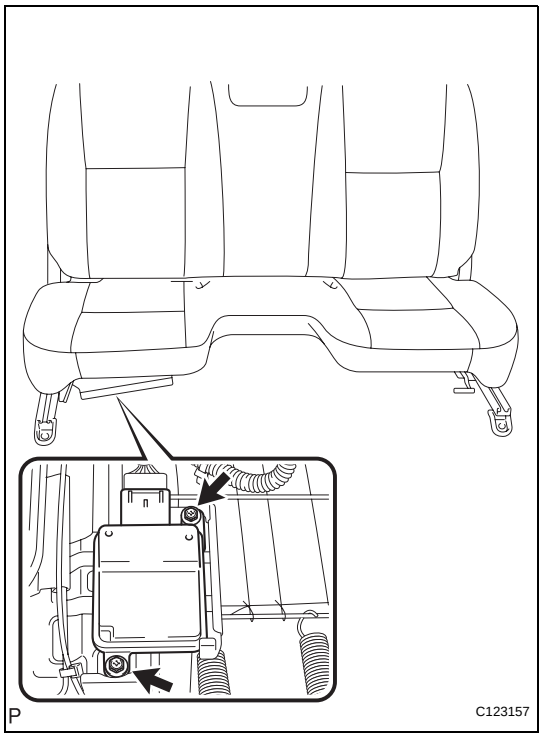


RS

INSTALLATION

NOTICE:

- **Never use SRS parts from another vehicle. When replacing the parts, replace them with new ones.**
- **Never reuse an occupant classification ECU involved in a collision when the airbag has deployed.**
- **If the occupant classification ECU 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 occupant classification ECU, make sure that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
- **After installing, shake the occupant classification ECU to check that there is no looseness.**
- **Remove the front seat cushion cover pad and front seat cushion cover together, in order to avoid occupant classification sensor malfunctions.**



1. INSTALL OCCUPANT CLASSIFICATION ECU

(a) Check that the ignition switch is OFF.

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

CAUTION:
After disconnecting the negative battery terminal, wait for at least 90 seconds before starting the operation.

(c) Install the occupant classification ECU with the 2 bolts.

Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)

(d) Connect the connector to the occupant classification ECU.

NOTICE:

- **If the occupant classification ECU has been dropped, or there are any cracks, dents or other defects in the case or connector, replace it with a new one.**
- **When installing the occupant classification ECU, make sure that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**
- **When replacing the occupant classification ECU, replace the bolt with a new one.**

2. INSTALL FRONT SEAT ASSEMBLY (See page SE-67)

3. INSTALL FRONT SEAT HEADREST ASSEMBLY (See page SE-68)

4. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH (See page SB-13)

5. INSTALL FRONT SEAT INNER BELT ASSEMBLY RH (See page SB-14)

6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL
Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)

RS

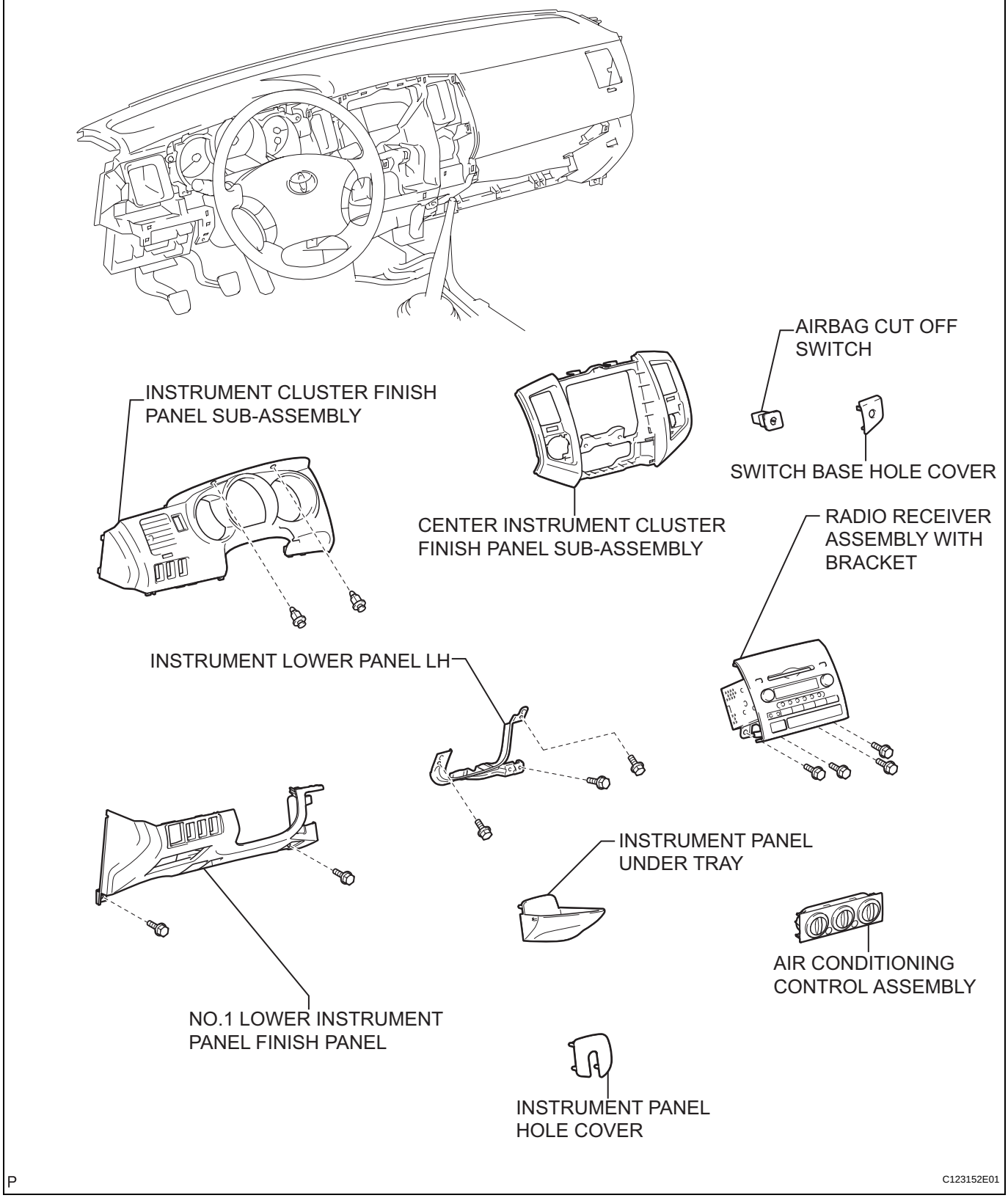
7. **INSERT OCCUPANT CLASSIFICATION ECU DATA**
(See page RS-476)

8. **PERFORM ZERO POINT CALIBRATION AND SENSITIVITY CHECK**
(See page RS-480)

9. **INSPECT SRS WARNING LIGHT**
(See page RS-28)

AIRBAG CUT-OFF SWITCH

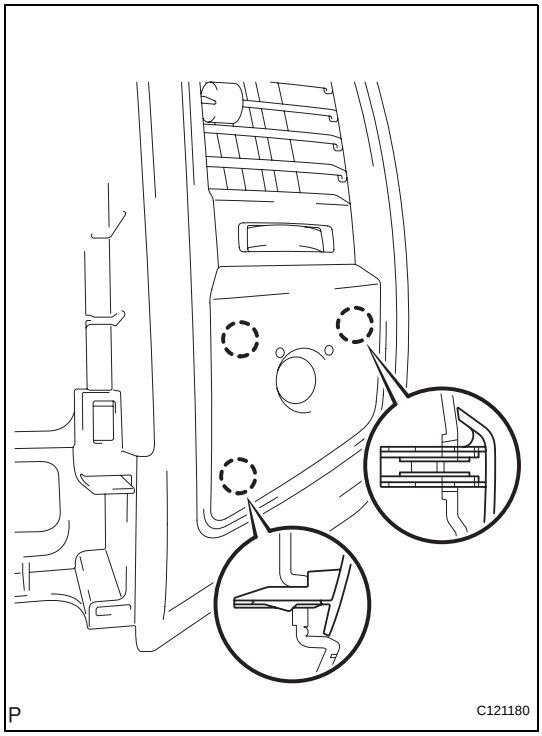
COMPONENTS



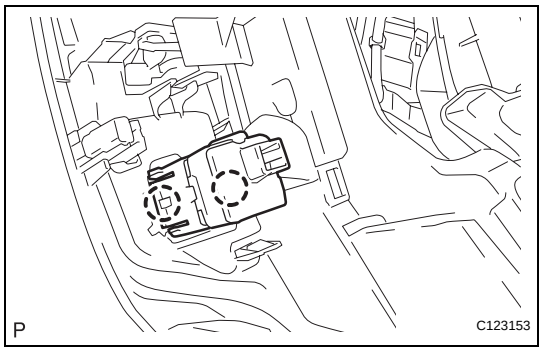
RS

REMOVAL

1. **PRECAUTION**
   (See page RS-1)
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
3. **REMOVE INSTRUMENT PANEL UNDER TRAY (for Pedal Type Parking Brake) (See page IP-9)**
4. **REMOVE INSTRUMENT PANEL HOLE COVER (for Lever Type Parking Brake) (See page IP-9)**
5. **REMOVE AIR CONDITIONING CONTROL ASSEMBLY (See page IP-12)**
6. **REMOVE RADIO RECEIVER ASSEMBLY WITH BRACKET (See page AV-69)**
7. **SEPARATE HOOD LOCK CONTROL LEVER SUB-ASSEMBLY (See page ED-3)**
8. **REMOVE NO.1 LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-12)**
9. **REMOVE INSTRUMENT LOWER PANEL LH (See page IP-14)**
10. **REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-12)**
11. **REMOVE CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-13)**
12. **REMOVE SWITCH BASE HOLE COVER**
    (a) Disengage the 3 claws and remove the switch base hole cover.



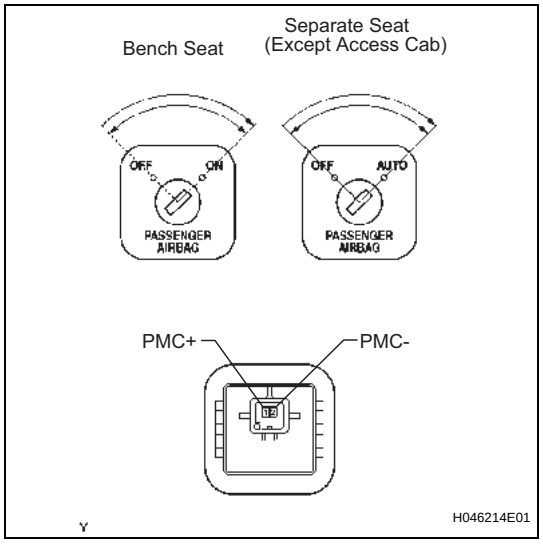
RS



13. REMOVE AIRBAG CUT OFF SWITCH

(a) Disconnect the airbag cut off switch connector.

(b) Remove the instrument cluster finish panel sub-assembly center while holding the 2 claws of the airbag cut off switch.



INSPECTION

1. INSPECT AIRBAG CUT OFF SWTCH

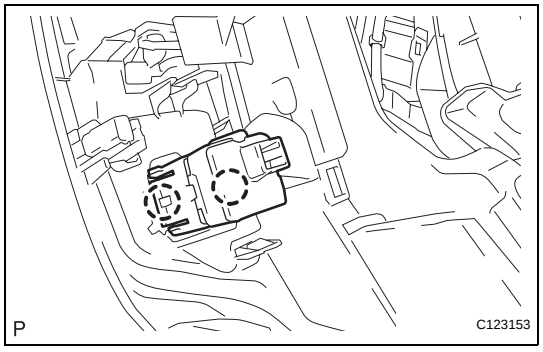
(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard :

Switch Connection	Tester Condition	Specified Condition
OFF	1 (MSW+) - 2 (MSW-)	80 to 120Ω
ON	1 (MSW+) - 2 (MSW-)	320 to 480Ω

If the result is not as specified, replace the air bag cut off switch.

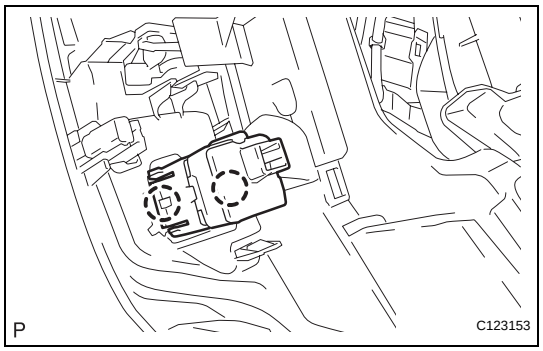


INSTALLATION

1. INSTALL AIRBAG CUT-OFF SWITCH

(a) Engage the 2 claws of the cut off switch with the instrument cluster finish panel sub-assembly center.

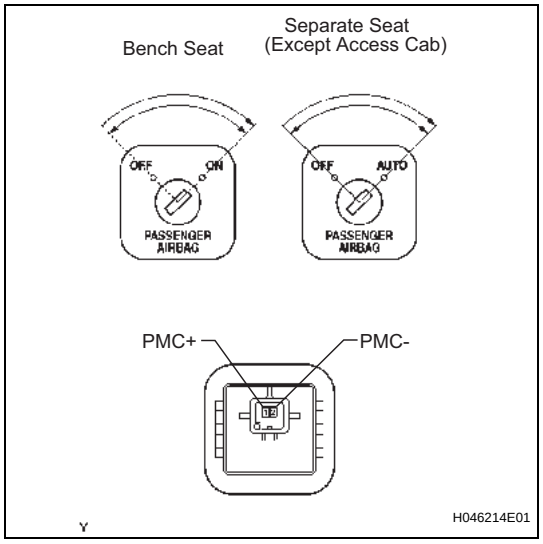
(b) Attach the connector to the airbag cut off switch.



13. REMOVE AIRBAG CUT OFF SWITCH

(a) Disconnect the airbag cut off switch connector.

(b) Remove the instrument cluster finish panel sub-assembly center while holding the 2 claws of the airbag cut off switch.



INSPECTION

1. INSPECT AIRBAG CUT OFF SWTCH

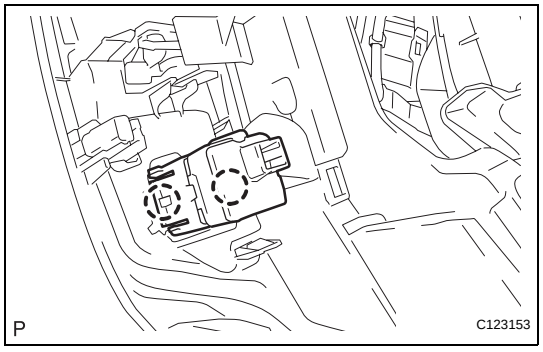
(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the terminals.

Standard :

Switch Connection	Tester Condition	Specified Condition
OFF	1 (MSW+) - 2 (MSW-)	80 to 120Ω
ON	1 (MSW+) - 2 (MSW-)	320 to 480Ω

If the result is not as specified, replace the air bag cut off switch.

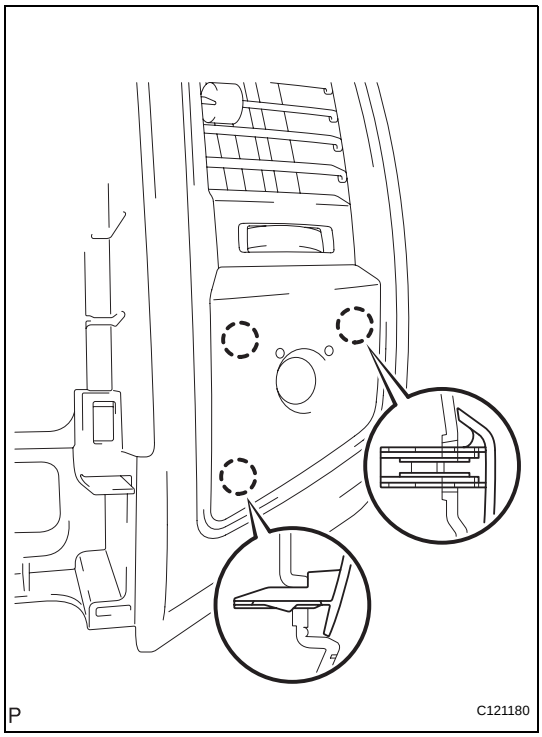


INSTALLATION

1. INSTALL AIRBAG CUT-OFF SWITCH

(a) Engage the 2 claws of the cut off switch with the instrument cluster finish panel sub-assembly center.

(b) Attach the connector to the airbag cut off switch.



2. **INSTALL SWITCH BASE HOLE COVER**
   (a) Disengage the 3 claws and install the switch base hole cover.
3. **INSTALL CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-21)**
4. **INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY (See page IP-21)**
5. **INSTALL INSTRUMENT LOWER PANEL LH (See page IP-20)**
6. **INSTALL NO.1 LOWER INSTRUMENT PANEL FINISH PANEL (See page IP-22)**
7. **CONNECT HOOD LOCK CONTROL LEVER SUB-ASSEMBLY (See page ED-8)**
8. **INSTALL RADIO RECEIVER ASSEMBLY WITH BRACKET (See page AV-70)**
9. **INSTALL AIR CONDITIONING CONTROL ASSEMBLY (See page IP-22)**
10. **INSTALL INSTRUMENT PANEL HOLE COVER (for Lever Type Parking Brake) (See page IP-25)**
11. **INSTALL INSTRUMENT PANEL UNDER TRAY (for Pedal Type Parking Brake) (See page IP-25)**
12. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
    Torque: 3.9 N*m (40 kgf*cm, 35 in.*lbf)
13. **INSPECT SRS WARNING LIGHT**
    (See page RS-28)