# SRS AIRBAG CONTROL SYSTEM

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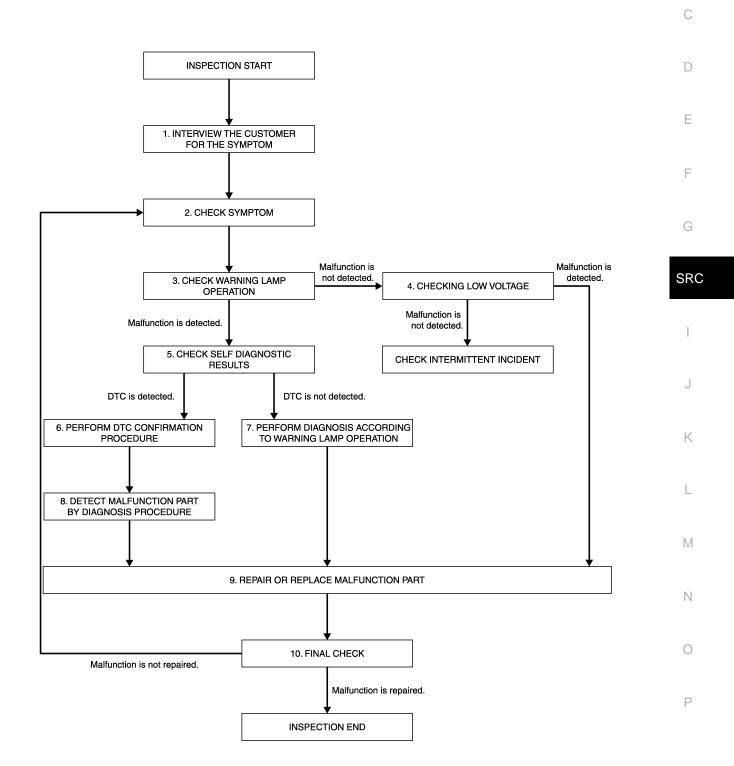
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Service	)
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< BASIC INSPECTION >

# BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

# **OVERALL SEQUENCE**



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#### DETAILED FLOW

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# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

# **1.**INTERVIEW THE CUSTOMER FOR THE SYMPTOM

Interview the customer for the symptom (the condition and the environment when the incident/malfunction occurs).

#### >> GO TO 2.

# 2.CHECK SYMPTOM

Check the symptom from the customer information.

#### >> GO TO 3.

# 3.CHECK WARNING LAMP OPERATION

Check air bag warning lamp operation in the user mode. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. <u>Are any malfunction detected?</u>

YES >> GO TO 5.

NO >> GO TO 4.

**4.**CHECK LOW VOLTAGE

Check low voltage. Refer to PG-3, "How to Handle Battery".

Are any malfunction detected?

YES >> GO TO 9.

NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

**5.**CHECK SELF DIAGNOSTIC RESULTS

Check self diagnostic result with CONSULT or diagnosis mode.

If it is impossible to switch to diagnosis mode, follow the same procedure that DTC is not detected. **NOTE:** 

Perform the following procedure if DTC is detected.

- Record DTC (Print them out with CONSULT.)
- Erase self diagnostic result.
- Study the relationship between the malfunction that DTC or air bag warning lamp indicates and the symptom that the customer describes.
- Check related service bulletins for information.

#### Is DTC detected?

YES >> GO TO 6.

NO >> GO TO 7.

**6.**PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the DTC.

# >> GO TO 8.

7. PERFORM DIAGNOSIS ACCORDING TO WARNING LAMP OPERATION

- 1. Check air bag warning lamp operation in the user mode. Refer to <u>SRC-15, "Air Bag Warning Lamp Diag-nosis"</u>.
- 2. Perform Diagnosis Procedure for the air bag warning lamp operation. Refer to <u>SRC-15, "Air Bag Warning</u> <u>Lamp Diagnosis"</u> (USER MODE).

# >> GO TO 9.

# **8.** DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the DTC.

#### >> GO TO 9.

**9.**REPAIR OR REPLACE THE MALFUNCTION PART

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	
Repair or replace the malfunctioning part.	A
>> GO TO 10.	A
10.FINAL CHECK	В
Check self diagnostic result and air bag warning lamp operation in the user mode. Is the malfunction repaired?	
YES >> INSPECTION END NO >> GO TO 2.	С
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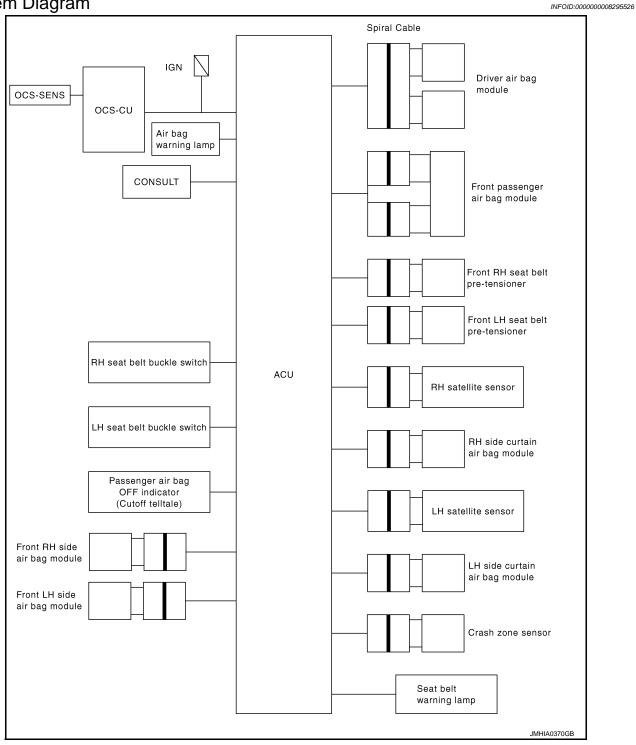
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# < SYSTEM DESCRIPTION >

# SYSTEM DESCRIPTION SRS AIR BAG SYSTEM

# System Diagram



# System Description

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This SRS Air Bag System has the following functions.

- Detects a collision and supplies the energy for deploying air bag and seat belt pre-tensioner.
- Detects electrical malfunction in SRS Air Bag System and Seat Belt Pre-tensioner System, records malfunction code, and blinking air bag warning lamp.

# SRC-8

# SRS AIR BAG SYSTEM

# < SYSTEM DESCRIPTION >

- Detects and records the deployment of air bag and seat belt pre-tensioner, and turns ON air bag warning lamp.
- Indicates malfunctioning portion with blinking times of air bag warning lamp in diagnosis mode.
- Indicates the malfunction record by CONSULT.
- Suppress the deployment of front passenger air bag when front passenger seat is empty or is occupied by a child or a child-seat.
- When passenger seat is occupied by a child or a child seat, turns ON front passenger air bag OFF indicator.
  When judges that passenger seat is occupied by a adult or a child and passenger seat belt is not fasten, turns ON seat belt warning lamp.

#### **COLLISION MODE**

- The operation of supplemental restraint system is different depending on the collision modes applications. For example, the driver air bag module, front passenger air bag module and front seat belt pre-tensioner are activated in a frontal collision but not in a side collision.
- SRS configurations that are activated for some collision modes are as per the following.

			×: Apply, —: Not apply	Е
SRS configuration	Frontal collision	Left side collision	Right side collision	
Driver air bag module.	×	—	—	
Front passenger air bag module.	×	—	—	F
Front LH seat belt pre-tensioner.	×	_	—	
Front RH seat belt pre-tensioner.	×	—	—	G
Front LH side air bag module.	-	×	—	0
Front RH side air bag module.	-	—	×	
LH side curtain air bag module.	-	×	—	SRC
RH side curtain air bag module.	_	_	×	

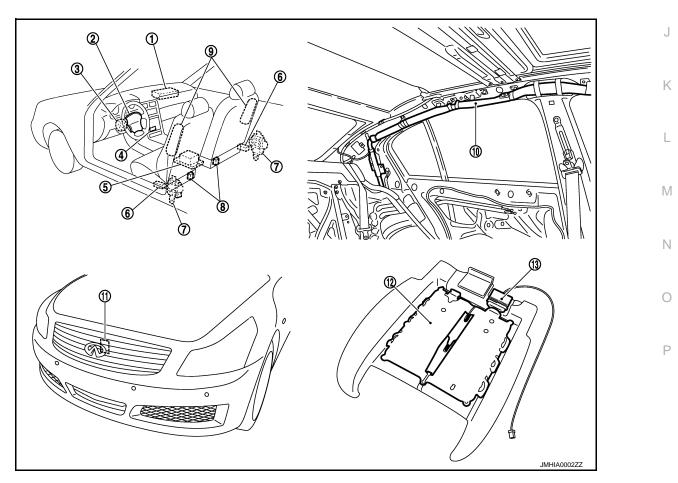
# **Component Parts Location**

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# SRS AIR BAG SYSTEM

# < SYSTEM DESCRIPTION >

- 1. Front passenger air bag module-1 2. Front passenger air bag module-2
- 4. Front passenger air bag off indicator 5.
- 7. Front LH/RH seat belt pre-tensioner 8.
- 10. LH/RH side curtain air bag module
- 13. Occupant Classification System control unit

# **Component Description**

- Driver air bag module
- Air bag diagnosis sensor unit
- Seat belt buckle switch
- 11. Crash zone sensor

- 3. Combination switch (spiral cable)
- 6. LH/RH side air bag (satellite) sensor
- 9. Front LH/RH side air bag module
- 12. Occupant Classification System seat sensor mat

Component	Function
Air bag diagnosis sensor unit	Detects a collision and supplies power supply for deployment to air bag module and pre-tensioner seat belt.
Air bag module • Driver • Passenger • Front side • Side curtain	Receives signal from air bag diagnosis sensor unit and deploys air bag.
Front seat belt pre-tensioner	Receives signal from air bag diagnosis sensor unit and deploys pre-tensioner seat belt.
Seat belt buckle switch	Controls deployment timing depending on the seat belt condition that is fastened or unfastened.
Crash zone sensor	Transmits signal to air bag diagnosis sensor unit when a frontal collision occurs.
Satellite sensor (LH/RH)	Transmits signal to air bag diagnosis sensor unit when a side collision occurs.
Occupant Classification System	Detects front passenger seat occupant and judges whether or not deploys front pas- senger seat air bag.
Combination meter (air bag warning lamp)	Indicates air bag malfunctioning and deployment by blinking and illuminating air bag warning lamp.
Front passenger air bag OFF indicator	Indicates whether or not front passenger air bag is in activation mode subject to the judgement by Occupant Classification System.
Combination switch (spiral cable)	Supplies power supply to driver air bag module on steering wheel.

# **OCCUPANT CLASSIFICATION SYSTEM**

# < SYSTEM DESCRIPTION >

# OCCUPANT CLASSIFICATION SYSTEM

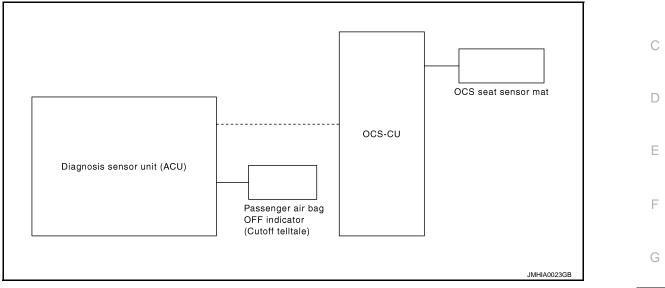
# System Diagram

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# OCCUPANT CLASSIFICATION SYSTEM



# System Description

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# THIS OCCUPANT CLASSIFICATION SYSTEM HAS THE FOLLOWING FUNCTIONS

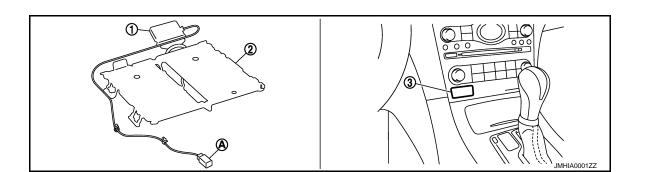
- 1. Suppress the deployment of front passenger air bag when front passenger seat is empty, or when occupied by child and child-seat. Turns ON front passenger air bag OFF indicator when front passenger seat is occupied by child-seat and child.
- 2. Indicates malfunction portion with blinking times of air bag warning lamp in diagnosis mode.
- 3. Indicates the malfunctioning record by CONSULT.

#### NOTE:

Operation of air bag diagnosis sensor unit when air bag diagnosis sensor unit receives information from Occupant Classification System.

Status (front passenger seat)	Passenger air bag	Front passenger air bag OFF indicator	Air bag warning lamp	Seat belt warning lamp (when front passenger seat is unbuckled)	L
Empty	Suppress	OFF	OFF	OFF	•
Child/ child-seat	Suppress	ON	OFF	ON	N
Adult	Enable to deploy	OFF	OFF	ON	•
Malfunction	Suppress	ON	Blinking	OFF	N

# **Component Parts Location**



# **OCCUPANT CLASSIFICATION SYSTEM**

# < SYSTEM DESCRIPTION >

- 1. Occupant Classification System con- 2. trol unit
- Occupant Classification System seat 3. Fro sensor mat tor

Front passenger air bag OFF indicator

A. Occupant Classification System harness connector

# **Component Description**

Component parts	Outline of function
Seat sensor mat	Detects if the passenger seat is empty or occupied
Occupant Classification System control unit	Transmits the passenger seat status (occupied or empty) to air bag diagnosis sensor unit
Front passenger air bag OFF indicator	Turns the front passenger air bag OFF indicator lamp ON when the front passenger seat is occupied by a child or a child-seat
Air bag diagnosis sensor unit	Performs the deploy judgement of passenger air bag based on the information from Occupant Classification System control unit

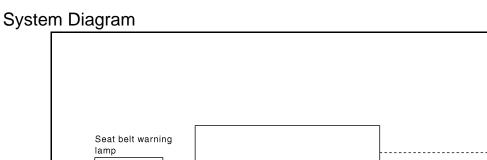
# PASSENGER SEAT BELT WARNING SYSTEM

# < SYSTEM DESCRIPTION >

Left side buckle

switch

# PASSENGER SEAT BELT WARNING SYSTEM



Diagnosis sensor unit (ACU)

System Description

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OCS-CU

Right side buckle

switch

- Turns ON seat belt warning lamp, when the Occupant Classification System judges adult or child in the front SRC passenger seat and the passenger seat belt buckle switch is OFF.
- Operation of air bag diagnosis sensor unit when air bag diagnosis sensor unit receives information from Occupant Classification System.
- In addition, seat belt warning lamp illuminates, when the driver side seat belt is not fasten. This does not relate to the air bag diagnosis sensor unit.
- For driver seat belt function, refer to <u>MWI-6, "METER SYSTEM : System Diagram"</u>

Status (front passenger seat)	Seat belt warning lamp (When front passenger seat is unbuck- led)
Empty	OFF
Child/ child-seat	ON
Adult	ON
Malfunction	OFF

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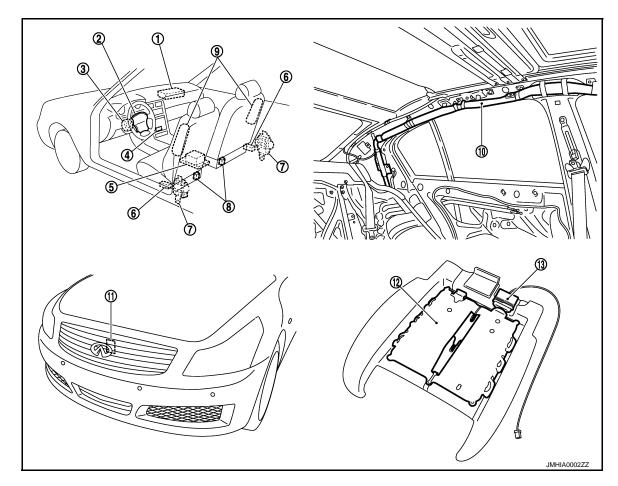
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# PASSENGER SEAT BELT WARNING SYSTEM

#### < SYSTEM DESCRIPTION >

# **Component Parts Location**



- 1. Front passenger air bag module-1 Front passenger air bag module-2
- 4. Front passenger air bag off indicator 5.
  - Front LH/RH seat belt pre-tensioner 8.
- 10. LH/RH side curtain air bag module
- 13. Occupant Classification System control unit

# **Component Description**

7.

Driver air bag module

2.

- Air bag diagnosis sensor unit
- Seat belt buckle switch
- 11. Crash zone sensor

- 3. Combination switch (spiral cable)
- 6. LH/RH side air bag (satellite) sensor
- 9. Front LH/RH side air bag module
- 12. Occupant Classification System seat sensor mat

Component parts	Outline of function
Seat belt buckle switch (Driver side)	Detects if the seat belt buckle switch (driver side) is fastened or unfastened
Seat belt buckle switch (Passenger side)	Detects if the seat belt buckle switch (passenger side) is fastened or unfastened
Seat belt warning lamp	Turns the seat belt warning lamp ON when the seat belt is unfastened
Occupant Classification System control unit	Judges the passenger seat condition based on the information from Occupant Classi- fication System control unit
Seat sensor mat	Detects if the passenger seat is empty or occupied
Air bag diagnosis sensor unit	Turns ON seat belt warning lamp based on the information from Occupant Classifica- tion System control unit
Front passenger air bag OFF indicator	Turns the front passenger air bag OFF indicator lamp ON when the front passenger seat is occupied by a child or a chile seat

# < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (AIRBAG)

# Diagnosis Description

**CAUTION:** 

- Never use electrical test equipment on any circuit related to the SRS unless instructed in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.
- Never repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.

#### **DIAGNOSIS FUNCTION**

- The SRS self-diagnosis results can be read by using air bag warning lamp and/or CONSULT.
- The user mode is exclusively prepared for the customer (driver). This mode warns the driver of a system malfunction through the operation of the air bag warning lamp.
- The diagnosis mode allows the technician to locate and inspect the malfunctioning part.
- The mode applications for the air bag warning lamp and CONSULT are as per the following.

	User mode	Diagnosis mode	Display type	Г
Air bag warning lamp	Х	Х	ON-OFF operation	
CONSULT	-	Х	Monitoring	G

×: Application, —: Not application

#### HOW TO PERFORM TROUBLE DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

A good understanding of the malfunction conditions can make troubleshooting faster and more accurate. In general, each customer feels differently about a malfunction. It is important to fully understand the symptoms or conditions for a customer complaint.

# Information from Customer. WHAT..... Vehicle model. WHEN..... Date, Frequencies. WHERE..... Road conditions. HOW..... Operating conditions, Symptoms. Preliminary Check. Check that the following parts are in good order. Battery (Refer to <u>PG-3</u>, <u>"How to Handle Battery"</u>). Fuse (Refer to <u>PG-30</u>, <u>"Fuse"</u>). System component-to-harness connections. Air Bag Warning Lamp Diagnosis SELF-DIAGNOSIS FUNCTION

- The reading of these results is accomplished by "User mode" and "Diagnosis mode".
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the user mode. At that time, the self-diagnosis result is cleared.

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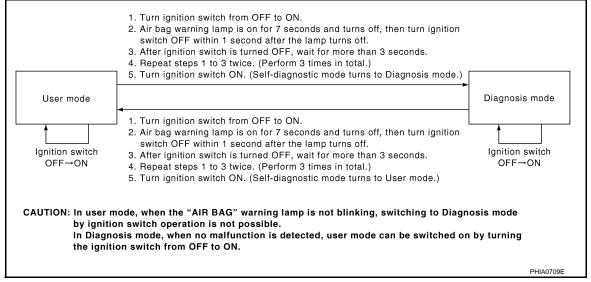
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#### < SYSTEM DESCRIPTION >

# HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT



# DIAGNOSTIC PROCEDURE (USER MODE)

Checking air bag operation according to air bag warning lamp-User mode

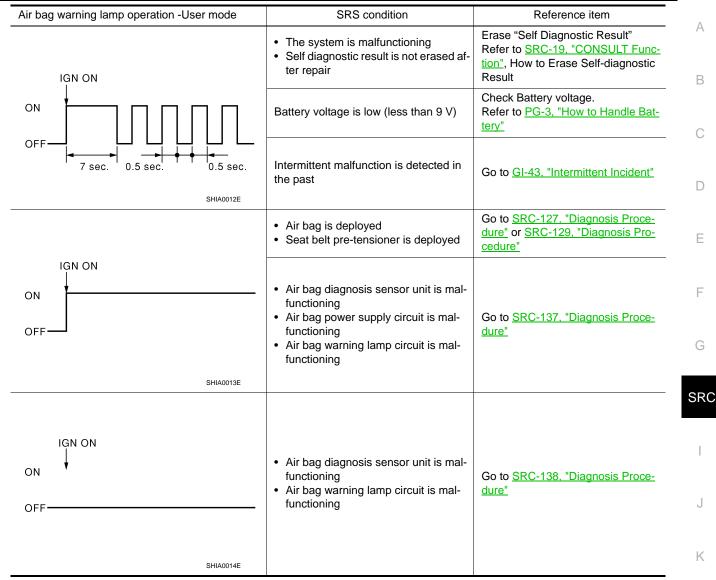
- 1. Turn the ignition switch from OFF to ON, and check that the air bag warning lamp blinks.
- 2. Compare the air bag warning lamp blinking pattern with the examples.



# Air bag warning lamp operation -User mode SRS condition Reference item IGN ON ON · No malfunction is detected No further action is necessary OFF 7 sec. SHIA0011E

Air bag warning lamp examples (User mode)

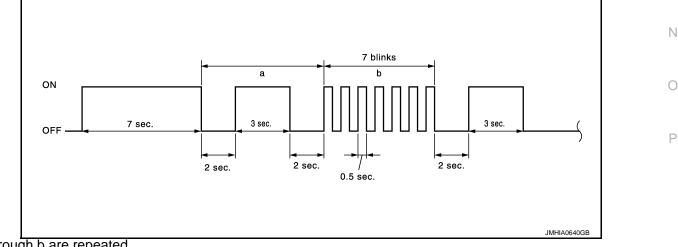
#### < SYSTEM DESCRIPTION >



#### DIAGNOSTIC PROCEDURE (DIAGNOSIS MODE)

- 1. Turn the ignition switch ON, and check that the air bag warning lamp blinks.
- There are 2 blinking patterns for the air bag warning lamp. One is a 3-second blink followed by a 0.5- second blink repeated. The other is two 1.5-second blinks followed by a 0.5-second blink repeated.

An Example of a 3-second Blink Followed by a 0.5-second Blink Repeated



#### a through b are repeated.

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#### < SYSTEM DESCRIPTION >

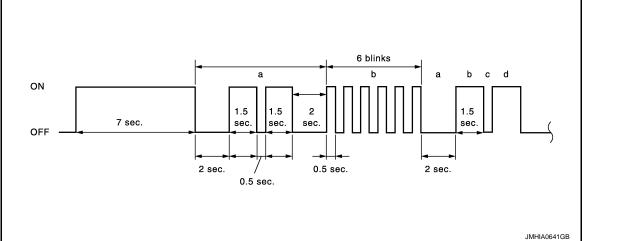
b: Seven 0.5-second blinks indicate that the air bag diagnosis sensor unit circuit is malfunctioning.

Number of 0.5-second blinks after a 3-second blink indicates malfunctioning items

Number of 0.5-second blinks	Malfunctioning items	Blinking pattern
0	Self-diagnosis result is not deleted	_
1	Front RH seat belt pre-tensioner	Refer to the following items         • SRC-63, "DTC Logic"         • SRC-65, "DTC Logic"         • SRC-67, "DTC Logic"         • SRC-69, "DTC Logic"
2	Driver air bag module	Refer to the following items         • SRC-43, "DTC Logic"         • SRC-45, "DTC Logic"         • SRC-47, "DTC Logic"         • SRC-49, "DTC Logic"
3	Front LH seat belt pre-tensioner	Refer to the following items <ul> <li><u>SRC-71, "DTC Logic"</u></li> <li><u>SRC-73, "DTC Logic"</u></li> <li><u>SRC-75, "DTC Logic"</u></li> <li><u>SRC-77, "DTC Logic"</u></li> </ul>
5	Occupant Classification System control unit	Refer to the following items         • SRC-27, "DTC Logic"         • SRC-29, "DTC Logic"         • SRC-31, "DTC Logic"
6	Crash zone sensor	Refer to the following items         • SRC-37, "DTC Logic"         • SRC-39, "DTC Logic"
7	Air bag diagnosis sensor unit	Refer to the following items         SRC-21, "DTC Logic"         SRC-23, "DTC Logic"         SRC-25, "DTC Logic"         SRC-35, "DTC Logic"         SRC-41, "DTC Logic"         SRC-51, "DTC Logic"         SRC-61, "DTC Logic"         SRC-79, "DTC Logic"         SRC-89, "DTC Logic"         SRC-107, "DTC Logic"         SRC-125, "DTC Logic"
8	Front passenger air bag module	Refer to the following items • <u>SRC-53, "DTC Logic"</u> • <u>SRC-55, "DTC Logic"</u> • <u>SRC-57, "DTC Logic"</u> • <u>SRC-59, "DTC Logic"</u>
11	Front passenger air bag OFF indicator	Refer to SRC-33, "DTC Logic".

#### < SYSTEM DESCRIPTION >

An Example of Two 1.5-second Blinks Followed by a 0.5-second Blink Repeated



a through b are repeated.

b: Six 0.5-second blinks indicate that the LH side curtain air bag module circuit is malfunctioning.

Number of 0.5-second blinks after Two 1.5-second blinks indicates malfunctioning items

Number of 0.5-second blinks	Malfunctioning items	Blinking pattern	G
1	Front RH side air bag module	Refer to the following items         • SRC-91, "DTC Logic"         • SRC-93, "DTC Logic"         • SRC-95, "DTC Logic"         • SRC-97, "DTC Logic"	SRC
2	Front LH side air bag module	Refer to the following items         • SRC-99, "DTC Logic"         • SRC-101, "DTC Logic"         • SRC-103, "DTC Logic"         • SRC-105, "DTC Logic"	
3	RH satellite sensor	Refer to the following items         • SRC-81, "DTC Logic"         • SRC-83, "DTC Logic"	
4	LH satellite sensor	Refer to the following items         • SRC-85, "DTC Logic"         • SRC-87, "DTC Logic"	K
5	RH side curtain air bag module	Refer to the following items         • SRC-109, "DTC Logic"         • SRC-111, "DTC Logic"         • SRC-113, "DTC Logic"         • SRC-115, "DTC Logic"	M
6	LH side curtain air bag module	Refer to the following items         • SRC-117, "DTC Logic"         • SRC-119, "DTC Logic"         • SRC-121, "DTC Logic"         • SRC-123, "DTC Logic"	N

# HOW TO ERASE SELF-DIAGNOSTIC RESULTS

After a malfunction is repaired, turn the ignition switch OFF for at least one second, then turn ignition switch ON. Diagnosis mode returns to the user mode. At that time the self-diagnosis result is cleared.

# **CONSULT** Function

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APPLICATION ITEM

CONSULT performs the following functions.

# < SYSTEM DESCRIPTION >

Diagnosis mode	Description
Ecu Identification	Air bag diagnosis sensor unit ECU discriminated number (identification number) or part number is displayed. Air bag diagnosis sensor unit has individual ECU discriminated number (identification number) or part number based on model and equipment.
Self Diagnostic Result	<ul> <li>Self-diagnosis result is displayed. Refer to <u>SRC-131. "DTC Index"</u>.</li> <li>"No DTC" is displayed when repair is completed by part replacement or other operations.</li> <li>"SELF-DIAG RESULT [PAST]" is displayed until "Erase" is performed.</li> <li>CAUTION: When "No DTC" is displayed after repair, always perform "Erase". If this is not done, SRS air bag warning lamp remains blinking when user mode is resumed.</li> </ul>
TROUBLE DIAG RECORD	With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on CONSULT screen.

# B1001, B1002, B1003, B1004, B1005 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS B1001, B1002, B1003, B1004, B1005 DIAGNOSIS SENSOR UNIT

# Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

# OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag, and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

# DTC Logic

INFOID:000000008295542

INFOID:000000008295541

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	DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
	B1001 B1002 B1003	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis</li> </ul>	SRC
	B1004 B1005			sensor unit does not match the vehi- cles specification	I
DTC	CONFIRMAT	ON PROCEDURE			1

1.CHECK SELF-DIAG RESULT

(P) With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

() Without CONSULT

1. Turn ignition switch ON.

Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>.

#### NOTE:

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-21, "Diagnosis Procedure"</u>. NO >> INSPECTION END

# Diagnosis Procedure

#### WARNING:

 Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)

Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2.CHECK WIRING HARNESS

Check the wiring harness externals.

# B1001, B1002, B1003, B1004, B1005 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

3.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-21, "DTC Logic"</u>. 1.
- 2.
- Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

# B1006, B1007, B1008, B1009, B1010 DIAGNOSIS SENSOR UNIT

# < DTC/CIRCUIT DIAGNOSIS >

# B1006, B1007, B1008, B1009, B1010 DIAGNOSIS SENSOR UNIT

# Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

# DTC Logic

INFOID:000000008295545

INFOID:00000008295544

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	0
B1006 B1007	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	Malfunction in air bag diagnosis sen- sor unit	G
B1008 B1009			Configuration in air bag diagnosis sensor unit does not match the vehi-	SR
B1010			cles specification	

# 

# **1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-23</u>, "Diagnosis Procedure".

NO >> INSPECTION END

# Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

# B1006, B1007, B1008, B1009, B1010 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

>> Replace wiring harness. NO

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>
   Perform DTC confirmation procedure. Refer to <u>SRC-23, "DTC Logic"</u>

#### Is DTC detected?

- >> GO TO 1. YES
- NO >> INSPECTION END

# B1011, B1012, B1013, B1014, B1015 DIAGNOSIS SENSOR UNIT

# < DTC/CIRCUIT DIAGNOSIS >

# B1011, B1012, B1013, B1014, B1015 DIAGNOSIS SENSOR UNIT

# Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

# DTC Logic

INFOID:000000008295548

INFOID:000000008295547

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	0
B1011 B1012	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	Malfunction in air bag diagnosis sen- sor unit	G
B1013 B1014			<ul> <li>Configuration in air bag diagnosis sensor unit does not match the vehi-</li> </ul>	SRO
B1015			cles specification	

# 

# **1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-25, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

# Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

# B1011, B1012, B1013, B1014, B1015 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

>> Replace wiring harness. NO

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>
   Perform DTC confirmation procedure. Refer to <u>SRC-25, "DTC Logic"</u>

#### Is DTC detected?

- >> GO TO 1. YES
- NO >> INSPECTION END

# B1017, B1020, B1021 OCCUPANT SENS C/U

#### < DTC/CIRCUIT DIAGNOSIS >

# B1017, B1020, B1021 OCCUPANT SENS C/U

# Description

INFOID:000000008295550

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Suppresses the deployment of front passenger air bag when the condition of passenger seat is empty or occupied with a child and child-seat. Also illuminates front passenger air bag OFF indicator lamp when the condition of passenger seat is occupied with a child-seat and child. In case of malfunction the blinking of the air bag warning lamp reports the malfunction to driver, and by the on board self-diagnosis system or CONSULT can detect the cause.

# OPERATION

This unit classifies occupant in passenger seat and detects electrical malfunctions in Occupant Classification System, and transmits malfunction information to air bag control unit.

# STRUCTURE

It is integrated into the seat sensor mat and detects the occupants with Occupant Classification System control unit that classifies the occupants.

#### INSTALLATION

Occupant Classification System control unit is installed in the passenger seat cushion.

# DTC Logic

INFOID:000000008295551

# DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	SR
B1017 B1020 B1021	OCCUPANT SENS C/U [UNIT FAIL]	Trouble occurs in Occupant Classifica- tion System control unit	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in Occupant Classification System control unit</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	
TC CONFIRMATI	ON PROCEDURE			
CHECK SELF-DI	AG RESULT			J
With CONSULT     Turn ignition swit     Perform "AIR BA     Without CONSUL     Turn ignition swit	AG" Self Diagnostic Re T	esult CONSULT.		K
IOTE:	diagnosis mode if no r	B. Refer to <u>SRC-15, "Air Bag Warn</u> nalfunction is detected in user mo		M
YES >> Refer to NO >> INSPEC	<u>SRC-27, "Diagnosis F</u> TION END	Procedure".		
Diagnosis Proce	dure		INFOID:00000008295552	Ν
minutes. (To discl	turn ignition switch harge backup capaci cified tester or other	tor.)	ive terminal and wait at least 3	0
DIAGNOSTIC PRC	CEDURE			Ρ
1.CHECK HARNES	S CONNECTOR			
Check the connection is the inspection resu	n of harness connecto	or.		

- YES >> GO TO 2.
- NO >> Replace harness connectors.

# B1017, B1020, B1021 OCCUPANT SENS C/U

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-27, "DTC Logic"</u>. 1.

2.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

4. REPLACE OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

1. Replace seat cushion frame. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-27, "DTC Logic".

Is DTC detected?

- YES >> GO TO 1.
- NO >> INSPECTION END

# B1018 OCCUPANT SENS

# Description

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Suppresses the deployment of front passenger air bag when the condition of passenger seat is empty or occupied with a child and child-seat. Also illuminates front passenger air bag OFF indicator lamp when the condition of passenger seat is occupied with a child-seat and child. In case of malfunction the blinking of the air bag warning lamp reports the malfunction to driver, and by the on board self-diagnosis system or CONSULT can detect the cause.

#### OPERATION

The unit classifies occupant in passenger seat and transmits it to Occupant Classification System control unit.

#### STRUCTURE

Multiple sensors are installed in the sensor mat to prevent incorrect sensing induced by the sitting position.

#### INSTALLATION

Occupant Classification System sensor is installed in the passenger seat cushion.

# DTC Logic

INFOID:000000008295554

# DTC DETECTION LOGIC

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	0
B1018	OCCUPANT SENS [UNIT FAIL]	Malfunction occurs in Occupant Classi- fication System sensor	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in Occupant Classification System sensor</li> <li>Malfunction in Occupant Classification System control unit</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC
DTC CONFIRMATI	ON PROCEDURE			

# **1.**CHECK SELF-DIAG RESULT

(I) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result CONSULT.
- **(R)** Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-29, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

# **Diagnosis Procedure**

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

#### DIAGNOSTIC PROCEDURE

**1.**CHECK HARNESS CONNECTOR

Check the connection of harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

>> GO TO 3. YES

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-29, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

4. REPLACE OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT AND SENSOR

1. Replace seat cushion frame. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-29, "DTC Logic".

Is DTC detected?

- YES >> GO TO 1.
- NO >> INSPECTION END

# B1022 OCCUPANT SENS C/U

# Description

Suppresses the deployment of front passenger air bag when the condition of passenger seat is empty or occupied with a child and child-seat. Also illuminates front passenger air bag OFF indicator lamp when the condition of passenger seat is occupied with a child-seat and child. In case of malfunction the blinking of the air bag warning lamp reports the malfunction to driver, and by the on board self-diagnosis system or CONSULT can detect the cause.

#### OPERATION

This unit classifies occupant in passenger seat and detects electrical malfunction in Occupant Classification System and transmits malfunction information to air bag control unit.

#### STRUCTURE

It is integrated into the seat sensor mat and detects the occupants and Occupant Classification System control unit that classifies the occupants.

#### INSTALLATION

Occupant Classification System control unit is installed in the passenger seat cushion.

# DTC Logic

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# DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	c
B1022	OCCUPANT SENS C/U [COMM FAIL]	Malfunction occurs in Occupant Classi- fication System control unit, circuit of Occupant Classification System control unit-Air bag diagnosis sensor unit or Air bag diagnosis sensor unit	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in Occupant Classification System control unit</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	S
DTC CONFIRMAT	TION PROCEDURE			
1.CHECK SELF-D	IAG RESULT			,
<ul><li>Without CONSU</li><li>1. Turn ignition sw</li></ul>	AG" Self Diagnostic Re LT vitch ON.	esult CONSULT. 5. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	ŀ
SRS does not enter Is malfunctioning pa YES >> Refer to	•	nalfunction is detected in user mo Procedure".	de.	N
Diagnosis Proc	edure		INFOID:00000008295558	ľ
minutes. (To disc	, turn ignition switch charge backup capaci acified tester or other		ive terminal and wait at least 3	(
DIAGNOSTIC PROCEDURE				F
1.CHECK HARNE	SS CONNECTOR			
Check the connection res	on of harness connecto sult normal?	or.		

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Replace harness connectors.

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-31, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

1. Replace seat cushion frame. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-31, "DTC Logic".

Is DTC detected?

- YES >> GO TO 1.
- NO >> INSPECTION END

# B1023 PASS A/B INDCTR CKT

# Description

Suppresses the deployment of front passenger air bag when the condition of passenger seat is empty or occupied with a child and child-seat. Also illuminates front passenger air bag OFF indicator lamp when the condition of passenger seat is occupied with a child-seat and child. In case of malfunction the blinking of the air bag warning lamp reports the malfunction to driver, and by the on board self-diagnosis system or CONSULT can detect the cause.

#### OPERATION

Illuminates front passenger air bag OFF indicator when the passenger seat is empty or occupied by a child or a child-seat.

#### STRUCTURE

Front passenger air bag OFF indicator with LED illumination.

#### INSTALLATION

Front passenger air bag OFF indicator is installed at the instrument panel center.

# DTC Logic

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# DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1023	PASS A/B INDCTR CKT [UNIT FAIL]	Passenger air bag OFF indicator circuit is open or shorted to ground or the cir- cuits are shorted each other	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in front passenger air bag OFF indicator</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	SI

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result CONSULT.

#### **(R)** Without CONSULT

- 1. Turn ignition switch ON.
- Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>.

# NOTE:

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

#### Is malfunctioning part detected?

YES >> Refer to <u>SRC-33</u>, "<u>Diagnosis Procedure</u>". NO >> INSPECTION END Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

#### DIAGNOSTIC PROCEDURE

# **1.**CHECK HARNESS CONNECTOR

Check the connection of harness connector.

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

# **B1023 PASS A/B INDCTR CKT**

< DTC/CIRCUIT DIAGNOSIS >

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

3. REPLACE PASSENGER AIR BAG OFF INDICATOR

1. Replace front passenger air bag OFF indicator. Refer to IP-11, "A/T MODELS : Exploded View"

2. Perform DTC confirmation procedure. Refer to SRC-33, "DTC Logic".

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-33, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

# B1026, B1027, B1028, B1029, B1030, B1031 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1026, B1027, B1028, B1029, B1030, B1031 DIAGNOSIS SENSOR UNIT

# Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

# DTC Logic

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1026 B1027	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	Malfunction in air bag diagnosis sen- sor unit	(
B1028 B1029 B1030			Configuration in air bag diagnosis sensor unit does not match the vehi- cles specification	SI
B1031				

# DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-35, "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

# B1026, B1027, B1028, B1029, B1030, B1031 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-35. "DTC Logic"</u>.
- Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

### B1033, B1034 CRASH ZONE SEN

### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level caused by vehicle frontal collision.

#### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both driver and passenger air bags and pre-tensioner seat belts.

#### STRUCTURE

Integrated type of the "G" sensor element for frontal collision with output terminals for signal voltage.

#### INSTALLATION

Crash zone sensor is installed on the radiator core support assembly with fixed nuts.

#### **DTC Logic**

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1033 B1034	CRASH ZONE SEN- SOR [UNIT FAIL]	Crash zone sensor is malfunctioning	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in crash zone sensor</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G
DTC CONFIRMA	TION PROCEDURE			SF
1.CHECK SELF-	DIAG RESULT			
<ul> <li>With CONSULT</li> <li>Turn ignition so</li> <li>Perform "AIR B</li> <li>Without CONSU</li> <li>Turn ignition so</li> </ul>	witch ON. BAG" Self Diagnostic Re JLT	esult.		J
2. Check the air l		s. Refer to <u>SRC-15, "Air Bag War</u>	ning Lamp Diagnosis".	
NOTE: SRS does not ente	ar diagnosis mode if no i	malfunction is detected in user m	ode	K
Is malfunctioning p	•	nandrelion is delected in user m	oue.	
• •	to <u>SRC-37, "Diagnosis I</u>	Procedure".		1
NO >> INSPE	CTION END			
Diagnosis Proc	cedure		INF0ID:00000008295567	
minutes. (To dis • Never use unsp	g, turn ignition switch charge backup capac ecified tester or other ESS CONNECTOR	itor.)	tive terminal and wait at least 3	N
Check the harness	connector.			C
Is the inspection re				
YES >> GO TO NO >> Replace				F
2.CHECK WIRING	ce harness connectors.			
Check the wiring h				
Is the inspection re				
YES >> GO TO NO >> Replace	o 3. ce wiring harness.			

**3.**REPLACE CRASH ZONE SENSOR

- 1. Replace crash zone sensor. Refer to <u>SR-20, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-37, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-37. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

### B1035, B1036 CRASH ZONE SEN

#### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level caused by vehicle frontal collision.

#### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both driver and passenger air bags and pre-tensioner seat belts.

#### STRUCTURE

Integrated type of the "G" sensor element for frontal collision with output terminals for signal voltage.

#### INSTALLATION

Crash zone sensor is installed on the radiator core support assembly with fixed nuts.

#### **DTC Logic**

INFOID:000000008295569

INFOID:00000008295568

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1035 B1036	CRASH ZONE SEN- SOR [COMM FAIL] [UNMATCH]	Crash zone sensor is malfunctioning or out of the specified specification	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in crash zone sensor</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G
DTC CONFIRMAT	ION PROCEDURE			SRC
<b>1.</b> CHECK SELF-D	IAG RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition sw</li> <li>2. Perform "AIR B.</li> <li>Without CONSULT</li> </ul>	ritch ON. AG" Self Diagnostic Re LT	esult.		l J
<ol> <li>Turn ignition sw</li> <li>Check the air back</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis"	
NOTE:	0 0 1			К
	•	malfunction is detected in user mo	de.	
	a <u>rt detected?</u> o <u>SRC-39, "Diagnosis F</u> CTION END	Procedure".		L
Diagnosis Proce	edure		INFOID:00000008295570	Μ
minutes. (To disc • Never use unspe	, turn ignition switch charge backup capaci cified tester or other SS CONNECTOR		ive terminal and wait at least 3	Ν
Check the harness	connector.			0
Is the inspection res	sult normal?			
YES >> GO TO				Р
· · ·	e harness connectors.			1
2.CHECK WIRING				
Check the wiring ha				
<u>Is the inspection res</u> YES >> GO TO				
	3. e wiring harness.			
	5			

**3.**REPLACE CRASH ZONE SENSOR

- 1. Replace crash zone sensor. Refer to <u>SR-20, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-39, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-39, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# B1042, B1043, B1044, B1045, B1046, B1047 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

### B1042, B1043, B1044, B1045, B1046, B1047 DIAGNOSIS SENSOR UNIT

#### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

#### DTC Logic

INFOID:000000008295572

INFOID:00000000829557

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1042 B1043	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	Malfunction in air bag diagnosis sen- sor unit	(
B1044 B1045			Configuration in air bag diagnosis sensor unit does not match the vehi-	S
B1046 B1047			cles specification	

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-41, "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:000000008295573

### B1042, B1043, B1044, B1045, B1046, B1047 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-41. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

### B1049, B1054 DRIVER AIRBAG MODULE

#### < DTC/CIRCUIT DIAGNOSIS >

### B1049, B1054 DRIVER AIRBAG MODULE

#### Description

For driver air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direc-В tion.

#### **OPERATION**

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Driver air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Driver air bag module is installed on the center of steering wheel with fixed bolts.

#### DTC Logic

INFOID:00000008295575

INFOID:000000008295574

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1049 B1054	DRIVER AIRBAG MOD- ULE [OPEN]	Driver air bag module circuit is open (including the spiral cable)	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in driver air bag module</li> <li>Malfunction in spiral cable</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	S

**1.**CHECK SELF-DIAG RESULT (P) With CONSULT 1. Turn ignition switch ON. 2. Perform "AIR BAG" Self Diagnostic Result. 🕅 Without CONSULT Turn ignition switch ON. 1. Κ Check the air bag warning lamp status. Refer to SRC-15, "Air Bag Warning Lamp Diagnosis". 2. NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. L Is malfunctioning part detected? YES >> Refer to <u>SRC-43, "Diagnosis Procedure"</u>. NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008295576 WARNING: Ν Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.) Never use unspecified tester or other measuring device. 1.CHECK HARNESS CONNECTOR Check the harness connector. Is the inspection result normal? Ρ YES >> GO TO 2. NO >> Replace harness connector.

2. CHECK WIRING HARNESS

### Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

### B1049, B1054 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

#### NO >> Replace wiring harness.

### **3.**CHECK SPIRAL CABLE CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect driver air bag module harness connector and combination switch (spiral cable) harness connector.
- 3. Check continuity between driver air bag module harness connector and combination switch (spiral cable) harness connector.

Driver air	bag module	Combination sw	Continuity	
Connector	Terminal	Connector	Continuity	
M302	10		28	
101302	11	Mos	30	Existed
M201	12 M35	29	Existed	
M301	9		30	-

#### 4. Check continuity between driver air bag module harness connector and ground.

Driver side a	ir bag module		Continuity		
Connector	Terminal		Continuity		
M302	10	Ground			
WOUZ	11	Ground	Not existed		
M301	12		NOT EXISTED		
IVISU I	9				

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to <u>SR-13, "Exploded View"</u>.

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to <u>SRC-43, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

**5.**REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to <u>SR-10, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to <u>SRC-43, "DTC Logic"</u>.

#### Is DTC detected?

- YES >> GO TO 1.
- NO >> INSPECTION END

#### B1050, B1055 DRIVER AIRBAG MODULE

#### < DTC/CIRCUIT DIAGNOSIS >

### B1050, B1055 DRIVER AIRBAG MODULE

#### Description

For driver air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direc-

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Driver air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Driver air bag module is installed on the center of steering wheel with fixed bolts.

#### DTC Logic

INFOID:000000008295578

INFOID:000000008295577

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1050 B1055	DRIVER AIRBAG MOD- ULE [VB-SHORT]	Driver air bag module circuit is shorted to some power supply circuit (including the spiral cable)	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in driver air bag module</li> <li>Malfunction in spiral cable</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>

#### DTC CONFIRMATION PROCEDURE

#### **1.**CHECK SELF-DIAG RESULT

With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

#### YES >> Refer to <u>SRC-45, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

#### Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

INFOID:000000008295579

### B1050, B1055 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

#### NO >> Replace wiring harness.

### 3. CHECK SPIRAL CABLE CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect driver air bag module harness connector and combination switch (spiral cable) harness connector.
- 3. Check continuity between driver air bag module harness connector and combination switch (spiral cable) harness connector.

Driver air l	Driver air bag module Combination switch (s		Combination switch (spiral cable)		
Connector	Terminal	Connector	- Continuity		
M202	10		28		
M302	11	MOE	30	Eviete d	
M204	M301 12 M35		29	Existed	
IVI301			30	+	

#### 4. Check continuity between driver air bag module harness connector and ground.

Driver side a	ir bag module		Continuity		
Connector	Terminal		Continuity		
M302	10	Ground			
WOUZ	11	Ground	Not existed		
M301	12		NOT EXISTED		
IVISU I	9				

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to <u>SR-13, "Exploded View"</u>.

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-45, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

**5.**REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to <u>SR-10, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to <u>SRC-43, "DTC Logic"</u>.

#### Is DTC detected?

- YES >> GO TO 1.
- NO >> INSPECTION END

### B1051, B1056 DRIVER AIRBAG MODULE

#### < DTC/CIRCUIT DIAGNOSIS >

### B1051, B1056 DRIVER AIRBAG MODULE

### Description

For driver air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direc-

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Driver air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Driver air bag module is installed on the center of steering wheel with fixed bolts.

#### DTC Logic

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INFOID:00000008295580

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det	DI	DT	DTC	TC det	detect	ecting c	g conditi	dition				Possibl	e cause		
0	Driver air l to ground (including	ground	und	0				it is sho	orted	s • N • N	hort Ialfunctio Ialfunctio	on in dri on in sp	ver air ba iral cable	arness an ag module gnosis sei	

#### DTC CONFIRMATION PROCEDURE

#### **1.**CHECK SELF-DIAG RESULT

With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

**Without CONSULT** 

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

#### YES >> Refer to <u>SRC-47, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

#### Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

INFOID:000000008295582

### B1051, B1056 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

#### NO >> Replace wiring harness.

### **3.**CHECK SPIRAL CABLE CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect driver air bag module harness connector and combination switch (spiral cable) harness connector.
- 3. Check continuity between driver air bag module harness connector and combination switch (spiral cable) harness connector.

Driver air	Driver air bag module Combination switch (spiral cable)		Combination switch (spiral cable)		
Connector	Terminal	harness connector	Continuity		
M202	10		28		
M302	11	Mag	30	Eviate d	
M204	12	- M35	29	Existed	
M301	9		30	+	

4. Check continuity between driver air bag module harness connector and ground.

Driver side ai	ir bag module		Continuity	
Connector	Terminal		Continuity	
M302	10	Ground		
WI302	11	Ground	Not existed	
M301	12		NOI EXISIEU	
IVISUT	9			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to <u>SR-13, "Exploded View"</u>.

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-47, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

**5.**REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to <u>SR-10, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-47, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

### B1052, B1057 DRIVER AIRBAG MODULE

#### < DTC/CIRCUIT DIAGNOSIS >

### B1052, B1057 DRIVER AIRBAG MODULE

### Description

For driver air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direc-

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Driver air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Driver air bag module is installed on the center of steering wheel with fixed bolts.

#### DTC Logic

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1052 B1057	DRIVER AIRBAG MOD- ULE [SHORT]	Driver air bag module circuit are shorted to each other (including the spiral cable)	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in driver air bag module</li> <li>Malfunction in spiral cable</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>

#### DTC CONFIRMATION PROCEDURE

#### **1.**CHECK SELF-DIAG RESULT

With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

**Without CONSULT** 

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

#### YES >> Refer to <u>SRC-49</u>, "Diagnosis Procedure".

NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

#### Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

INFOID:000000008295585

### B1052, B1057 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

#### NO >> Replace wiring harness.

### **3.**CHECK SPIRAL CABLE CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect driver air bag module harness connector and combination switch (spiral cable) harness connector.
- 3. Check continuity between driver air bag module harness connector and combination switch (spiral cable) harness connector.

Driver air	bag module	Combination sw	itch (spiral cable)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M202	10	- Nor	28	
M302	11		30	Existed
M301	12	M35	29	Existed
	9		30	1

#### 4. Check continuity between driver air bag module harness connector and ground.

Driver side a	ir bag module		Continuity
Connector	Connector Terminal		Continuity
M302	10	Ground	
WOUZ	11	Ground	Not existed
M301	12		NOT EXISTED
IVISU I	9		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to <u>SR-13, "Exploded View"</u>.

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-49, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

**5.**REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to <u>SR-10, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-49, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

## B1058, B1059, B1060, B1061, B1062, B1063 DIAGNOSIS SENSOR UNIT

#### < DTC/CIRCUIT DIAGNOSIS >

### B1058, B1059, B1060, B1061, B1062, B1063 DIAGNOSIS SENSOR UNIT

#### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

#### DTC Logic

INFOID:000000008295587

INFOID:00000008295586

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1058 B1059 B1060 B1061 B1062	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis sensor unit does not match the vehicles specification</li> </ul>	S
B1063				

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-51, "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:00000000829558

### B1058, B1059, B1060, B1061, B1062, B1063 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-51, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

### B1065, B1070 ASSIST A/B MODULE

### Description

For front passenger air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Front passenger air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Front passenger air bag module is installed on the instrument panel with fixed bolts.

#### **DTC Logic**

INFOID:000000008295590

INFOID:00000008295589

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1065 B1070	ASSIST A/B MODULE [OPEN]	Front passenger air bag module circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in front passenger air bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G SRC
DTC CONFIRMAT	TION PROCEDURE			
1.CHECK SELF-D	IAG RESULT			
Without CONSU     Turn ignition sw	AG" Self Diagnostic Re LT vitch ON.			J
<ol> <li>Check the air b NOTE:</li> </ol>	ag warning lamp status	s. Refer to <u>SRC-15, "Air Bag Warn</u>	<u>ing Lamp Diagnosis"</u> .	N
SRS does not enter Is malfunctioning pa YES >> Refer to	•	malfunction is detected in user mo Procedure".	de.	L
Diagnosis Proc			INF01D:00000008295591	M
minutes. (To disc • Never use unspe	, turn ignition switch charge backup capaci ecified tester or other SS CONNECTOR	itor.)	ive terminal and wait at least 3	N
Check the harness Is the inspection res YES >> GO TO NO >> Replac 2.CHECK WIRING	sult normal? 2. e harness connector.			Ρ
Check the wiring ha	sult normal?			
Revision: 2012 Augu	st	SRC-53	2013 G Sedan	

### B1065, B1070 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-53, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT PASSENGER AIR BAG MODULE

- 1. Replace front passenger air bag module. Refer to <u>SR-16. "Exploded View"</u>
- Perform DTC confirmation procedure. Refer to SRC-53, "DTC Logic". 2.

#### Is DTC detected?

YES >> GO TO 1.

### B1066, B1071 ASSIST A/B MODULE

### Description

For front passenger air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Front passenger air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Front passenger air bag module is installed on the instrument panel with fixed bolts.

#### **DTC Logic**

INFOID:000000008295593

INFOID:00000008295592

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1066 B1071	ASSIST A/B MODULE [VB-SHORT]	Front passenger air bag module circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front passenger air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-I	DIAG RESULT			Ι
<ul> <li>With CONSULT</li> <li>1. Turn ignition s</li> <li>2. Perform "AIR I</li> <li>Without CONSULT</li> <li>1. Turn ignition s</li> </ul>	witch ON. BAG" Self Diagnostic Re ULT	esult.		J
2. Check the air		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	Κ
NOTE: SRS does not ente	er diagnosis mode if no r	malfunction is detected in user mo	de.	
Is malfunctioning p	-			L
	to <u>SRC-55, "Diagnosis F</u> ECTION END	Procedure".		
Diagnosis Prod	cedure		INFOID:00000008295594	M
minutes. (To dis	g, turn ignition switch scharge backup capaci becified tester or other		ive terminal and wait at least 3	Ν
1.CHECK HARNI	ESS CONNECTOR	<b>U</b>		0
Check the harness	s connector.			
Is the inspection re YES >> GO TO				Ρ
	ce harness connector.			
2. CHECK WIRIN	G HARNESS			
Check the wiring h				
Is the inspection re	esult normal?			

YES >> GO TO 3.

### B1066, B1071 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-55, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT PASSENGER AIR BAG MODULE

1. Replace front passenger air bag module. Refer to <u>SR-16, "Exploded View"</u>.

Perform DTC confirmation procedure. Refer to SRC-55, "DTC Logic". 2.

#### Is DTC detected?

YES >> GO TO 1.

### B1067, B1072 ASSIST A/B MODULE

### Description

For front passenger air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Front passenger air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Front passenger air bag module is installed on the instrument panel with fixed bolts.

#### **DTC Logic**

INFOID:000000008295596

INFOID:00000008295595

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1067 B1072	ASSIST A/B MODULE [GND-SHORT]	Front passenger air bag module circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front passenger air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMAT	ION PROCEDURE			
1.CHECK SELF-DI	IAG RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition sw</li> <li>2. Perform "AIR B/</li> <li>Without CONSUL</li> </ul>	AG" Self Diagnostic Re	esult.		J
<ol> <li>Turn ignition sw</li> <li>Check the air ba</li> <li>NOTE:</li> </ol>	itch ON. ag warning lamp status	s. Refer to <u>SRC-15, "Air Bag Warn</u>		K
Is malfunctioning pa	•	malfunction is detected in user mo	de.	L
	o <u>SRC-57, "Diagnosis F</u>	Procedure"		
	TION END	<u>10000010</u> .		
Diagnosis Proce	edure		INFOID:00000008295597	Μ
minutes. (To disc • Never use unspe	harge backup capaci cified tester or other		ive terminal and wait at least 3	Ν
<b>1.</b> CHECK HARNES	SS CONNECTOR			0
Check the harness of				
Is the inspection res				Ρ
YES >> GO TO NO >> Replace	2. e harness connector.			
2. CHECK WIRING				
Check the wiring ha				
Is the inspection res				
YES >> GO TO	3.			
Revision: 2012 Augus	st	SRC-57	2013 G Sedan	

### B1067, B1072 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-57, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT PASSENGER AIR BAG MODULE

1. Replace front passenger air bag module. Refer to <u>SR-16. "Exploded View"</u>

Perform DTC confirmation procedure. Refer to SRC-57, "DTC Logic". 2.

#### Is DTC detected?

YES >> GO TO 1.

### B1068, B1073 ASSIST A/B MODULE

### Description

For front passenger air bag module, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Front passenger air bag module mainly consists of air bag and inflator that inflates air bag.

#### INSTALLATION

Front passenger air bag module is installed on the instrument panel with fixed bolts.

#### **DTC Logic**

INFOID:000000008295599

INFOID:000000008295598

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1068 B1073	ASSIST A/B MODULE [SHORT]	Front passenger air bag module circuits are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front passenger air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMAT	TION PROCEDURE			
1.CHECK SELF-D	DIAG RESULT			
Without CONSU     Turn ignition sv	BAG" Self Diagnostic Re ILT vitch ON.			J
<ol> <li>Check the air b NOTE:</li> </ol>	ag warning lamp status	s. Refer to <u>SRC-15, "Air Bag Warr</u>	ing Lamp Diagnosis".	1.
SRS does not enter	•	malfunction is detected in user mo	de.	I
<u>Is malfunctioning pa</u> YES >> Refer to	<u>art detected?</u> o <u>SRC-59, "Diagnosis F</u>	Procoduro"		
NO >> INSPE	CTION END	-locedule		
Diagnosis Proc	edure		INFOID:00000008295600	Μ
minutes. (To dis • Never use unspe	g, turn ignition switch charge backup capaci ecified tester or other	itor.)	ive terminal and wait at least 3	N
Check the harness				
Is the inspection rea				Р
YES >> GO TO				
NO >> Replac 2.CHECK WIRING	e harness connector.			
Check the wiring ha				
YES >> GO TO				
Revision: 2012 Augu	st	SRC-59	2013 G Sedan	

### B1068, B1073 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-59, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT PASSENGER AIR BAG MODULE

- 1. Replace front passenger air bag module. Refer to <u>SR-16. "Exploded View"</u>
- Perform DTC confirmation procedure. Refer to SRC-59, "DTC Logic". 2.

#### Is DTC detected?

YES >> GO TO 1.

## B1074, B1075, B1076, B1077, B1078, B1079 DIAGNOSIS SENSOR UNIT

#### < DTC/CIRCUIT DIAGNOSIS >

### B1074, B1075, B1076, B1077, B1078, B1079 DIAGNOSIS SENSOR UNIT

#### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

#### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

### DTC Logic

INFOID:000000008295602

INFOID:000000008295601

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1074 B1075 B1076	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis</li> </ul>	
B1077 B1078 B1079			sensor unit does not match the vehi- cles specification	S

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-61, "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:000000008295603

### B1074, B1075, B1076, B1077, B1078, B1079 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22</u>, "Exploded View".
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-61. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

### B1081 PRE-TEN FRONT RH

#### Description

For front RH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

#### INSTALLATION

Front RH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295605

INFOID:00000008295604

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1081	PRE-TEN FRONT RH [OPEN]	Front RH seat belt pre-tensioner circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in front RH seat belt pretensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>
DTC CONFIRMAT	ION PROCEDURE		
1.CHECK SELF-DI	IAG RESULT		
<ul> <li>With CONSULT</li> <li>Turn ignition sw</li> <li>Perform "AIR B/</li> <li>Without CONSUL</li> </ul>	AG" Self Diagnostic Re	esult.	
NOTE:	ag warning lamp status	s. Refer to <u>SRC-15, "Air Bag Warn</u>	
	-	malfunction is detected in user mo	de.
	o <u>SRC-63, "Diagnosis F</u> CTION END	Procedure".	
Diagnosis Proce	edure		INFOID:00000008295606
WARNING:			
<ul> <li>Before servicing minutes. (To disc</li> </ul>	, turn ignition switch harge backup capac cified tester or other	OFF, disconnect battery negat itor.) measuring device.	ive terminal and wait at least 3
1.CHECK HARNES	SS CONNECTOR		
Check the harness of	connector.		
Is the inspection res			
YES >> GO TO NO >> Replace	2. e harness connector.		
2.CHECK WIRING			
Check the wiring ha			
Is the inspection res	ult normal?		

### **B1081 PRE-TEN FRONT RH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front RH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-63, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. 1.

2. Perform DTC confirmation procedure. Refer to SRC-63, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### **B1082 PRE-TEN FRONT RH**

#### Description

For front RH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in В front direction.

#### **OPERATION**

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects С the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

#### **INSTALLATION**

Front RH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295608 F

INFOID:00000008295607

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1082	PRE-TEN FRONT RH [VB-SHORT]	Front RH seat belt pre-tensioner circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front RH seat belt pre- tensioner</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>
DTC CONFIRMAT	ION PROCEDURE		
1.CHECK SELF-D	IAG RESULT		
	AG" Self Diagnostic Re	esult.	
<ul> <li>Without CONSU</li> <li>1. Turn ignition sw</li> <li>2. Check the air b</li> <li>NOTE:</li> </ul>	vitch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
	diagnosis mode if no i	malfunction is detected in user mo	de.
	a <u>rt detected?</u> o <u>SRC-65, "Diagnosis I</u> CTION END	Procedure".	
Diagnosis Proc	edure		INFOID:00000008295609
minutes. (To dise	charge backup capac cified tester or other		ive terminal and wait at least 3
Check the harness	connector.		
Is the inspection res YES >> GO TO	<u>sult normal?</u> 2. e harness connector.		
Check the wiring ha			

Is the inspection result normal?

### **B1082 PRE-TEN FRONT RH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front RH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-65, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to SR-22, "Exploded View". 1.

2. Perform DTC confirmation procedure. Refer to SRC-65, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### B1083 PRE-TEN FRONT RH

#### Description

For front RH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

DTC detecting condition

#### INSTALLATION

DTC No

Front RH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

Trouble diagnosis name

### DTC Logic

INFOID:000000008295611

Possible cause

INFOID:00000008295610

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DIC No.	I rouble diagnosis name	DIC detecting condition	Possible cause	~
B1083	PRE-TEN FRONT RH [GND-SHORT]	Front RH seat belt pre-tensioner circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front RH seat belt pre- tensioner</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SR
DTC CONFIRMATI	ON PROCEDURE			
1.CHECK SELF-DI	AG RESULT			
	G" Self Diagnostic Re	esult.		J
<ul> <li>Without CONSUL</li> <li>1. Turn ignition swir</li> <li>2. Check the air ba</li> <li>NOTE:</li> </ul>	tch ON.	. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	Κ
	diagnosis mode if no r	nalfunction is detected in user mo	de.	L
Is malfunctioning par	t detected?			
YES >> Refer to NO >> INSPEC	<u>SRC-67, "Diagnosis F</u> TION END	Procedure".		M
Diagnosis Proce	dure		INFOID:00000008295612	
minutes. (To discl	harge backup capaci cified tester or other		ive terminal and wait at least 3	N O
Check the harness c	onnector.			Р
Is the inspection result YES >> GO TO 2 NO >> Replace				Γ
2.CHECK WIRING	HARNESS			
Check the wiring har	ness externals.			

Is the inspection result normal?

### **B1083 PRE-TEN FRONT RH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front RH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-67, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to SR-22, "Exploded View". 1.

2. Perform DTC confirmation procedure. Refer to SRC-67, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### **B1084 PRE-TEN FRONT RH**

#### Description

For front RH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in В front direction.

#### **OPERATION**

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects С the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

#### **INSTALLATION**

Front RH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295614 F

INFOID:00000008295613

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1084	PRE-TEN FRONT RH	Front RH seat belt pre-tensioner circuit	Disconnection of wiring harness and short
	[SHORT]	are shorted to each other	<ul> <li>Malfunction in front RH seat belt pre-</li> </ul>
			tensioner
			<ul> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>
DTC CONFIRMA	TION PROCEDURE		
1.CHECK SELF-D	DIAG RESULT		
With CONSULT			
<ol> <li>Turn ignition sv</li> <li>Perform "AIR E</li> </ol>	witch ON. 3AG" Self Diagnostic Re	esult.	
🕱 Without CONSL	JLT		
		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
NOTE: SRS does not ente	r diagnosis mode if no i	malfunction is detected in user mo	de.
Is malfunctioning p	-		ue.
YES >> Refer t	o <u>SRC-69, "Diagnosis I</u>	Procedure".	
NO >> INSPE	CTION END		
Diagnosis Proc	cedure		INFOID:00000008295615
WARNING:			
	g, turn ignition switch charge backup capac	OFF, disconnect battery negat	ive terminal and wait at least 3
<ul> <li>Never use unsp</li> </ul>	ecified tester or other	measuring device.	
<b>1.</b> CHECK HARNE	ESS CONNECTOR		
Check the harness	connector.		
Is the inspection re			
YES >> GO TO NO >> Replace			
•	ce harness connector.		
2.CHECK WIRING			
Check the wiring h			
Is the inspection re	suit normal?		

### **B1084 PRE-TEN FRONT RH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front RH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-69, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. 1.

2. Perform DTC confirmation procedure. Refer to SRC-69, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### **B1086 PRE-TEN FRONT LH**

#### < DTC/CIRCUIT DIAGNOSIS >

### B1086 PRE-TEN FRONT LH

#### Description

For front LH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in front direction.

#### OPERATION

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

#### INSTALLATION

Front LH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295617

INFOID:00000008295616

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1086	PRE-TEN FRONT LH [OPEN]	Front LH seat belt pre-tensioner circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in front LH seat belt pretensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G SR
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-I	DIAG RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition s</li> <li>2. Perform "AIR I</li> <li>Without CONSU</li> </ul>	witch ON. BAG" Self Diagnostic Re	esult.		J
1. Turn ignition s	witch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	K
SRS does not ente	•	malfunction is detected in user mo	de.	L
<u>Is malfunctioning p</u> YES >> Refer	<u>part detected?</u> to <u>SRC-71, "Diagnosis I</u>	Procedure"		
	ECTION END	<u>locedule</u> .		N
Diagnosis Proc	cedure		INFOID:00000008295618	
WARNING:				Ν
	g, turn ignition switch scharge backup capac	OFF, disconnect battery negat	ive terminal and wait at least 3	
Never use unsp	ecified tester or other	measuring device.		0
<b>1.</b> CHECK HARNI	ESS CONNECTOR			
Check the harness	s connector.			Р
Is the inspection re				
YES >> GO TO NO >> Replace	2 2. ce harness connector.			
2.CHECK WIRIN				
Check the wiring h	arness externals.			
Is the inspection re	esult normal?			

### **B1086 PRE-TEN FRONT LH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front LH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-71, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-71, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# **B1087 PRE-TEN FRONT LH**

### Description

For front LH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in В front direction.

### **OPERATION**

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects С the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

### **INSTALLATION**

Front LH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295620 F

INFOID:00000008295619

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1087	PRE-TEN FRONT LH [VB-SHORT]	Front LH seat belt pre-tensioner circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH seat belt pretensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>
DTC CONFIRMATI	ON PROCEDURE		
1.CHECK SELF-DI	AG RESULT		
	G" Self Diagnostic Re	esult.	
<ul> <li>Without CONSUL</li> <li>1. Turn ignition swi</li> <li>2. Check the air ba</li> <li>NOTE:</li> </ul>	tch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
	diagnosis mode if no r	malfunction is detected in user mo	de.
Is malfunctioning par			
YES >> Refer to NO >> INSPEC	<u>SRC-73, "Diagnosis F</u> TION END	<u>Procedure"</u> .	
Diagnosis Proce	dure		INFOID:00000008295621
minutes. (To disc	harge backup capaci cified tester or other		ive terminal and wait at least 3
Check the harness c	onnector.		
Is the inspection resu			
YES >> GO TO 2 NO >> Replace	2. harness connector.		
2.CHECK WIRING			
Check the wiring har	ness externals.		

Is the inspection result normal?

# **B1087 PRE-TEN FRONT LH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

1. Replace front LH seat belt pre-tensioner. Refer to <u>SB-6. "SEAT BELT RETRACTOR : Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-73, "DTC Logic".

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-73, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

### **B1088 PRE-TEN FRONT LH**

### < DTC/CIRCUIT DIAGNOSIS >

# **B1088 PRE-TEN FRONT LH**

### Description

For front LH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in В front direction.

### **OPERATION**

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects С the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

### **INSTALLATION**

Front LH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295623 F

INFOID:00000008295622

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1088	PRE-TEN FRONT LH [GND-SHORT]	Front LH seat belt pre-tensioner circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH seat belt pretensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>
DTC CONFIRMAT			
1.CHECK SELF-DI			
<ul> <li>With CONSULT</li> <li>1. Turn ignition sw</li> <li>2. Perform "AIR B/</li> </ul>	itch ON. AG" Self Diagnostic Re	esult.	
<ul> <li>Without CONSUI</li> <li>1. Turn ignition sw</li> <li>2. Check the air ba</li> <li>NOTE:</li> </ul>	ritch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
	diagnosis mode if no i	malfunction is detected in user mo	de.
Is malfunctioning pa	rt detected?		
	) <u>SRC-75, "Diagnosis I</u> CTION END	Procedure".	
Diagnosis Proce	edure		INF0/D:00000008295624
minutes. (To disc	, turn ignition switch harge backup capac cified tester or other		ive terminal and wait at least 3
<b>1.</b> CHECK HARNES	SS CONNECTOR		
Check the harness of	connector.		
Is the inspection res         YES       >> GO TO         NO       >> Replace         2.CHECK WIRING	2. e harness connector.		
Check the wiring ha	rness externals.		

Is the inspection result normal?

# **B1088 PRE-TEN FRONT LH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front LH seat belt pre-tensioner. Refer to <u>SB-6, "SEAT BELT RETRACTOR : Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-75, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-75, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

### **B1089 PRE-TEN FRONT LH**

### < DTC/CIRCUIT DIAGNOSIS >

# **B1089 PRE-TEN FRONT LH**

### Description

For front LH seat belt pre-tensioner, crash is judged by main "G" sensor output signal and safing algorithm in В front direction.

### **OPERATION**

In the case of a frontal collision that exceeds specified impact level, the air bag diagnosis sensor unit detects С the deceleration caused by collision. It restrains the passenger with seat belt easing the stress on passengers chest with load limiter.

#### STRUCTURE

The restraint system for front seat occupant consists of the pre-tensioner mechanism and load limiter mechanism.

### **INSTALLATION**

Front LH seat belt pre-tensioner is installed on the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295626 F

INFOID:00000008295625

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1089	PRE-TEN FRONT LH [SHORT]	Front LH seat belt pre-tensioner circuit are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH seat belt pre- tensioner</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>
DTC CONFIRMA	TION PROCEDURE		
1.CHECK SELF-	DIAG RESULT		
	witch ON. BAG" Self Diagnostic Re	esult.	
Without CONSU 1. Turn ignition s 2. Check the air I NOTE:	witch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
	er diagnosis mode if no r	malfunction is detected in user mo	de.
	<u>part detected?</u> to <u>SRC-77, "Diagnosis F</u> ECTION END	Procedure".	
Diagnosis Proc	cedure		INFOID:00000008295627
minutes. (To dis • Never use unsp	g, turn ignition switch scharge backup capaci secified tester or other ESS CONNECTOR	itor.)	ive terminal and wait at least 3
Check the harness			
<u>Is the inspection re</u> YES >> GO TO			
	ce harness connector.		
Check the wiring h			

Is the inspection result normal?

# **B1089 PRE-TEN FRONT LH**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE FRONT SEAT BELT PRE-TENSIONER

Replace front LH seat belt pre-tensioner. Refer to <u>SB-6</u>, "<u>SEAT BELT RETRACTOR</u> : <u>Exploded View</u>".
 Perform DTC confirmation procedure. Refer to <u>SRC-77</u>, "<u>DTC Logic</u>".

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-77, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# B1106, B1107, B1108, B1109, B1110, B1111 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1106, B1107, B1108, B1109, B1110, B1111 DIAGNOSIS SENSOR UNIT

### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

### DTC Logic

INFOID:000000008295629

INFOID:00000008295628

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1106 B1107 B1108 B1109 B1110	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis sensor unit does not match the vehicles specification</li> </ul>	S
B1111				

### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-79, "Diagnosis Procedure"</u>. NO >> INSPECTION END

### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:000000008295630

# B1106, B1107, B1108, B1109, B1110, B1111 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-79. "DTC Logic"</u>.
- Is DTC detected?

YES >> GO TO 1.

### B1113, B1114 SATELLITE SENS RH

### < DTC/CIRCUIT DIAGNOSIS >

# B1113, B1114 SATELLITE SENS RH

### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level by vehicle B side collision.

### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both the front side air bag and side curtain air bag.

### STRUCTURE

Integrated type of the "G" sensor element for side collision with output terminals for signal voltage.

### INSTALLATION

RH satellite sensor is installed at the underside of center pillar with fixed nuts.

### **DTC** Logic

INFOID:000000008295632

INFOID:00000008295631

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1113 B1114	SATELLITE SENS RH [UNIT FAIL]	RH satellite sensor is malfunctioning	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in RH satellite sensor</li> <li>Malfunction in air bag diagnosis sen-</li> </ul>	G
			sor unit	

### DTC CONFIRMATION PROCEDURE

### **1.**CHECK SELF-DIAG RESULT

(P) With CONSULT Turn ignition switch ON. 1. Perform "AIR BAG" Self Diagnostic Result. 2. 🕅 Without CONSULT Turn ignition switch ON. 1. Check the air bag warning lamp status. Refer to SRC-15, "Air Bag Warning Lamp Diagnosis". 2. NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? YES >> Refer to SRC-81, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:000000008295633 WARNING: Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.) Never use unspecified tester or other measuring device. 1.CHECK HARNESS CONNECTOR Check the harness connector. Is the inspection result normal? YES >> GO TO 2. NO >> Replace harness connector. 2. CHECK WIRING HARNESS

Check the wiring harness externals.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

# B1113, B1114 SATELLITE SENS RH

< DTC/CIRCUIT DIAGNOSIS >

# **3.**REPLACE SATELLITE SENSOR

- 1. Replace RH satellite sensor. Refer to <u>SR-21, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-81, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-81. "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

### B1115, B1116 SATELLITE SENS RH

### < DTC/CIRCUIT DIAGNOSIS >

# B1115, B1116 SATELLITE SENS RH

### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level by vehicle B side collision.

### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both the front side air bag and side curtain air bag.

### STRUCTURE

Integrated type of the "G" sensor element for side collision with output terminals for signal voltage.

### INSTALLATION

RH satellite sensor is installed at the underside of center pillar with fixed nuts.

### **DTC** Logic

INFOID:000000008295635

INFOID:000000008295634

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1115 B1116	SATELLITE SENS RH [COMM FAIL] [UNMATCH]	RH satellite sensor is malfunctioning or out of the specified specification	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in RH satellite sensor</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>
DTC CONFIRMATI	ON PROCEDURE		
<b>1.</b> CHECK SELF-DIA	AG RESULT		
<ul> <li>Without CONSUL</li> <li>Turn ignition swit</li> <li>Check the air bas</li> <li>NOTE:</li> <li>SRS does not enter our set of the set of t</li></ul>	G" Self Diagnostic Re T ch ON. g warning lamp status diagnosis mode if no r <u>t detected?</u> <u>SRC-83, "Diagnosis F</u>	s. Refer to <u>SRC-15, "Air Bag Warn</u> nalfunction is detected in user mo	
Diagnosis Proce	-		
Diagnosis Floce	uure		INFOID:00000008295636
	harge backup capaci ified tester or other	tor.)	ive terminal and wait at least 3
Check the harness co			
Is the inspection resu YES >> GO TO 2	I <u>lt normal?</u>  harness connector.		
Check the wiring ham Is the inspection result YES >> GO TO 3 NO >> Replace	Ilt normal?		

# B1115, B1116 SATELLITE SENS RH

< DTC/CIRCUIT DIAGNOSIS >

# **3.**REPLACE SATELLITE SENSOR

- 1. Replace RH satellite sensor. Refer to <u>SR-21, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-83, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-83. "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

### B1118, B1119 SATELLITE SENS LH

### < DTC/CIRCUIT DIAGNOSIS >

# B1118, B1119 SATELLITE SENS LH

### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level by vehicle B side collision.

### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both the front side air bag and side curtain air bag.

### STRUCTURE

Integrated type of the "G" sensor element for side collision with output terminals for signal voltage.

### INSTALLATION

LH satellite sensor is installed at the underside of center pillar with fixed nuts.

### DTC Logic

INFOID:000000008295638

INFOID:00000008295637

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1118 B1119	SATELLITE SENS LH [UNIT FAIL]	LH satellite sensor is malfunctioning	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in LH satellite sensor</li> <li>Malfunction in air bag diagnosis sen-</li> </ul>	G
			sor unit	

### DTC CONFIRMATION PROCEDURE

### **1.**CHECK SELF-DIAG RESULT

(P) With CONSULT Turn ignition switch ON. 1. Perform "AIR BAG" Self Diagnostic Result. 2. 🕅 Without CONSULT Turn ignition switch ON. 1. Check the air bag warning lamp status. Refer to SRC-15, "Air Bag Warning Lamp Diagnosis". 2. NOTE: Κ SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? YES >> Refer to SRC-85, "Diagnosis Procedure". L NO >> INSPECTION END Diagnosis Procedure INFOID:000000008295639 M WARNING: Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.) Ν Never use unspecified tester or other measuring device. 1.CHECK HARNESS CONNECTOR Check the harness connector. Is the inspection result normal? YES >> GO TO 2. NO >> Replace harness connector. 2. CHECK WIRING HARNESS

Check the wiring harness externals.

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

# B1118, B1119 SATELLITE SENS LH

< DTC/CIRCUIT DIAGNOSIS >

**3.**REPLACE SATELLITE SENSOR

- 1. Replace LH satellite sensor. Refer to <u>SR-21, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-85, "DTC Logic"</u>

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-85. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

### B1120, B1121 SATELLITE SENS LH

### < DTC/CIRCUIT DIAGNOSIS >

# B1120, B1121 SATELLITE SENS LH

### Description

Main "G" sensor generates signal voltage, when it detects deceleration beyond the specified level by vehicle B side collision.

### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to be that of collision which exceeds a specified level, the driving circuit switches on and feeds the electric ignitor of both the front side air bag and side curtain air bag.

### STRUCTURE

Integrated type of the "G" sensor element for side collision with output terminals for signal voltage.

### INSTALLATION

LH satellite sensor is installed at the underside of center pillar with fixed nuts.

### **DTC Logic**

INFOID:000000008295641

INFOID:00000008295640

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1120 B1121	SATELLITE SENS LH [COMM FAIL] [UNMATCH]	LH satellite sensor is malfunctioning or out of the specified specification	<ul> <li>Disconnection of wiring harness</li> <li>Malfunction in LH satellite sensor</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G
DTC CONFIRMATIO	ON PROCEDURE			SRC
1.CHECK SELF-DIA	AG RESULT			
With CONSULT				

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

**Without CONSULT** 

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

- YES >> Refer to <u>SRC-87, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

### Diagnosis Procedure

WARNING:

INFOID:000000008295642

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Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
 Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

#### Check the harness connector.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

# B1120, B1121 SATELLITE SENS LH

< DTC/CIRCUIT DIAGNOSIS >

# **3.**REPLACE SATELLITE SENSOR

- 1. Replace LH satellite sensor. Refer to <u>SR-21, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-87, "DTC Logic"</u>.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-87. "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# B1122, B1123, B1124, B1125, B1126, B1127 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1122, B1123, B1124, B1125, B1126, B1127 DIAGNOSIS SENSOR UNIT

### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

### DTC Logic

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1122 B1123 B1124 B1125	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis sensor unit does not match the vehi-</li> </ul>	S
B1126 B1127			cles specification	

### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES >> Refer to <u>SRC-89, "Diagnosis Procedure"</u>. NO >> INSPECTION END

### Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:000000008295645

# B1122, B1123, B1124, B1125, B1126, B1127 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-89. "DTC Logic"</u>.
- Is DTC detected?

YES >> GO TO 1.

### **B1129 SIDE MODULE RH**

### < DTC/CIRCUIT DIAGNOSIS >

# **B1129 SIDE MODULE RH**

# Description

For front RH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### **OPERATION**

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by С electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front RH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front RH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1129	SIDE MODULE RH [OPEN]	Front RH side air bag module circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in front RH side air bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	S
OTC CONFIRMA	TION PROCEDURE		·	
1.CHECK SELF-	DIAG RESULT			
With CONSULT Turn ignition s C. Perform "AIR Without CONS	switch ON. BAG" Self Diagnostic Re	esult.		
<ol> <li>Turn ignition s</li> <li>Check the air</li> </ol>		S.SRC-15, "Air Bag Warning Lamp	Diagnosis"	I
NOTE:			-	
s malfunctioning p	•	malfunction is detected in user mo	de.	
YES >> Refer	to SRC-91, "Diagnosis F	Procedure".		
	ECTION END			ľ
Diagnosis Pro	cedure		INFOID:00000008295648	
			ive terminal and wait at least 3	
	scharge backup capaci becified tester or other			
	ESS CONNECTOR	<b>U</b>		(
Check the harness	s connector.			
s the inspection re				I
YES >> GO TO NO >> Repla	ce harness connector.			
2.CHECK WIRIN				
Check the wiring h	narness externals.			
s the inspection re YES >> GO TO				
Revision: 2012 Aua	ust	SRC-91	2013 G Sedan	

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-91, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

- 1. Replace front RH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-91, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### **B1130 SIDE MODULE RH**

### < DTC/CIRCUIT DIAGNOSIS >

# B1130 SIDE MODULE RH

# Description

For front RH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front RH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front RH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295650

INFOID:00000008295649

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1130	SIDE MODULE RH [VB-SHORT]	Front RH side air bag module circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front RH side air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-D	DIAG RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition sv</li> <li>2. Perform "AIR E</li> <li>Without CONSU</li> </ul>	vitch ON. 3AG" Self Diagnostic Re JLT	esult.		J
<ol> <li>Turn ignition sw</li> <li>Check the air b</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	Κ
NOTE:				
Is malfunctioning pa	•	malfunction is detected in user mo	de.	L
	o <u>SRC-93, "Diagnosis F</u>	Procedure".		
	CTION END			M
Diagnosis Proc	edure		INFOID:00000008295651	IVI
minutes. (To dis • Never use unspe	charge backup capac ecified tester or other	itor.)	ive terminal and wait at least 3	N
I.CHECK HARNE	SS CONNECTOR			0
Check the harness				
Is the inspection re YES >> GO TC				Ρ
	e harness connector.			
2.CHECK WIRING	G HARNESS			
Check the wiring ha	arness externals.			
Is the inspection re	sult normal?			
YES >> GO TC	) 3.			
Revision: 2012 Augu	ıst	SRC-93	2013 G Sedan	

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-93, "DTC Logic"</u>. 1.
- 2.

### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

4.REPLACE FRONT SIDE AIR BAG MODULE

- 1. Replace front RH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-93, "DTC Logic".

### Is DTC detected?

YES >> GO TO 1.

### **B1131 SIDE MODULE RH**

### < DTC/CIRCUIT DIAGNOSIS >

# B1131 SIDE MODULE RH

# Description

For front RH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

Front RH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front RH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295653

INFOID:00000008295652

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1131	SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front RH side air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SR
DTC CONFIRMAT	TION PROCEDURE			
<b>1.</b> CHECK SELF-D	DIAG RESULT			I
<ul> <li>With CONSULT</li> <li>1. Turn ignition sw</li> <li>2. Perform "AIR B</li> <li>Without CONSUL</li> </ul>	BAG" Self Diagnostic Re	esult.		J
<ol> <li>Turn ignition sv</li> <li>Check the air b</li> <li>NOTE:</li> </ol>	vitch ON. ag warning lamp status	s. Refer to <u>SRC-15, "Air Bag Warr</u>		Κ
Is malfunctioning particular to YES >> Refer to	•	malfunction is detected in user mo Procedure".	ode.	L
Diagnosis Proc	edure		INF01D:00000008295654	Μ
minutes. (To dis	charge backup capaci	itor.)	ive terminal and wait at least 3	Ν
• Never use unspe 1.CHECK HARNE	ecified tester or other	measuring device.		0
Check the harness				
Is the inspection res				Р
YES >> GO TO	2.			Г
<b>^</b>	e harness connector.			
2.CHECK WIRING	B HARNESS			

### Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-95, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

- 1. Replace front RH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-95, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

### **B1132 SIDE MODULE RH**

### < DTC/CIRCUIT DIAGNOSIS >

# B1132 SIDE MODULE RH

# Description

For front RH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### **OPERATION**

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by С electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front RH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front RH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295656

INFOID:00000008295655

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1132	SIDE MODULE RH [SHORT]	Front RH side air bag module circuit are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front RH side air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>
DTC CONFIRMA	TION PROCEDURE		
<b>1.</b> CHECK SELF-	DIAG RESULT		
Without CONSL	switch ON. BAG" Self Diagnostic Re JLT	esult.	
<ol> <li>Turn ignition s</li> <li>Check the air</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis"
NOTE:			
s malfunctioning p	•	malfunction is detected in user mo	de.
YES >> Refer	to <u>SRC-97, "Diagnosis F</u>	Procedure".	
	ECTION END		
Diagnosis Pro	cedure		INFOID:00000008295657
WARNING: Before servicin	a turn ignition switch	OFF disconnect battery negat	ive terminal and wait at least 3
minutes. (To dis	scharge backup capaci	itor.)	
4	ecified tester or other ESS CONNECTOR	measuring device.	
Check the harness			
Is the inspection re			
YES >> GO TO	-		
2.CHECK WIRIN	ICE harness connector.		
	narness externals.		
Is the inspection re			
YES >> GO TO	O 3.		
Revision: 2012 Aug	wet	SRC-97	2013 G Sedan

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-97, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

- 1. Replace front RH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-97, "DTC Logic".

### Is DTC detected?

YES >> GO TO 1.

# B1134 SIDE MODULE LH

# Description

For front LH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front LH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front LH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295659

INFOID:000000008295658

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1134	SIDE MODULE LH [OPEN]	Front LH side air bag module circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in front LH side air bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G SRC
DTC CONFIRMATI	ON PROCEDURE			
1.CHECK SELF-DI	AG RESULT			
Without CONSUL	AG" Self Diagnostic Re T	esult.		J
		s. Refer to <u>SRC-15, "Air Bag Warr</u>	<u>iing Lamp Diagnosis"</u> .	Κ
NOTE: SRS does not enter Is malfunctioning par	diagnosis mode if no r <u>t detected?</u> <u>SRC-99, "Diagnosis F</u>	nalfunction is detected in user mo		L
Diagnosis Proce	edure		INF0ID:00000008295660	Μ
minutes. (To disc	turn ignition switch harge backup capaci cified tester or other	itor.)	ive terminal and wait at least 3	Ν
1.CHECK HARNES		U		0
Check the harness c				
Is the inspection result YES >> GO TO 2 NO >> Replace				Ρ
2. CHECK WIRING	HARNESS			
Check the wiring har				
Is the inspection results YES >> GO TO 3				
YES >> GO TO : Revision: 2012 Augus		SRC-99	2013 G Sedan	

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-99, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

1. Replace front LH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-99, "DTC Logic".

### Is DTC detected?

YES >> GO TO 1.

# B1135 SIDE MODULE LH

# Description

For front LH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front LH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front LH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295662

INFOID:00000008295661

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1135	SIDE MODULE LH [VB-SHORT]	Front LH side air bag module circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH side air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-D	DIAG RESULT			Ι
Without CONSU	BAG" Self Diagnostic Re LT	esult.		J
<ol> <li>Turn ignition sv</li> <li>Check the air b</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warr</u>	iing Lamp Diagnosis".	Κ
NOTE:		_		
Is malfunctioning p	•	malfunction is detected in user mo	ue.	L
YES >> Refer t	o <u>SRC-101, "Diagnosis</u>	Procedure".		
NO >> INSPE Diagnosis Proc	CTION END		INFOID:00000008295663	M
minutes. (To dis • Never use unsp	g, turn ignition switch charge backup capaci ecified tester or other ESS CONNECTOR	itor.)	ive terminal and wait at least 3	N
Check the harness				
Is the inspection re				Р
YES >> GO TO				
NO >> Replace 2.CHECK WIRING	ce harness connector.			
Check the wiring ha				
YES >> GO TO				
Revision: 2012 Augu	ust	SRC-101	2013 G Sedan	

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-101, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

1. Replace front LH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-101, "DTC Logic"</u>.

### Is DTC detected?

YES >> GO TO 1.

# B1136 SIDE MODULE LH

# Description

For front LH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front LH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front LH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC Logic**

INFOID:000000008295665

INFOID:00000008295664

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1136	SIDE MODULE LH [GND-SHORT]	Front LH side air bag module circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH side air bag module</li> </ul>	G
			Malfunction in air bag diagnosis sen- sor unit	SR
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-D	DIAG RESULT			
With CONSULT				
<ol> <li>Turn ignition sv</li> <li>Perform "AIR E</li> <li>Without CONSU</li> </ol>	BAG" Self Diagnostic Re	esult.		J
<ol> <li>Turn ignition sv</li> <li>Check the air b</li> <li>NOTE:</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warr</u>	ning Lamp Diagnosis".	Κ
	•	malfunction is detected in user mo	ode.	I
Is malfunctioning particular terms YES >> Refer t	art detected? o <u>SRC-103, "Diagnosis</u>	Procedure"		
	CTION END	<u></u>		
Diagnosis Proc	edure		INFOID:00000008295666	Μ
WARNING: • Before servicing	a. turn ianition switch	OFF. disconnect battery negat	tive terminal and wait at least 3	Ν
minutes. (To dis	charge backup capac	itor.)		
• Never use unspo 1.CHECK HARNE	ecified tester or other	measuring device.		0
Check the harness				
Is the inspection re				Р
YES >> GO TO				1
<b>^</b>	e harness connector.			
2.CHECK WIRING				
Check the wiring ha				
Is the inspection re				

Revision: 2012 August

>> GO TO 3.

YES

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-103, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

1. Replace front LH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.

Perform DTC confirmation procedure. Refer to <u>SRC-103, "DTC Logic"</u>. 2.

### Is DTC detected?

YES >> GO TO 1.

# B1137 SIDE MODULE LH

# Description

For front LH side air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

Front LH side air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

Front LH side air bag module is installed on the side of front seat back with fixed nuts.

### **DTC** Logic

INFOID:000000008295668

INFOID:00000008295667

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1137	SIDE MODULE LH [SHORT]	Front LH side air bag module circuit are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in front LH side air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRO
DTC CONFIRMA	TION PROCEDURE		·	
1.CHECK SELF-I	DIAG RESULT			
Without CONSL	witch ON. BAG" Self Diagnostic Re JLT	esult.		J
		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	Κ
Is malfunctioning p YES >> Refer	•	nalfunction is detected in user mo <u>Procedure</u> ".	de.	L
Diagnosis Prod	cedure		INFOID:00000008295669	Μ
minutes. (To dis	g, turn ignition switch scharge backup capaci pecified tester or other	itor.)	ive terminal and wait at least 3	Ν
4	ESS CONNECTOR			0
Check the harness				
<u>Is the inspection re</u> YES >> GO TO NO >> Replace				Ρ
2.CHECK WIRIN				
Check the wiring h <u>Is the inspection re</u> YES >> GO TO	esult normal?			
Bovision: 2012 Aug	uot	SRC-105	2013 C Sodan	

NO >> Replace wiring harness.

3. REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-105, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE FRONT SIDE AIR BAG MODULE

1. Replace front LH side air bag module. Refer to <u>SE-60, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-105, "DTC Logic".

### Is DTC detected?

YES >> GO TO 1.

# B1138, B1139, B1140, B1141, B1142, B1143 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1138, B1139, B1140, B1141, B1142, B1143 DIAGNOSIS SENSOR UNIT

### Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

### OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

### DTC Logic

INFOID:000000008295671

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1138 B1139 B1140 B1141 B1142	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	<ul> <li>Malfunction in air bag diagnosis sensor unit</li> <li>Configuration in air bag diagnosis sensor unit does not match the vehicles specification</li> </ul>	SI

### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

Without CONSULT

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES	>> Refer to <u>SRC-107, "Diagnosis Procedure"</u> .
NO	>> INSPECTION END

### Diagnosis Procedure

INFOID:000000008295672

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#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

**2.**CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

# B1138, B1139, B1140, B1141, B1142, B1143 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-107, "DTC Logic"</u>.
- Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## B1145 CURTAIN MODULE RH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

## STRUCTURE

RH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

RH side curtain air bag module is installed on the roof side with fixed bolts.

## DTC Logic

INFOID:000000008295674

INFOID:000000008295673

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1145	CURTAIN MODULE RH [OPEN]	RH side curtain air bag module circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in RH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G SRC
DTC CONFIRMA 1.CHECK SELF-	ATION PROCEDURE DIAG RESULT			I
	switch ON. BAG" Self Diagnostic Re	esult.		J
Without CONSU 1. Turn ignition s 2. Check the air	switch ON.	. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	K

#### NOTE:

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

## YES >> Refer to <u>SRC-109, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

## Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

## Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

INFOID:000000008295675

## **B1145 CURTAIN MODULE RH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-109, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace RH side curtain air bag module. Refer to <u>SR-18, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to SRC-109, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## **B1146 CURTAIN MODULE RH**

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

## STRUCTURE

RH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

RH side curtain air bag module is installed on the roof side with fixed bolts.

## DTC Logic

INFOID:00000008295677

INFOID:000000008295676

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B1146	CURTAIN MODULE RH [VB-SHORT]	RH side curtain air bag module circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in RH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>
	TION PROCEDURE		
1.CHECK SELF-	DIAG RESULT		
<ul> <li>With CONSULT</li> <li>1. Turn ignition sv</li> <li>2. Perform "AIR E</li> <li>Without CONSU</li> </ul>	BAG" Self Diagnostic Re	esult.	
<ol> <li>Turn ignition sv</li> <li>Check the air b</li> </ol>		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".
NOTE:	r diagnosis mode if no r	molfunction is detected in user me	do
Is malfunctioning p	•	malfunction is detected in user mo	ue.

is manunctioning part detected?

#### YES >> Refer to <u>SRC-111, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

## Diagnosis Procedure

#### WARNING:

- Ν Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

1.CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

## Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3. INFOID:000000008295678

## **B1146 CURTAIN MODULE RH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-111, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace RH side curtain air bag module. Refer to <u>SR-18, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to SRC-111, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## B1147 CURTAIN MODULE RH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

### OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

#### STRUCTURE

RH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

RH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

INFOID:000000008295680

INFOID:00000008295679

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1147	CURTAIN MODULE RH [GND-SHORT]	RH side curtain air bag module circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in RH side curtain air</li> </ul>	G
			<ul><li>bag module</li><li>Malfunction in air bag diagnosis sensor unit</li></ul>	SRC
DTC CONFIRMAT	ION PROCEDURE			
1.CHECK SELF-DI	AG RESULT			
	AG" Self Diagnostic Re	esult.		J
Without CONSUL 1. Turn ignition swi 2. Check the air ba NOTE:	tch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	К
	•	malfunction is detected in user mo	de.	I
Is malfunctioning part YES >> Refer to	<u>rt detected?</u> SRC-113, "Diagnosis	Procedure".		
NO >> INSPEC		<u></u> .		в. 4
Diagnosis Proce	edure		INFOID:00000008295681	Μ
minutes. (To disc	turn ignition switch harge backup capac cified tester or other		ive terminal and wait at least 3	Ν
1.CHECK HARNES	SS CONNECTOR	-		0
Check the harness c	connector.			
Is the inspection res				Ρ
YES >> GO TO 2 NO >> Replace	2. harness connector.			
2.CHECK WIRING				
Check the wiring har	ness externals.			
Is the inspection res				
YES >> GO TO 3	3.			

## **B1147 CURTAIN MODULE RH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-113, "DTC Logic"</u>. 1.

2.

#### Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

1. Replace RH side curtain air bag module. Refer to <u>SR-18, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to SRC-113, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## B1148 CURTAIN MODULE RH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

RH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

RH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

INFOID:000000008295683

INFOID:00000008295682

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DTC No.	Trouble diagnosis nome	DTC detecting condition	Possible cause	
B1148	Trouble diagnosis name CURTAIN MODULE RH [SHORT]	RH side curtain air bag module circuit are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in RH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SR(
DTC CONFIRMATIO	ON PROCEDURE		<u>.</u>	
1.CHECK SELF-DIA	G RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition swite</li> <li>2. Perform "AIR BAG</li> <li>Without CONSULT</li> </ul>	G" Self Diagnostic Re	esult.		J
1. Turn ignition swite	ch ON.	. Refer to <u>SRC-15, "Air Bag Warr</u>	ing Lamp Diagnosis".	K
Is malfunctioning part	<u>t detected?</u> SRC-115, "Diagnosis	nalfunction is detected in user mo	de.	L
Diagnosis Proce	dure		INF01D:00000008295684	M
	arge backup capaci	tor.)	ive terminal and wait at least 3	Ν
1.CHECK HARNES		5		0
Check the harness co				
Is the inspection resultYES>> GO TO 2NO>> Replace2.CHECK WIRING F	harness connector.			Ρ
Check the wiring harr Is the inspection resu				

YES >> GO TO 3.

## **B1148 CURTAIN MODULE RH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-115, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace RH side curtain air bag module. Refer to <u>SR-18, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-115, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

## **B1150 CURTAIN MODULE LH**

## < DTC/CIRCUIT DIAGNOSIS >

## **B1150 CURTAIN MODULE LH**

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

LH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

LH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

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INFOID:00000008295685

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1150	CURTAIN MODULE LH [OPEN]	LH side curtain air bag module circuit is open	<ul> <li>Disconnection of wiring harness and open</li> <li>Malfunction in LH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	( SI
TC CONFIRM	ATION PROCEDURE			
CHECK SELF	-DIAG RESULT			
With CONSULT	Г switch ON. BAG" Self Diagnostic Re	esult.		ţ

#### NOTE:

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

## YES >> Refer to <u>SRC-117</u>, "Diagnosis Procedure".

NO >> INSPECTION END

## Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

## Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

INFOID:000000008295687

## **B1150 CURTAIN MODULE LH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-117, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace LH side curtain air bag module. Refer to SR-18. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-117, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## **B1151 CURTAIN MODULE LH**

## < DTC/CIRCUIT DIAGNOSIS >

## B1151 CURTAIN MODULE LH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

## STRUCTURE

LH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

LH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

INFOID:000000008295689

INFOID:00000008295688

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1151	CURTAIN MODULE LH [VB-SHORT]	LH side curtain air bag module circuit is shorted to some power supply circuit	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in LH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sen-</li> </ul>	G SR(
			sor unit	SKI
DTC CONFIRMA	TION PROCEDURE			
<b>1.</b> CHECK SELF-D	DIAG RESULT			
<ul> <li>With CONSULT</li> <li>1. Turn ignition sv</li> <li>2. Perform "AIR E</li> </ul>	witch ON. BAG" Self Diagnostic Re	esult.		J
	witch ON.	s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis".	K
	-	malfunction is detected in user mo	de.	I
	o <u>SRC-119, "Diagnosis</u>	Procedure".		L
	CTION END			M
Diagnosis Proc	edure		INFOID:00000008295690	
minutes. (To dis	g, turn ignition switch charge backup capaci ecified tester or other		ive terminal and wait at least 3	Ν
1.CHECK HARNE				0
Check the harness	connector.			
Is the inspection re				Ρ
YES >> GO TC NO >> Replac	2. harness connector.			
2.CHECK WIRING				
Check the wiring ha				
Is the inspection re	sult normal?			

Revision: 2012 August

>> GO TO 3.

YES

## SRC-119

## **B1151 CURTAIN MODULE LH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-119, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace LH side curtain air bag module. Refer to SR-18. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-119, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## B1152 CURTAIN MODULE LH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

LH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

LH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

INFOID:000000008295692

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1152	CURTAIN MODULE LH [GND-SHORT]	LH side curtain air bag module circuit is shorted to ground	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in LH side curtain air bag module</li> </ul>	G
			Malfunction in air bag diagnosis sen- sor unit	SRO
DTC CONFIRMA	TION PROCEDURE			
1.CHECK SELF-D	DIAG RESULT			
With CONSULT  Turn ignition sv Perform "AIR E Without CONSU	BAG" Self Diagnostic Re	esult.		J
1. Turn ignition sw 2 Check the air h		s. Refer to <u>SRC-15, "Air Bag Warn</u>	ing Lamp Diagnosis"	K
NOTE: SRS does not ente Is malfunctioning particular YES >> Refer t	r diagnosis mode if no r	malfunction is detected in user mo		L
Diagnosis Proc	edure		INFOID:00000008295693	Μ
minutes. (To dis	g, turn ignition switch charge backup capaci ecified tester or other	itor.)	ive terminal and wait at least 3	Ν
4				0

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

## Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

Ρ

## **B1152 CURTAIN MODULE LH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-121, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace LH side curtain air bag module. Refer to SR-18. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-121, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## < DTC/CIRCUIT DIAGNOSIS >

## B1153 CURTAIN MODULE LH

## Description

For RH side curtain air bag module, crash is judged by main "G" sensor output signal (left side: LH satellite sensor, right side: RH satellite sensor) and safing algorithm (in air bag diagnosis sensor unit).

## OPERATION

In case of frontal collision whose acceleration exceeds the specified level, the ignition materials are ignited by electric ignition system. The system burns the gas generating materials resulting in a chemical reaction. This generates hot gases that flow into the air bag through a filter and expand the bag.

### STRUCTURE

LH side curtain air bag module mainly consists of air bag and inflator that inflates air bag.

### INSTALLATION

LH side curtain air bag module is installed on the roof side with fixed bolts.

## **DTC Logic**

INFOID:000000008295695

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1153	CURTAIN MODULE LH [SHORT]	LH side curtain air bag module circuit are shorted to each other	<ul> <li>Disconnection of wiring harness and short</li> <li>Malfunction in LH side curtain air bag module</li> <li>Malfunction in air bag diagnosis sen- sor unit</li> </ul>	G SRC
DTC CONFIRMAT	ION PROCEDURE			
1.CHECK SELF-DI	AG RESULT			I
Without CONSUL	AG" Self Diagnostic Re T	esult.		J
<ol> <li>Turn ignition swi</li> <li>Check the air bat</li> </ol>		. Refer to <u>SRC-15, "Air Bag Warr</u>	ning Lamp Diagnosis".	Κ
Is malfunctioning pa	rt detected? SRC-123, "Diagnosis	nalfunction is detected in user mo	ode.	L
Diagnosis Proce	edure		INF0ID:00000008295696	Μ
minutes. (To disc • Never use unspectively a second secon	harge backup capaci cified tester or other	tor.)	tive terminal and wait at least 3	N
1.CHECK HARNES				
Check the harness of Is the inspection res YES >> GO TO NO >> Replace 2.CHECK WIRING	ult normal? 2. e harness connector.			Ρ
Check the wiring has <u>Is the inspection res</u> YES >> GO TO	ult normal?			
Revision: 2012 Augus	ot	SRC-123	2013 G Sedan	

## **B1153 CURTAIN MODULE LH**

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-123, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

- YES >> GO TO 4.
- NO >> INSPECTION END

**4.**REPLACE SIDE CURTAIN AIR BAG MODULE

- 1. Replace LH side curtain air bag module. Refer to SR-18. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-123, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

## B1202, B1203, B1204, B1205, B1206, B1207 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

## B1202, B1203, B1204, B1205, B1206, B1207 DIAGNOSIS SENSOR UNIT

## Description

Checks the entire SRS and displays the malfunction either by illuminating or blinking the air bag warning lamp on the combination meter. Malfunctioning part can be detected by on board self-diagnosis system and CON-SULT.

## OPERATION

It detects a shock that exceeds a specified level and monitors whether the driver and passenger air bags, front side air bag, side curtain air bag and pre-tensioner seat belts operate normally.

#### STRUCTURE

It contains the "G" sensors for both frontal and side collisions and spare battery function in case of main battery damage in collision.

#### INSTALLATION

Air bag diagnosis sensor unit is installed under the center console with fixed bolts.

## DTC Logic

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DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	
B1202 B1203	CONTROL UNIT	Air bag diagnosis sensor unit is mal- functioning or out of the specification	Malfunction in air bag diagnosis sen- sor unit	(
B1204 B1205			<ul> <li>Configuration in air bag diagnosis sensor unit does not match the vehi-</li> </ul>	S
B1206 B1207			cles specification	

## DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result.

**Without CONSULT** 

- 1. Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to <u>SRC-15, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:**

SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

YES	>> Refer to <u>SRC-125, "Diagnosis Procedure"</u> .
NO	>> INSPECTION END

## Diagnosis Procedure

- WARNING:
   Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

**2.**CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

INFOID:00000000829569

## B1202, B1203, B1204, B1205, B1206, B1207 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE AIR BAG DIAGNOSIS SENSOR UNIT

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-125, "DTC Logic"</u>.
- Is DTC detected?

YES >> GO TO 1.

## **B1209 FRONTAL COLLISION DETECTION**

## < DTC/CIRCUIT DIAGNOSIS >

## B1209 FRONTAL COLLISION DETECTION

#### А Description INFOID:00000008295700 DTC B1209 FRONTAL COLLISION DETECTION When crash zone sensor detects component damage resulting from a front collision, the system blinks or illuminates the air bag warning lamp to inform the driver. Malfunctioning can be detected by CONSULT. OPERATION The air bags and seat belt pre-tensioners for driver and front passenger are activated by the air bag diagnosis sensor unit signal transmitted at the time of the frontal collision. D STRUCTURE It consists of crash zone sensor, air bag diagnosis sensor unit, air bags and seat belt pre-tensioners for driver and front passenger. Е INSTALLATION Refer to SR-10, "Exploded View" (Driver air bag module), SR-16, "Exploded View" (Front passenger air bag module), SR-20, "Exploded View" (Crash zone sensor), SR-22, "Exploded View" (Air bag diagnosis sensor F unit), <u>SB-6. "SEAT BELT RETRACTOR : Exploded View"</u> (Front LH/RH seat belt pre-tensioner). DTC Logic INFOID:000000008295701 DTC No. Trouble diagnosis name DTC detecting condition Possible cause B1209 FRONTAL COLLISION Front seat belt pre-tensioner, front air SRC DETECTION bag is deployed DTC CONFIRMATION PROCEDURE 1.CHECK SELF-DIAG RESULT (P)With CONSULT Turn ignition switch ON. 1. Perform "AIR BAG" Self Diagnostic Result. 2. Without CONSULT 1 Turn ignition switch ON. Κ 2. Check the air bag warning lamp status. Refer to SRC-15, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode.

Is malfunctioning part detected?

## YES >> Refer to <u>SRC-127, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

## Diagnosis Procedure

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)
- Never use unspecified tester or other measuring device.

**1.**PERFORM COLLISION DIAGNOSIS

Perform collision diagnosis. Refer to <u>SR-4</u>, "FOR FRONTAL COLLISION : When SRS is activated in a collision" or <u>SR-5</u>, "FOR FRONTAL COLLISION : When SRS is not activated in a collision".

Is collision diagnosis complete?

YES >> GO TO 2. NO >> INSPECTION END

**2.**FINAL INSPECTION

Perform "AIR BAG" Self Diagnostic Result. <u>Is the inspection result normal?</u> INFOID:000000008295702

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## **B1209 FRONTAL COLLISION DETECTION**

< DTC/CIRCUIT DIAGNOSIS >

- YES >> INSPECTION END
- NO >> Perform diagnosis of applicable DTC. Refer to <u>SRC-131, "DTC Index"</u>.

## **B1210 SIDE COLLISION DETECTION**

## < DTC/CIRCUIT DIAGNOSIS > B1210 SIDE COLLISION DETECTION

#### А Description INFOID:00000008295703 DTC B1210 SIDE COLLISION DETECTION When satellite sensor detects component damage resulting from a side collision, blinks or illuminates the air bag warning lamp to inform the driver. Malfunctioning can be detected by CONSULT. OPERATION The front side air bag and side curtain air bag are activated by the air bag diagnosis sensor unit signal transmitted at the time of the side collision. D STRUCTURE It consists of satellite sensor, air bag diagnosis sensor unit, front side air bag and side curtain air bag. INSTALLATION Ε Refer to SE-60, "Exploded View" (Front LH/RH side air bag module), SR-20, "Exploded View" (Side curtain air bag module), SR-21, "Exploded View" (LH/RH satellite sensor). DTC Logic INFOID:000000008295704 DTC No. Possible cause Trouble diagnosis name DTC detecting condition B1210 SIDE COLLISION DE-Front side air bag, side curtain air bag is TECTION deployed DTC CONFIRMATION PROCEDURE SRC 1.CHECK SELF-DIAG RESULT (P)With CONSULT Turn ignition switch ON. 1. Perform "AIR BAG" Self Diagnostic Result. 2. Without CONSULT 1. Turn ignition switch ON. 2. Check the air bag warning lamp status. Refer to SRC-15, "Air Bag Warning Lamp Diagnosis". NOTE: Κ SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? YES >> Refer to SRC-129, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:00000008295705 M WARNING: Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.) Ν Never use unspecified tester or other measuring device. 1.PERFORM COLLISION DIAGNOSIS Perform collision diagnosis. Refer to SR-6, "FOR SIDE AND ROLLOVER COLLISION : When SRS is activated in a collision" or SR-7, "FOR SIDE AND ROLLOVER COLLISION : When SRS is not activated in a collision". Is collision diagnosis complete? Ρ YES >> GO TO 2. NO >> INSPECTION END 2. FINAL INSPECTION

Perform "AIR BAG" Self Diagnostic Result. <u>Is the inspection result normal?</u>

YES >> INSPECTION END

## **B1210 SIDE COLLISION DETECTION**

## < DTC/CIRCUIT DIAGNOSIS >

NO >> Perform diagnosis of applicable DTC. Refer to <u>SRC-131, "DTC Index"</u>.

## ECU DIAGNOSIS INFORMATION DIAGNOSIS SENSOR UNIT

## DTC Index

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Diagnostic item		Explanation	Reference page
NO DTC IS DETECTED	When malfunction is in-	Low battery voltage (Less than 9 V)	SRC-27, "DTC Logic".
	dicated by the "AIR BAG" warning lamp in User mode	<ul> <li>Self-diagnosis result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after re- pair</li> <li>Intermittent malfunction has been de- tected in the past</li> </ul>	SRC-15, "Air Bag Warning Lamp Diag- nosis", SRC-19, "CONSULT Function".
	No malfunction is detected	ed	
CONTROL UNIT [B1001-B1015]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification		<ul> <li><u>SRC-21, "DTC Logic".</u></li> <li><u>SRC-23, "DTC Logic".</u></li> <li><u>SRC-25, "DTC Logic".</u></li> </ul>
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Malfunction occurs in Occupant Classification System control unit		SRC-27, "DTC Logic".
OCCUPANT SENS [UNIT FAIL] [B1018]	Malfunction occurs in Occupant Classification System sensor		SRC-29, "DTC Logic".
OCCUPANT SENS C/U [COMM FAIL] [B1022]	Malfunction occurs in Occupant Classification System control unit, circuit of Occupant Classification System control unit air bag diag- nosis sensor unit, or air bag diagnosis sensor unit		SRC-31, "DTC Logic".
PASS A/B INDCTR CKT [B1023]	Front passenger air bag OFF indicator circuit is open or shorted to ground or the circuits are shorted each other		SRC-33, "DTC Logic".
CONTROL UNIT [B1026-B1031]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification		SRC-35, "DTC Logic".
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034]	Crash zone sensor is malfunctioning		SRC-37, "DTC Logic".
CRASH ZONE SEN [COMM FAIL] [B1035] [UNMATCH] [B1036]	Crash zone sensor is malfunctioning or out of the specified speci- fication		SRC-39, "DTC Logic".
CONTROL UNIT [B1042-B1047]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification		SRC-41, "DTC Logic".
DRIVER AIRBAG MOD- ULE [OPEN] [B1049] [B1054]	Driver air bag module circuit is open (including the spiral cable)		SRC-43, "DTC Logic".
DRIVER AIRBAG MOD- ULE [VB-SHORT] [B1050] [B1055]	Driver air bag module circuit is shorted to some power supply cir- cuit (including the spiral cable)		SRC-45, "DTC Logic".
DRIVER AIRBAG MOD- ULE [GND-SHORT] [B1051] [B1056]	Driver air bag module circuit is shorted to ground (including the spi- ral cable)		SRC-47, "DTC Logic".

Diagnostic item	Explanation	Reference page
DRIVER AIRBAG MOD- ULE [SHORT] [B1052] [B1057]	Driver air bag module circuits are shorted to each other (including spiral cable)	SRC-49, "DTC Logic".
CONTROL UNIT [B1058-B1063]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification	SRC-51, "DTC Logic".
ASSIST A/B MODULE [OPEN] [B1065] [B1070]	Front passenger air bag module circuit is open	SRC-53, "DTC Logic".
ASSIST A/B MODULE [VB-SHORT] [B1066] [B1071]	Front passenger air bag module circuit is shorted to some power supply circuit	SRC-55, "DTC Logic".
ASSIST A/B MODULE [GND-SHORT] [B1067] [B1072]	Front passenger air bag module circuit is shorted to ground	SRC-57, "DTC Logic".
ASSIST A/B MODULE [SHORT] [B1068] [B1073]	Front passenger air bag module circuits are shorted to each other	SRC-59. "DTC Logic".
CONTROL UNIT [B1074-B1079]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification	SRC-61, "DTC Logic".
PRE-TEN FRONT RH [OPEN] [B1081]	Front RH seat belt pre-tensioner circuit is open	SRC-63, "DTC Logic".
PRE-TEN FRONT RH [VB-SHORT] [B1082]	Front RH seat belt pre-tensioner circuit is shorted to some power supply circuit	SRC-65, "DTC Logic".
PRE-TEN FRONT RH [GND-SHORT] [B1083]	Front RH seat belt pre-tensioner circuit is shorted to ground	SRC-67. "DTC Logic".
PRE-TEN FRONT RH [SHORT] [B1084]	Front RH seat belt pre-tensioner circuits are shorted to each other	SRC-69, "DTC Logic".
PRE-TEN FRONT LH [OPEN] [B1086]	Front LH seat belt pre-tensioner circuit is open	SRC-71, "DTC Logic".
PRE-TEN FRONT LH [VB-SHORT] [B1087]	Front LH seat belt pre-tensioner circuit is shorted to some power supply circuit	SRC-73, "DTC Logic".
PRE-TEN FRONT LH [GND-SHORT] [B1088]	Front LH seat belt pre-tensioner circuit is shorted to ground	SRC-75, "DTC Logic".
PRE-TEN FRONT LH [SHORT] [B1089]	Front LH seat belt pre-tensioner circuits are shorted to each other	SRC-77, "DTC Logic".
CONTROL UNIT [B1106-B1111]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification	SRC-79, "DTC Logic".
SATELLITE SENS RH [UNIT FAIL] [B1113] [B1114]	RH satellite sensor is malfunctioning	SRC-81, "DTC Logic".

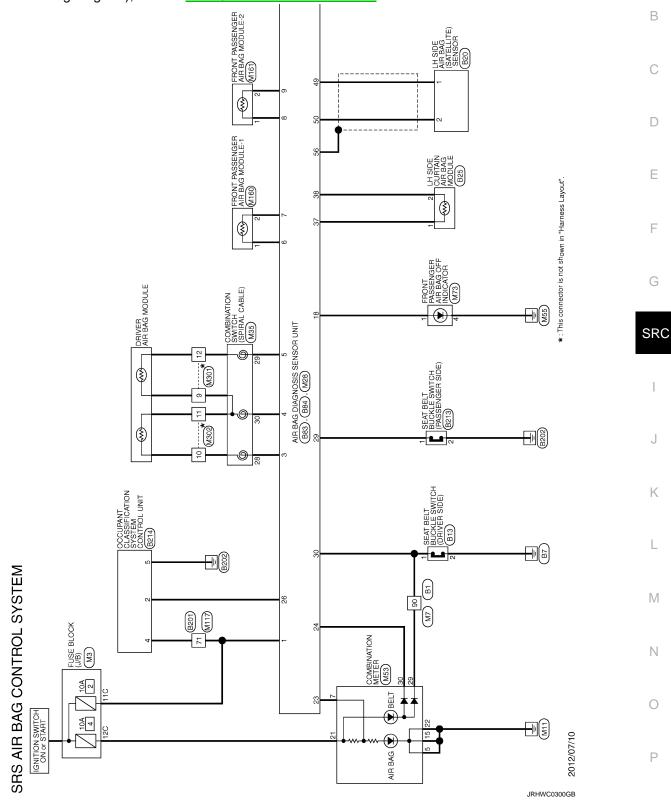
Diagnostic item	Explanation	Reference page	
SATELLITE SENS RH [COMM FAIL] [B1115] [UNMATCH] [B1116]	RH satellite sensor is malfunctioning or out of the specified specification	SRC-83, "DTC Logic".	— <i>A</i>
SATELLITE SENS LH [UNIT FAIL] [B1118] [B1119]	LH satellite sensor is malfunctioning	SRC-85, "DTC Logic".	C
SATELLITE SENS LH [COMM FAIL] [B1120] [UNMATCH] [B1121]	LH satellite sensor is malfunctioning or out of the specified specification	SRC-87, "DTC Logic".	C
CONTROL UNIT [B1122-B1127]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification	SRC-89, "DTC Logic".	_ [
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open	SRC-91, "DTC Logic".	- F
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to some power sup- ply circuit	SRC-93, "DTC Logic".	0
SIDE MODULE RH GND-SHORT] B1131]	Front RH side air bag module circuit is shorted to ground	SRC-95, "DTC Logic".	SI
SIDE MODULE RH [SHORT] [B1132]	Front LH seat belt pre-tensioner circuits are shorted to each other	SRC-97, "DTC Logic".	
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open	SRC-99, "DTC Logic".	_
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to some power sup- ply circuit	SRC-101, "DTC Logic".	ł
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground	SRC-103, "DTC Logic".	
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other	SRC-105, "DTC Logic".	N
CURTAIN MODULE RH [OPEN] [B1145]	RH side curtain air bag module circuit is open	SRC-109, "DTC Logic".	-
CURTAIN MODULE RH [VB-SHORT] [B1146]	RH side curtain air bag module circuit is shorted to some power supply circuit	SRC-111, "DTC Logic".	
CURTAIN MODULE RH [GND-SHORT] [B1147]	RH side curtain air bag module circuit is shorted to ground	SRC-113, "DTC Logic".	_
CURTAIN MODULE RH [SHORT] [B1148]	RH side curtain air bag module circuits are shorted to each other	SRC-115, "DTC Logic".	_ F
CURTAIN MODULE LH [OPEN] [B1150]	LH side curtain air bag module circuit is open	SRC-117, "DTC Logic".	

Diagnostic item	Explanation	Reference page
CURTAIN MODULE LH [VB-SHORT] [B1151]	LH side curtain air bag module circuit is shorted to some power supply circuits	SRC-119, "DTC Logic".
CURTAIN MODULE LH [GND-SHORT] [B1152]	LH side curtain air bag module circuit is shorted to ground	SRC-121, "DTC Logic".
CURTAIN MODULE LH [SHORT] [B1153]	LH side curtain air bag module circuits are shorted to each other	SRC-123, "DTC Logic".
CONTROL UNIT [B1202-B1207]	Air bag diagnosis sensor unit is malfunctioning or out of the speci- fied specification	SRC-125. "DTC Logic".
FRONTAL COLLISION DETECTION [B1209]	Front seat belt pre-tensioner and front air bag is deployed	SRC-127, "DTC Logic".
SIDE COLLISION DE- TECTION [B1210]	Front side air bag and side curtain air bag are deployed	SRC-129, "DTC Logic".

< ECU DIAGNOSIS INFORMATION >

## Wiring Diagram - SRS AIR BAG CONTROL SYSTEM -

For connector terminal arrangements, harness layouts, and alphabets in a  $\bigcirc$  (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".

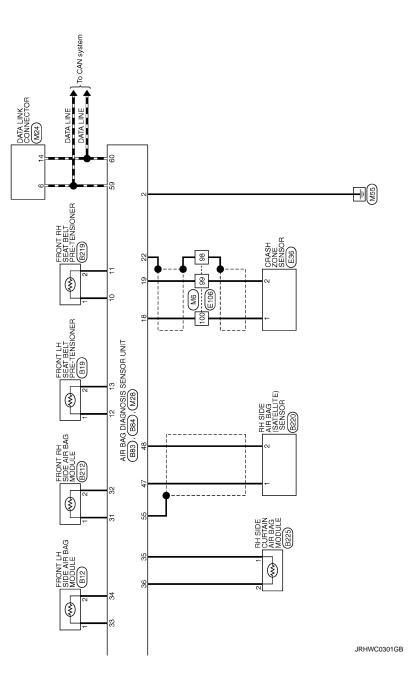


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SRS AIR BAG WARNING LAMP DOES NOT TURN OFF	
< SYMPTOM DIAGNOSIS >	
SYMPTOM DIAGNOSIS	^
SRS AIR BAG WARNING LAMP DOES NOT TURN OFF	A
Diagnosis Procedure	В
1. CHECK FRONT AIR BAG MODULE	
Check the deployment of front air bag module.	С
Is air bag module deployed?	
YES >> Refer to <u>SR-10</u> or <u>SR-16, "Exploded View"</u> . NO >> GO TO 2.	D
2. CHECK AIR BAG FUSE	
Check the air bag fuse. Refer to PG-115, "Fuse and Fusible Link Arrangement".	Е
Is 10A fuse [No.2. located in fuse block (J/B)] normal?	
YES >> GO TO 4.	
NO >> GO TO 3. 3.CHECK AIR BAG FUSE AGAIN	F
Replace air bag fuse and turn ignition switch ON.	
Did the air bag fuse blow again?	G
YES >> Repair or replace main harness. NO >> <b>INSPECTION END</b>	
4. CHECK DIAGNOSIS SENSOR UNIT	SR
Check the screen of CONSULT.	
Is the inspection result normal?	
YES >> GO TO 5.	
NO >> Replace diagnosis sensor unit (ACU). Refer to <u>SR-22, "Exploded View"</u> . <b>5.</b> CHECK HARNESS CONNECTION	J
	0
Check harness connection between air bag warning lamp and diagnosis sensor unit. Is the inspection result normal?	
YES >> Check the intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .	K
NO >> Replace wiring harness connector.	
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## SRS AIR BAG WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

## SRS AIR BAG WARNING LAMP DOES NOT TURN ON

Diagnosis Procedure

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"SRS AIR BAG" Warning Lamp Does Not Turn ON

**1.**CHECK METER FUSE

Check the meter fuse. Refer to PG-115, "Fuse and Fusible Link Arrangement".

Is 10A fuse [No.4, located in fuse block (J/B)] normal?

YES >> GO TO 3. NO >> GO TO 2.

2.CHECK METER FUSE AGAIN

Replace 10A fuse [No.4, located in fuse block (J/B)] and turn ignition switch ON.

Did the meter fuse blow again?

YES >> Repair or replace the related harness.

NO >> INSPECTION END

**3.**CHECK HARNESS CONNECTION

1. Check harness connection between diagnosis sensor unit and combination meter.

2. Disconnect diagnosis sensor unit connector and turn ignition switch ON.

Did air bag warning lamp turn ON?

YES >> Replace diagnosis sensor unit (ACU). Refer to <u>SR-22, "Exploded View"</u>.

NO >> Replace combination meter assembly. Refer to MWI-112, "Removal and Installation".

## PASSENGER SEAT BELT WARNING SYSTEM

< SYMPTOM DIAGNOSIS >

## PASSENGER SEAT BELT WARNING SYSTEM

Diagnosis Procedure	A
<b>1.</b> CHECK THE SYSTEM 1	В
Check the seat belt warning lamp function.	
<ul><li>Seat belt warning lamp turns ON in the following conditions.</li><li>Driver seat belt is fastened.</li><li>Occupant is on passenger seat.</li></ul>	С
<ul> <li>Passenger seat belt is not fasten.</li> </ul>	D
<u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Check the followings.	E
<ul> <li>Harness between air bag diagnosis sensor unit and combination meter.</li> <li>Seat belt buckle switch (passenger side) circuit.</li> <li>Seat belt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit.</li> </ul>	F
2. CHECK THE SYSTEM 2	G
Check the seat belt warning lamp function.	SRC
<ul> <li>Seat belt warning lamp turns OFF in the following conditions.</li> <li>Driver seat belt is fastened.</li> <li>Occupant is on passenger seat.</li> <li>Passenger seat belt is fastened.</li> </ul>	
Is the inspection result normal?	J
<ul> <li>YES &gt;&gt; System is OK.</li> <li>NO &gt;&gt; Check the followings.</li> <li>Seat belt buckle switch (passenger side) circuit.</li> <li>Seat belt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit.</li> </ul>	K
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# < PRECAUTION > PRECAUTION

## PRECAUTIONS

## Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

## WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

### PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

## Service

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- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.

For approximately 3 minutes after the cables are removed, it is still possible for the air bag and seat belt pretensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have elapsed.

- Diagnosis sensor unit must always be installed with their arrow marks " " pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

## Occupant Classification System Precaution

- INFOID:000000008295713
- Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to <u>SE-63, "Removal and Installation"</u>.